



A MITEL
PRODUCT
GUIDE

Unify OpenScape 4000

Troubleshooting - AIFe

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1 Error codes

1.1 Fundamentals

While the system is starting up the current status of the board (DP or bus board) is displayed on the 7-segment display.

Apart from signaling with a 7-segment display it is also possible to output the error code via a terminal connected to the board.

When the startup is complete, error codes can also be displayed as advisory messages on the service terminal.

1.1.1 Sequence of the subsystems while startup

In the following a list of the subsystems is displayed, which start in the respective servers sequentially.

D0- = ADP subsystem

S0- = SWU subsystem

Table 1: Subsystems while startup

SUSY	CR-F	D0- S0-	ADP	CC	CC-AP
zonnucl0	02H	D0-	x	x	x
zonncan0	03H	D0-	x	x	x
zqpcom00	08H	D0-	x	x	x
zdbottra	08H	D0-	x		
zdbottr0	08H	S0-		x	x
zodsiop1	20H	D0-	x		x
zodbios0	21H	D0-	x		x
zdbsys00	2AH	D0-	x	x	x
zdbsys0a	2AH	D0-	x		x
zdaihsc0	2BH	D0-	x	x	x
zdacfgc0	2CH	D0-	x	x	x
zdaadsc0	2DH	D0-	x		x
zdasrlc0	2DH	D0-	x		x
zmqsync0	2FH	D0-	x		x
zodpbo00	30H	D0-	x	x	x

SUSY	CR-F	D0-S0-	ADP	CC	CC-AP
zoltcp00	30H	D0-	x	x	x
zdbottrx	33H	D0-	x	x	x
zppdep00	3AH	D0-	x		x
zmeupdja	3BH	D0-	x		
zmeupdjs	3BH	S0-		x	x
zoninth0	3BH	S0-		x	x
zmflbtj0	3BH	D0-	x		x
zocrypt0	3FH	D0-	x	x	x
zaahcm00	41H	D0-	x		x
zaahcm0s	41H	S0-		x	
zodusfm0	44H	D0-	x		x
zodfmfm0	45H	D0-	x		x
zmdfest0	4AH	D0-	x		x
zoddscr0	4CH	D0-	x		x
zodbckup	4FH	D0-	x		x
zodpcl00	50H	D0-	x		x
zodpgl00	51H	D0-	x		x
zggdeb10	58H	D0-	x	x	x
zbaacm00	59H	D0-	x		x
zafran0	5AH	D0-	x		x
zmhstbma	5BH	D0-	x		x
zmhstbms	5BH	S0-		x	
zmiptcha	5CH	D0-	x		
zmqnfya	5FH	D0-	x		x
zmdamcja	60H	D0-	x		x
zmdsig00	62H	D0-	x		x
zmkbst00	63H	D0-	x		x
zmncdbr0	63H	D0-	x		x
zcgoutp0	64H	D0-	x		x
zppdiag0	70H	D0-	x		x

Error codes

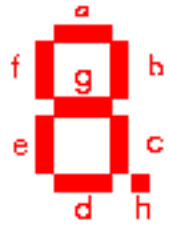
SUSY	CR-F	D0-S0-	ADP	CC	CC-AP
zmdhist0	7DH	D0-	x		x
zppcoa00	7DH	D0-	x		x
zppjtae0	7EH	D0-	x		x
zqfabt00	80H	S0-		x	x
zdbcc000	82H	S0-		x	x
zrsdeps0	84H	S0-		x	x
zoxhsr0s	85H	S0-		x	x
zqfmains	86H	S0-		x	x
zqqdc00s	8AH	S0-		x	x
zqqpitz0	8CH	S0-		x	x
zmdamcjs	8EH	S0-		x	
zmdamcgs	8FH	S0-		x	x
zmbadpj0	90H	S0-		x	x
zaaftp0a	90H	D0-	x		
zaaftp0s	90H	S0-		x	x
zmibrtjs	91H	S0-		x	x
zmikttjs	91H	S0-		x	x
zmibzmj0	92H	S0-		x	x
zcacalp0	94H	S0-		x	x
zcgcdm0	96H	S0-		x	x
zcgcoll0	98H	S0-		x	x
zqqrto0s	9AH	S0-		x	x
zqvvecos	9CH	S0-		x	x
zqsrec0s	9DH	S0-		x	x
zmiptchs	A3H	S0-		x	x
zqqdiag0	ADH	S0-		x	x
zqfjtaes	AEH	S0-		x	x
zqfmainl	B3H	S0-		x	x
zdblgtg00	B4H	S0-		x	x
zqisomhl	B9H	S0-		x	x

SUSY	CR-F	D0-S0-	ADP	CC	CC-AP
zeeprep0	BBH	S0-		x	x
zmbamdb0	BDH	S0-		x	x
zqqdc00l	C0H	S0-		x	x
zqqpitll	C3H	S0-		x	x
zqqrto0l	CCH	S0-		x	x
zqvvecol	CDH	S0-		x	x
zqsrecol	CEH	S0-		x	x
zqqcos00	E0H	S0-		x	x
zqfjtael	F1H	S0-		x	x

1.1.2 7-segment display of the DP boards

The 7-segment displays on the boards signal the

- Start-up,
- Operating status of the board,
- Error code.

	Segment	Value
	h	H'80
	g	H'40
	f	H'20
	e	H'10
	d	H'08
	c	H'04
	b	H'02
Segment arrangement	a	H'01

Example: H'93 -> values H'80 and H'10 and H'02 and H'01 =>

Segments h, e, b, a



1.1.2.1 Segments

A distinction is made between 3 sub-functions:

- Track point
- Decimal point (monitor display)

Error codes

- Error code (status outputs)

1.1.2.2 Track point (segment)

The input parameter track point is encoded in the display code by the hexadecimal code, stored in the memory and then displayed.

1.1.2.3 Decimal point (h)

The input parameter decimal point is decoded and displayed with the track point stored in the memory.

1.1.2.4 Service overview of the Outputs on the DP

For more information please refer to [Section 1.1.2.5, “Status Outputs on the DP of the ADP”](#) and [Section 1.1.2.6, “Status Outputs on the DP of the SWU”](#).

ADP

Table 2: Overview DP status displays of the ADP

Display	Status
	Hardware test, PID Polling, Restart Message, ready to load
	Error code will be signaled. Most often signaled when no boot device found.
	Starting SYSLOAD, Loading Subsystems, Creating Checksums If fails here, most like a new SW image is needed - Console output to be checked.
	The startup of the ADP is finished, ADP active

SWU

Table 3: Overview DP Status Display in the SWU

Display	Status
4	DP test CC is trying to connect to ADP over Atlantic LAN.
5	Hardware test, PID Polling, Restart Message, ready to load

Display	Status
9	Starting SYSLOAD, Loading Subsystems, Creating Checksums If fails here, most like a new SW image is needed - console output to be checked.
!	Standby (waiting for active SWU partner) ¹
4	ZQFJTAES, End-of-Jota-Task CC If hanging here, blank database OR "ACT-USSU:LTG,1;" was not executed.
7	ZQFMAINL, Error Analysis of LTG If hanging here, the check for RTM hardware fails. Check Portal and AMO CPCI configuration accordingly.
14	ZDBLTG00, Data Basis Code for SWU and LTG When failing here, most often a problem with AMO DIMSU.
-	Periphery is being put back into service (loading shelves), Call Processing is being resumed OR standby loading
A	SWU active
S	Standby active ²

1.1.2.5 Status Outputs on the DP of the ADP

Table 4: Status Outputs on the DP of the ADP

Display	Creation Flag	Status
1		BOOT started
5		Formatting the Memories
4		DP Test
6		Hardware test, PID Polling, Restart Message, ready to load

¹ only valid for Duplex

² only valid for Duplex

Error codes

Display	Creation Flag	Status
7		Loading SYSLOAD
9		Starting SYSLOAD, Loading Subsystems, Creating Checksums If fails here, most like a new SW image is needed - Console output to be checked.
A		ZONNUCL0, RMX-OS
7	03	ZONNCAN0, OS Extension
-	08	ZQPCOM00, ZDBOTTRA, common Callgates, Tracer
I	20	ZODSIOP1, SIOP Driver
r	21	ZODBIOS0, Basic Input Output System
U	2A	ZDBSYS00, ZDBSYS0A, System Data Basis ADP
Q	2B	ZDAIHSC0, Database, Loader
L	2C	ZDACFGC0, Database, Central Data
C	2D	ZDAADSC0, ZDASRLC0, Database, Access Routine
Q	2F	ZMQSYNC0, Data Basis Synchronization
I	30	ZODPBO00, Program Loader (PBO) ZOOLTCP00, TCP Sub System
r	33	ZDBOTTRX, Wakeup Tracer Initialization Task
U	3A	ZPPDEP00, Safety Equipment
Q	3B	ZMEUPDJA, ZMFLBTJ0, Update DB on HD, Logbook Task
Q	3F	ZOCRYPT0, Encryption
=	41	ZAAHCM00, Communication Management
7	44	ZODUSFM0, User File Manager
-	45	ZODFMFM0, Flash Memory File Manager

Display	Creation Flag	Status
1.	4A	ZMDFEST0, Front End Signalization Task
3	4C	ZODDSCR0, Device Status Configuration
3	4F	ZODBACKUP, Backup, Backup of Program System and Database
7	50	ZODPCL00, Peripheral Computer Loader
7	51	ZODPGL00, Program Loader
0	58	ZGGDEB10, Residential Part of Debug
0	59	ZBAACM00, ACL Manager
2	5A	ZAFTRAN0, File Transfer
2	5B	ZMHSTBMA, Support Task for BELAU
0	5C	ZMIPTCHA, Patch Subsystem
0	5F	ZMQNFYJA, NOTIFY Task
7	60	ZMDAMCJA, AMO Control internal/external
7	62	ZMDSIG00, Signalization Task
0	63	ZMBKST00, ZMNCDBR0, Support Task
7	64	ZCGOUTP0, ETB Support Task
7	70	ZPPDIAG0, EEA Support Task
0	7D	ZMDHIST0, ZPPCOA00, Residential HISTA Task, COA Task
8	7E	ZPPJTAE0, End-of-Jota-Task ADP
1.	90	ZAAFTP0A, FTP Server
11		Semaphore ONSMINI, wait for Units of the Security Technics
7.		The startup of the ADP is finished, ADP active

1.1.2.6 Status Outputs on the DP of the SWU

Table 5: DP Status Display in the SWU

Display	Creation Flag	Status
I		BOOT started
S		Formatting the Memories
4		DP Test CC is trying to connect to ADP over Atlantic LAN.
6		Hardware test, PID Polling, Restart Message, ready to load
7		Loading SYSLOAD
9		Starting SYSLOAD, Loading Subsystems, Creating Checksums If fails here, most like a new SW image is needed - Console output to be checked.
A		ZONNUCL0, RMX-OS
7	03	ZONNCAN0, OS Extension
-	08	ZQPCOM00, ZDBOTTRA, Common Callgates, Tracer
U	2A	ZDBSYS00, ZDBSYS0A, System Data Basis ADP
Q	2B	ZDAIHSC0, Database, Loader
L	2C	ZDACFGC0, Database, Central Data
I	30	ZODPBO00, Program Loader (PBO) ZOOLTCP00, TCP Sub System
P	33	ZDBOTTRX, Wakeup Tracer Initialization Task
C	3B	ZMEUPDJA, ZMFLBTJ0, Update DB on HD, Logbook Task
0	3F	ZOCRYPT0, Encryption
=	41	ZAAHCM00, Communication Management

Display	Creation Flag	Status
	58	ZGGDEB10, Residential Part of Debug
	5B	ZMHSTBMA, Support Task for BELAU
	80	ZQFABT00, Activity Determination Task
	82	ZDBCC000, Initialization of CC Data Basis
	84	ZRSDEPS0, System Security Technics
	85	ZOXHSR0S, Signalling Router Standby (waiting for active SWU partner) ³
	86	ZQFMAINS, Error Analysis of CC
	8A	ZQQDC00S, Device Management in CC
	8C	ZQQPITZ0, Peripheral Setup CC
	8E	ZMDAMCJS, Technical Equipment AMC
	8F	ZMDAMCGS, CC specific AM Routines
	90	ZMBADPJ0, CP Interface Task to AM ZAAFTP0S, FTP Server
	91	ZMIBRTJS, Board Reconfiguration Task ZMIKTTJS, Network Topology Task
	92	ZMIBZMJ0, Time dependent Authorization Shift Task
	94	ZCACALP0, Call Processing
	96	ZCGCDBM0, Buffering of CDB's on ADP breakdown
	98	ZCGCOLL0, Charge Gathering
	9A	ZQQRTO0S, Routine Test Organisation CC
	9C	ZQVVECOS, Connection Control in CC
	9D	ZQSREC0S, Recovery in CC
	A3	ZMIPTCHS, Patch Subsystem

³ Only valid for Duplex

Error codes

Display	Creation Flag	Status
	AD	ZQQDIAG0, Diagnosis
	AE	ZQFJTAES, End-of-Jota-Task CC If hanging here, blank database OR "ACT-USSU:LTG,1;" was not executed.
	B3	ZQFMAINL, Error Analysis of LTG If hanging here, the check for RTM hardware fails. Check Portal and AMO CPCI configuration accordingly.
	B4	ZDBLTG00, Data Basis Code for SWU and LTG When failing here, most often a problem with AMO DIMSU.
	B9	ZQISOMHL, Somup Handler
	BB	ZEEPREP0, Pre-Processing of SWU
	BD	ZMBAMDB0, Technical Equipment Support Task LTG
	C0	ZQQDC00L, Device Management LTG
	C3	ZQQPITLL, Peripheral Setup LTG
	CC	ZQQRTO0L, Routine Test Organisation LTG
	CD	ZQVVECOL, Connection Control in LTG
	CE	ZQSREC0L, Recovery in LTG
	E0	ZQQCOS00, Communication Objekts for TDS
	F1	ZQFJTAEL, End-of-Jota-Task LTG
		Semaphor ONSMINI, wait for further Units of the Security Technic
		Periphery is beeing put back into service, Call Processing is beeing resumed
		SWU Active

Display	Creation Flag	Status
		Standby active ⁴

1.1.2.7 Status Outputs on the DP of the CC-AP

Table 6: Status Outputs on the DP of the CC-AP

Display	Creation Flag	Status
		BOOT started
		Formatting the Memories
		DP Test
		Other hardware test, PID Polling, Restart Message
		Loading SYSLOAD
		Starting SYSLOAD, Loading Subsystems, Creating Checksums
		ZONNUCL0, RMX-OS
	03	ZONNCAN0, OS Extension
	08	ZQPCOM00, ZDBOTTRA, common Callgates, Tracer
	20	ZODSIOP1, SIOP Driver
	21	ZODBIOS0, Basic Input Output System
	2A	ZDBSYS00, ZDBSYS0A, System Data Basis ADP
	2B	ZDAIHSC0, Database, Loader
	2C	ZDACFGC0, Database, Central Data
	2D	ZDAADSC0, ZDASRLC0, Database, Access Routines

⁴ Only valid for Duplex

Error codes

Display	Creation Flag	Status
	2F	ZMQSYNC0, Data Basis Synchronization
	30	ZODPBO00, Program Loader (PBO) ZOOLTCP00, TCP Sub System
	33	ZDBOTTRX, Wakeup Tracer Initialization Task
	3A	ZPPDEP00, Safety Equipment
	3B	ZMEUPDJA, ZMFLBTJ0, Update DB on HD, Logbook Task
	3F	ZOCRYPT0, Encryption
	41	ZAAHCM00, Communication Management
	44	ZODUSFM0, User File Manager
	45	ZODFMFM0, Flash Memory File Manager
	4A	ZMDFEST0, Front End Signalization Task
	4C	ZODDSCR0, Device Status Configuration
	4F	ZODBCKUP, Backup, Backup of Program System and Database
	50	ZODPCL00, Peripheral Computer Loader
	51	ZODPGL00, Program Loader
	58	ZGGDEB10, Residential Part of Debug
	59	ZBAACM00, ACL Manager
	5A	ZAFTRAN0, File Transfer
	5B	ZMHSTBMA, Support Task for BELAU
	5F	ZMQNFYJA, NOTIFY Task
	60	ZMDAMCJA, AMO Control internal/external
	62	ZMDSIG00, Signalization Task
	63	ZMBKST00, ZMNCDBR0, Support Task
	64	ZCGOUTP0, ETB Support Task

Display	Creation Flag	Status
7	70	ZPPDIAG0, EEA Support Task
6	7D	ZMDHIST0, ZPPCOA00, Residential HISTA Task, COA Task
8	7E	ZPPJTAE0, End-of-Jota-Task ADP
.	80	ZQFABT00, Activity Determination Task
!	82	ZDBCC000, Initialization of CC Data Basis
!	84	ZRSDEPS0, System Security Technics
!	85	ZOXHSR0S, Signalling Router
!	86	ZQFMAINS, Error Analysis of CC
!	8A	ZQQDC00S, Device Management in CC
!	8C	ZQQPITZ0, Peripheral Setup CC
!	8F	ZMDAMCGS, CC specific AM Routines
!	90	ZMBADPJ0, CP Interface Task to AM ZAAFTP0S, FTP Server
!	91	ZMIBRTJS, Board Reconfiguration Task ZMIKTTJS, Network Topology Task
!	92	ZMIBZMJ0, Time dependent Authorization Shift Task
!	94	ZCACALP0, Call Processing
!	96	ZCGCDBM0, Buffering of CDB's on ADP breakdown
!	98	ZCGCOLL0, Charge Gathering
!	9A	ZQQRTO0S, Routine Test Organisation CC
!	9C	ZQVVECOS, Connection Control in CC
!	9D	ZQSREC0S, Recovery in CC
!	A3	ZMIPTCHS, Patch Subsystem
!	AD	ZQQDIAG0, Diagnosis

Error codes

BOOT error codes

Display	Creation Flag	Status
U	AE	ZQFJTAES, End-of-Jota-Task CC
P.	B3	ZQFMAINL, Error Analysis of LTG
L	B4	ZDBLTG00, Data Basis Code for SWU and LTG
C.	B9	ZQISOMHL, Somup Handler
Q.	BB	ZEEPREP0, Pre-Processing of SWU
Q	BD	ZMBAMDB0, Technical Equipment Support Task LTG
-.	C0	ZQQDC00L, Device Management LTG
P.	C3	ZQQPITLL, Peripheral Setup LTG
u	CC	ZQQRTO0L, Routine Test Organisation LTG
-u	CD	ZQVVECOL, Connection Control in LTG
u	CE	ZQSREC0L, Recovery in LTG
L.	E0	ZQQCOS00, Communication Objekts for TDS
F.	F1	ZQFJTAEL, End-of-Jota-Task LTG
LL		Semaphor ONSMINI, wait for further Units of the Security Technic
-.		Periphery is beeing put back into service, Call Processing is beeing resumed
A		Activ

1.2 BOOT error codes

The BOOT FW controls the HL (in the CC and in the ADS) until transferred to the SYSLOAD. BOOT functions can then be called up via a FAR_GATE.

The BOOT HL is classified into a CC-HL or ADS-HL.

The following tables contains error codes that can be issued by the DP in the CC and ADS:

- [BOOT error codes in the ADP and the CC](#)

- [BOOT error codes when booting as CC](#)
- [BOOT error codes when booting as ADP](#)
- [BOOT error codes during the FWLP](#)
- [BOOT error codes while determining the reason for the restart](#)
- [BPL286 error codes \(BOOT Program Loader\)](#)
- [NFD286 error codes \(Named File Driver\)](#)

1.2.1 BOOT error codes in the ADP and the CC

Table 7: BOOT error codes in ADP and CC

Hex code	Name	Explanation	Recommended action
1000	WA_E_NMEM	No memory in system	Check load tables or increase number memory (either with MIP, M8M or by inserting memory modules in DM4L)
1002	WA_E_LAYB	PGL/IPL not ready for loading	Wait since PGL may be overloaded at the moment; otherwise reload or update APS if necessary
1004	WA_E_INT	General protection fault	Retry or switch on/off and check BOOT FW and APS
1005	WA_E_NOCO	Available queue in DPR is empty	Retry because system is overloaded
1006	WA_E_PCON	Container address for PUT_CONTAINER wrong	If necessary, trigger reload or exchange IP/MIP FW
1007	WA_E_FCON	Container address for FREE_CONTAINER wrong	If necessary, trigger reload or exchange IP/MIP FW
1008	WA_E_IND1	INDEX1 in LO_P_FAR incorrect	Check BOOT FW and Sysload
1009	WA_E_IND2	INDEX2 in LO_P_FAR incorrect	Check BOOT FW and Sysload
100A	WA_E_HOFA	Acknowledgment of RSTA message wrong	If necessary, trigger reload or exchange BOOT FW
100B	WA_E_CCHL	Common control will not boot	Check BOOT FW on both sides that they are equivalent and up-to-date
100C	WA_E_WDT	1-ms clock failed	Exchange DP
100D	WA_E_MEME	Memory defective	Exchange DP
100F	WA_E_DLNK	Incorrect DT information in link field	Reload or correct APS if necessary

Error codes

Hex code	Name	Explanation	Recommended action
1010	WA_E_RRSA	Wrong response to RSTA message	If necessary, trigger reload or exchange BOOT FW
1011	WA_E_RLSY	Wrong response to LOAD_SYSLOAD message	If necessary, trigger reload or exchange BOOT FW and check APS
1012	WA_E_RLAL	Wrong response to LOAD_ALL message	If necessary, trigger reload or exchange BOOT FW and check APS
1013	WA_E_RLJO	Wrong response to LOAD_JOB message	If necessary, trigger reload or exchange BOOT FW and check APS
1014	WA_E_RDMP	Wrong response to DUMP message	If necessary, trigger reload or exchange BOOT FW and check APS
1015	WA_E_RRSE	Wrong response to RSTE message	If necessary, trigger reload or exchange BOOT FW and check APS
1016	WA_E_SIDT	Segment descriptor in IDT	Check APS
1017	WA_E_SLOT	Start selector invalid	Check APS
1018	WA_E_LINK	Descriptor link interrupted	Check APS
1019	WA_E_SDDL	Too many data areas for SDD request	Check APS
1020	WA_E_SDT	Descriptor outside the descriptor table	Check APS and BOOT FW
1021	WA_E_HOME	Error in WA_P_HOME	Check APS and BOOT FW
1030	WA_E_PMT_GET	No free entry in PMT	Check load tables
1031 to 1036	WA_E_PMT_ADO_x	Error entering a memory area in the PMT (Physical Memory Table)	Check APS and BOOT FW
1038	WA_E_COMPUTE_RANGE	Error in defining area for selector	Check APS and BOOT FW
1039	WA_E_NO_SIOP	Illegal call of SIOP functions	Check BOOT FW and IOPx
2000	WA_E_TIP	IP is not collecting container	Check IP FW
2001	WA_E_LOCK	Queue blocked for too long	Check IP FW
2002	WA_E_RSIP	IP cannot be reset	Check IP FW and BG
2003	WA_E_IPER	IP has reset itself	Check IP FW

Hex code	Name	Explanation	Recommended action
3000	WA_E_TADM	Partner (ADS) not responding	ADS probably not yet booted or faulty
3001	WA_E_ADMH	ADS will not boot	Check boards in the ADS
3002	WA_E_TRCN	Transmit counter wrong	Check IP/MIP FW
3003	WA_E_TPID	Error in PID request	Check IP/MIP/BOOT FW
3004	WA_E_QBLK	Queue block byte set	Check IP/MIP/BOOT FW
3005	WA_E_DLNG	Data length too big	Check IP/MIP/BOOT FW
3010	WA_E_IECB	Bus handler error (not from BOOT)	Check IP/MIP FW
3011	WA_E_TOUE	Time overflow error	Check IP/MIP/BOOT FW
3012	WA_E_QBSH	Queue block short container	Check IP/MIP FW
3013	WA_E_QBLO	Queue block long container	Check IP/MIP FW
3014	WA_E_NOPA	IP cannot set up a connection	Check IP/MIP FW
3015	WA_E_CONE	Wrong task code	Check IP/MIP/BOOT FW
4003	WA_E_TEMPERATURE	Board-/ambient temperatur to high	Check fan
4100	WA_E_PCI_NO_MEMORY	No memory in system	Connect/check memory
4200	WA_E_NO_HOSTBRIDGE	Hostbridge not found in the system	Exchange DP
4204	WA_E_PCI_NO_DSCC4	No DSCC4 controller found	Exchange DP
4300	WA_E_PCI_UNEXPECTED_DEVICE	Wrong PCI controller found	Check DP/if necessary update LW
4400	WA_E_FW_NO_MATCH	FW ID does not correspond to board ID	Check DP/LW, if necessary, check HD
4545	WA_E_MONOPROC_DETECTED	one DPC5 is booted as MONO	Restart (HR at least)
4546	WA_E_SLOT_NOT_DETERMINED	Wrong slot	Check slot
4566	WA_E_JUMPER_6_SETTING	Wrong jumpering on board	Check jumper 6 (above battery jumper) (jumper must be inserted for ADP and MONO systems)

Error codes

Hex code	Name	Explanation	Recommended action
8001	WA_E_NO_OR_UNKNOWN_DEV	Unknown device or no device found at the PCI bus	Check board (particularly the PMC slot) - exchange DP
8002	WA_E_RESERVED_DEVICE	PCI device recognized at wrong slot	Check FW
8003	WA_E_PCI_INIT_ERROR	Error during PCI initialization	Check board
8004	E_PARAM	Wrong parameter	Check IP/MIP/BOOT FW

Recommended action:

- Retry: the action cannot be executed at the moment; please try again. If, after several retries, the action will not execute, please contact your system expert.
- Verify load tables: Check that the correct applications have been activated.
- Check FW: Check that the respective firmware is up-to-date.
- Check APS: Check that the APS used does not contain any errors, or that all necessary patches have been activated.
- Verify subsystem(s): Check that the subsystem(s) are available on load medium.
- Reinstall subsystem(s): Subsystem(s) on load medium defective; the subsystem(s) must therefore be reinstalled.
- If an action has not been recommended, the software probably contains an error.
- In this case, please contact your system expert with the full log and the relevant extracts from the history file

IMPORTANT: For a detailed error diagnosis, a log from the startup of the DP is also required.

1.2.2 BOOT error codes when booting as CC

The following table contains error codes that are only reported when the CC is booted. In this case, the error codes 31xx for LAN errors and 32xx for FWLP (FirmWare Loading Process) are used

LAN errors (error code 3100 - 31FFH) indicate a defective LAN connection between the CC and ADP. These errors may be specific to either LAN, TPS (Transport Service) or TCP (Transmission Control Protocol). The most frequent LAN error is 310A: The DP4L does not have a LAN connection. The HUB board may not be plugged in or may be faulty.

Causes and solutions:

- Check the HUB module at the slot and check the functions of the CC and ADP (modules inserted correctly?),
- Release of FW/LW of DP4L/DPC5 (CC) and DM3L/DM4L/DPC5 (in ADP),
- Board exchange, if necessary.

FWLP errors usually originate either on the LW (Load Ware) file, which is located on the load device or on the access path.

The most common FWLP error is 3212: An error occurred while sending/receiving to/from PGL (mostly timeout). For further information, please refer to the BOOT ERROR INFO.

Solutions/procedure:

- in the case of 3212 CC, restart with reload or power on,
- check file saved on load device (with rmx commands or with AMO stalist:":pds:apsc/cfw/cdp4i010",,100;

Table 8: BOOT-FW error codes when booting as CC

Hex code	Name	Explanation	Recommended action
3101	WA_E_BASE_INIT	LAN driver layer error	Wait until ADS has booted and check boards incl. FW
3102	WA_E_BLOCK_INIT	- " -	- " -
3103	WA_E_INTERR_INIT	- " -	- " -
3104	WA_E_RDRFILL_INIT	- " -	- " -
3105	WA_E_NO_STP_ENP	- " -	- " -
3106	WA_E_ETH_LONG	- " -	- " -
3107	WA_E_ETH_SHORT	- " -	- " -
3108	WA_E_RCV_NOBUFF	- " -	- " -
3109	WA_E_TR_RDYERR	- " -	- " -
310A	WA_E_LAN_INT	- " -	- " -
310B	WA_E_INT_STUCK	- " -	- " -
310C	WA_E_TDR_FULL	- " -	- " -
3141	WA_E_IP_RCVLEN_IMPL	IP layer error (Internet Protocol)	- " -
3181	WA_E_CON_ALREADY_EXIST	TCP layer error	- " -
3182	WA_E_CON_PLAUS_ERR1	- " -	- " -
3183	WA_E_CON_PLAUS_ERR2	- " -	- " -
3184	WA_E_CON_SETUP_DENIED	- " -	- " -
3185	WA_E_CON_SETUP_TIMO	- " -	- " -
3186	WA_E_DATASEND_SEND	- " -	- " -

Error codes

Hex code	Name	Explanation	Recommended action
3187	WA_E_NODATASEND_BUFFLACK	- " -	- " -
3188	WA_E_RSTSEND_BUFFLACK	- " -	- " -
3189	WA_E_RSTSEND_SEND	- " -	- " -
31A0	WA_E_IMPLAUS_STATE_OPEN	Error inside TCP state machine	- " -
31A1	WA_E_IMPLAUS_STATE_SEND	- " -	- " -
31A2	WA_E_IMPLAUS_STATE_RECEIVE	- " -	- " -
31A3	WA_E_IMPLAUS_STATE_ABORT	- " -	- " -
31A4	WA_E_IMPLAUS_STATE_SEGARIV	- " -	- " -
31A5	WA_E_IMPLAUS_EVENT	- " -	- " -
31A6	WA_E_CON_NOT_CLOSED	- " -	- " -
31A7	WA_E_BAD_SEND_STATE	- " -	- " -
31A8	WA_E_BAD_RECEIVE_STATE	- " -	- " -
31A9	WA_E_BAD_ABORT_STATE	- " -	- " -
31AA	WA_E_SEGARIV_ILLFLAGS1	- " -	- " -
31AB	WA_E_SEGARIV_ILLFLAGS2	- " -	- " -
31AC	WA_E_SEGARIV_ILLFLAGS3	- " -	- " -
31AD	WA_E_SEGARIV_REACHERR	- " -	- " -
31C0	WA_E_WAIT_MSEC	TPS Layer Error	- " -
31C1	WA_E_GLOBAL_1	- " -	- " -
31C2	WA_E_GLOBAL_2	- " -	- " -
31C3	WA_E_AVBUFF_LACK	- " -	- " -
31C4	WA_E_SEND_QUIT_1	- " -	- " -
31C5		- " -	- " -
31C6	WA_E_SND_NOBUFF_1	- " -	- " -
31C7	WA_E_RCV_PLAUS_1	- " -	- " -
31C8	WA_E_RCV_THROWAWAY_1	- " -	- " -
31C9	WA_E_RCV_THROWAWAY_2	- " -	- " -
31CA	WA_E_ACK_BUFF_LACK	- " -	- " -

Hex code	Name	Explanation	Recommended action
31CB	WA_E_SET_SEL_BASE	- " -	- " -
31CC	WA_E_PLAUS_GET_DATA	- " -	- " -
31CD	WA_E_GET_SEL_BASE	- " -	- " -
31CE	WA_E_SET_WD	- " -	- " -
31CF	WA_E_RCV_THROWAWAY_3	- " -	- " -
31D0	WA_E_RCV_THROWAWAY_4	- " -	- " -
3201	WA_Y_WRONG_HEX_POINTER	FWLP - pointer to hex-file do not start with offset "0"	Check BOOT LW
3202	WA_Y_IMPLAUS_RECORD	FWLP - the read record from the MCS86-file contained an wrong record type (MCS86 format)	Check BOOT LW
3203	WA_Y_IMPLAUS_BASE_ADDR	FWLP - while incrementing the base_address the last base_address was already greater	Check BOOT LW
3204	WA_Y_HEX_FILE_OVER_LIMIT	FWLP - the created hex-file was too great	Check BOOT LW
3205	WA_Y_RES_1	FWLP - not used	Check BOOT LW
3206	WA_Y_GET_FILE_LEN_ERROR	FWLP - the file on HD is too great	Check BOOT LW
3207	WA_Y_CHKSUM_LEN_ERROR	FWLP - the file length is not an odd value	Check BOOT LW
3208	WA_Y_CHKSUM_CALC_ERROR	FWLP - checksum was '0000'	Check BOOT LW
3209	WA_Y_FM_PROGRAM_ERR	FWLP - error while programming the FLASH memory	Check BOOT LW and if necessary check board

Error codes

Hex code	Name	Explanation	Recommended action
320A	WA_Y_FM_ERASE_ERR	FWLP - error while erasing the FLASH memory	Check BOOT LW and if necessary check board
320B	WA_Y_WRONG_FILE_TYPE_ON_HD	FWLP - the read file from HD is not MCS86 format	Check BOOT LW
320C	WA_Y_WRONG_MCS86_POINTER	FWLP - pointer to MCS86-file do not start with offset '0'	Check BOOT LW
3210	WA_Y_SET_SEL_ERR	FWLP - the BOOT function 'set_selector' returned an error	Check BOOT LW
3211	WA_Y_GET_SEL_ERR	FWLP - the BOOT function 'get_selector' returned an error	Check BOOT LW
3212	WA_Y_SEND_REC_LAY_ERR	FWLP - the called PGL returned an error	Check BOOT LW and ADS
8004	E_PARAM	Wrong parameter	Check BOOT LW

Recommended actions:

- Retry: the action cannot be executed at the moment; please try again. If, after several retries, the action will not execute, please contact your system expert.
- Check LW: Check that the respective LW (on path :pds:apsc/cfw/cdxxxx) is up-to-date and, if necessary, upgrade it to the latest version.
- Check FW: Check that the FW implemented (EPROM) is up-to-date and, if necessary, upgrade it to the latest version
- Check APS: Check that the APS used does not contain any errors, or that all necessary patches have been activated.
- Check ADS: Check whether the modules in the ADP are inserted in the correct slot; whether the ADS powered up correctly; whether the FW of the relevant modules 'are up to date' .
- Check board: check that the respective board is plugged in correctly (if necessary, unplug board and plug in again). If the error could not be recovered, change board and have the faulty board tested in the test field.
- If an action has not been recommended, the software probably contains an error. In this case, please contact your system expert with the full log and the relevant extracts from the history file.

IMPORTANT: For a detailed error diagnosis, a log from the startup of the DP is also required.

1.2.3 BOOT error codes when booting as ADP

The following errors can be issued by the BOOT in the ADP.

Table 9: BOOT-FW error codes in the ADP

Hex code	Name	Explanation	Recommended action
2B	WA_E_IO	Device IO error	Check SCSI-ID of the load medium and, if necessary, exchange HD or MO
2C	WA_E_IOPS	IOPS error	Check SCSI-ID of the load medium and, if necessary, exchange HD or MO
0001	E_TIME	Time has elapsed, load from FD	retry or wait
0004	E_LIMIT	The response cannot be linked in	retry or wait
0005	E_CONTEXT	Synchronous and asynchronous calls at the same time	retry or wait
0006	E_EXIST	The addressed area does not exist	Check load medium
0007	E_INCONSISTENT	Inconsistent bit set for PDS area. Alternatively, switched to HD or MO.	Check load medium
002B	WA_E_IO	IO time out	Check load medium
012B	WA_E_IO	Recovered error	Check load medium
022B	WA_E_IO	Drive not ready	Check load medium
032B	WA_E_IO	Non-critical error	Retry and, if necessary, check load medium
042B	WA_E_IO	Hardware error	Check load medium
052B	WA_E_IO	Wrong response	Retry and, if necessary, check load medium
062B	WA_E_IO	Advisory information from output device	Retry and, if necessary, check load medium
072B	WA_E_IO	Non-critical write error	Retry and, if necessary, check load medium

Error codes

Hex code	Name	Explanation	Recommended action
182C	WA_E_IOPS	SCSI not available	Retry and, if necessary, check load medium
1A2C	WA_E_IOPS	Device not initialized	Retry and, if necessary, check load medium
1B2C	WA_E_IOPS	Ready changed: READY/NOT READY/READY	Retry and, if necessary, check load medium
1C2C	WA_E_IOPS	Ready changed: READY/NOT READY	Retry and, if necessary, check load medium
202C	WA_E_IOPS	Task not implemented	Check IOPx FW
212C	WA_E_IOPS	Command not known	Check IOPx and BOOT FW
222C	WA_E_IOPS	Command not known	Check IOPx and BOOT FW
232C	WA_E_IOPS	Status unknown	Check IOPx and BOOT FW
2A2C	WA_E_IOPS	Task not running	Check IOPx and BOOT FW
302C	WA_E_IOPS	Bus device outside permitted values	Check IOPx and BOOT FW
322C	WA_E_IOPS	Inconsistent data transfer direction	Check IOPx and BOOT FW
382C	WA_E_IOPS	Maximum number of devices set up has been reached	Too many devices on the SCSI BUS
392C	WA_E_IOPS	Wrong device type	Check load medium
402C	WA_E_IOPS	No response from the device connected to the SCSI	Check load medium
412C	WA_E_IOPS	The number of bytes is wrong ($n < b \cdot l$)	Check IOPx and BOOT FW
422C	WA_E_IOPS	The number of bytes is wrong ($n < b \cdot l$)	Check IOPx and BOOT FW
442C	WA_E_IOPS	SCSI bus is being used by another device	Check devices at the SCSI bus

Recommended action:

- Retry: the action cannot be executed at the moment; please try again. If, after several retries, the action will not execute, please contact your system expert.
- Check APS: Check that the APS used does not contain any errors, or that all necessary patches have been activated

- Check ADS: Check whether the modules in the ADS are inserted in the correct slot; whether the ADS powered up correctly; whether the FW of the relevant modules 'are up to date'.
- Check FW: Check that the FW of the DP / DM boards or IOPx is up-to-date. In the case of IOPx, the jumper positions may have to be checked.
- Check load medium: Check that the hard disk or MO has the correct connection. Similarly, check the associated IOPx (IOPA, IOPS or IOPX). If several devices are at the SCSI bus, check the SCSI IDs of the individual devices
- If an action has not been recommended, the software probably contains an error.
- In this case, please contact your system expert with the full log and the relevant extracts from the history file.

IMPORTANT: For a detailed error diagnosis, a log from the startup of the DP is also required.

1.2.4 BOOT error codes during the FWLP

Errors during the firmware loading process are also signaled at the SSD. The following errors can occur:

Table 10: BOOT error codes for the firmware loading process

Hex code	Name	Explanation	Recommended action
3201	WA_Y_WRONG_HEX_POINTER	FWLP - pointer to hex-file do not start with offset '0'	Check BOOT LW
3202	WA_Y_IMPLAUS_RECORD	FWLP - the read record from the MCS86-file contained an wrong record type (MCS86 format)	Check BOOT LW
3203	WA_Y_IMPLAUS_BASE_ADDR	FWLP - while incrementing the base_address the last base_address was already greater	Check BOOT LW
3204	WA_Y_HEX_FILE_OVER_LIMIT	FWLP - the created hex-file was too big	Check BOOT LW
3205	WA_Y_RES_1	FWLP - not used	Check BOOT LW

Error codes

Hex code	Name	Explanation	Recommended action
3207	WA_Y_CHKSUM_LEN_ERROR	FWLP - the file length is not an odd value	Check BOOT LW
3208	WA_Y_CHKSUM_CALC_ERROR	FWLP - checksum was '0000'	Check BOOT LW
3209	WA_Y_FM_PROGRAM_ERR	FWLP - error while programming the FLASH memory	Check DM4L board
320A	WA_Y_FM_ERASE_ERR	FWLP - error while erasing the FLASH memory	Check DM4L board
320B	WA_Y_WRONG_FILE_TYPE_ON_HD	FWLP - the read file from HD is not MCS86 format	Check BOOT LW
320C	WA_Y_WRONG_MCS86_POINTER	FWLP - pointer to MCS86-file do not start with offset '0'	Check BOOT LW
3220	WA_Y_SET_SEL_ERR	FWLP - the BOOT function 'set_selector' returned an error	Check BOOT LW
3221	WA_Y_GET_SEL_ERR	FWLP - the BOOT function 'get_selector' returned an error	Check BOOT LW
3222	WA_Y_ATTACH_VOL_ERR	FWLP - the NFD function 'attach_volume' returned an error	Check BOOT LW
3223	WA_Y_DETACH_ERR	FWLP - the NFD function 'detach_volume' returned an error	Check BOOT LW
3224	WA_Y_NAM_SETUP_ERR	FWLP - the NFD function 'nam_setup' returned an error	Check BOOT LW
3225	WA_Y_BLOCK_READ_ERR	FWLP - the NFD function 'block_read' returned an error	Check BOOT LW

Hex code	Name	Explanation	Recommended action
3226	WA_Y_WAIT_DEV_ERR	FWLP - the NFD function 'wait_device' returned an error	Check BOOT LW
3227	WA_Y_NFD_DEV_ERR	FWLP - the NFD was called with incorrect values	Check BOOT LW
3230	WA_E_FM_UNKNOWN	FWLP - Flash module not detected	Exchange DP,
3231	WA_E_FM_DEVICE_NOT_SUPPORTED	FWLP - Flash module not supported	Check BOOT LW - exchange DP,
3232	WA_E_FM_BLOCK_ERASE_FAIL	FWLP - Error while deleting	Check BOOT LW,
3233	WA_E_FM_PROGRAM_FAIL	FWLP - Error while writing	Check BOOT LW,
3234	WA_E_FM_NOT_ALIGNED	FWLP - Parameter error	Check BOOT LW - check APS,
3235	WA_E_FM_OUT_OF_RANGE	FWLP - Parameter error	Check APS,
3236	WA_E_FM_PARAM	FWLP - Parameter error	Check APS,

Recommended action:

- Retry: the action cannot be executed at the moment; please try again. If, after several retries, the action will not execute, please contact your system expert.
- Check BOOT LW: Check that the BOOT LW (:pds:apsc/cfw/cdxxx) stored on the load device is up-to-date.
- Check load medium: Check that the hard disk or MO has the correct connection. Similarly, check the associated IOPx (IOPA, IOPS or IOPX). If several devices are at the SCSI bus, check the SCSI IDs of the individual devices.

IMPORTANT: For a detailed error diagnosis, a log from the startup of the DP is also required.

1.2.5 BOOT error codes while determining the reason for the restart

The following errors can occur while determining the reason for the restart:

Table 11: BOOT error codes while determining the reason for the restart

Hex code	Name	Explanation	Recommended action
3301H	WA_Y_E_AREA_NOT_AVAILABLE	Load area not available	Check the load medium, if necessary, exchange HD or MO
3302H	WA_Y_E_AREA_ONLY_ONE		
3303H	WA_Y_E_CONFIG	Invalid configuration	Check configuration
3304H	WA_Y_E_SUBFUNCT_NOT_PLAUS	Restart manager was activated using an invalid function	Exchange BOOT LW
3305H	WA_Y_E_REST_NOT_DETERMINED	No reason could be found for the restart	
3306H	WA_Y_E_NO_AREA_AVAILABLE	No load area available	Check the load medium, if necessary, exchange HD or MO
3310H	WA_Y_E_BS_INFO_SUBFCT_NOT_PLAUS		

IMPORTANT: For a detailed error diagnosis, a log from the startup of the DP is also required.

1.2.6 BPL286 error codes (BOOT Program Loader)

The error codes of the BOOT Program Loader (used to load the IPL) consist of the command used (e.g. ATTACH_VOLUME), the error which occurs (e.g. incorrect parameter transfer) and a basic error code (8880H).

Example:

Command: MP\$ATTACH 0010H

Error extension: E\$USER\$PARAM 0000H

Basic error code: 8880H

ERROR 8890H

Table 12: Error extension for BPL286

Hex code	Name	Explanation
0	E_USER_PARAM	Errors in task parameter
1	E_FILE	File not available/readable (IPL286)

Hex code	Name	Explanation
2	E_OMF	Error in the OMF of the load file
3	E_APS	Memory/descriptor overlap
4	E_INT_PARAM	Parameter errors (internal and external)
5	E_INT_DATA	Data errors (internal and external)
6	E_INTERN	Internal program error
7	E_LOCKED	File access is locked
0FH	E_NESTED	Nested error

Table 13: BPL286 error codes

Hex code	Name	Explanation	Recommend action
8880	E_USER_PARAM	General execution error in the BPL286	Check BOOT FW
889x	E_MP_ATTACH	Error executing command 'ATTACH_VOLUME'	Check BOOT FW
88Ax	E_IBM_FILES	Error accessing IBM-formatted files	Check BOOT FW/IOPx and APS
88Bx	E_OPEN_FILE	Error opening file	Check BOOT FW/IOPx and APS
88Cx	E_READ_FILE	Error reading file	Check BOOT FW/IOPx and APS
88Dx	E_CLOSE_FILE	Error closing file	Check BOOT FW
88Ex	E_DETACH	When executing command 'DETACH_VOLUME'	Check BOOT FW
88Fx	E_INIT_PHYSICAL	Error initiating physically addressed block	Check BOOT FW and load device
890x	E_READ_PHYSICAL	Error reading a physically addressed block	Check BOOT FW and load device
891x	E_COPY_PHYSICAL	Error copying physically addressed blocks	Check BOOT FW and load device

Error codes

Hex code	Name	Explanation	Recommend action
892x	E_COMPUTE_RANGE	Error comparing first/last segment address	Check BOOT FW and load device
893x	E_PMT_INIT	not used	
894x	E_PMT_GET	not used	
895x	E_PMT_PUT	not used	
896x	E_PMT_ADD	not used	
897x	E_AL_TAB_COMPARE	not used	
898x	E_DC_TAB_INIT	Error in the descriptor check table	Check BOOT FW
899x	E_DC_TAB_SEARCH	Error searching for an associated table for the specified descriptor	Check BOOT FW
89Ax	E_DC_TAB_ADD	Error adding in the descriptor check table	Check BOOT FW
89Bx	E_INSTALL_DSC	Error installing a descriptor	Check BOOT FW
89Cx	E_INSTALL_SPEC	Error installing a descriptor	Check BOOT FW
89Dx	E_LOAD_MODULE	Error loading an OMF Bootable file	Check BOOT FW and load device
89Ex	E_HD_MODULE	Error loading from hard disk	Check BOOT FW and load device
89Fx	E_FD_MODULE	Error loading from floppy disk (e.g. MODisk)	Check BOOT FW and load device
8A0x	E_BPL_MODULE	Error loading the IPL	Check BOOT FW and load device

Recommended action:

- Retry: the action cannot be executed at the moment; please try again. If, after several retries, the action will not execute, please contact your system expert.
- Check BOOT FW: Check that the BOOT FW implemented is up-to-date
- Check APS: Check that the version of APS implemented is up-to-date.
- Check load device: Check that the load device is in working order (e.g. using RMX commands). Check that the hard disk or MO has the correct connection. Similarly, check the associated IOPx (IOPA, IOPS or IOPX). If

several devices are at the SCSI bus, check the SCSI IDs of the individual devices.

IMPORTANT: For a detailed error diagnosis, a log from the startup of the DP is also required.

1.2.7 NFD286 error codes (Named File Driver)

Table 14: NFD286 error codes

Hex code	Name	Explanation	Recommended action
092B	E_MEDIA_CHANGED	Media has been changed	Check load device
8840	E_DRIVE	Drive not okay; New initialization	Check load device
8841	E_FNODE	Fnode number is too big	Check BOOT FW and load device
8842	E_EOF1	File is empty	Check load device
8843	E_EOF2	File/disk is inconsistent	Check load device
8844	E_SETUP	File was opened before loading/writing	Check BOOT FW
8846	E_FTYPE	Invalid file type	Check BOOT FW and load device
8847	E_BUFLLEN	User buffer too small	Check BOOT FW or caller
8848	E_DEVGRAN	Device granularity is greater than buffer	Check BOOT FW or caller
8849	E_INIT	Drive was not initialized before reading/writing	Check BOOT FW and load device
884A	E_FILENAME	Invalid file name/character	Check BOOT FW or caller
884B	E_NOTFOUND	File not contained in catalog	Check BOOT FW and load device
884C	E_MODE	Structure mode not supported	Check BOOT FW or caller
884D	E_DELETED	File deleted	Check BOOT FW and load device
884E	E_SHORTEN	Block length greater than last block	Check BOOT FW and load device
884F	E_LENGTHEN	Block length smaller than last block	Check BOOT FW and load device

Error codes

Hex code	Name	Explanation	Recommended action
8850	E_UNDFLW	More read than written	Check BOOT FW or caller
8851	E_OVFLOW	FIFO too small	Check BOOT FW or caller
8852	E_INCONSISTENT	CLEO inconsistent/not initialized	Check BOOT FW or caller
8853	E_PNAFID_SUPPORT	(CDD) _area_offset Blocksize > 64k	Check BOOT FW or caller
8854	E_DDENSITY	FD is not single density	Check load device
8855	E_WRITEPROTECT	File is write protected	Check load device
8856	E_SYSDATA	No system file permitted apart from directory	Check BOOT FW or caller
8857	E_NAME_LEN	File name too long	Check BOOT FW
8858	E_IBM_HDR	IBM header1 does not contain a volume file	Check BOOT FW and load device
8859	E_EBC_ZIFF	Number field does not contain an EBCDIC number	Check load device
885A	E_DEV_TYPE	File type is not valid for NAFID	Check load device
885B	E_CON_TAB	Connection table overflow	Check BOOT FW
885C	E_CONNECTION	Connection not valid for user	Check BOOT FW or caller
885D	E_IBM_ONLY	Only IBM format permitted	Check BOOT FW or caller
885E	E_ERMAP	Reserved tracks on FD	Check BOOT FW or caller
885F	E_VOL1	IBM format not supported data inconsistencies	Check BOOT FW
8860	E_NO_RS232	No RS232 connection (SBC only)	Check BOOT FW and load device
8861	E_DATCAT_FUL	Too many catalog entries in DAT	Check DAT
8862	E_DATCAT_EMPTY	No catalog entries in DAT	Check DAT
8863	E_DAT_NOSUPPORT	Function not supported for DAT	Check DAT
8880	E_USER_PARAM	Errors in task parameter	Check BOOT FW
8881	E_FILE	File not available/readable (IPL)	Check load device
8882	E_OMF	Error in the OMF of the load file	Check BOOT FW and load device

Hex code	Name	Explanation	Recommended action
8883	E_APS	Memory/descriptor overlap	Check BOOT FW
8884	E_INT_PARAM	Parameter errors (internal and external)	Check BOOT FW
8885	E_INT_DATA	Data errors (internal and external)	Check BOOT FW
8886	E_INTERN	Internal program error	Check BOOT FW
8887	E_LOCKED	File access is locked	Check load device
888F	E_NESTED	Nested error	Check BOOT FW

Recommended action:

- **Retry:** the action cannot be executed at the moment; please try again. If, after several retries, the action will not execute, please contact your system expert.
- **Check BOOT FW:** Check that the BOOT FW implemented is up-to-date
- **Check DAT:** Check that the files stored on the DAT are contained in the correct directories.
- **Check caller:** Check the caller of the NFD function (mostly Sysload).
- **Check load device:** Check that the load device is in working order (e.g. using RMX commands). Check that the hard disk or MO has the correct connection. Similarly, check the associated IOPx (IOPA, IOPS or IOPX). If several devices are at the SCSI bus, check the SCSI IDs of the individual devices.

1.3 IPL286, PGL286 and PBO286 error codes

Table 15: IPL, PGL, PBO286 error codes

Hex code	Name	Explanation	Recommended action
02	MC_Y_E_MEM	Insufficient memory	Retry
8430	MC_Y_E_OMF_ERR	Error in OMF286	Reinstall subsystem
8431	MC_Y_E_TAB_ERR	Physical memory table error(s) or error(s) in descriptor table, link table, load table	Verify load tables, reinstall subsystem(s)
8432	MC_Y_E_USER_ERR	User error	Verify time out
8433	MC_Y_E_OS_ERR	Error in operating system	
8434	MC_Y_E_RMX_ERR	Error in RMX nucleus	
8435	MC_Y_E_DMS_ERR	Error in data management system	

Error codes

Hex code	Name	Explanation	Recommended action
8436	MC_Y_E_DSC_ERR	Descriptor overlap	Reinstall subsystem(s)
8437	MC_Y_E_CHSU_ERR	Checksum error	Reinstall subsystem(s)
8438	MC_Y_E_MEM_ERR	Insufficient memory	Insert more memory; verify load tables
8439	MC_Y_E_NAFID_ERR	Error in the named file driver	Verify load device
843A	MC_Y_E_INT_ERR	Internal PGL/PBO error; descriptors in memory and on load volume not the same	
843B	MC_Y_E_CONT_ERR	Continuous error	Check first error message
8410	MC_Y_E_WAIT	Task cannot be processed at the moment	Retry
8441	MC_Y_E_EXIST	Subsystem already loaded	Verify load tables
8442	MC_Y_E_NOT_EXIST	Object etc. does not exist	
8443	MC_Y_E_CNR_CHK	Wrong computer number	Verify DP HW/ FW
8444	MC_Y_E_CONTEXT	Wrong task sequence	
8445	MC_Y_E_LOGNAME	Logical device name wrong	Verify logical device name (AMO DDSM)
8446	MC_Y_E_LOCK	Directory locked	Retry
8447	MC_Y_E_REQUEST	UNLOCK before LOCK finished	Retry
8448	MC_Y_E_WRITE	Error writing to lock table	
8449	MC_Y_E_LTBCNT	Too many entries in the lock table	
844A	MC_Y_E_BREAK	Load process interrupted by PGL	Retry
844B	MC_Y_E_BREAK_PBO	Load process interrupted by PBO	Retry
844C	MC_Y_E_RESCUE_MODE	ADP running in RESCUE mode	Reinstall the load device

Hex code	Name	Explanation	Recommended action
8847	MC_Y_E_BUFLN	User buffer too small	
884B	MC_Y_E_NOTFOUND	File not contained in catalog	Verify subsystem(s)

Recommended action:

- Retry: the action cannot be executed at the moment; please try again. If, after several retries, the action will not execute, please contact your system expert.
- Verify load tables: Check that the correct applications have been activated.
- Verify subsystem(s): Check that the subsystem(s) are available on load medium.
- Reinstall subsystem(s): Subsystem(s) on load medium defective; the subsystem(s) must therefore be reinstalled.
- If an action has not been recommended, the software probably contains an error. In this case, please contact your system expert with the full log and the relevant extracts from the history file.

1.4 PCL286 error codes

Table 16: PCL286 error codes

Hex code	Name	Explanation	Recommended action
8800	OP_Y_E_WARNINGS	No hardware, warning flags output	None
8801	OP_Y_E_PGLIBM	Internal PGLIBM error	
8802	OP_Y_E_MEM	Insufficient memory	Retry
8803	OP_Y_E_HARD_WARN	Errors can occur with other commands or options	
8804	OP_Y_E_COMMAND	Invalid or inconsistent parameter	
8805	OP_Y_E_LOADER_SUPPORT	Command or module not supported	
8806	OP_Y_E_FILE	Invalid file name	
8807	OP_Y_E_EOF	End of file before MOD_END	Reinstall
8808	OP_Y_E_REC_FMT	Object Module Format (OMF) error(s)	Reinstall
8809	OP_Y_E_CHECKSUM	Object Module Format (OMF) error(s)	Reinstall
880A	OP_Y_E_SAVE_TYPE	LTL data cannot be saved	

Error codes

Hex code	Name	Explanation	Recommended action
880B	OP_Y_E_NO_SAVE_SEG	No segment definition for SAVE_DATA	
880C	OP_Y_E_HEADER	OMF error	Reinstall
880E	OP_Y_E_ALIGN	Mixed ABS/LTL segments	Reinstall
880F	OP_Y_E_NO_NAME	No name definition found	Reinstall
8810	OP_Y_E_NAME_COUNT	OMF error	Reinstall
8811	OP_Y_E_NAME_INDEX	OMF error	Reinstall
8812	OP_Y_E_NO_SEGS	No segment definition found	Reinstall
8813	OP_Y_E_SEG	OMF error	Reinstall
8814	OP_Y_E_SEG_COUNT	OMF error	Reinstall
8815	OP_Y_E_SEG_INDEX	OMF error	Reinstall
8816	OP_Y_E_GRP	OMF error	Reinstall
8817	OP_Y_E_GRP_COUNT	OMF error	Reinstall
8818	OP_Y_E_GRP_INDEX	OMF error	Reinstall
8819	OP_Y_E_CNF_COUNT	More than one CNF segment found	Reinstall
881A	OP_Y_E_CNF_SIZE	CNF segment is too big	Reinstall
881B	OP_Y_E_CNF_GRP	CNF segment is part of a group	Reinstall
881C	OP_Y_E_NO_DESCRIPTOR	Data record does not have a corresponding segment	Reinstall
881D	OP_Y_E_DSC_ADDR	No space for segment in the load area output	Reinstall
881E	OP_Y_E_DSC_STATUS	Record does not have a valid corresponding segment	Reinstall
881F	OP_Y_E_OFFS_OVFLW	Segment (beginning and) length over 64 Kbytes	Reinstall
8820	OP_Y_E_IT_SAVE_DATA	Iterated record in save-area	
8821	OP_Y_E_FIXUP	OMF error	Reinstall
8822	OP_Y_E_REJ_FIX	OMF error	Reinstall
8823	OP_Y_E_BUF_SIZE	Record to be processed is too long	Reinstall
8824	OP_Y_E_EXPAND	Expanded iterated record > 64kB	Reinstall

Hex code	Name	Explanation	Recommended action
8825	OP_Y_E_STACK_SIZE	Too many recursions f. iterated record	Reinstall
8826	OP_Y_E_COVER_TAB_SIZE	Internal PGLIBM table is too small	
8827	OP_Y_E_DSC_TAB_SIZE	Too many names/segments/groups specified	
8828	OP_Y_E_TRANS_LEN	Length of bytes transferred is zero	Reinstall
8829	OP_Y_E_MEM_OVFL	Addressing attempt over 16 Mbytes	Reinstall
882A	OP_Y_E_ATM_OVFL	Attempt to address an ATM register higher than 7	Reinstall
882B	OP_Y_E_ATM_NUM	No free ATM register for destination address	Reinstall
882C	OP_Y_E_INT_DSC_OVLP	Internal area DSC overlap	Reinstall
882D	OP_Y_E_DSC_OVLP	Descriptor overlap	Reinstall
882E	OP_Y_E_ABORT	Loading of buffer was aborted	Retry

Recommended action:

- Retry: the action cannot be executed at the moment; please try again. If, after several retries, the action will not execute, please contact your system expert.
- Reinstall: The loadware on the load device is defective and must therefore be re-installed.
- If an action has not been recommended, the software probably contains an error. In this case, please contact your system expert with the full log and the relevant extracts from the history file.

IMPORTANT: For a detailed error diagnosis, a log from the startup of the DP is also required.

1.5 FAM/BIOS error codes

Table 17: DMS error codes

Hex code	Name	Explanation	Recommended action
01	ON_Y_E_TIME	Wait time elapsed	Switch on area/ device with ACT-DSSM

Error codes

Hex code	Name	Explanation	Recommended action
04	ON_Y_E_LIMIT	No space in catalog	Retry, if necessary initiate a soft restart
06	ON_Y_E_EXIST	Connection/mailbox does not exist	Switch on area/device with ACT-DSSM
08	OD_Y_E_CONFIG	Task not supported	Check file type
20	OD_Y_E_FILE_EXIST	File already exists	Check file name entered
21	OD_Y_E_FILE_NOT_EXIST	File does not exist	Check file name entered
22	OD_Y_E_DEV_NOT_EXIST	Device and file driver incompatible	See below
23	OD_Y_E_SUPPORT	Parameter combination not supported	See below
24	OD_Y_E_EMPTY_ENTRY	Directory is empty	See below
25	OD_Y_E_DIR_END	Directory does not contain so many entries	See below
26	OD_Y_E_ACCESS	Invalid access mode	See below
27	OD_Y_E_FILE_TYPE	Operation for file type invalid	Check file type
28	OD_Y_E_SHARE	Invalid parallel access	Check file name entered; if necessary, try DEACT-DSSM, then ACT-DSSM on the relevant device/area
29	OD_Y_E_SPACE	No free space on the volume	Delete unnecessary files
2A	OD_Y_E_ILL_DD_RQ	Illegal device driver request	See below
2B	OD_Y_E_IO	IO error (hardware fault)	Check hardware (cable connections, device switched on?)
2C	OD_Y_E_FLUSHING	Connection was cleared before task completed	Repeat command
2D	OD_Y_E_ILL_VOL	Device incorrectly formatted	Save data and reinitialize area
2E	OD_Y_E_DEV_OFFLINE	Device is OFFLINE	Switch on device
2F	OD_Y_E_ILL_FD_RQ	Illegal file driver request	See below

Hex code	Name	Explanation	Recommended action
30	OD_Y_E_FRAGMENTATION	Expansion not possible (fragmentation)	Save data and reinitialize area
31	OD_Y_E_DIR_NOT_EMPTY	Directory is not empty	See below
32	OD_Y_E_NOT_FILE_CONN	Not a file, but a device connection	See below
33	OD_Y_E_NOT_DEVICE_CONN	No device connection	See below
34	OD_Y_E_CONN_NOT_OPEN	Connection not open	Repeat command
35	OD_Y_E_CONN_OPEN	Connection is already open	Soft restart, repeat command
36	OD_Y_E_BUFFERED_CONN	Connection opened by EIOS, used by BIOS	Soft restart, repeat command
37	OD_Y_E_OUTSTANDING_CONN	In the case of soft restart, must connect to device	See below
38	OD_Y_E_ALREADY_ATTACHED	Device is already switched on	Soft restart, repeat command
39	OD_Y_E_DEV_DETACHING	Addressed device is just being detached	Repeat command
3A	OD_Y_E_NOT_SAME_DEV	Files on different devices	Check file names entered
3B	OD_Y_E_ILLOGICAL_RENAME	Error in specified new_pathname	Check file names entered
3C	OD_Y_E_STREAM_SPECIAL	Unexpected task for a Stream_File	See below
3D	OD_Y_E_ILL_FNODE	Connection refers to illegal Fnode	Area logically destroyed, save data and reinitialize
3E	OD_Y_E_PATHNAME_SYNTAX	Path name contains invalid characters	Area logically destroyed, save data and reinitialize
3F	OD_Y_E_FNODE_LIMIT	Maximum number of Fnodes exceeded	Delete unnecessary files
40	OD_Y_E_LOGNAME_SYNTAX	Invalid path name	Check file names entered
41	OD_Y_E_CLOSE	Error closing file	Soft restart, repeat command
42	OD_Y_E_IOMEM	Insufficient memory in the BIOS preventing processing	Soft restart, repeat command

Error codes

Hex code	Name	Explanation	Recommended action
44	OD_Y_E_MEDIA	Addressed device is not ONLINE	Switch on device, insert or exchange medium
45	OD_Y_E_LOGNAME	Logical name contains an error	Check file names entered
46	OD_Y_E_NOT_OWNER	Not owner of the device being detached	See below
47	OD_Y_E_IO_JOB	Size for object directory too small	See below
50	OD_Y_E_IO_UNCLASS	Unknown IO error	See below
51	OD_Y_E_IO_SOFT	Minor IO error, try again	Repeat command
52	OD_Y_E_IO_HARD	Critical IO error	Exchange device
53	OD_Y_E_IO_OPRINT	Addressed device is OFFLINE	See below
54	OD_Y_E_PROTECTED	Volume is write-protected	Remove write protection
55	OD_Y_E_IO_NO_DATA	No other data found	See below
56	OD_Y_E_IO_MODE	Write/read conflict	See below
8004	OD_Y_E_DMS_PARAM	Wrong parameter	See below
8020	OD_Y_E_ILL_FILE_DRIVER	Wrong file driver for the file type	Check file type
8021	OD_Y_E_NO_USER	No users defined	See below
8022	OD_Y_E_NO_PREFIX	No prefix defined	See below
8023	OD_Y_E_BAD_BUFF	Illegal use of buffers for IO	See below
802B	OD_Y_E_DEL_RECORD	Record deleted (with SAM files)	See below
802C	OD_Y_E_VOL_NOT_IN_DEV	Volume has not been inserted	Insert volume
8040	OD_Y_E_NOT_LOGNAME	Object is not a device or a file connection	See below
8041	OD_Y_E_NOT_DEVICE	Token object, but not a device connection	See below
8042	OD_Y_E_CONNECTION	Token object, but not a device connection	See below
8043	OD_Y_E_SUSY_NOT_LOADED	Subsystem not loaded	See below

Hex code	Name	Explanation	Recommended action
8101	OD_Y_E_DMS	Error in DMS	See below
8102	OD_Y_E_EOF	End of file identified	See below
8103	OD_Y_E_DEV_NOT_ATTACHED	Device not connected	Switch on area/ device with ACT- DSSM
8104	OD_Y_E_VOL1	No VOL1 ID	See below
8105	OD_Y_E_VOLID	Volume ID does not exist	Check tape names entered
8106	OD_Y_E_USERID	User ID does not exist	Check tape names entered
8107	OD_Y_E_HDR	Not standard HDR label	See below
8108	OD_Y_E_EOD	Logical tape end (end of data) identified	See below
8109	OD_Y_E_EOT	Physical tape end (End of Tape) identified	See below
8201	OD_Y_E_SAM	File is not a SAM file	See below
8202	OD_Y_E_RECORD_LENGTH	Record length error	See below
8203	OD_Y_E_CAT_INCONSISTENT	Catalog inconsistent or not available	Reinitialize DAT tape
8204	OD_Y_E_CAT_NOT_EXIST	Catalog cannot be found	Reinitialize DAT tape
8205	OD_Y_E_CAT_PARTIT_TOO_SMALL	Catalog partition too small	Use new tape
8206	OD_Y_E_DEVICE_NOT_ATTACHED	Device not connected	Switch on area/ device with ACT- DSSM
8207	OD_Y_E_NO_DEV_CONNECTED	No connection to the device/no device available	Switch on area/ device with ACT- DSSM/check or connect device
8208	OD_Y_E_NO_ERR_INFO	Error information cannot be found	See below
8209	OD_Y_E_NO_RESPMBX	No or wrong mailbox signal	See below
8210	OD_Y_E_NO_SS_NO_CATALOG	Device not entered in the DB	Enter part number with AMO DTSM
8211	OD_Y_E_NOT_MEDIUM_CONN	Connection is not a volume connection	Check file names entered

Error codes

Hex code	Name	Explanation	Recommended action
8212	OD_Y_E_TSK_OR_MBX_INVALID	Disk or mailbox symbol contains an error	Check file names entered
8213	OD_Y_E_BYTE	File is not a byte file	See below
8300	OD_Y_E_DD_IO_HARD	Hardware error; normally device faulty	Exchange device
8301	OD_Y_E_DD_IO_SOFT	Software error	Repeat command, if necessary exchange device
8302	OD_Y_E_DD_LIMIT	Block too big	See below
8303	OD_Y_E_DD_DRIVE_NOT_READY	Drive not ready	Switch on power at the device, then activate with ACT-DSSM
8304	OD_Y_E_DD_UNIT_ATTENTION	New attempt	If the action has not been carried out, retry
8305	OD_Y_E_DD_REJECT	Disconnection error (magnetic tape)	See below
8306	OD_Y_E_DD_SCSI_CNTR	Diagnosis error (magnetic tape)	See below
8307	OD_Y_E_DD_FILE_PROTECT	Write protection	Remove write protection
8308	OD_Y_E_DD_UNIT_RESERVED	Device reserved for another controller	See below
8309	OD_Y_E_DD_VOL_OVERFLOW	End of tape reached; Rewind?	See below
830A	OD_Y_E_DD_FILE_MARK	File marking found	See below
830B	OD_Y_E_DD_EOT	End of tape reached	See below
830C	OD_Y_E_DD_TOO_LARGE	Transfer length too large	See below
830D	OD_Y_E_DD_MED_ERROR	Tape error	Exchange volume
830E	OD_Y_E_DD_VAR_MODE	Unit is in variable mode	See below
830F	OD_Y_E_DD_WRONG_SIZE	Incorrect block size	See below
8310	OD_Y_E_DD_BOT	Beginning of tape reached	See below
8311	OD_Y_E_DD_IO_PARITY	Parity error	Check parity settings on SCSI bus; if necessary exchange device/IOPA(X)

Hex code	Name	Explanation	Recommended action
8312	OD_Y_E_DD_ILL_REQUEST	Illegal request (wrong parameter in command block (CDB))	See below
8313	OD_Y_E_DD_ILL_FUNCTION	Illegal function	See below
8314	OD_Y_E_DD_DUIB_NOT_FOUND	Device information block not found	See below
8315	OD_Y_E_DD_ILL_SPECIAL	Special command not accepted by the BIOS	See below
8316	OD_Y_E_DD_BLANK_TAPE	Part of a blank tape was read	See below
8317	OD_Y_E_DD_DENSITY	Incorrect density (format)	See below
8318	OD_Y_E_DD_ABORT	SCSI command aborted	Check SCSI bus (cable connections, terminating resistors), if necessary exchange IOPA(X)
8319	OD_Y_E_DD_COPY_ABORT	SCSI 'COPY' Aborted	Check SCSI bus (cable connections, terminating resistors), if necessary exchange IOPA(X)
831A	OD_Y_E_DD_EOD	End of data on the tape reached	See below
831B	OD_Y_E_DD_SETMARK	SETMARK found	See below
831C	OD_Y_E_DD_BOP	BOP found	See below
831D	OD_Y_E_DD_TAPE_LOAD	Tape load executed	See below
831E	OD_Y_E_DD_DEV_RESET	Device has been reset	Repeat command
831F	OD_Y_E_DD_IOP_WRONG_FW	IOP has the wrong FW version	Upgrade IOPA(X) firmware to the latest version
8320	OD_Y_E_DD_IOP	IOP error	Exchange IOPA(X) firmware and/or board IOPA(X)
8330	OD_Y_E_DD_RES_END	-	-

Error codes

Operating system error codes

IMPORTANT:

General procedure for DMS errors (unless an action has been given in the above table):

- 1) Repeat command.
- 2) If the same or another error should occur:
- 3) initiate a soft restart in the ADP and repeat the command.
- 4) If the same or another error should occur after this, the software probably contains an error. In this case, please contact your system expert with the full log and the relevant extracts from the history file.

1.6 Operating system error codes

Table 18: Operating system error codes

Hex code	Name	Explanation	Recommended action
0001	ON_Y_E_TIME	Timeout	
0002	ON_Y_E_MEMORY	Insufficient memory	
0004	ON_Y_E_LIMIT	Object limit reached	
0005	ON_Y_E_CONTEXT	System call made at incorrect position	
0006	ON_Y_E_EXIST	Object address of the token does not exist	
0007	ON_Y_E_STATE		
0009	ON_Y_E_INT_SATURATION		
000A	ON_Y_E_INT_OVERFLOW		
000C	ON_Y_E_NAK_MBU1	No acknowledgment from MBU1	
000D	ON_Y_E_NAK_MBU2	No acknowledgment from MBU2	
000E	ON_Y_E_NAK_MBU3	No acknowledgment from MBU3	
000F	ON_Y_E_NAK_MBU4	No acknowledgment from MBU4	
0010	ON_Y_E_NAK_LONG_MSG	No acknowledgment from receiving processor	
0011	ON_Y_E_BG_NOT_READY	Bus processor could not be booted	
0022	ON_Y_E_OBJFOR	Continuous number of tasks to mailbox, semaphore or region	
0023	ON_Y_E_OBJLINK	Token in obj. link not in available memory or object link continuous	
0024	ON_Y_E_EXTLINK	Error for object inspection with debug	

Hex code	Name	Explanation	Recommended action
0025	ON_Y_E_TASKLINK	Error for object inspection with debug	
0026	ON_Y_E_CHILDLINK	Error for object inspection with debug	
0028	OL_Y_E_RESOURCE_BUSY	The requested TCP/IP resource is already in use	Check TCP/IP configuration
0029	OL_Y_E_WOULD_BLOCK	The complete performance of the activated function would block the activating party for an unspecified period of time	
002A	OL_Y_E_CONN_LOSS	Loss of connection	Check LAN connections
002B	OL_Y_E_TIMEOUT	Timeout occurred before function was executed.	Check LAN connections
002C	OL_Y_E_DUMMY_CALLED	A dummy was activated rather than the function requested	Check whether the TCP/IP application is activated using the load table
002D	OL_Y_E_BAD_PARAM	Parameter has an invalid value.	Check TCP/IP configuration
002E	OL_Y_E_FATAL_INTERNAL	Internal TCP/IP transport layer error	
002F	OL_Y_E_CONNECTING	TCP/IP connection is being set up	
0088	ON_Y_E_SCHREIBSCHUTZ	No longer used	
4000	ON_Y_E_NO_ACKNOWLEDGE	The system waits for a response for another processor to no avail. Check whether all central boards have been booted	
8000	E_ZERO_DIVIDE	No longer used	
8001	E_OVERFLOW	No longer used (Interrupt 4)	
8002	ON_Y_E_TYPE	Token references existing OS object, this is, however, not the type required	
8003	undefined	No longer used	
8004	ON_Y_E_PARAM	A parameter unequal to token contains an invalid value.	
8005 - 800E	reserved by the iRMX Nucleus	No longer used	
800F	ON_Y_E_BAD_ADDR	The logical address is invalid. The selector either displays an invalid segment or the offset is outside the segment limits	

IMPORTANT: General procedure for operating system errors: Operating system errors are usually caused by a software error or hardware and operating errors which are not taken into sufficient consideration by the software. An accurate diagnosis cannot be made without any further details (call code, user address, etc.). Some operating system error codes overlap the DMS error codes. If an error occurs while the DMS is in use, it should be investigated first (DMS error code table). If an error cannot be cleared and if this same error continues to occur, please contact your system expert with the full log, the relevant extracts from the history file, the specification of the system software and hardware configuration and a description of the circumstances under which the error occurred or recurs.

2 AM handling of alarms

2.1 AMOs used

The AMO's below are used in conjunction with alarms, error messages or message outputs:

- AMO-VADSU / VADSM
- AMO-GRA
- AMO-HISTA / HISTO
- AMO-SIGNL
- AMO-TDCSU
- AMO-ASSGN

2.2 Validation data for central and periphery alarms

The threshold values and validation times of the central and periphery alarm classes can be modified. Exceptions: threshold values of certain central alarms that are marked in the tables of central alarm classes (see Troubleshooting, Alarm concept). The validation data and threshold values are modified by means of the AMOs VADSU (SWU) and VADSM (ADP/SM).

Example:

Modifying the threshold value and validation time of the major alarm for central alarm 5 in the SWU:

```
CHANGE-VADSU: CATEGORY=MMA, ALARM CL=CENTRAL, ALARMNO=5,  
THRESHD2=4, TIME2=1000;
```

2.3 Configuring, modifying and deleting SWU logical alarms

The special alarms (alarms numbers 1 to 7) are already assigned by the system. Only threshold values and validation times can be modified for these alarm classes with the AMO VADSU. The assignment to trunk circuits is performed with the AMOs TACSU / TDCSU (for further information see Alarm concept, Special alarms).

Directional and personal alarms are configured and deleted with the AMO VADSU. The AMO searches on request for a free alarm number. The validation time and the threshold value as well as the alarm name can be changed in the case of an alarm that has already been configured.

The directional alarms configured with the AMO VADSU are assigned to PENs with the AMOs TACSU, TDCSU and TSCSU. TACSU configures analog circuits, TDCSU configures digital circuits and TSCSU configures special circuits for toll lines, special equipment and service modules. When configuring a circuit, the search for a free PEN can be left to the AMO. The B-channels in an S2 circuit can be configured individually, in groups or completely with a single command. Individual B-channels in an S2 circuit can also be added or removed.

A directional alarm can also be assigned to a group of trunk circuits configured beforehand with the AMO BUEND.

In the same way, personal alarms configured with the AMO VADSU can be assigned to station numbers with the AMOs SBCSU and SCSU. The AMO SBCSU configures the S0/Up0 ports for digital terminals and SET 500/600/700. The AMO SCSU configures the ports of all other terminals.

See also:

- [Differences between SWU-logical alarm classes depending on the version](#)

2.3.1 Differences between SWU-logical alarm classes depending on the version

The number of directional alarm classes is 512. For the distribution of directional and personal alarm classes see [Table 19](#).

Table 19: Distribution of directional and personal alarm classes

Alarm class range directional	Alarm class range personal
8 - 519 (512)	520 - 583 (64)

Creating a (directional) alarm for an S0 link (no CO trunk): The first step is to add an alarm with the AMO VADSU:

If you do not specify an alarm number, the AMO looks for the first free alarm class (in the example below this is the first directional alarm No. 8).

ADD -

```
VADSU:TYPE=DIR,THRESHD1=10,THRESHD2=20,TIME1=300,TIME2=600,
NAME=AL1;
```

The AMO-VADSU then issues the following advisory message:

```
H01: ALARM NUMBER 08 WAS CONFIGURED.
```

Or you can select the alarm number yourself:

```
ADD-VADSU:ART=DIR,ALARMNO=
63,THRESHD1=10,THRESHD2=20,TIME1=300,TIME2=600, NAME=AL1;
```

The AMO-VADSU then issues the following advisory message:

```
H01: ALARM NUMBER 063 WAS CONFIGURED.
```

The next step is to assign the newly added alarm number to the PEN (created beforehand) of your choice:

```
CHA-TDCSU:PEN=01-02-103-00,ALARMNO=08,DEV=S0CONN;
```

The AMO TDCSU then issues the following advisory messages:

```
H03 : CIRCUIT FOR PEN 1-2-103-0 CHANGED
```

You can use the AMO VADSU to display the PENs assigned to directional alarms and the station numbers assigned to personal alarms:

Example:

To display assignments of logical alarm numbers 08 through 522 (i.e. of directional alarms 08 through 519 and personal alarms 520 through 522):

DIS-VADSU: ASS,08&&522;

Display output

ASSIGNMENT: DIRECTIONAL ALARMS

ALARM NO.	PENS ASSIGNED
08	1-2-103-00
324	1-1-007-05

ASSIGNMENT: PERSONAL ALARMS

ALARM NO.	STATION NUMBERS ASSIGNED
520	2500 2501 2503 2507 2511 2533 2534 2535 2536 2541
521	3405 3502
522	3300 3301

IMPORTANT: If the PEN or station number is assigned to an SWU-log. alarm, the PEN/station number is monitored only by this alarm and monitoring by the appropriate SWU periphery summation alarm is deactivated. Monitoring by the SWU periphery summation alarm is reactivated when this assignment is deleted. When the PEN or station number is assigned to the new alarm class, it is automatically assigned to the new alarm number in all hardware error messages which reference this PEN/station number (DEV/CIR/Board FMs).

The corresponding assignments are automatically canceled when you delete a personal or directional alarm.

Example:

To delete directional alarm 8:

DEL-VADSU:08;

The AMO then issues the following advisory message:

H04 : ALARM NUMBER 8 WAS DELETED ASSIGNMENT TO FOLLOWING
PENS CANCELED : 1-2-103-0

2.4 Deactivating and activating alarms

2.4.1 General

Broadly speaking, all alarm classes can be deactivated and activated. Deactivation means that alarm handling for the relevant alarm class is disabled. Activation re-enables alarm handling for the alarm class in question.

If an alarm is waiting at the time when its corresponding alarm class was deactivated, the alarm is reset immediately after deactivation (signaling of an A9002 / A9003 / A9007 message). The alarm is immediately signaled following reactivation (A9000 / A9001 / A9006), if at this time one of the threshold alarms is violated.

IMPORTANT: However, in the interests of system safety, deactivation of the central alarms and the SWU periphery summation alarms should be avoided:

2.4.2 Deactivating/activating alarms

Activation and deactivation by means of the AMOs VADSU / VADSM using DEACTIVATE / ACTIVATE. The advantage of the new functions is that it is no longer necessary to memorize the most recent threshold, because this value is stored and is again available when the alarm is reactivated.

Example:

To deactivate, display, activate, and again display SWU periphery alarm 4

DIS-VADSU:PERIPHER,4; H500: AMO VADSU STARTED

ALARM CLASS: SWU PERIPHERY ALARM CLASS										
AL. OR.	THRES1 IN %	THRES2 IN %	FAIL. ABS.	FAIL IN %	TOTAL ABSOL.	[TIME1 [SEC]	TIME2 [SEC]	TIME [H]	PR	NAME
4	10	90	27	57	58	600	600	0	0	TIE LINE

AMO-VADSU-84 NMC ALARMS CONFIGURATION, SWITCHING UNIT
DISPLAY CARRIED OUT;

DEACT-VADSU:PERIPHER,4; H500: AMO VADSU STARTED H02: MINOR
ALARM 4 DEACTIVATED. H03: MAJOR ALARM 4 DEACTIVATED.
AMO-VADSU-84 NMC ALARMS CONFIGURATION, SWITCHING UNIT
DEACTIVATION COMPLETED;

DIS-VADSU:PERIPHER,4; H500: AMO VADSU STARTED

ALARM CLASS: SWU PERIPHERY ALARM CLASS										
AL. NR.	THRES1 IN %	THRES2 IN %	FAIL. ABS.	FAIL IN %	TOTAL ABSOL.	TIME1 [SEC]	[TIME2 [SEC]	TIME [H]	PR	NAME
4	DEACT	DEACT	27	57	58	600	600	0	0	TIE LINE

AM0-VADSU-84 NMC ALARMS CONFIGURATION, SWITCHING UNIT
DISPLAY CARRIED OUT;

ACT-VADSU:PERIPHER,4;H500: AM0 VADSU STARTED H09: MINOR
ALARM 4 ACTIVATED. H10: MAJOR ALARM 4 ACTIVATED. AM0-
VADSU-84 NMC ALARMS CONFIGURATION, SWITCHING UNIT
ACTIVATION COMPLETED;

AB-VADSU:PERIPHER,4;H500: AM0 VADSU STARTED

ALARM CLASS: SWU PERIPHERY ALARM CLASSES										
AL. NO.	THRES1 IN %	THRES2 IN %	FAIL. ABS.	FAIL IN %	TOTAL ABSOL.	TIME1 [SEC]	[TIME2 [SEC]	TIME [H]	PR	NAME
4	10	90	27	57	58	600	600	0	0	TIE LINE

AM0-VADSU-84 NMC ALARMS CONFIGURATION, SWITCHING UNIT
DISPLAY CARRIED OUT;

2.4.2.1 Deactivation combinations

The method used in the past to deactivate an alarm level of an alarm - e.g. MAJOR ALARM - can also be combined with the extended method described above. Note, however, that an alarm level deactivated with the old method cannot subsequently be reactivated with ACTIVATE.

Example:

You deactivate the MAJOR alarm level of the DIGITAL VOICE DEVICES alarm with CHA-VADSU, then deactivate the entire alarm with DEACT-VADSU and subsequently reactivate the entire alarm with ACT-VADSU.

Old method:

ACT-VADSU:PERIPHER,ALARMNO=04 THRESHD2=65535;

The AMO then issues the following advisory message:

H03 : MAJOR ALARM 4 DEACTIVATED. DEACT-VADSU:PERIPHER,4;
H500: AM0 VADSU STARTED H02: MINOR ALARM 1 DEACTIVATED.
H03: MAJOR ALARM 4 DEACTIVATED. AM0-VADSU-151 NMC ALARMS
CONFIGURATION, SWITCHING UNIT

DEACTIVATION COMPLETED;

New method

EINS-VADSU:PERIPHER,1; H500: AM0 VADSU STARTED H10: MAJOR
ALARM 4 ACTIVE. H11: AN ALARM INITIALIZED WITH 'DEACT' MUST
BE ACTIVATED WITH 'CHANGE-VADSU' AM0-VADSU-151 NMC ALARMS
CONFIGURATION, SWITCHING UNIT ACTIVATION COMPLETED;

2.5 DEVICE ALARM

The features which distinguish the DEVICE alarm from minor/major alarms are as follows:

AM handling of alarms

Changing the message priority to alarm

- The threshold always corresponds to a unit, e.g. terminal, line.
- The validation time is longer (max. 255 hours)

This alarm type is a special application. The DEVICE alarm is generally employed for long-term monitoring of trunks or tie lines. If, for example, a trunk is out of service because of a line fault in the exchange, the DEVICE alarm can be used to signal excessively long down times (up to 255 hours). This can be used to demonstrate to the network operator how long a line was not available.

The alarm type can be activated for all alarm classes, but as a rule the function is of practical use only in the above-mentioned case

The DEVICE alarm is activated and deactivated with CHA-VADSU (CHA-VADSM).

Example:

Activate SWU periphery alarm 1 (TIE LINE): Monitoring time 5 hours:

CHA-VADSU: DA, PERIPHER, 1, 5;

Check the change:

DIS-VADSU: PERIPHER, 1;

The AMO displays the following:

ALARM CLASS: SWU PERIPHERY ALARM CLASS									
AL . NO .	THRES1 IN %	THRES2 IN %	FAIL . ABS .	FAIL IN %	TOTAL ABSOL .	TIME1 [SEC]	[TIME2 [SEC]	TIME [H]	NAME
1	50	90	57	83	69	600	600	5	TIE LINE

You always deactivate the DEVICE alarm by setting Time = 0:

Example:

CHA-VADSU: DA, PERIPHER, 1, 0;

2.6 Changing the message priority to alarm

The message priority of the single alarm messages (A9000-A9003 / A9006-A9007) Ex/Mx is configured and changed with the AMO-SIGNL. This setting, however, is always valid only for one alarm number, in other words all A9000 messages, for example, have the same priority.

This functionality enables you to assign a message priority 0-11 to any alarm, i.e. to the corresponding alarm class.

In this way you can selectively assign individual alarms priorities other than those configured with the AMO-SIGNL.

You can change priorities with the AMO-VADSU/VADSM.

The default is Priority "0", i.e. the alarm messages have the message priority assigned with the AMO-SIGNL.

You can, however, assign priorities 1 - 11.

The functions of the priorities changed with the AMO VADSU/VADSM:

PRIO 0 :

The individual alarm messages for the corresponding alarm class retain the message priority assigned to the alarm number with the AMO-SIGNL.

PRIO 1 - 8 :

The individual alarm messages for the corresponding alarm class have the priority assigned to this alarm class. The message identifier M/E remains unchanged, however, which means that the character output is the one configured for the alarm number with the AMO-SIGNL. All output devices configured, e.g. AFR1, DPT1, receive the alarm message with the new priority.

PRIO 9 :

The individual alarm messages for the corresponding alarm class are not sent to AFR1 (Remote Service Platform (RSP)). All other output devices configured receive the alarm messages with the priority configured for the alarm number with the AMO-SIGNL.

PRIO 10 :

The individual alarm messages for the alarm class are not sent to AFR2 (DMS). All other output devices configured receive the alarm messages with the priority configured for the alarm number with the AMO-SIGNL.

PRIO 11 :

The individual alarm messages for the alarm class are not sent to AFR1 (Remote Service Platform (RSP)) and AFR2 (DMS). All other output devices configured receive the alarm messages with the priority configured for the alarm number with the AMO-SIGNL.

Example:

In Remote Service Platform (RSP) you want to prevent the TIE LINE alarm being sent to PERLE as a fault by a certain PABX. You do this by changing the priority of this alarm to 6, for example. In Remote Service Platform (RSP) the filter can now be set in such a way that alarms with priority 6 are not sent to PERLE.

Example:

To change a message PRIO for the TIE LINE alarm:

The priority set for message number A9001 with AMO-SIGNL is, for example, PRIO M4. This means that all MAJOR ON alarms are signaled with M4.

```
A9001 M4 N3290 NO ACT BPB NMCALARM MAJOR ALARM ON 96-07-25
07:26:44 ALARM CLASS:SWU-PER:001 ALARM NAME:TIE LINE
FORMAT:2D
```

```
DIS-VADSU:PERIPHER,1; H500: AMO VADSU STARTED
```

ALARM CLASS: SWU-PERIPHERY ALARM CLASS										
AL . NO .	THRES1 IN %	THRES2 %	MAIL . ABS .	FAIL IN %	TOTAL ABSOL .	TIME1 [SEC]	[TIME2 [SEC]	TIME [H]	PR	NAME
1	10	90	27	57	58	600	600	0	0	TIE LINE

AMO-VADSU-84 NMC ALARMS CONFIGURATION; SWITCHING UNIT
DISPLAY CARRIED OUT;

CHA-VADSU:PERIPHER,1,,,,,6; H500: AMO VADSU STARTED H12: NOTES
ON ALARM PRIORITIES : PRI0 = 0 : ALARM MESSAGES FOR THIS
ALARM ARE ASSIGNED MESSAGE PRIORITY, CONFIGURED BY THE AMO
SIGNL (SEE A9000 TO A9007) PRI0 = 1 THIS PRIORITY IS USED
AS THE MESSAGE PRIORITY FOR THE ALARM MESSAGES CONCERNING
THIS ALARM (A9000 - A9007) PRI0 = 9 BIS 11 : ALARM MESSAGES
FOR THIS ALARM ARE ASSIGNED MESSAGE PRIORITY, CONFIGURED
BY THE AMO SIGNL (SEE A9000 TO A9007) (PRI0 = 9 : ALARM
OF THIS ALARM CLASS IS NOT SENT TO AFR1 (RSP) (PRI0 = 10 :
ALARM OF THIS ALARM CLASS IS NOT SENT TO AFR2 (DMS) (PRI0
= 11 : ALARM OF THIS ALARM CLASS IS NOT SENT TO AFR1 (rsp)
AND AFR2 (DMS) AMO-VADSU-84 NMC ALARMS CONFIGURATION,
SWITCHING UNIT CHANGE COMPLETED;

DIS-VADSU:PERIPHER,1; H500: AMO VADSU STARTED

ALARM CLASS: SWU PERIPHERY ALARM CLASS

AL. NO.	THRES1 IN %	THRES2 IN %	FAIL. ABS.	FAIL IN %	TOTAL ABSOL.	TIME1 [SEC]	[TIME2 [SEC]	TIME [H]	PR	NAME
1	10	90	27	57	58	600	600	0	6	TIE LINE

AMO-VADSU-84 NMC ALARMS CONFIGURATION, SWITCHING UNIT
DISPLAY CARRIED OUT;

After this change the alarm message is always signaled with M6 (see example
below).

A9001 M6 N3290 NO ACT BPB NMCALARM MAJOR ALARM ON 96-07-25
07:26:44 ALARM CLASS:SWU-PER:001 ALARM NAME:TIE LINE
FORMAT:2D

Example:

You do not want the SWU-logical alarm 'Dir1' to be sent to AFR1. All you have
to do is set priority 9 for this message. The alarm message retains the message
priority assigned with the AMO SIGNL.

CHA-VADSU:LOGICAL,157,,,,,9; H500: AMO VADSU STARTED H12:
NOTES ON ALARM PRIORITIES: PRI0 = 0 : ALARM MESSAGES FOR
THIS ALARM ARE ASSIGNED MESSAGE PRIORITY, CONFIGURED BY
THE AMO SIGNL (SEE A9000 BIS A9007) PRI0 = 1 TO 8 : THIS
PRIORITY IS USED AS THE MESSAGE PRIORITY FOR THE ALARM
MESSAGES CONCERNING THIS ALARM (A9000 - A9007) PRI0 = 9
TO 11 : ALARM MESSAGES FOR THIS ALARM HAVE THE MESSAGE
PRIORITY CONFIGURED BY THE AMO SIGNL (SEE A9000 BIS A9007)
(PRI0 = 9 : ALARM OF THIS ALARM CLASS IS NOT SENT TO AFR1
(RSP) (PRI0 = 10 : ALARM OF THIS ALARM CLASS IS NOT SENT
TO AFR2 (DMS) (PRI0 = 11 : ALARM IN THIS ALARM CLASS NOT
SENT TO AFR21 (RSP) AND AFR22 (DMS) SENT AMO-VADSU-84 NMC
ALARMS CONFIGURATION, SWITCHING UNIT CHANGE COMPLETED;

DIS-VADSU:LOGICAL,157; H500: AMO VADSU STARTED

ALAM CLASS: SWU LOGICAL ALARMS										
AL . NO .	THRES1 IN %	THRES2 IN %	FAIL . ABS .	FAIL IN %	TOTAL ABSOL .	TIME1 [SEK]	[TIME2 [SEK]	TIEM [H]	PR	NAME
157	10	90	27	57	58	600	600	0	9	DIR1

AMO-VADSU-84 NMC ALARMS CONFIGURATION, SWITCHING UNIT
DISPLAY CARRIED OUT;

2.7 Variable Hardware contacts in the case of individual alarms

It is possible to allocate individual alarms to a hardware contact (LED) with the AMO-VADSU/VADSM. Important alarms can thus be signaled individually (see AMO description).

The hardware contacts have the following meaning.

SU: (Standard) The alarm is not assigned to a hardware contact, a summation report is compiled with the other MINOR/MAJOR and it is signaled at the appropriate LEDs. Alarms assigned to an SU hardware contact are only signaled at LEDs which have not yet been allocated a hardware contact. If, for example, alarms have been allocated to S1 and none have been allocated to S2, all SU alarms (both minor and major) are signaled at LED2 (MAJOR LED). When alarms have been allocated to S1 as well as to S2, alarms which have an SU hardware contact are not signaled at an LED.

S1: The alarm is allocated to LED1 (MINOR LED). If a MINOR/MAJOR ALARM (which one is irrelevant) is issued for this alarm, this is signaled at LED1 (MINOR LED).

S2: The alarm is allocated to LED2 (MAJOR LED). If a MINOR/MAJOR ALARM (which one is irrelevant) is issued for this alarm, this is signaled at LED2 (MAJOR LED).

Example:

Every alarm is allocated to the SU (standard) hardware contact. The SWU central alarm "SIGNAL UNIT" should be allocated individually to the MINOR LED to aid monitoring.

Once major and minor alarms have been allocated to the S1 hardware contact, they are categorized under the alarm class "SIGNAL UNIT" and signaled at the MINOR LED. Any other alarms (minor and major) are signaled at the MAJOR LED.

CHA-VADSU:CENTRAL,20,,,,,,S1; H500: AMO VADSU STARTED H13:
ONLY ALARMS WITH HWCONT = S1 ARE SIGNALLED IN THE CASE OF
LED P2 (PAL) ON IOP AND NAL ON DP. THE SUMMATION DISPLAY
(ALL NON-URGENT ALARMS) IS DEACTIVATED FOR THIS HW CONTACT.
IT ONLY REACTIVATES IF HWCONT = S1 IS NOT SET AT ANY ALARM.
AMO-VADSU-79 NMC ALARMS CONFIGURATION, SWITCHING UNIT
CHANGE COMPLETE;

DIS-VADSU:CENTRAL,20; H500: AMO VADSU STARTED

AM handling of alarms

Configuring the validity period for SLA

ALARM CLASS: SWU CENTRAL ALARM CLASS									
AL. NO.	THRES1	THRES2	FAIL. ABS.	TIME1 [SEC]	[TIME2 [SEC]	TIME [H]	PR	HW- CON	NAME
20	1	2	0	900	900	0	0	S1	SIGNAL UNIT

AMO-VADSU-84 NMC ALARMS CONFIGURATION, SWITCHING UNITN
DISPLAY COMPLETE

To allow the alarm "LTU FAILURE" to be monitored more closely, the alarm can be allocated to the S2 HW contact. This alarm is then signaled individually at the MAJOR LED and the summation statement for all other alarms with a hardware contact is not displayed at any LED.

CHA-VADSU:CENTRAL,2,,,,,S2; H500: AMO VADSU STARTED H14: ONLY ALARMS WITH HWCONT = S2 ARE SIGNALLED IN THE CASE OF LED C3 (ZAL) ON IOP AND UAL ON DP. THE SUMMATION DISPLAY (ALL NON-URGENT ALARMS) IS DEACTIVATED FOR THIS HW CONTACT.IT ONLY REACTIVATES IF HWCONT = S2 IS NOT SET AT ANY ALARM. AMO-VADSU-79 NMC ALARMS CONFIGURATION, SWITCHING UNIT CHANGE COMPLETE;

2.8 Configuring the validity period for SLA

You can set the time of day during which the individual IP connections in an NBCS system should be monitored for the alarm, "BAD IP CONNECTIVITY". You can set a start and an end time for the relevant SLA (Service Level Agreement) with the AMO VADSU. Outside this period, the "BAD IP CONNECTIVITY" alarm is automatically deactivated (see DIS-VADSU). The alarm is reactivated the following day at the start time of the SLA and is then monitored and signaled. The SLA is normally valid for the whole day (from 0:00 to 24:00).

IMPORTANT: If the SLA period (= SLA valid) is modified, these modifications take effect an hour later.

Example:

The IP connections in an NBCS system should only be monitored from 5:00 until 22:00 (this applies daily). Outside this SLA period (from 22:00 until 5:00) the "BAD IP CONNECTIVITY" alarm is deactivated.

ADD-VADSU:SLATIME,5,00,22,00; H500: AMO VADSU STARTED
AMO-VADSU-79 NMC ALARMS CONFIGURATION, SWITCHING UNIT
CONFIGURATION COMPLETED;

DIS-VADSU:SLATIME; H500: AMO VADSU STARTED | SLATIME
| START: 05:00 END: 22:00 AMO-VADSU-79 NMC ALARMS
CONFIGURATION, SWITCHING UNIT DISPLAY COMPLETE;

2.9 Activating the snapshot function

Units which have been preventively configured and which are not in operation or which are blocked by an AMO are considered “defective” when snapshot is not activated. These units consequently trigger alarms.

The Service Department can use the snapshot function at any given time to reduce the current alarm situation to the real alarm situation. SWU periphery units which have the status NPR (Not PResent) at the moment when the snapshot is taken can be removed from alarm monitoring with the AMO VADSU. This action deletes the SWU alarms which are activated due to missing boards, terminals or trunks.

These units, which were removed from alarm monitoring for the purpose of the snapshot, are reinserted when:

- the snapshot is deactivated with the AMO VADSU.
- a unit is activated or deactivated, whether this be automatic (e.g. loss of line alarm) or manually by the Service Department (board/terminal activation).

IMPORTANT: The snapshot function can be activated several times whereas it can only be deactivated once. Thus, any SWU periphery units which have gained the status NPR after the last snapshot are removed from alarm monitoring.

IMPORTANT: The snapshot function has no effect on SWU periphery units which have system-wide repercussions (e.g.: trunks for ALUM alarms, RGEN/WESEN or periphery SIU boards).

IMPORTANT: The effect of the snapshot function to the board alarms can be suppressed via DIAGS switch S02. If S02 is “ON” the snapshot function is ignored for the calculation of the board alarms (default: OFF). Activation: CHA-DIAGS:PROCID=CC,COMP=NMC,S02=ON; Deactivation: CHA-DIAGS:PROCID=CC,COMP=NMC,S02=OFF; In both cases the changes must be saved. At least a hard restart is necessary for the SWUs: EXEC-UPDAT:BP,ALL; EXEC-REST:MODUL,BP,HARD;

Example:

When the snapshot function is activated, the unavailable SLMO board with 10 OPTISETs is removed from alarm handling and the configuration and alarm counter for DIGITAL VOICE DEVICES is decremented by 10.

DIS-VADSU:PERIPHER,4; H500: AMO VADSU STARTED

ALARM CLASS: SWU PERIPHERY ALARM CLASS										
AL. NO.	THRES1 IN %	THRES2 IN %	FAIL. ABS.	FAIL IN %	TOTAL ABSOL.	TIME1 [SEC]	[TIME2 [SEC]	TIME [H]	PR	NAME

AM handling of alarms

ALARM CLASS: SWU PERIPHERY ALARM CLASS										
4	10	90	10	50	20	600	600	0	0	DIGITAL VOICE DEVICES

AMO-VADSU-79 NMC ALARMS CONFIGURATION, SWITCHING UNIT
DISPLAY CARRIED OUT;

ACT-VADSU:SNAPSHOT;H500: AMO VADSU STARTED AMO-VADSU-79
NMC ALARMS CONFIGURATION, SWITCHING UNIT ACTIVATION
COMPLETED;

DIS-VADSU:SNAPSHOT;H500: AMO VADSU STARTED SNAPSHOT
DISPLAY OUTPUT: STATUS | SNAPSHOT - STATUS : ON AMO-
VADSU-79 NMC ALARMS CONFIGURATION, SWITCHING UNIT DISPLAY
CARRIED OUT;

DIS-VADSU:PERIPHER,4;H500: AMO VADSU STARTED

ALARM CLASS: SWU PERIPHERY ALARM CLASS										
AL. NO.	THRES1 IN %	THRES2 IN %	FAIL. ABS.	FAIL IN %	TOTAL ABSOL.	TIME1 [SEC]	[TIME2 [SEC]	TIME [H]	PR	NAME
4	10	90	0	0	10	600	600	0	0	DIGITAL VOICE DEVICES

AMO-VADSU-79 NMC ALARMS CONFIGURATION, SWITCHING UNIT
DISPLAY COMPLETE;

2.10 Regenerating the validation data

You can use the AMO REGEN to create an AMO command batch that the AMO GENDB can then use to match the status of another PABX to the current status. To accomplish this the AMO REGEN calls other AMOs with the "REGENERATE" action. The regenerate function of the AMOs VADSU and VADSM is thus used to create the ADD and CHANGE commands needed to create the current alarm status from basic initialization.

2.11 Controlling alarm output

The following AMOs are used to control how alarms are output:

AMO SIGNL:	The AMO SIGNL is used, among other things, to define which messages (error, alarm and advisory messages) will be sent to which symbolic device. This custom setting can be overridden by the (symbolic) error number 1000. If error number 1000 is assigned to a symbolic device, all selected messages will be sent to the device in question.

AMO ASSGN:	This AMO is used to display and change a variety of device assignment tables containing the assignments between symbolic and physical devices. The Standard Assignment Table for Internal Connections (SATIC) is important as regards alarm output. This table is used by PABX programs that are not AMOs for output to a device.
AMO-HISTA	If a file is selected as physical device (must always be DPT4), it can be read with the AMO HISTA.

IMPORTANT: When a PABX is installed, the following standard settings are created with the aid of an AMO batch.

- Only service-relevant messages are sent via AFR (Automatic Fault Report) to Remote Service Platform (RSP).
- All error and advisory messages are collected in a history file for diagnostics purposes (the HISTO file is assigned to the symbolic device DPT4).
- In addition, all alarms (except the RESTART alarms) are displayed via the Maintenance and Alarm Panel (MAP) or the IOPA (x) display.

When you call any of the AMOs listed above, take care not to change the default setting (all changes should affect only additional alarm outputs).

See also:

- [Displaying alarm messages at the terminal](#)
- [Saving and searching for alarm/error messages in HISTO files](#)

2.11.1 Displaying alarm messages at the terminal

The alarm messages can be output to a terminal by means of the following AMO calls:

1) To assign all alarm messages to the symbolic device DPT1:

```
CHA-SIGNL:MID,A,1000;
```

1) To assign the symbolic device DPT1 to the physical device CO1:

```
CHA-ASSGN:SATIC,DPT1,CO1;
```

2.11.2 Saving and searching for alarm/error messages in HISTO files

2.11.2.1 AMO-HISTA (HISTO search)

This new AMO has powerful search criteria and fast recovery times (approx. 10 seconds) for improved error-message searches in HISTO files (HISTO database). You can use it to search for error messages by time, error number, alarm, the PEN, the station number, the priority, function complex, exception-code/call-code/user-addr. It is also possible to display the current alarm status in table form.

Example:

- Assign a HISTO file:
CHANGE-ASSGN:SATIC,DPT4,CFILE,C-FBTHIST,7000;
- Assign all error numbers to output devices DPT1 and DPT4 (HISTO-FILE);
CHANGE-SIGNL:MID,F,1000,FREE,,DPT1&DPT4,DPT1&DPT4;
- Create a HISTA database (size of database from 500 Kbytes to 2500 Kbytes). A 2.5 MB database can accommodate approximately 1200 error messages. In this range the database size you define must be a multiple of 500 (500, 1000, 1500.).
ADD-HISTA:FSIZE=2500;
- Display existing messages;
DIS-HISTA;

The AMO displays the following message, for example;
H500 : AMO HISTA STARTED
DATABASE SIZE : 2500KB
NUMBER OF ENTRIES : 2
OLDEST ENTRY : 95-09-06 07:58
MOST RECENT ENTRY : 95-09-06 08:05
DISPLAY CARRIED OUT;
- Start a search for error messages relating to PEN 1-3-25-0:
START-
HISTA:SEARCH,95-09-06/00-00,95-09-06/12-00,y,PEN,1,3,25,0;

The AMO displays the number of messages found and asks you whether you want to view these messages
H01: 00001 ERROR MESSAGES FOUND
CONTINUE (Y/N/F)
ANS: Y
Fxxxx error message listing

2.11.2.2 HISTA “alarming” function

The ADD command also has an option for activating an "Alarming" function, i.e. a potential loss of error messages by overwriting the HISTO file is signaled by a MAINTENANCE alarm (see also F6524). The MINOR alarm is a warning before the file is overwritten and the MAJOR alarm signals that messages are overwritten.

The "**ALARMING**" parameter controls this function. The parameter is optional: if it is not specified the function remains deactivated.

Example:

ADD-HISTA: FSIZE=2500,ALARMING=0N;

Alarming is not activated. You must first delete the HISTO file in order to deactivate alarming (caution: deletion means a loss of messages, see 'Data backup' in the description of error message F6524).

Example:

DEL-HISTA; ADD-HISTA:2500; OR ADD-HISTA:FSIZE=2500,ALARMING=OFF;

2.12 Alarm mirror

There are two ways of displaying the system's current alarm mirror.

- 1) With **AMO GRA** You can use AMO GRA to request the following alarm-mirror messages:

ALL (all processors)	BP (Switching unit)	A1 (Administration and data processor)	C1 (Call charge server)	T1 -T3 (Text and fax server)	V1 -V3 (Voice mail server)
A9005	A9005	A9005	A9005	A9005	A9005
A9012	A9012	A9012	A9012	A9012	A9012
A9013	A9013	A9015	A9015	A9015	A9015
A9014	A9014				
A9015					

- 1) See Alarm concept for an evaluation of alarm mirror messages.

Example:

Display the alarm mirror of the SWU:

DIS-GRA:BP;

NOTICE: In this case the AMO terminates without display. The requested alarm-mirror message or messages are output to the output devices in the form of the above-mentioned alarm messages.

- 2) With **AMO HISTA**
- 3) If the AMO HISTA is added (see ADD-HISTA), you can output the alarm mirror with the following command;

START-HISTA:MIRROR;

The AMO displays the current alarm mirror in the following form:

ALARM GROUP	ABS	ALARM NUMBER	ALARM PRIO	ALARM NAME
CENTRAL	BPB	005	MINOR	CC RESTARTS

ALARM GROUP	ABS	ALARM NUMBER	ALARM PRIO	ALARM NAME
SWU-PER	BPB	001	MINOR	TIE LINE

AM handling of alarms

ALARM GROUP	ABS	ALARM NUMBER	ALARM PRIO	ALARM NAME
SWU-PER	BPB	004	MAJOR	DIGITAL VOICE DEVICES

ALARM GROUP	ABS	ALARM NUMBER	ALARM PRIO	ALARM NAME
CENTRAL	A1	028	MAJOR	SYSTEM TIME FAILURE

2.13 Resetting alarms

You can use the AMO GRA to reset certain SWU or server alarms. The following central alarms are deletable:

- In SWU: 0, 5, 7, 9, 16, 17, 19, 23, 24, 27, 29.
- In ISP: 9, 10, 21, 23, 27, 29.
- In ISS: 13, 22, 23, 29.

IMPORTANT: All central alarms (SWU and ADP) can be deleted.

Example:

You want to delete central alarm 05 (CC RESTARTS).

DEL - GRA : BP, 5 ;

3 Controlling error signalling with AMO SIGNAL

3.1 Current (ASD) / Configured (CSD) output devices

AMO-SIGNAL supports a function that allows you to transfer the devices specified by the ASD parameter to those specified by the CSD parameter.

Example:

The following output devices were created for F2109 for example in a SIGNAL batch:

CHA-

SIGNAL : TYPE=MID, CD=F, NO=2109, OUTPUT=FREE, , ASD=DPT1&DPT4&AFR1, CSD=D

This means that the actual (ASD) devices are the same as the configured (CSD) devices. For test purposes we can change the actual symbolic devices (ASD) for this error number (only DPT1).

DEL - SIGNAL : MID, F, 2109, FREE, , DPT4&AFR1;

This means that the error number will now be output only to DPT1. It is not necessary to make a note of the original device configuration, which can be restored simply by entering the command:

SET - SIGNAL : MID, F, 2109;

The effect of this command is to restore the actual symbolic devices (ASD) as the devices entered for CSD.

3.2 Output device definition with F1000 and individual error no.

The command CHA-SIGNAL:MID,F,1000,FREE, ,DPT4,DPT4; directs all error messages to the output device DPT4 (HISTO file). This does not mean that the error numbers of individual configurations are suppressed.

In this case output is directed to the output devices in the F1000 and the output devices of the individual error numbers (if defined).

Example:

The following commands have been executed:

CHA-SIGNAL : MID, F, 1000, FREE, , DPT4, DPT4; CHA-SIGNAL : MID, F, 2109, FREE, , DPT1&AFR1;

with the result that F2109 is output on DPT1, DPT4 and AFR1.

4 Alarm Generation

4.1 Generating SWU logical alarm classes

The AMO VADSU supports generation of SWU-logical, individual alarm classes. A distinction is made between the generation of directional alarm classes and personal alarm classes.

Alarm-class generation permits user definition of the validation data, i.e.

- the MINOR / MAJOR alarm level is definable,
- the time preceding alarm signaling is definable, symbolic alarm names can be assigned.
- A symbolic alarm name can be assigned.

This dependability feature thus permits selective alarm signaling of individual or individually grouped lines/station terminals. This means a finer degree of detail in signaling hardware failure (Remote Service Platform (RSP) / DMS) and easier searching for the pertinent error information (error messages).

IMPORTANT: Basic generation similar to SWU periphery accumulated alarm classes is impractical. The advantage of this new feature is that, depending on the PABX configuration, you can use it to implement alarm signaling for your custom-defined failure units. for in PABX generation. At this point it is also advisable to decide on the lines/line groups or terminals for which you want to generate new alarm classes. You can then incorporate alarm-class generation in the generation batch run.

4.1.1 Potential uses of directional alarm classes

Directional alarm classes are used for selective monitoring of lines (TRUNK / TIE / special lines) and all other terminals identified by a PEN and not by a station number.

Generation of alarm classes as a function of trunk groups (e.g. tie lines) is an example of how this feature can be used.

It is possible to assign a separate alarm to each trunk group.

Specials such as APSE are another potential use for directional alarm classes.

4.1.2 Potential uses of personal alarm classes

Personal alarm classes are used for selective monitoring of terminals identifiable by their station numbers.

Selective failure monitoring of a customer's particularly important station numbers is one potential use for personal alarm classes.

IMPORTANT: For reasons associated with data protection and confidentiality, never use real names when generating personal alarms. Always use station numbers or synonyms.

4.1.3 Alarm class generation

The procedure for generating alarm classes is illustrated in general terms by the example below

- 1) Generate an alarm class with ADD-VADSU. Use the DIR or PERS parameter to select the subgroup. The AMO itself supplies the alarm number if you do not enter an alarm number. Take the number of lines or terminals into account when you define the thresholds (e.g. when monitoring more than one line (a trunk group)). It is advisable to set the threshold such that the alarm is not signaled as soon as the first line fails. Empirical values are 30-50% for the MINOR threshold and 90% for MAJOR. Only one threshold has to be activated for single monitoring, i.e. the MINOR threshold can be set to 65535 (inactive) and the MAJOR threshold to 0% (the alarm is signaled when the first line fails). The validation times (parameters: Time1 / Time2) should be set to 10 minutes (Time = 600) to avoid unnecessarily frequent alarms signaling sporadic line failures with ON / OFF. The alarm name is always included in the alarm message, where it appears along with a prefix, e.g. Dxxx: / Pxxx: (D for directional, P for personal, xxx is the physical alarm number assigned by either the AMO or the user).

In the case of a directional-alarm class the first 4 characters of the name must be unique in the entire set of directional alarms (this is checked by the AMO VADSU). This restriction is for identification when systems are integrated in networks and when systems are administrated via NMC / DMS (Network Management Center / Domain Management System). In this case, the first 4 digits of the alarm name should define the DIR1, i.e. the partner system. These can be identical, for example to the trunk group number or the trunk group name. From the point of view of network administration the advantage is that each alarm has a unique identifier (originator of alarm and identifier for the route).

- 1) Use DIS-VADSU: LOGISCH to check the configured data
- 2) Assign the alarm number you generated to the PENs or station numbers. You assign the number with the CHANGE command of the corresponding configuration AMO (AMO TDCSU / TACSU / TSCSU). Before assigning the alarm number, use the DISPLAY command of the AMO TDCSU / TACSU / TSCSU to check whether an alarm number is already entered. Use the parameter ALARMNO for basic initialization, this is performed with 0 (no alarm class). After generating the alarm class, use the AMO TDCSU or TACSU to assign the alarm number to the PENs, e.g.

CHA-TDCSU: PEN=1-1-109-0, ALARMNO=50, DEV=S2CONN, BCGR=0;

- 1) (All other parameters remain unchanged).

This change command changes the relevant PEN from the default DH-TYPE-dependent SWU periphery summation alarm to the newly generated alarm, i.e. the dependability system removes the relevant PEN from the configuration counter of the summation alarms and adds it to the configuration counter of the new alarm. You can revoke the change by setting ALARMNO = 0 in the relevant AMO. The relevant PEN is thus

monitored by either the summation alarm, e.g. TIE-LINE, or the individual alarm, e.g. TGRP1 SYS4. If, at the time of assignment with CHA-TDCSU for example, the PEN status was NPR and if the threshold value for MINOR was exceeded in the SWU periphery alarm class TIE LINE (i.e. an alarm message exists for TIE LINE), the change is followed by OFF alarm signaling for the TIE LINE alarm. If the threshold of the new alarm class is set to a value such that the newly added PEN (NPR) causes the threshold to be exceeded, the new ALARM is signaled by ON.

- 2) After assigning the alarm number, use DISPLAY-VADSU to check the assignment. e.g. : DIS-VADSU: LOGICAL, DIR, 50;
- 3) The field TOTAL ABSOLUTE (configuration counter) now contains the number of assigned PENs (in the cause of circuits with B-channels the number of B-channels is included in the count). This counter is not updated if the line of the terminal is blocked by AMO at this time. The counter is not updated until such times as startup is effected by AMO.

The FAILED IN % field (number of failed lines/terminals as percentage of total absolute value) is not updated unless the status of the assigned line or assigned device is not READY/MAN_AMO/HIR_AMO at this time. e.g. : DIS-VADSU: ASS, 50 A list of all PENs or station numbers assigned to this alarm class is then displayed.

4.1.4 Alarm-relevant error messages

The dependability system usually assigns SWU periphery error messages the alarm class or classes which correspond to the device-handler types of the PENs. A BOARD error message for a DIUS2, for example, is assigned the alarm class SWU-PER. 001 (TIE LINE). This information is in line 2 of the error message:

- 1) in the ALARM CLASS line.

If a new directional alarm class is generated for the PENs of this board, this new alarm class is also entered in the error message (SWU-LOG xxx). The error message in question can thus be found by its SWU periphery alarm class as well as by its new alarm class with the appropriate search tools such as Remote Service Platform (RSP) / DMS or with AMO HISTA. Please ensure that the PENs are monitored only by the new alarm class.

4.2 DEVICE ALARM

The DEVICE ALARM (A9006 / A9007) is only signaled as an alarm if generated with an AMO.

The DEVICE ALARM is activated or deactivated with AMO VADSU / AMO VADSM.

The alarm type can be configured for all periphery SWU and SM alarms and for certain central alarms.

- Activation: The alarm type is activated with CHA-VADSU (for SM). This alarm type is activated by changing the threshold from "0" to a value between "1" and "255" (number of hours).
- Deactivation; The alarm type is deactivated with CHA-VADSU (for SM). This alarm type is deactivated by changing the threshold to "0".

- Display; With DIS-VADSU (DIS-VADSM) to check whether the alarm is activated and the time (output column: DEV-T) entered.

4.2.1 General notes for this alarm type

This alarm type is normally configured when long-term monitoring is activated for trunk or tie lines. It can show how long lines were out of service. This can be used as proof against claims by the owner of the line.

IMPORTANT: The activation of this alarm type is thus only possible if the status of the device or line to be monitored is READY. The alarm type can also be activated for a periphery alarm to which multiple lines or devices are assigned. In this case the first line/device to fail is signaled in principle. The monitoring time started in this way remains valid even if subsequent failures occur.

Example:

Generate an SWU directional alarm with subsequent activation of the DEVICE alarm for a digital trunk or tie line:

- 1) Use DIS-SDSU to display the status of the line to be monitored. Do not proceed to the next step unless the line status is READY.
- 2) Add directional alarm with ADD-VADSU
- 3) Assign the alarm class you generated to the PEN with CHA-TDCSU
- 4) Activate DEVICE ALARM with CHA-VADSU (e.g. for 24 hours)

4.3 F4704 Handling

This section describes errors which can occur in association with SWU logical/periphery alarms. In conjunction with an alarm, an inconsistency in a configuration counter has led to falsification of the alarm validation. Consequently, this alarm can no longer accurately reflect the as-is alarm situation of the PENs in question.

This situation is signaled by a MAINTENANCE NOTE central alarm Alarm. The advisory message described below is available under this alarm (either directly as a log message or determined with AMO-HISTA, using the alarm number or error number as search criterion)

F4704 M4 Nxxxx NO ACT BPA DEP MAINTENANCE xxxxxxxx

Format:2C

ATTENTION PLEASE : INCONSISTENT CONFIGURATION COUNT OF NMC-ALARM

¹ R50: RV50 QUER FD270

² REPAIR MEASURE: s.SERVICE-MANUAL/SECTION:ALARM MESSAGES/
F7404 HANDLING

- ¹: Alarm name (e.g. R50 means a directional alarm, alarm number 50)
- ²: The text output by older software may be: SUGGESTED MEASURE :
SYSTEM RESTART.

In both cases you should proceed as follows:

- 1) Read message F4704 to discover the name of the SWU alarm which has been triggered (see the example above).
- 2) If the string at the start of the alarm name is Dxx: or Pxx:, the alarm is an SWU-logical alarm, so you should follow the instructions in Step 3 below. All other cases are either SWU periphery summation alarms or SWU-logical alarms (1 - 7); and you should proceed as described in Step 4.
- 3) Directional or personal alarms In order to re-establish the consistency of the configuration counter of the relevant alarm so that the alarm class can be reused, you must first delete and then re-add the alarm. You then have to reassign the PENs or station numbers originally assigned to the alarm. The following instructions lead you through the process step by step (the example taken illustrates the handling required for the error message mentioned above).
- 4) Read the alarm number (Dxx/Pxx) from the error message.

Use DIS-VADSU:LOGICAL,DIR,50; to display the alarm class details (the current information on this alarm is displayed).

Delete the alarm with DEL - VADSU, 50; The relevant configuration counter is thus deleted, along with all data assigned to this alarm (Control: DIS-VADSU:DIR, 50; should no longer display any data for this alarm).

Re-add the alarm you deleted using the instructions given under point c). Use the same parameter values as for the alarm just deleted - the command is.

ADD-VADSU:DIR, 50, 100, 600, 600, RV50 TIE FD270;

Use DIS-VADSU:LOGICAL,DIR,50; to check the result of your actions. The fields TOTAL ABSOLUTE (configuration counter) and FAILED IN % (percentage of logical units failed) must both contain 0.

Use the appropriate configuration AMO to reassign the alarm number to the PEN or station number (in the case of a personal alarm), for example for a directional alarm with

CHA-TDCSU: PEN=1-1-115-0, ALARMNO=50, DEV=S2CONN, BCGR=0;

After each assignment with DIS-VADSU:LOGICAL,DIR,50; as described under point e), always check the information displayed. The values output in the TOTAL ABSOLUTE and FAILED IN % fields change as a function of the number of logical units assigned (single lines/B-channels or terminals) and their states.

Example:

If the status of a PEN (e.g. an S2 line with 30 B-channels) is READY (display with DIS-SDSU), the value in the TOTAL ABSOLUTE field must be 30. If the status is NPR, the FAILED IN % field must contain the corresponding percentage (e.g. 100% for 30 B-channels). The two fields should not have changed if the status of the circuit is MAN_AMO, i.e. the two fields change as a function of the number of logical units assigned and their status.

After assigning the alarm number to the PENs/station numbers, use DIS-VADSU again to recheck the alarm-assignment details. The TOTAL ABSOLUTE field should not be 0 unless the status of all assigned PENs station numbers is MAN-AMO.

Use DEL-GRA to delete alarm No. 29 (MAINTENANCE NOTE).

- 5) SWU periphery alarms. A SYSTEM RESTART is the only way of restoring the consistency of the configuration counter assigned to this alarm, i.e. a hard restart of both the active and the stand-by CC is necessary. A system restart can usually be performed only in a light-traffic period or perhaps only with the approval of the customer, so in the interim it is best to deactivate the alarm with AE-VADSU (set the thresholds for MINOR and MAJOR to 65535). On account of the inconsistency of the alarm's configuration counter, an alarm could be signaled that would lead to an unjustified fault report (e.g. with Remote Service Platform (RSP) or DMS). Delete the original alarm MAINTENANCE NOTE (alarm No. 29) with AMO GRA (DEL - GRA). After the hard restart, do not forget to reactivate the alarm with CHA-VADSU (re-enter original thresholds for MINOR and MAJOR).

5 Alarm concept

5.1 Important information

Intervention at the customer system can sometimes cause malfunctions which will be detected by the system and reported to the Remote Service Platform (RSP). You should therefore shut down the Remote Service Platform (RSP) system before beginning work with the AMO-AFR.

IMPORTANT: Connected boards can only be configured in the PABX software after the necessary removal (terminals, trunk and tie lines, etc.).

5.2 Alarm definition

In general:

- An alarm is signaled when a threshold value is reached and the alarm count does not drop below this value within a specific time period.
- The alarm is reset only if the threshold value remains undershot for a specific time period.

This approach prevents sporadic failures (such as short-term line alarms) being transferred to Remote Service Platform (RSP) or NMC.

5.3 AMOs used

- AMO ASSGN
 - Assignment between symbolic and physical devices for alarm output.
- AMO GRA (Get Reset Alarm)
 - Requesting alarm mirror messages (ALARM MIRROR).
 - Deleting alarms.
- AMO HISTA
 - Outputting the current alarm status.
 - Specific error searches (by search criteria).
- AMO HISTO
 - Reading error and alarm messages from the HISTO file.
- AMO SIGNAL
 - Establishing which alarms should be output at which symbolic device.
- AMO VADSM (VALidation Data Service Module)
 - Alarm validation in ADS/SM.

- AMO VADSU (VALidation Data Switching Unit)
 - Alarm validation in the SWU.
 - Configuring customer-specific personal and directional alarms.
 - Activating and deactivating the SNAPSHOT function.
 - Configuring the start and end time for the valid SLA (Service Level Agreement).

See also [AM handling of alarms](#).

5.4 Threshold value and validation time

The threshold value can be set as an absolute value or a percentage value. An alarm is signaled if the threshold value is not exceeded for a specific time period (validation time).

The threshold values and validation times of most central and peripheral alarms can be modified. The only exceptions are certain central alarms, which are specially marked in the alarm message tables. The AMOs for assigning and modifying the validation data and threshold values are AMO VADSU (SWU) and AMO VADSM (ADS/SM).

Example:

Change the threshold value and validation time of the MAJOR ALARM for central alarm 5 in the SWU:

CHA-VADSU:

CATEGORY:MMA,ALARMGR=CENTRAL,ALARMNO=5,THRESHD2=4,TIME2=1000;

5.5 Alarm types

There are three alarm types:

- **DEVICE ALARM**
- This alarm type is only signaled if previously activated. The threshold value cannot be changed for this alarm, i.e. the alarm is always indicated after the first failure of a unit assigned to the alarm class or alarm class concerned (once the validation time has run out) e.g. failure of a peripheral line during long-term supervision.
- **MINOR ALARM**
- Low priority alarm. The threshold value "TRESH1" was reached within the validation time "TIME1" specified. e.g. failure of 50% of the trunk lines.
- **MAJOR ALARM**
- High-priority alarm. The threshold value "THRESH2" was reached within the validation time "TIME2" specified. e.g. failure of 90% of the trunk lines.

The discrimination and prioritization of the alarms thus depends on the different threshold values.

See also:

- [DEVICE ALARM](#)
- [Alarm classes](#)
- [Assigning error messages](#)
- [Single alarms and alarm mirror](#)

- [Alarm mirror](#)
- [Evaluating the alarm mirror](#)

5.6 DEVICE ALARM

The DEVICE ALARM type can be activated for all the SWU and SM periphery alarm classes (see [DEVICE ALARM](#) and [AM handling of alarms](#)).

The DEVICE ALARM alarm type is only signaled if generated by AMO (A9006 / A9007).

The DEVICE ALARM is activated and deactivated with the AMOs VADSU / VADSM.

This alarm type can be generated for all SWU periphery and server periphery alarms, as well as for certain central alarms.

Activation: The alarm type is activated with the CHA-VADSU command (for servers). This alarm type is activated by increasing the threshold value from "0" to between "1" and "255" (number of hours).

Deactivation: The alarm type is deactivated with CHA-VADSU (for servers). To deactivate, set the threshold value to "0" again.

Display: The DIS-VADSU (DIS-VADSM) command allows users to check that the alarm type is activated and what time was entered (output column: TIME).

In general, this type of alarm is activated in order to provide a long-term monitoring function for a specific exchange line or tie-line. It can show how long lines were out of service.

The DEVICE ALARM alarm type can be activated for all the SWU alarm classes.

5.7 Timed decrementing system

The timed decrementing system is used for a number of central device alarms, which are not initiated by the activation or deactivation of system units. With this system, the respective alarm counters are reset at regular intervals, provided the counter value is greater than 0 but has not yet reached the threshold value. The decrementing interval timer of each counter is the same as the validation time of the respective alarm. Resetting the counters means that the error count is not entered in the error statistics. This means that low-impact ('tolerable') errors cannot lead to an alarm under normal circumstances. Only an abnormal, rapid succession of errors within one decrementing interval will lead to an alarm. The decrementing system also reacts when the error counter has reached 70% of the threshold value: In this case, the timed decrementing system does not reset the counter until four decrementing interval timers have elapsed. If enough additional errors occur in this time, the counter will reach the threshold value and an alarm will be initialized. The alarms used for this procedure are identified in the description.

5.8 RESET ALARM function

All central alarms can be cleared with the AMO GRA.

5.9 Alarm classes

The designations ALARM-CLASS and DEV-CLASS have the same meaning.

The system is divided into alarm classes. These alarm classes represent groups of associated functional units. The alarm classes are:

- [Central alarm class](#) LTG failures, CC Restarts.
- [SWU periphery alarm class](#) Exchange/tie-trunk failures, all analog or digital voice services.
- [SWU logical alarm classes](#) Exchange trunk failures and individual alarms.
 - Directional alarms: assigned to a specific PEN.
 - Personal alarms: assigned to a specific user's station number
- [SM periphery alarm class](#) Service-specific hardware for TTX or data storage units/volumes such as hard disks.

See also:

- [Alarm types](#)
- [Assigning error messages](#)
- [Single alarms and alarm mirror](#)
- [Alarm mirror](#)
- [Evaluating the alarm mirror](#)
- List of alarms: [CENTRAL](#), [SWU-PER](#), [SWU-LOG](#), [SM-PER](#)

5.10 Assigning error messages

Every error message is assigned to one or more alarms.

Error messages contain the ALARM CLASS in the second line. This line is suppressed in the case of output via NMC and is displayed in the case of output via Remote Service Platform (RSP) or printer.

In the following example alarm class assignment is arbitrary. Six combination options describe the appearance of the second line of an error message.

In the central group, only one alarm class that does not provide for combination with peripheral groups is specified.

Periphery alarm classes can contain up to six alarm classes, these are separated by "/" characters.

Only the SWU-PER and SWU-LOG groups can occur in combination.

```
Fxxxx M4 N1769 xxxx .....xxx ..xxx xxxx xxxx .....01-10-29 14:51:41
```

```
.....ALARM-CLASS:SWU PER:001/002/003/004/005/006 SWU  
LOG:201/202/203/204/205/206
```

or:

```
.....ALARM-CLASS:SWU-PER:001/002/003 .....SWU-LOG:206
```

```
.....ALARM-CLASS:SWU-PER:001/002/006
```

```
.....ALARM-CLASS:SWU-LOG:416
```

```
.....ALARM-CLASS:SM-PER: 011/012/013/014/015/016
```

```
.....ALARM-CLASS:CENTRAL:026
```

See also:

- [Alarm types](#)
- [Alarm classes](#)
- [Single alarms and alarm mirror](#)
- [Alarm mirror](#)
- [Evaluating the alarm mirror](#)
- List of alarms: [CENTRAL](#), [SWU-PER](#), [SWU-LOG](#), [SM-PER](#)

5.11 Single alarms and alarm mirror

Alarm signaling occurs in the following formats:

- Single alarms:
- A9000 - A9003, A9006, A9007 These messages contain only one alarm.
- Summation alarms (alarm mirror):
- A9008 - A9015: When using these alarms, the alarm mirror is sent for each individual alarm class.

See also:

- [Alarm types](#)
- [Alarm classes](#)
- [Assigning error messages](#)
- [Alarm mirror](#)
- [Evaluating the alarm mirror](#)

5.12 Alarm mirror

The alarm mirror output is carried out with the aid of alarm messages which contain all the set alarms of an alarm class. The following alarm messages are possible:

- **A9008** contains all the alarms set in the central alarm class (SWU or server).
- **A9009** contains all the alarms set in the SWU periphery alarm class.
- **A9010** contains all the alarms set in the SWU logical device alarm class.
- **A9011** contains all the alarms set in the server periphery alarm class.
- **A9012 to A9015**. these summation alarms can only be interrogated manually with the aid of the AMO GRA, or by means of an external NMC command, see NMC Administrator Manual (A31003-G8014-A100-*-35).

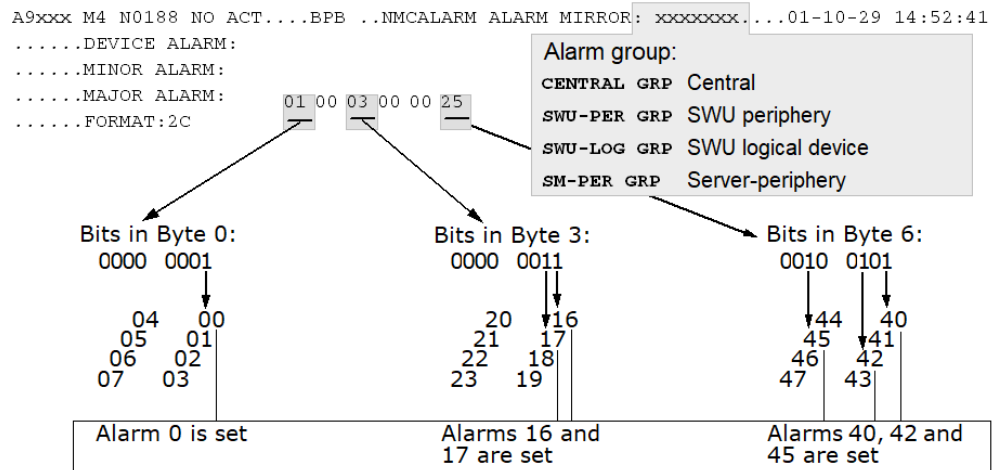
See also:

- [Alarm types](#)
- [Alarm classes](#)
- [Assigning error messages](#)
- [Single alarms and alarm mirror](#)
- [Evaluating the alarm mirror](#)

5.12.1 Evaluating the alarm mirror

The following example shows the interpretation of the bit lines in alarm messages. Direction of the information to be read:

- the bytes from **left to right** in ascending order.
- bits within a bytes from **right to left**.



The interpretation of the bit line for DEVICE/MINOR and MAJOR is identical.

Alarm mirror of the central alarm class

A9008 M4 N1001 NO ACT...BPA ..NMCALARM MIRROR:
CENTRAL GRP.....01-10-29 15:34:25 DEVICE ALARM:
1122334455667788 MINOR ALARM: 1122334455667788 MAJOR
ALARM: 1122334455667788 FORMAT:30

11 = Byte 1 22 = Byte 2 33 = Byte 3 44 = Byte 4 55 = Byte 5 66 = Byte 6 77 = Byte 7 88 = Byte 8 Bytes 1 to 8 contain the 64 central alarms.

Alarm mirror of the SWU periphery device class

A9008 M4 N1001 NO ACT...BPA ..NMCALARM MIRROR: SWU-PER
GRP....01-10-29 13:58:45 DEVICE-ALARM: 11223344 MINOR ALARM:
11223344 MAJOR ALARM: 11223344 FORMAT:30

11 = Byte 1 22 = Byte 2 33 = Byte 3 44 = Byte 4 Bytes 1 - 4 contain the 32 SWU
periphery alarms.

Alarm mirror of the SWU logical device class

A9010 M4 N1001 NO ACT...BPA ..NMCALARM MIRROR: SWU-LOG
GRP.....01-10-29 13:58:45

DEVICE-ALARM:

[illegible]

MINOR-ALARM:...

[illegible]

[illegible]

11 = Byte 1 contains the 8 specific alarms 22 = Bytes 2 to 65 contain the 512 directional alarms 33 = Bytes 66 to 73 contain the 64 personal alarms

A9011 M4 N1001 NO ACT...BPA ..NMCALARM MIRROR: SM-PER
GRP.....01-10-29 13:58:45 DEVICE-ALARM: 112233 MINOR ALARM:
112233 MAJOR ALARM: 112233 FORMAT:30

See also:

- Alarm types
- Alarm classes
- Assigning error messages
- Single alarms and alarm mirror
- List of alarms: CENTRAL, SWU-PER, SWU-LOG, SM-PER
- Alarm mirror

This group comprises 64 alarms, which cannot be unambiguously assigned to one of the periphery device class, as well as alarms defined as central alarms due to their functionality. Central alarms are permanently defined and are assigned by the system and are available for:

- Examples:

```
Fxxxx M4 N1769 xxxx .....xxx ..xxx xxxx xxxx .....01-10-29
14:51:41 .....ALARM CLASS:CENTRAL:026
```

- Table of central alarms
- List of central alarms: CENTRAL
- Alarm classes
- Evaluating the alarm mirror

5.13.1 Table of central alarms

Table 20: Central SWU Alarms

ALARM GROUP: CENTRAL SWU ALARMS									
Alarm number	THRSHD1	THRSHD2	Errors Absol.	Time1 [sec]	Time2 [sec]	Time	PR	HW-CON	Alarm name
0	2	4	0	1800	1800	0	0	SU	LTG RESTARTS
1	1	2	0	420	420	0	0	SU	LTG FAILURE
2	1	2	2	600	600	0	0	SU	LTU FAILURE
3	1	DEACT	0	300	0	0	0	SU	PHONEMAIL ALARM
4	1	DEACT	0	300	0	0	0	SU	LTU STANDBY CABLE
5	2	3	0	1800	1800	0	0	SU	CC RESTARTS
6	1	DEACT	0	900	0	0	0	SU	STBY-CC FAILURE
8	DEACT	1	0	0	600	0	0	SU	RMS FAILURE
15	1	2	0	600	600	0	0	SU	EXTERNAL SERVER
16	5	8	0	900	900	0	0	SU	LTG CENTRAL CONTROL
17	2	DEACT	0	900	900	0	0	SU	CC CENTRAL CONTROL
18	1	2	0	900	900	0	0	SU	SWITCHING NETWORK
19	2	4	0	900	900	0	0	SU	CLOCKING SYSTEM
20	1	2	0	900	900	0	0	SU	SIGNAL UNIT
23	DEACT	DEACT	0	0	0	0	0	SU	SW ERRORS
24	DEACT	DEACT	0	0	0	0	0	SU	SYSTEM MESSAGES
25	1	2	0	120	120	0	0	SU	POWER SUPPLY
26	DEACT	1	0	0	1800	0	0	SU	SM FAILURE
29	1	2	0	1	1	0	0	SU	MAINTENANCE NOTE
32	1	2	7	120	120	0	0	SU	ACCESS POINT FAILURE

ALARM GROUP: CENTRAL SWU ALARMS

Alarm number	THRSHD1	THRSHD2	Errors Absol.	Time1 [sec]	Time2 [sec]	Time	PR	HW-CON	Alarm name
33	10%	50%	0%	120	120	0	0	SU	BAD IP CONNECTIVITY
34	1	DEACT	0	120	0	0	0	SU	LW-SW VERSION CONFLICT
36	1	2	0	120	120	0	0	SU	PER-BOARD SWITCHOVER
37	DEACT	1	0	1	1	0	0	SU	AP EMERGENCY
38	DEACT	1	2	1	1	0	0	SU	CC-AP UNAVAILABLE
39	1	2	0	1	1	0	0	SU	ENCRYPTION PROBLEM
40	1	2	0	1	1	0	0	SU	SECURE TRACE

ALARM GROUP: CENTRAL SM ALARMS

Alarm number	THRSHD1	THRSHD2	Errors Absol.	Time1 [sec]	Time2 [sec]	Time	PR	HW-CON	Alarm name
5	2	3	0	1800	1800	0	0	SU	CC RESTARTS
9	DEACT	1	0	0	600	0	0	SU	CHARGE COMPUTER
10	1	2	0	1800	1800	0	0	SU	IS RESTARTS
13	DEACT	1	0	0	1	0	0	SU	ALTERNATE LOAD AREA
17	DEACT	1	0	0	900	0	0	SU	CC CENTRAL CONTROL
21	5	DEACT	0	900	0	0	0	SU	IS CENTRAL CONTROL
22	5	DEACT	0	900	0	0	0	SU	SM CENTRAL CONTROL
23	DEACT	DEACT	0	0	0	0	0	SU	SW ERRORS
24	DEACT	DEACT	0	0	0	0	0	SU	SYSTEM MESSAGES
25	1	2	0	120	120	0	0	SU	POWER SUPPLY
27	1	2	0	1	1	0	0	SU	UNIX FAILURE
28	DEACT	1	0	0	1	0	0	SU	SYSTEM TIME FAILURE

ALARM GROUP: CENTRAL SM ALARMS									
Alarm number	THRSHD1	THRSHD2	Errors Absol.	Time1 [sec]	Time2 [sec]	Time	PR	HW-CON	Alarm name
29	1	2	0	1	1	0	0	SU	MAINTENANCE NOTE
30	DEACT	1	0	0	1	0	0	SU	SWITCHING UNIT FAILURE
35	DEACT	1	0	1	1	0	0	SU	HW DEFECT

Table 21: Central SM Alarms

See also:

- [Central alarm class](#)
- List of alarms: [CENTRAL](#)
- [Alarm classes](#)

CENTRAL

Alarm classes: CENTRAL -- [SWU-PER](#) -- [SWU-LOG](#) -- [SM-PER](#)

[Central alarm class](#)

[Table of central alarms](#)

CENTRAL:000	CENTRAL:001	CENTRAL:002	CENTRAL:003
CENTRAL:004	CENTRAL:005	CENTRAL:006	
CENTRAL:008	CENTRAL:009	CENTRAL:010	CENTRAL:011
CENTRAL:012	CENTRAL:013	CENTRAL:014	CENTRAL:015
CENTRAL:016	CENTRAL:017	CENTRAL:018	CENTRAL:019
CENTRAL:020	CENTRAL:021	CENTRAL:022	CENTRAL:023
CENTRAL:024	CENTRAL:025	CENTRAL:026	CENTRAL:027
CENTRAL:028	CENTRAL:029	CENTRAL:030	CENTRAL:031
CENTRAL:032	CENTRAL:033	CENTRAL:034	CENTRAL:035
CENTRAL:036	CENTRAL:037	CENTRAL:038	CENTRAL:041
CENTRAL:063			

See also:

- [Alarm classes](#)
- [Evaluating the alarm mirror](#)

[A9000](#) -- [F1000](#) -- [F2000](#) -- [F3000](#) -- [F4000](#) -- [F5000](#) -- [F6000](#) -- [F7000](#) -- [F8000](#)

CENTRAL:000

LTG RESTARTS

IMPORTANT: Not relevant for US release.

This alarm indicates that at least 1 LTG has undergone too many restarts within the defined period of time. Although the above alarm is a summation alarm, the number of LTG restarts are logged by separate counters for each LTG.

Restart alarm criteria:

- The error counters are controlled via error messages. One of the messages assigned to the restart alarm contains a restart flag. This message causes the appropriate error counter to be incremented.
- Each type of restart is counted.
- The alarm is set 1 minute after the threshold value is reached. This value is not the same as the validation time, but is a separate, fixed time.
- The timed decrementing system is used for this alarm.
- These alarms can be reset by means of an external NMC command (see NMC Administrator Manual A31003-G8014-A100-*-35) or AMO GRA (CHA- GRA). If this is not done, the alarm is automatically cleared after 18 hours.
- List: [CENTRAL](#)

CENTRAL:001

LTG FAILURE

IMPORTANT: Not relevant for US release.

This alarm indicates failure of an entire LTG or one GP half.

Assignment to error messages: F5057, F5059 and F5069

Alarm criteria:

- Minor alarm: failure of at least one standby LTG
- Major alarm: failure of at least one active LTG
- The alarm is reset as soon as the LTG/GP half is available again. This alarm can also be cleared with the AMO GRA.
- The threshold values for this alarm are fixed at source-code level and cannot be changed with AMO-VADSU.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:002

LTU FAILURE

This alarm indicates failure of an LTU shelf, a SYN-clock or the failure of the ac generator ACGEN/ac ringing voltage generator RG.

IMPORTANT: The error which generates this alarm can also generate other SWU periphery alarms, e.g. DIGITAL VOICE DEVICES as a secondary reaction.

The failure or deactivation of the LTU shelf power supply also generates this alarm. This situation is also signaled by the POWER SUPPLY alarm of the SWU. Consequently, in the event of an LTU FAILURE, a search should always be carried out for the POWER SUPPLY alarm.

The failure of an Access Point in NBCS systems also generates this alarm.

Assignment to error messages: F5300 - F5336.

Alarm criteria:

- Minor alarm: Failure of at least one ACGEN/RG board
- Major alarm: Failure of at least one LTU (or an Access Point) Failure of at least one SYN_1/SYN_2 clock Failure of at least one HDLC DCL path
- The alarm is reset as soon as all above-mentioned units are back in operation. This alarm can also be cleared with the AMO GRA.
- The threshold values for this alarm are fixed at source-code level and cannot be changed with AMO-VADSU.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:003

PHONEMAIL ALARM

IMPORTANT: US-specific alarm release.

This alarm signals the failure of Phonemail (PM) nodes.

Assignment to error messages: F5700-F5701

Alarm criteria:

- The alarm is controlled by the error messages F5700 and F5701
- The alarm is set if F5700 (Alarm on) is signaled for at least one PM node.
- The alarm is reset if all failed PM nodes have been put back into operation, i.e. an F5701 (Alarm off) must exist for every PM that has been put back into operation. This alarm can also be cleared with the AMO GRA.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:004

LTU STANDBY CABLE

This alarm indicates a cabling problem between the STBY-CC and the LTUCX board. This happens when the cables to the board are defective, disconnected or connected in the incorrect sequence.

Assignment to error message: F5906

Alarm criteria:

- The alarm is controlled by the above-mentioned error message
- The alarm is set when at least one cable to the board is disconnected/defective.
- The alarm can only be cleared with the AMO GRA (DEL - GRA). The external NMC delete tasks (see NMC Administrator Manual A31003-G8014-A100-*35) and the automatic timed decrementing system (18 hours) are not used for this alarm.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:005

CC RESTARTS

This alarm indicates that the CC (both active and standby) has undergone too many restarts.

Restart alarm criteria:

- The error counters are controlled via error messages. One of the messages assigned to the restart alarm contains a restart flag. This message causes the appropriate error counter to be incremented.
- Each type of restart is counted.
- The alarm is set 1 minute after the threshold value is reached. This value is not the same as the validation time, but is a separate, fixed time.
- The timed decrementing system is used for this alarm.
- The alarm can be reset by means of an external NMC command (see NMC Administrator Manual A31003-G8014-A100-*-35) or the AMO GRA (CHA-GRA). If this is not done, the alarm is deleted after 18 hours.
- List: [CENTRAL](#)

CENTRAL:006

STBY-CC FAILURE

This alarm indicates failure of the standby CC half.

Error messages assigned:

The following error messages indicate the loss of the connection to the STBY-CC. These messages can be found via the alarm classes CC CENTRAL CONTROL or SW ERROR. The cause of the error is indicated via the restart error messages of the alarm class CC RESTARTS when availability has been restored.

(LAN): F8266 - F8272

Alarm criteria:

- A minor alarm only is generated for this alarm: STBY-CC failure
- The alarm is reset automatically as soon as the standby CC half is back in operation. This alarm can also be cleared with the AMO GRA.
- The threshold values for this alarm are fixed at source-code level and cannot be changed with AMO-VADSU.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#) -- [F8000](#)

IMPORTANT: US-specific alarm release (valid for SP300H-V1.0/R6.6 and earlier).

CENTRAL:008

RMS FAILURE

This alarm indicates failure of a remote shelf RMS. Each RMS has one error counter, but the alarm is a summation alarm.

Assignment to error message: F5336

Alarm criteria:

- A major alarm only is generated for this alarm.
- The alarm is only controlled via the F5336 message.
- The alarm is set if at least one RMS has failed. The indicator is the DIUR error message F5336 with the action "OUT SERV".

- The alarm is reset automatically, if the DIUR error message F5336 was sent with the action "IN SERVICE" for all failed RMSs. This alarm can also be cleared with the AMO GRA.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:009

CHARGE COMPUTER

IMPORTANT: Not relevant for US release.

This alarm indicates failure of the call charge computer connected to the V.24 interface of the ADS.

Assignment to error message: F7650

Alarm criteria:

- A major alarm only is generated for this alarm.
- The error counter is controlled via the above error messages (incrementing).
- The timed decrementing system is used for this alarm.
- The alarm can be reset by means of an external NMC command (see NMC Administrator Manual A31003-G8014-A100-*-35) or the AMO GRA (CHA-GRA). If this is not done, the alarm is deleted after 18 hours.
- List: [CENTRAL](#) -- [A9000](#) -- [F7000](#)

CENTRAL:010

IS RESTARTS

This alarm indicates that the ADS has undergone too many restarts.

Restart alarm criteria:

- The error counters are controlled via error messages. One of the messages assigned to the restart alarm contains a restart flag. This message causes the appropriate error counter to be incremented.
- Each type of restart is counted.
- The alarm is set 1 minute after the threshold value is reached. This value is not the same as the validation time, but is a separate, fixed time.
- The timed decrementing system is used for this alarm.
- These alarms can be reset by means of an external NMC command (see NMC Administrator Manual A31003-G8014-A100-*-35) or the AMO GRA (CHA-GRA). If this is not done, the alarm is deleted after 18 hours.
- List: [CENTRAL](#)

CENTRAL:011

Not used

- List: [CENTRAL](#)

CENTRAL:012

Not used

- List: [CENTRAL](#)

CENTRAL:013

ALTERNATE LOAD AREA

This alarm indicates that a system reload has occurred as a result of a serious software or hardware error. Thus an escalation to a “fallback medium” (GLA, rescue software) has taken place.

Assignment to error message:

F6507

Alarm criteria:

- A major alarm only is generated for this alarm.
- The alarm is controlled via the error messages mentioned above.
- The alarm is set when the load device conflicts with the HD (GLA, rescue software) after a system reload without manual intervention (AMO REST). The alarm is reset when the error is removed (e.g.: regenerate the HD), the HD is then rebooted.
- The alarm can be reset by means of AMO GRA (DEL - GRA).
- List: [CENTRAL](#) -- [A9000](#) -- [F6000](#)

CENTRAL:014

Not used

- List: [CENTRAL](#)

CENTRAL:015

EXTERNAL SERVER

This alarm indicates that the external server is not available from the point of view of the SWU, i.e. the SWU periphery modules that have a physical connection (via a LAN for example) to an external server monitor this connection.

At the moment, this alarm clearly indicates the non-availability of the TC server (telecommuting).

IMPORTANT: The error messages assigned to this alarm only refer to the SWU periphery hardware.

Assignment to error message: F5870/F5871

Alarm criteria:

- MINOR alarm: A minor alarm is signaled if at least one SLMPX module identifies a loss of connection to a TC server.
- MAJOR alarm: A major alarm is signaled if the only SLMPX module or all SLMPX modules identify a loss of connection to a server.
- The alarm is reset if each SLMPX module has restored the connection to its server. This alarm can also be reset with AMO GRA.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:016

LTG CENTRAL CONTROL

IMPORTANT: Not relevant for US release.

See Central alarm SWU: CC CENTRAL CONTROL (A/17)

Assignment to error messages: F2200 - F2201, F3000 - F3010, F3050 - F3059, F3150 - F3174, F5030 - F5041, F5160 - F5173

- List: [CENTRAL](#) -- [A9000](#) -- [F2000](#) -- [F3000](#) -- [F5000](#)

CENTRAL:017

CC CENTRAL CONTROL

This alarm can occur both in the SWU and in the ADP.

- SWU
- This alarm indicates too many errors in the central hardware of a CC half. Critical errors of this type which lead to a processor restart are indicated via the alarm CC RESTARTS.

Assignment to error messages: F2200 - F2201, F3000 - F3010, F3150 - F3174, F5140 - F5141, F7100 - F7132, F5060 - F5076 (apart from the error messages see LTG FAILURE, CLOCKING SYSTEM) F3100 - F3110 (apart from the error messages, see SM FAILURE)

Alarm criteria:

- The error counter is controlled via the above error messages (incrementing).
- The timed decrementing system is used for this alarm.
- This alarm can be reset by means of an external NMC command (see NMC Administrator Manual A31003-G8014-A100-*35) or AMO GRA (CHA- GRA). If this is not done, the alarm is deleted after 18 hours.
- ADP
- In the ADP, this alarm is signaled as an emergency alarm (major alarm) whenever the connection to both CC halves is lost (> 15 minutes). The alarm is reset when the connection to the active CC has been restored.

Error messages have not been assigned to this alarm.

The messages F8264 - F8271 relating to the connection to the CC have been assigned to the alarm class SW ERROR and can be found in the HISTO file using the command STA-HISTA:SEARCH, , J, Alarm, CENTRAL, CENTRAL_23.

The actual cause of the failure of the CC can only be ascertained after the CC has been booted (search with AMO-HISTA, alarm class CC RESTARTS).

IMPORTANT: When the SWU fails, it is not normally possible to signal this alarm to the service center, if the remote connection has been configured over SWU routes. In this situation, the hardware contact for the TFT is switched via the ADP alarm SWITCHING UNIT FAILURE (Trunk failure transfer TFT). Thus, this emergency situation can be signaled to an external monitoring unit.

- List: [CENTRAL](#) -- [A9000](#) -- [F2000](#) -- [F3000](#) -- [F5000](#) -- [F7000](#)

CENTRAL:018

SWITCHING NETWORK

This alarm indicates failure of system units, e.g. CSN, GSN, MTS, HIGHWAY, TIMESLOT and MBU (if > 0). Separate error counters exist for these system units, but the alarm is a summation alarm.

The failure of the central hardware, e.g. MTS causes the SWU to be restarted and the error is thus indicated via the alarm CC RESTARTS. In this case the error messages are also assigned to the alarm class CC RESTARTS.

The alarm "SWITCHING NETWORK" is therefore mainly signaled when individual hardware units fail. The relevant error messages are F5180 - F5183.

Assignment to error messages: F5050 - F5059, F5180 - F5183, F5200

Alarm criteria:

- Minor alarm: Failure of at least one passive CSN half Failure of at least one TSL (GSN/CSN) Failure of at least one standby MTS (GSN/CSN) Failure of at least one CONF-HWY Failure of GSN-Standby-HWY <100% Failure of GSN-ACT-HWY <50% Failure of CSN-Standby-HWY <50%
- Major alarm: Failure of at least one MBU Failure of at least one MTS-ACT (GSN/CSN) Failure of GSN-Standby-HWY =100% Failure of GSN-ACT-HWY >50% or all HWY for a peripheral board Failure of CSN-ACT-HWY >50
- The alarm is automatically reset as soon as all above units are back in operation. This alarm can also be cleared with the AMO GRA.
- The threshold values for this alarm are fixed at source-code level and cannot be changed with AMO-VADSU.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:019

CLOCKING SYSTEM

This alarm indicates errors in the system clock, i.e. in the PCG/CCG modules. Critical errors however cause the SWU to restart. The error messages can still be ascertained via the alarm class CC RESTARTS (AMO-HISTA).

Assignment to error messages: F5100 - F5107, F5070 - F5075, F5553 - F5586, F5588 - F5591

Alarm criteria:

- The error counter is incremented via the following error messages: F5100-F5107, F5557, F5573.
- When an external clock box / front reference is implemented , this alarm can also be automatically reset. This is controlled by means of the error messages F5588-F5591.
- The timed decrementing system is used for this alarm.
- This alarm can be reset either by means of an external NMC / DMS command (see NMC Administrator Manual A31003-G8014-A100-*-35) or AMO-GRA (CHA-GRA). If this is not done, the alarm is deleted after 18 hours.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:020

SIGNAL UNIT

This alarm indicates failure of central and peripheral SIU and CONF functions. Separate error counters exist for these system units, but the alarm is a summation alarm. The alarm is controlled by means of the status changes of the units (SIU/CONF/SIU functions).

Critical errors in the standard SIU, or conf cause the SWU to restart. In this case the error messages can be ascertained via the alarm class CC RESTARTS (AMO-HISTA).

Assignment to error messages: F5220 - F5241, F5260 - F5292, F5340 - F5374 (only for SIU board type 2/3)

Alarm criteria:

- Minor alarm: CONF failure in at least one standby GP half Failure of the central SIU in at least one standby GP half Failure of < 80% of the peripheral SIU functions of a GP half s
- Major alarm: CONF failure in at least one active LTG Failure of the central SIU in at least one active LTG Failure of > 80% of the peripheral SIU functions of an LTG
- The alarm is automatically reset as soon as all above units are back in operation. This alarm can also be cleared with the AMO GRA.
- The threshold values for this alarm are fixed at source-code level and cannot be changed with AMO-VADSU.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:021

IS CENTRAL CONTROL

See [CENTRAL:022](#).

- List: [CENTRAL](#)

CENTRAL:022

SM CENTRAL CONTROL

IMPORTANT: Not relevant for US release.

These alarms are central alarms of the ADS and the different servers. They indicate too many errors in the central hardware of the server (MEM/IP/MULTIBUS), as well as the hardware interrupts of the DP. Critical errors of this type which lead to a processor restart are indicated via the alarms 'IS RESTARTS' (ADS), or 'SM RESTARTS'.

Assignment to error messages: F2200 - F2201, F7050 - F7079, F7100 - F7132, F7153 - F7194, F7200 - F7202

Alarm criteria

- The error counter is controlled via the above-mentioned error messages (incrementing).
- The timed decrementing system is used for this alarm.
- The alarm can be reset by means of an external NMC command (see NMC Administrator Manual A31003-G8014-A100-*35) or AMO GRA (CHA - GRA). If this is not done, the alarm is deleted after 18 hours.
- List: [CENTRAL](#) -- [A9000](#) -- [F2000](#) -- [F7000](#)

CENTRAL:023

SW ERRORS

See [CENTRAL:024](#).

- List: [CENTRAL](#)

CENTRAL:024

SYSTEM MESSAGES

Both alarms are also defined as "NO-ALARM" classes. Software errors are not normally indicated via alarms, unless a software error causes a module restart. In this case, the appropriate reset alarm is set if the alarm threshold value has been reached. This also applies to the SYSTEM MESSAGES, status messages of the Recovery system and the VECO system.

IMPORTANT: It is always recommended when analyzing alarms for HTS or NMC that you run a search in the error messages for these alarm classes. The alarm class, SYSTEM MESSAGES, can help to indicate how the error might be solved.

Assignment to error messages:

- SW ERRORS: F2000 - F2099, F4008 - F4094, F4100 - F4199, F4250 - F4299, F6000 - F6033, F6050 - F6083, F6103 - F6198, F6200 - F6298, F6300 - F6333, F6600 - F6653, F6700 - F6701
- SYSTEM MESSAGES F2050-F2099, F2450, F2750 - F2752, F4352 - F4399, F4400 - F4419, F4450 - F4457, F4500 - F4509, F6103 - F6198, F6200 - F6298, F6300 - F6333, F7000 - F7005
- List: [CENTRAL](#) -- [A9000](#) -- [F2000](#) -- [F4000](#) -- [F6000](#) -- [F7000](#)

CENTRAL:025

POWER SUPPLY

This alarm is valid for SWU and ADP. The alarm is controlled by the following error messages.

- SWU
- Assignment to error messages: F8014 - F8019 / F8020 / F8021

Alarm criteria:

- Minor alarm: A power supply unit in the CC/periphery shelf has failed.
- Major alarm: More than one power supply unit in the CC/periphery shelf has failed
- Alarm on/off:

CC shelf: F8014 / F8015 (pow fail powerfail CC on/off) Per. shelves: F8016 / F8017 (pow fail power fail LTUE on/off) Per. shelves: F8018 / F8019 (pow fail power fail LTU on/off) Battery card: F8020 / F8021 (pow fail Batt mgr card failed/ok)

- ADP

- Assignment to error messages:

F8010 - F8013 / F8023 - 8030

Alarm criteria:

- Minor alarm: Inverter in the ADS: F8012 / F8013 (pow fail converter on/off) Redundancy lost: F8025 / F8026 (pow fail redund loss/back ac/dc sys) F8029 / F8030 (pow fail redund loss/back dc/dc sys)
- Major alarm: Mains power failure: F8010 / F8011 (pow fail start/end) F8023 / F8024 (pow fail start/end AC/DC sys) F8027 / F8028 (pow fail start/end DC/DC sys)
- The alarm is reset automatically when a return of power is signaled, i.e. the devices are back in operation. This alarm can also be cleared with the AMO GRA.
- The threshold values for this alarm are fixed at source-code level and cannot be changed with AMO-VADSU.
- List: [CENTRAL](#) -- [A9000](#) -- [F8000](#)

CENTRAL:026

SM FAILURE

IMPORTANT: Not relevant for US release.

This alarm indicates failure of server units, with the exception of the ADS. The failure status and, subsequently, the return to ready status of the server concerned is detected by status polling, and the alarm validation in this alarm class is controlled by the poll results. Internal error counters exist for this alarm, but the alarm is a summation alarm.

Assignment of error messages: F3106, F3109, F3110

Alarm criteria:

- Minor alarm: is not generated
- Major alarm: Failure of at least one server
- The alarm is reset automatically as soon as all the configured servers are back in operation. This alarm can also be cleared with the AMO GRA.
- List: [CENTRAL](#) -- [A9000](#) -- [F3000](#)

CENTRAL:027

UNIX FAILURE

This alarm indicates failure of UNIX software in the server, e.g. call charge computing. This alarm can also indicate the failure of UNIX software in servers that are connection to the Atlantic LAN via the HUB. The alarm is controlled by means of the error messages listed below.

Assignment to error messages: F2100 - F2115

Alarm criteria:

- MINOR alarm: F2112 (unix hw err) / F2103 (unix err) / F2107 (unix appl err) / F2101 (xenix err)
- MAJOR alarm: F2114 (hw fatal err) / F2105 (fatal err) / F2109 (appl fatal err)
- Alarm escalation to a MINOR alarm or if a MINOR alarm already exists, to a MAJOR alarm: F2104 (unix err escal) / F2108 (appl err escal) / F2113 (hw err escal er)

- Automatic resetting of the alarm: F2110 (sw reset alarm) / F2115 (hw reset alarm)
- The timed decrementing system is used for this alarm.
- This alarm can also be reset either by means of an external NMC command (see NMC Administrator Manual A31003-G8014-A100-*-35) or the AMO GRA (CHA GRA). If this is not done, the alarm is deleted after 18 hours.
- List: [CENTRAL](#) -- [A9000](#) -- [F2000](#)

CENTRAL:028

SYSTEM TIME FAILURE

This alarm indicates failure of the system time or of the hardware clock on the IOPA/MAC module or on the central processor module of the ADP. The alarm is controlled by means of the error messages listed below.

Assignment to error messages: F3106, F3109, F3110

Alarm criteria:

- MAJOR alarm: F8100 / F8101 (time date valid/invalid)
- MINOR alarm: F8104 / F8105 (battery power fail/on) F8106 / F8107 (battery switch off/on)
- The alarm is reset automatically as soon as a valid system time is available again or when the battery has been switched on again and is fully operational. This alarm can also be cleared with the AMO GRA.
- List: [CENTRAL](#) -- [A9000](#) -- [F8000](#)

CENTRAL:029

MAINTENANCE NOTE

The alarm indicates that the system requires routine maintenance work on one or more software or hardware devices. The software or hardware error messages (software / hardware errors) assigned to this alarm show which device requires your attention. Examples of routine maintenance devices are the call data recording system (loss of call charge data) or the DAT recorder (tape heads need cleaning).

Assignment to error messages: HW: F7407 / F7408 (Event DRIVE) SW: All error messages which contain the subevent, MAINTENANCE.

Alarm criteria:

- This alarm can be reset by means of an external NMC command (see NMC Administrator Manual A31003-G8014-A100-*-35) or the AMO GRA (CHA - GRA). If this is not done, the alarm is deleted after 18 hours.
- List: [CENTRAL](#) -- [A9000](#) -- [F7000](#)

CENTRAL:030

SWITCHING UNIT FAILURE

This alarm is signaled by the dependability system in the ADP if loss of connection to the active CC has been identified for a period exceeding the soft restart time of the CC (valid only for the 600 ECX model). In this situation, the CC software can no longer control the hardware contact/LED for the ALUM (or Trunk failure transfer TFT). This function is therefore controlled by the alarm in the ADP. This means that an external alarm signal is also possible in this case.

- There are no error messages assigned to this alarm.

- The alarm is automatically reset as soon as the connection to the SWU is restored, i.e. as soon as message traffic is again possible. This alarm can also be cleared with the AMO GRA.
- The threshold values for this alarm are fixed at source-code level and cannot be changed with AMO VADSM.
- List: [CENTRAL](#)

CENTRAL:031

Not used

- List: [CENTRAL](#)

CENTRAL:032

ACCESS POINT FAILURE

This alarm indicates a serious error in an ACCESS POINT (e.g.: the expansion box is not available, the power supply for the expansion box has failed, failure of fans, faulty V24 interface or Ethernet driver, problems with resources, survivability problems).

Assignment to error messages:

F5916, F5917, F5305 depending on the reason field.

Alarm criteria:

- The alarm is controlled by the error messages mentioned above.
- The alarm is set if one of the errors mentioned above occurs and the error message is output.
- The alarm can be reset by means of an external NMC command (see NMC Administrator Manual A31003-G8014-A100-*-35) or the AMO GRA (DEL - GRA). If this is not done, the alarm is deleted after 18 hours.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:033

BAD IP CONNECTIVITY

This alarm monitors the IP connection between the host system and the Access Points.

Assignment to error messages:

F5915, F5750, F5470 - F5472

IMPORTANT: In contrast to the central alarms, the error counter and the threshold values for this alarm are not absolute values but percentage values. The error counter performs its calculations on the basis of the faulty IP connections and the configured IP connections. The time frame during a day when the Service Level Agreement (SLA) is valid can be set with the AMO VADSU. The alarm is automatically deactivated outside this period and it is therefore not signaled. The alarm is automatically activated if the SLA becomes valid again. Note: If the SLA period is modified with AMO VADSU, these modifications come into force an hour later. The quality of the IP connections often fluctuates, the alarm is therefore set and reset sporadically. If need be, the alarm can be either be deactivated or the priority of the alarm can be changed with the

AMO VADSU, this means that the alarm is not reported to the Service Center (Prio 11).

Alarm criteria:

- The alarm is mainly controlled by the error messages described above. The status of the IP boards (NCUI,STMI) is also taken into consideration.
- Minor alarm: The faulty connection has reached/surpassed the percentage values defined for the MINOR threshold.
- Major alarm:
 - The faulty connection has reached/surpassed the percentage values defined for the MAJOR threshold.
 - An IP board (NCUI,STMI) has failed.
 - A Layer1 loss has been reported for a (physical) IP cable.
- The alarm can be reset by means of the AMO GRA (DEL - GRA).
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:034

LW-SW VERSION CONFLICT

This alarm signals a version conflict between the loadware and AMO/UW7 interface.

Assignment to error message:

F5870

Alarm criteria:

- A minor alarm only is generated for this alarm.
- The alarm is controlled by the error messages described above.
- The alarm can be reset by means of AMO GRA (DEL - GRA). The external reset command (see NMC Administrator Manual A31003-G8014-A100-*-35) and the timed decrementing system (18 hours) are not available for this alarm.
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:035

HW DEFECT

This alarm indicates a fatal hardware error in the environment of the central processor boards. At present, only the fans of the PCI systems are monitored.

Assignment to error messages:

F7084

Alarm criteria:

- Only a major alarm is generated for this alarm.
- The alarm is controlled by the above-mentioned error message.
- A major alarm is set when one of the fans fails, for example, or if the set rotation speeds (RPM) cannot be reached.
- The alarm can be deleted with the AMO-GRA (DEL-GRA).
- List: [CENTRAL](#) -- [A9000](#) -- [F7000](#)

CENTRAL:036

PER-BOARD SWITCHOVER

This alarm signals the switchover of a redundant peripheral board (e.g., a switchover to the standby HFA board).

Assignment to error messages:

F5880 depending on Reason field.

Alarm criteria:

- The alarm is controlled by the above-mentioned error message.
- The alarm can be deleted with the AMO-GRA (DEL - GRA).
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:037

AP EMERGENCY

This alarm signals the Access Point Emergency Mode. The Access Point Emergency Mode is enabled when the Access Point Emergency Shelf has control over at least one access point.

Assignment to error messages:

F5919, F5920, F5921

Alarm criteria:

- Only a major alarm is generated for this alarm.
- This alarm can only be set at the Access Point Emergency Shelves.
- The alarm is controlled by the above-mentioned error messages.
- A major alarm is set when the Access Point Emergency Shelf has assumed control over at least one access point.
- The alarm can be deleted with the AMO-GRA (DEL - GRA).
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:038

CC-AP UNAVAILABLE

This alarm monitors the availability of the Access Point Emergency Shelves from the viewpoint of the host system.

Assignment to error messages:

F5922, F5923

Alarm criteria:

- Only a major alarm is generated for this alarm.
- This alarm can only be set at a host system.
- The alarm is controlled by the above-mentioned error messages.
- A major alarm is set when the host system can no longer reach at least one Access Point Emergency Shelf.
- The alarm can be deleted with the AMO-GRA (DEL-GRA).
- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:039

ENCRYPTION PROBLEM

This alarm indicates if any kind of encryption problem exists in the whole system.

Assignment to error messages:

F5881,F5781,F5924,F5477

Alarm criteria:

- Only a major alarm is generated for this alarm.
- The alarm is controlled by the above-mentioned error messages.
- Major alarm will be set when the first Encryption problem in the whole system happens and it should remain so until the last problem disappears.
- The alarm can be deleted with the AMO-GRA (DEL - GRA).
- The encryption problem status (i.e.: type of active encryption problems) can be displayed with AMO-UCSU, AMO-BCSU and AMO-SDSU for the given CGW/NCUI board or IP trunk.

IMPORTANT: Since there is only one alarm for all encryption problems and they might happen simultaneously, the error log has to be checked for all related error messages! Each encryption problem has to be checked and solved before manual reset of the alarm by AMO.

- List: [CENTRAL](#) -- [A9000](#) -- [F5000](#)

CENTRAL:040

SECURE TRACE

This alarm indicates if secure trace is activated on at least one NCUI/CGW board.

Assignment to error messages:

F5882

Alarm criteria:

- Only a major alarm is generated for this alarm.
- The alarm is controlled by the above-mentioned error message.
- Major alarm will be set when the first secure trace activation in the whole system happens and it should remain so until there is not any activated secure trace.
- The alarm can be deleted with the AMO-GRA (DEL - GRA).
- The secure trace status can be displayed together with the encryption problem status with AMO-UCSU and AMO-BCSU for the given CGW/NCUI board.

CENTRAL:041

CENTRAL:041 to CENTRAL:063

Not used

These alarms are not yet in use.

- List: [CENTRAL](#)

CENTRAL:063

CENTRAL:039 to CENTRAL:063

Not used

These alarms are not yet in use.

- List: [CENTRAL](#)

5.14 SWU-specific alarm classes

This alarm class indicates failure of the SWU periphery, i.e. terminals and connection lines (CO/TIE), as well as SWU periphery boards. These alarms are administered with the AMO VADSU.

The alarm type, [DEVICE ALARM](#), can be activated for all SWU alarm classes.

There are two types of SWU-specific alarms:

- [SWU periphery alarm class](#): The SWU periphery alarms are not hardware dependent; they are functionally assigned to the different device types. For example, the failure of a TMBD which is configured with the device type designation 'MOSIG', is indicated by an alarm of the 'CO-TRUNK/EXCH-LINE' alarm class. The threshold of these alarm classes corresponds to the number of configured terminals or lines of device types_HKZ assigned to a class.
- [SWU logical alarm classes](#): This group comprises up to 576 alarms, divided into special alarms.

Assignment to error messages: F5340 - F5374, F5420 - F5459, F5500 - F5644, F5680 - F5685

See also:

- [SWU-specific alarm criteria](#)
- [Alarm classes](#)
- [Evaluating the alarm mirror](#)
- List: [SWU-PER](#) -- [SWU-LOG](#) -- [A9000](#) -- [F5000](#)

5.14.1 SWU-specific alarm criteria

The following alarm criteria apply to the SWU periphery alarms and the SWU logical device alarms:

- **Validation threshold value** In contrast to the central alarms, the threshold values are not absolute values but percentage values, for example, the relevant alarm is set if 50% of the exchange lines have failed.
- **Alarm level** The alarm level contains the sum of all the configured devices of the device type assigned to the alarm type. If a terminal is deactivated by means of an AMO, or if a higher-level device in the device hierarchy (LTG / LTU / BOARD / CIRCUIT) is deactivated, the alarm level is decremented by the number of (dependent) terminals which have been put out of service. This means that deactivated terminals are not taken into consideration in the validation threshold count. Conversely, the alarm level is incremented by the number of terminals blocked by AMO which have been put back into service and thus affect alarm handling.

- **Alarm count** The alarm count contains the sum of all the terminals of the device type assigned to the alarm, which are blocked by the dependability system. If a terminal is put out of service by the error analysis system FA (status is DEF/NPR/TRS), or if a higher-level device in the device hierarchy (LTG / LTU / BOARD / CIRCUIT) is out of service (i.e. status is UNACH / UNACHA), the alarm count is incremented by the number of terminals which have been put out of service. Conversely, the alarm count is decremented by the number of terminals put back into service. The alarm is not set unless the validation threshold is reached. If terminals or higher-level devices are put out of service by means of an AMO after being blocked by dependability, then both the alarm level and the alarm count are decremented by the number of terminals thus deactivated. This means that terminals which are blocked via AMO are not taken into consideration in the validation threshold count.

5.15 SWU periphery alarm class

This group comprises 32 alarms which correspond to the various terminal types and device types. The threshold values and the validation times can be set with the AMO VADSU.

The assignment of the device type to an individual board can be seen in the table [Device types](#) / Board assignments.

The alarm type, [DEVICE ALARM](#), can be activated for all SWU alarm classes.

The assignments of error messages of the SWU periphery BOARD / CIRCUIT / terminal to the alarm classes below are also dependent in the DH device type, i.e. in the case of a BOARD error message more than one alarm class may be assigned.

Examples:

```
A9008 M4 N1001 NO ACT BPA NMCALARM MIRROR: SWU-PER GRP
94-04-19 13:58:45 DEVICE ALARM: 00000000 MINOR ALARM: 00000000
MAJOR ALARM: 00000000
```

```
0 ---> 32
```

```
Fxxxx M4 N1769 xxxx .....xxx ..xxx xxxx xxxx .....01-10-29
14:51:41 .....ALARM CLASS:SM-PER:011/012/013/014/015/016
```

IMPORTANT: The periphery boards in Access Points can be loaded later for NBCS systems. The relevant alarms (e.g.: DIGITAL VOICE DEVICES, ANALOG VOICE DEVICES, etc.) can remain set until the end of the load operation. These alarms can be prevented, this increases validation times.

See also:

- [SWU-specific alarm classes](#)
- [Table of SWU periphery alarm](#)
- [Description of SWU periphery alarms](#)
- List of alarms: [SWU-PER](#)
- [Alarm classes](#)
- [Evaluating the alarm mirror](#)

5.15.1 Table of SWU periphery alarm

Table 22: SWU periphery alarm

Alarm number	Alarm name	Threshold value and validation time for					Message priority
		MINOR ALARM (percent)	MAJOR ALARM (percent)	MINOR ALARM (seconds)	MAJOR ALARM (seconds)	DEVICE ALARM (hours)	
SWU-PER:000	C-O-TRUNK/ EXCH-LINE	50%	90%	600	600	0	E0
SWU-PER:001	TIE LINE	50%	90%	600	600	0	E0
SWU-PER:002	MULTIPLE DEVICES	50%	90%	600	600	0	E0
SWU-PER:003	ANALOG VOICE DEVICES	10%	90%	600	600	0	E0
SWU-PER:004	DIGITAL VOICE DEVICES	10%	90%	600	600	0	E0
SWU-PER:005	ATTENDANT CONSOLE	deact.	0%	0	600	0	E0
SWU-PER:006	C-O/ EXCHANGE DATA LINE	50%	90%	600	600	0	E0
SWU-PER:007	TIE DATA LINE	50%	90%	600	600	0	E0
SWU-PER:008	BASE STATION	1%	50%	600	600	0	E0
SWU-PER:009	LOGICAL DEVICES	0%	90%	600	600	0	E0
SWU-PER:010	TFS LINE	25%	50%	600	600	0	E0
SWU-PER:011	VMS LINE	25%	50%	600	600	0	E0
SWU-PER:012	APSE	50%	90%	600	600	0	E0
SWU-PER:013	OTHER DEVICES	deact.	deact.	0	0	0	E0
SWU-PER:014	DATA DEVICES	10%	90%	600	600	0	E0
SWU-PER:015	CONVERSION RESOURCES	1%	50%	600	900	0	E0
SWU-PER:016	NOT USED	--	--	--	--	0	E0
SWU-PER:0xx	NOT USED	--	--	--	--	0	E0
SWU-PER:032	NOT USED	--	--	--	--	0	E0

See also:

- [SWU-specific alarm classes](#)
- [SWU periphery alarm class](#)
- [Description of SWU periphery alarms](#)
- List of alarms: [SWU-PER](#)
- [Alarm classes](#)
- [Evaluating the alarm mirror](#)

5.15.2 Description of SWU periphery alarms

These alarms are assigned to appropriate DH device types.

Assignment to error messages: The assignments of error messages of the SWU periphery BOARD / CIRCUIT / terminal to the alarm classes are also dependent in the DH device type, i.e. in the case of a BOARD error message more than one alarm class may be assigned.

The alarm type, [DEVICE ALARM](#), can be activated for all SWU alarm classes.

SWU-PER

Alarm classes: [CENTRAL](#) -- **SWU-PER** -- [SWU-LOG](#) -- [SM-PER](#)

[Description of SWU periphery alarms](#)

Table of SWU periphery alarm

SWU-PER:000	SWU-PER:001	SWU-PER:002	SWU-PER:003
SWU-PER:004	SWU-PER:005	SWU-PER:006	SWU-PER:007
SWU-PER:008	SWU-PER:009	SWU-PER:010	SWU-PER:011
SWU-PER:012	SWU-PER:013	SWU-PER:014	SWU-PER:015
SWU-PER:016	SWU-PER:032		

See also:

- [Alarm classes](#)
- [Evaluating the alarm mirror](#)

[A9000](#) -- [F1000](#) -- [F2000](#) -- [F3000](#) -- [F4000](#) -- [F5000](#) -- [F6000](#) -- [F7000](#) -- [F8000](#)

SWU-PER:000

C-O-TRUNK/EXCH-LINE

This alarm is a summation alarm for indicating trunk failures. Associated device types:

DB_DH_DEV_TYP	_HKZ
"	_IKZ
"	_HAS_SCH
"	_HAS_WTK

"	_TMAU_LW
"	_TMAG
"	_TMAU_UEF
"	_TMFS_AMT
"	_TMGSR_GS
"	_TMGSR_SR
"	_TMLS
"	_NW_DIGITAL_B, only if CP-TYP=DB_CP_DEVTYP_TMD_AMT_ISDN
"	_NW_DIGITAL_P, only if CP-TYP=DB_CP_DEVTYP_TMD_AMT_ISDN
DB_DH_DEV_TYP	_HKZ

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:001

TIE LINE

This alarm is a summation alarm for indicating tie-trunk failures. Associated device types:

DB_DH_DEV_TYP	_QS_SIM
"	_QS_WES
"	_QS_SCH
"	_QS_TF
"	_QS_EM
"	_TMAU_ABZ
"	_TMAU_LW_QV
"	_TMD_QUER_CH
"	_TMFS_QV
"	_NW_ANALOG
	_NW_S1
	_NW_S1_D
"	_NW_DIGITAL_B, only if CP-TYP=DB_CP_DEVTYP_TMD_VERB_ISDN
"	_NW_DIGITAL_P, only if CP-TYP=DB_CP_DEVTYP_TMD_VERB_ISDN

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:002

MULTIPLE DEVICES

This alarm is a summation alarm for indicating failures of multi-function devices, e.g. CTE or multipoint configurations (S0 bus configurations). Associated device types:

DB_DH_DEV_TYP	_CTE
"	_CTE_AB
"	_CTE_X21
"	_T3510
"	_S3510
"	_HAUSPOST
"	_U_STERN_CLC
"	_DCI_U200
"	_SB_ALLG
"	_SB_FKT_EG
"	_MULT_LINE_8
"	_MULT_LINE_30

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:003

ANALOG VOICE DEVICES

This alarm is a summation alarm for indicating failures in the analog voice service. Associated device types:

DB_DH_DEV_TYP	_ANATE

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:004

DIGITAL VOICE DEVICES

This alarm is a summation alarm for indicating failures in the digital voice services. Associated device types:

DB_DH_DEV_TYP	_DIGITE
"	_DIG_M

"	_CRNT_VOICE
	_MOPO_DIG
	_DIG_M
	_KEYSYSTEM
	_OPS
	_DIGITE_DYAD
	_CRNT_KEYSYS
	_SYMPHONIE

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:005

ATTENDANT CONSOLE

This alarm is a summation alarm for indicating attendant console (ATND) failures. Associated device types:

DB_DH_DEV_TYP	_VPL

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:006

C-O/EXCHANGE DATA LINE

This alarm is a summation alarm for indicating failures of special data lines to a public switched data network. Associated device types:

DB_DH_DEV_TYP	_X21_NC
"	_TMX_21, only if CP-TYP=DB_CP_DEVTYP_TTX_AMT_IDN
"	_TMX21PPH

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:007

TIE DATA LINE

This alarm is a summation alarm for indicating failures of special data lines to a PABX in a network, or a satellite PABX. Associated device types:

DB_DH_DEV_TYP	_TMCL_UA
"	_TMX_21, only if CP-TYP=DB_CP_DEVTYP_TTX_VERB

	_TMCL_HA

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:008

BASE STATION

This alarm is a summation alarm for indicating failures of base stations (mobile radio) connected to an SLMC board. Associated device types:

DB_DH_DEV_TYP	_SYM_CMI_BASE
DB_DH_DEV_TYP	_SYM_CMI_OPTI *
DB_DH_DEV_TYP	_SYM_CMI_ADMI *

* These DH types are pseudo devices and are not monitored by this alarm.

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:009

LOGICAL DEVICES

This alarm is a summation alarm for indicating the failure of so-called logical or fictitious devices that do not have a physical module connection, for example as in the WAML2, SLMY. Failure of these modules is thus essentially monitored.

Associated device types:

DB_DH_DEV_TYP	_SYM_FICTITIO
DB_DH_DEV_TYP	_TC_REM_PORT
DB_DH_DEV_TYP	_TC_FIC_PORT

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:010

TFS LINE

This alarm is a summation alarm for indicating line failures of lines to the integrated TEXT and FAX service. Associated device types:

DB_DH_DEV_TYP	_SM_FAX
"	_SM_TTX
"	_SM_FAXTTX
"	_SM_VM, only if CP-TYP=DB_CP_DEVTYP_FAX_U_TTX_SM

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:011

VMS LINE

This alarm is a summation alarm for indicating line failures of lines to the integrated Voice Mail Service: Associated device types:

DB_DH_DEV_TYP	_SM_VM, only if CP-TYP = DB_CP_DEVTYP_VOICEMAILTTX_SM

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:012

APSE

This alarm is a summation alarm for indicating failures of various special-circuit equipment, e.g. door intercom, code-calling system or dictation equipment. Associated device types:

DB_DH_DEV_TYP	_APSE_PSE
"	_APSE_PSM
"	_APSE_TE
"	_APSE_ELA
"	_APSE_DE
"	_APSE_ANSE_M
"	_APSE_ANSE_A
	_APSE_ANSE_S
"	_APSE_WKE

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:013

OTHER DEVICES

This alarm is a summation alarm for indicating failures of DH device types, which cannot be assigned to specific alarm classes. Associated device types:

No valid DH devices at present.

- List: [SWU-PER](#)

SWU-PER:014

DATA DEVICES

This alarm is a summation alarm for indicating the line failure of special data lines to SWU terminals, e.g. CorNet terminals. Associated device types:

DB_DH_DEV_TYP	_CRNT_DATA	

"	_TMX_21, only	if CP-TYP=DB_CP_DEVTYP_DEE_X21_IDN
"		or CP-TYP=DB_CP_DEVTYP_DEE_X21_VERB
SKY_MANAGER		
SKY_PHONE		
SKY_LINE		
CRNT_DATA		

See [Device types](#) for the boards required.

- List: [SWU-PER](#)

SWU-PER:015

CONVERSION RESOURCES

This alarm signals a summary of the failure of special resources (conversion resources) for converting A-Law/ μ -Law and for echo cancellation. The CBMMs (Central Byte Manipulation Modules) are available on LTUCC and NCUI boards.

- List: [SWU-PER](#)

SWU-PER:016

SWU-PER:016 to SWU-PER:032

Not used

These alarms are not yet in use.

- List: [SWU-PER](#)

SWU-PER:032

SWU-PER:016 to SWU-PER:032

Not used

These alarms are not yet in use.

- List: [SWU-PER](#)

5.15.2.1 Device types

The following table illustrates the assignment of boards to device types:

Table 23: Assignment of boards to a device type

DB_DH_DEV_TYP_	Board
ANATE	SLMA
APSE_ANSE_A	TMOM
APSE_ANSE_M	TMOM
APSE_DE	TMOM

DB_DH_DEV_TYP_	Board
APSE_ELA	TMOM
APSE_PSE	TMOM
APSE_PSM	TMOM
APSE_TE	TMOM
APSE_WKE	TMOM
CRNT_DATA	SLMU, SLMQ, SLMS, STMD
CRNT_VOICE	SLMU, SLMQ, SLMS, STMD, (Set 500 / 700)
CTE	SLMA, TMX21
CTE_AB	SLMA, TMX21
CTE_X21	TMX21
DCI_U200	
DIG_M	SLMB, (Set400)
DIGITE	SLMB, SLMB16, SLMD
HAS_SCH	TMBM
HAS_WTK	
HAUSPOST	SLMD
HKZ	TMBD, TMFS, DIUC, DIUC64
IKZ	TMBD, DIUC, DIUC64
MSN_DEVICE	SLMU, SLMQ, SLMS, STMD
MULTI_LINE_30	DIUS2/VCM
MULTI_LINE_8	SLMU, SLMQ, SLMS, STMD, VCM
NW_ANALOG	TMBC_NW, TMBS, TMEM_NW, TMIPI, TMIPO,
NW_DIGITAL_B	STMD
NW_DIGITAL_P	DIUS2,SLMN,WAML
QS_EM	TMEMW, TMEM, TMSVF, DIUC, DIUC64, TMEMW, TMSVF
QS_SCH	TMLR
QS_SIM	TMBP
QS_TF	TMEMW, TMEM, DIUC, DIUC64
QS_WES	TMBC, DIUC, DIUC64

DB_DH_DEV_TYP_	Board
SB_ALLG	SLMU, SLMQ, SLMS, STMD, (Set 600)
SB_FTK_EG	SLMU, SLMQ, SLMS, STMD, DIUS2
SM_FAX	SLMD
SM_FAXTTX	SLMD
SM_TTX	SLMD
SM_VM	SLMD
S3510	SLMD
SYM_CMI_BASE	SLMC
SYM_CMI_OPTI	SLMC
SYM_CMI_ADMI	SLMC
SYMPHONY	SLMO,SLMQ
TMAG	
TMAU_ABZ	TMAU
TMAU_LW	TMAU
TMAU_LW_QV	TMAU
TMAU_UEF	TMAU
TMCL_HA	TMCL
TMCL_UA	TMCL
TMD_VERB_ISDN	WAML
TMFS_AMT	TMFS, DIUC, DIUC64
TMGSR_GS	
TMGSR_SR	
TMLS	DIUC, DIUC64, TMBLN, TMEW, TMACH, TMAG, TMAU, TMAS, TMAS8, TMEDG, TMGSR, TMCOW, TMELS, TMGSR, TMLRW, TMLBL, TMEW, TMLRS, TMLRW, TMLRP, TMLSF, TMLSL, TMLSR, TMN2S
TMX21	TMX21
TMX21PPH	
T3510	SLMD

See [SWU-LOG:002](#)

- List: [SWU-LOG](#)

SWU-LOG:002

OUTWARD-TRUNK/EX-LINE

These two special alarms are summation alarms for indicating exchange trunk failures. They discriminate between 'incoming traffic' (INWARD TRUNK/EX-LINE) and 'outgoing traffic' (OUTWARD TRUNK/EX-LINE). Only one of these two alarms can be generated. In accordance with the DBP Telekom guidelines, for example, the 'OUTWARD TRUNK/EX-LINE' alarm is generated in German systems. At the same time, regardless of which alarm is generated, the alarm leads to a trunk failure transfer (TFT). In Germany, trunk failure transfer may only take place if 100% of all outgoing or bothway trunks have been out of service for at least one second. The alarm 'INWARD DIALING' is generated for the United Kingdom, for example. The validation data is generated in accordance with the appropriate British Telecom specifications. The alarm is triggered if 60% of the incoming or bothway exchange trunks have been out of service for longer than 16 seconds.

IMPORTANT: To monitor a trunk lines using the NMC alarm, trunk lines had to be assigned by setting the parameter **ALARMNO** to 0,1,2 or 4 (see also the parameter descriptions for AMOs TACSU/TDCSU). Please ensure that for the device class, outgoing/bothway trunk lines, no trunk lines, tie lines or incoming/digital lines are entered. Otherwise, the ALUM function is not activated by a failure or by the failure of tie/S0/S2 lines.

- List: [SWU-LOG](#)

SWU-LOG:003

Not used

This alarm is not yet in use.

- List: [SWU-LOG](#)

SWU-LOG:004

DIU-Cas-Italien

This special alarm is the Italian variant of the exchange line alarm. It specifically indicates failure of the DIUC exchange lines. The trunk failure transfer may only take place if this alarm is triggered and all DIUC exchange lines are out of service. In order for the alarm to indicate the failure of the DIUC exchange lines, the parameter **ALARMNO** set to **2** (see also AMO description for TDCSU).

- List: [SWU-LOG](#)

SWU-LOG:005

PHONEMAIL-ACCESS

IMPORTANT: US-specific alarm.

- List: [SWU-LOG](#)

Not used

- List: [SWU-LOG](#)

Not used

- List: [SWU-LOG](#)

Directional alarms (max. 512 with the alarm numbers 8 - 519) are used to indicate faults in trunk groups consisting of tie trunks, special equipment (TCOM / APSE) lines or call charge lines. Lines of this type are configured via the PEN. The subscriber chooses how to combine these lines, i.e. a single line, several lines, a configured trunk group or an individual trunk group containing lines can be assigned to the alarm.

The AMOs TACSU, TDSCU and TSCSU are used to assign the directional alarm numbers configured by means of the AMO VADSU to "PENs".

The alarm type, **DEVICE ALARM**, can be activated for all alarm classes.

A9010 M4 N1001 NO ACT BPA NMCALARM MIRROR: **SWU-LOG GRP**
94-04-19 13:58:45

[illegible][illegible][illegible]

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- SWU-specific alarm classes
- SWU logical alarm classes
- Table of SWU logical device alarms
- Description of SWU logical Special alarms
- Description of SWU logical Personal alarms
- List of alarms: SWU-LOG
- Alarm classes
- Evaluating the alarm mirror

Personal alarms (max. 64; alarm number 520 - 583) are used to indicate errors in terminals with a specific station number.

The AMO VADSU can be used to create or change threshold values, validation times and alarm names. The AMOs SBCSU and SCSU are used to assign the personal alarm numbers configured with VADSU to station numbers.

Examples:

DEVICE-ALARM:

[illegible][illegible][illegible]

0 ----->
-----> -----> 583

```
Fxxxx M4 N1769 xxxx .....xxx ..xxx xxxx xxxx .....01-10-29
14:51:41 .....ALARM-CLASS:SWU-LOG:520/510/513/583
```

- SWU-specific alarm classes
- SWU logical alarm classes
- Table of SWU logical device alarms
- Description of SWU logical Special alarms

- Description of SWU logical [Directional alarms](#)
- List of alarms: [SWU-LOG](#)
- [Alarm classes](#)
- [Evaluating the alarm mirror](#)

5.16.5 Board alarms

The board alarms are a more general version of the directional alarms and they share the same alarm number range (8-519). The board alarms provide individual alarm supervision possibility for each peripheral board and for each LTU/Access Point (AP) - practically there is no restriction on the board type (e.g.: trunk board) in contrast to the directional alarms.

At first the user has to define with the help of AMOs VADSU, BCSU, UCSU which board alarm should supervise the given boards or LTUs.

Note: The given board or LTU has to be deactivated with DEACT-BSSU or DEACT-USSU before the alarm assignment happens otherwise the alarm counters might have incorrect values. Of course after the assignment the board or LTU can be activated again.

Based on this board-alarm assignment the board alarms will be set or reset according to the state transitions of the proper peripheral boards or LTUs/APs. Only the given level (LTU or board) will be considered in the alarm evaluation and the subordinate units (e.g.: trunks) not. For example if all trunks on a trunk board get defective but the board itself remains ready then the assigned board alarm won't be set. It happens only if the board itself goes defective too.

If a board alarm is configured it does not affect the other alarms and it provides an additional and independent supervision possibility even for the same system element. For example if there is a board alarm configured for the AP 34 and this AP has a failure then both the default central alarm "LTU FAILURE" and additionally the board alarm will be set as well.

See also:

- [SWU-specific alarm classes](#)
- [SWU logical alarm classes](#)
- [Table of SWU logical device alarms](#)
- Description of SWU logical [Special alarms](#)
- Description of SWU logical [Directional alarms](#)
- List of alarms: [SWU-LOG](#)
- [Alarm classes](#)
- [Evaluating the alarm mirror](#)

5.17 SM periphery alarm class

The server periphery alarm class signals the failure of SM periphery units, such as LBC / LCX / LCX channel, or IOP / HARD DISK / CARTRIDGE / magnetic tape. All alarms of this type depend on the server dependability system, which controls the blocking and subsequent release of the devices, modules and channels (i.e. whether they are put out of service, and when they are to be put back in service).

Alarms in the VADSU server periphery alarm class are administered by the AMO VADSM.

Examples:

A9011 M4 N1001 NO ACT...BPA ..NMCALARM MIRROR: SM-PER
GRP.....01-10-29 13:58:45 DEVICE ALARM: 000000 MINOR ALARM: 000000
MAJOR ALARM: 000000

0 -> 23

Fxxxx M4 N1769 xxxx xxx ..xxx xxxx xxxx 01-10-29
14:51:41 ALARM CLASS:**SM-PER**: 006/007/008/014/015/016

See also:

- [Table SM periphery alarms](#)
- [Description of SM periphery alarms](#)
- List of alarms: [SM-PER](#)
- [Alarm classes](#)
- [Evaluating the alarm mirror](#)

5.17.1 Table SM periphery alarms

Table 25: SM periphery alarms

Alarm number	Alarm name	Threshold value and validation time for					Message priority
		MINOR ALARM (percent)	MAJOR ALARM (percent)	MINOR ALARM (seconds)	MAJOR ALARM (seconds)	DEVICE ALARM (hours)	
SM-PER:000	SERVICE TELETYP	deact.	1	0	600	0	E0
SM-PER:001	SERVICE UTC	deact.	1	0	600	0	E0
SM-PER:002	SERVICE TTX	deact.	1	0	600	0	E0
SM-PER:003	SERVICE FAX	deact.	1	0	600	0	E0
SM-PER:004	SERVICE VOICE	deact.	1	0	600	0	E0
SM-PER:005	SERVICE XENIX	deact.	1	0	600	0	E0
SM-PER:006	SERVICE BSC	deact.	1	0	600	0	E0
SM-PER:007	SERVICE ISO	deact.	1	0	600	0	E0
SM-PER:008	SERVICE IBM	deact.	1	0	600	0	E0

Alarm number	Alarm name	Threshold value and validation time for					Message priority
		MINOR ALARM (percent)	MAJOR ALARM (percent)	MINOR ALARM (seconds)	MAJOR ALARM (seconds)	DEVICE ALARM (hours)	
SM-PER:009	NOT USED	--	--	--	--	0	E0
SM-PER:010	NOT USED	--	--	--	--	0	E0
SM-PER:011	NOT USED	--	--	--	--	0	E0
SM-PER:012	NOT USED	--	--	--	--	0	E0
SM-PER:013	NOT USED	--	--	--	--	0	E0
SM-PER:014	IS FLASH MEMORY	deact.	1	0	600	0	E0
SM-PER:015	SM FLASH MEMORY	deact.	1	0	600	0	E0
SM-PER:016	IS DAT RECORDER	deact.	1	0	600	0	E0
SM-PER:017	SM DAT RECORDER	deact.	1	0	600	0	E0
SM-PER:018	IS HARD DISK	deact.	1	0	600	0	E0
SM-PER:019	IS CARTRIDGE	deact.	1	0	600	0	E0
SM-PER:020	IS TAPE	deact.	1	0	600	0	E0
SM-PER:021	SM HARD DISK	deact.	1	0	600	0	E0
SM-PER:022	NOT USED	--	--	--	--	0	E0
SM-PER:023	NOT USED	--	--	--	--	0	E0

See also:

- [SM periphery alarm class](#)
- [Description of SM periphery alarms](#)
- List of alarms: [SM-PER](#)
- [Alarm classes](#)
- [Evaluating the alarm mirror](#)

5.17.2 Description of SM periphery alarms

The following alarm criteria apply to the server periphery alarms:

- **Validation threshold** In contrast to the central alarms, the threshold values are not absolute values but percentage values. For example, the appropriate alarm is set if 50% of the configured VMS lines have failed.
- **Alarm level** The alarm level contains the sum of all the configured channels of a specific CMS service, e.g. TELETYPE or FAX. In the case of the backup periphery, it is the sum of the configured devices. If an LBC/LCX/LCX channel or a peripheral backup device is deactivated by means of an AMO, the alarm level is decremented by the number of units which have been put out of service. This means that deactivated units are not taken into consideration in the validation threshold count. Conversely, the alarm level is incremented by the number of terminals blocked by AMO and which have been put back into service and thus affect alarm handling.
- **Alarm count** The alarm count contains the sum of all the peripheral units assigned to the CMS service-dependent alarm and which are blocked by the dependability system. If peripheral units are blocked by the server dependability system (SM-DEP), the alarm count is incremented; the count is decremented by the units are put into service. In the case of the line periphery, the number of units by which the alarm count is incremented/decremented is dependent on the switching job (LBC/LCX/CHANNEL). The alarm is not set unless the validation threshold is reached.

Error messages assigned:

- Server line periphery: F7530 - F7584, F7600 - F7642, F7700 - F7701
- Server backup periphery: F7356 - F7365, F7400
- List of alarms: [SM-PER](#)
- List of error messages: [A9000](#), [F7000](#)

SM-PER

Alarm classes: [CENTRAL](#) -- [SWU-PER](#) -- [SWU-LOG](#) -- SM-PER

[Description of SM periphery alarms](#)

[Table SM periphery alarms](#)

SM-PER:000	SM-PER:001	SM-PER:002	SM-PER:003
SM-PER:004	SM-PER:005	SM-PER:006	SM-PER:007
SM-PER:008	SM-PER:009	SM-PER:010	SM-PER:011
SM-PER:012	SM-PER:013	SM-PER:014	SM-PER:015
SM-PER:016	SM-PER:017	SM-PER:018	SM-PER:019
SM-PER:020	SM-PER:021	SM-PER:022	SM-PER:023

See also:

- [Alarm classes](#)
- [Evaluating the alarm mirror](#)

[A9000](#) -- [F1000](#) -- [F2000](#) -- [F3000](#) -- [F4000](#) -- [F5000](#) -- [F6000](#) -- [F7000](#) -- [F8000](#)

SM-PER:000

SERVICE TELETYP

This alarm is a summation alarm for indicating line failures on asynchronous V.24 lines.

- List: [SM-PER](#)

SM-PER:001

SERVICE UTC

This alarm is a summation alarm for indicating failures of server channels, for which the CMS service UTC (Universal Teletex Controller), a PC connection for TELETEX, is configured in the TCS.

- List: [SM-PER](#)

SM-PER:002

SERVICE TTX

This alarm is a summation alarm for indicating failures of server channels, for which the CMS service TTX is configured. The channels link the server to the SWU periphery, (e.g. SLMD).

- List: [SM-PER](#)

SM-PER:003

SERVICE FAX

This alarm is a summation alarm for indicating failures of server channels, for which the CMS service FAX is configured. The channels link the server to the SWU periphery, (e.g. SLMD).

- List: [SM-PER](#)

SM-PER:004

SERVICE VOICE

This alarm is a summation alarm for indicating failures of server channels, for which the CMS service VOICE is configured. The channels link the server to the SWU periphery, (e.g. SLMD).

- List: [SM-PER](#)

SM-PER:005

SERVICE XENIX

This alarm is a summation alarm for indicating failures of server channels, for which the CMS service XENIX is configured, e.g. ETD or even NMC / DMS. The channels usually link the server to special terminals.

- List: [SM-PER](#)

SM-PER:006

SERVICE BSC

This alarm is a summation alarm for indicating failures of server channels, for which the CMS service BSC (synchronous V.24) is configured. The channels usually link the server to an IBM or other mainframe, or to PCs, via modem.

- List: [SM-PER](#)

SM-PER:007

SERVICE ISO

This alarm is a summation alarm for indicating failures of server channels, for which the CMS service ISO is configured. The channels usually link the server to an IBM or other mainframe, or to PCs, via modem.

- List: [SM-PER](#)

SM-PER:008

SERVICE IBM

This alarm is a summation alarm for indicating failures of server channels, for which the CMS service IBM is configured. The channels usually link the server to an IBM or other mainframe, or to PCs, via modem.

- List: [SM-PER](#)

SM-PER:009

Not used

This alarm is not yet in use.

- List: [SM-PER](#)

SM-PER:010

Not used

This alarm is not yet in use.

- List: [SM-PER](#)

SM-PER:011

Not used

This alarm is not yet in use.

- List: [SM-PER](#)

SM-PER:012

Not used

This alarm is not yet in use.

- List: [SM-PER](#)

SM-PER:013

Not used

This alarm is not yet in use.

- List: [SM-PER](#)

SM-PER:014

IS FLASH MEMORY

This alarm indicates a flash memory failure. The alarm is automatically reset, when the flash memory is back in operation.

- List: [SM-PER](#)

SM-PER:015

SM FLASH MEMORY

This alarm indicates a flash memory failure. The alarm is automatically reset, when the flash memory is back in operation

- List: [SM-PER](#)

SM-PER:016

IS DAT RECORDER

This alarm indicates a DAT recorder failure. The alarm is automatically reset, when the DAT recorder is back in operation

- List: [SM-PER](#)

SM-PER:017

SM DAT RECORDER

This alarm indicates a DAT recorder failure. The alarm is automatically reset, when the DAT recorder is back in operation.

- List: [SM-PER](#)

SM-PER:018

IS HARD DISK

This alarm indicates failures of the hard disk drive of the ADS.

- List: [SM-PER](#)

SM-PER:019

IS CARTRIDGE

This alarm indicates failures of the cartridge drive of the ADS.

- List: [SM-PER](#)

SM-PER:020

IS TAPE

This alarm indicates failures of the tape unit of the ADS.

- List: [SM-PER](#)

SM-PER:021

SM HARD DISK

This alarm indicates failures of a server hard disk drive.

- List: [SM-PER](#)

SM-PER:022

Not used

This alarm is not yet in use.

- List: [SM-PER](#)

SM-PER:023

Not used

This alarm is not yet in use.

- List: [SM-PER](#)

5.18 Alarm signaling

5.18.1 Message priority

Individual alarm messages (A9000 to A9007) are identified with a variable message priority. The message priority can be changed with AMO VADSU/VADSM (see AMO description). The meaning of message priority is:

E0: (Default) The alarm message has the message priority configured for the alarm number with AMO SIGNL.

E1-E8: The alarm message has the message priority configured for the alarm class with AMO VADSU/VADSM.

E9: The alarm message is assigned the message priority that was configured with AMO SIGNL for the alarm number. However, alarm messages with this message priority are not output to AFR1 (Remote Service Platform (RSP)).

E10: The alarm message is assigned the message priority that was configured with AMO SIGNL for the alarm number. However, alarm messages with this message priority are not output to AFR2 (DMS).

E11: The alarm message is assigned the message priority that was configured with the AMO SIGNL for the alarm number. However, alarm messages with this message priority are not output to AFR1 (Remote Service Platform (RSP)) and AFR2 (DMS).

See also:

- [Variable hardware contacts in the case of individual alarms](#)

5.18.2 Variable hardware contacts in the case of individual alarms

It is possible to allocate individual alarms to a hardware contact (LED) with the AMO-VADSU/VADSM. Important alarms can thus be signaled individually (see AMO description).

The hardware contacts have the following meaning:

SU: (Standard) The alarm is assigned to a hardware contact for which a summation report is compiled with the other MINOR/MAJOR and signaled at the appropriate LEDs. Alarms assigned to an SU hardware contact are only signaled at LEDs which have not yet been allocated a hardware contact. If, for example, alarms have been allocated to S1 and none have been allocated to

S2, all SU alarms (both minor and major) are signaled at LED2 (MAJOR LED). When alarms have been allocated to S1 as well as to S2, alarms which have an SU hardware contact are not signaled at an LED.

S1: The alarm is allocated to LED1 (MINOR LED). If a MINOR/MAJOR ALARM (which one is irrelevant) is issued for this alarm, this is signaled at LED1 (MINOR LED).

S2: The alarm is allocated to LED2 (MAJOR LED). If a MINOR/MAJOR ALARM (which one is irrelevant) is issued for this alarm, this is signaled at LED2 (MAJOR LED).

See also:

- [Message priority](#)

6 Enhanced Alarms Generated on the Manager

License Management Tool Alarms

LMT_CDW_UPDATE	LMT cannot update codeword for the switch
LMT_LICENSE_REDUCTION	LMT starts license reduction in one of the admin groups
LMT_GLOBAL_ALARM_THRESHOLD	Threshold alarm is set for one of the admin groups
LMT_GLOBAL_ALARM	'Global alarm' is set in LMT
LMT_GLOBAL_WARNING_THRESHOLD	Threshold warning is set for one of the admin groups
LMT_GLOBAL_WARNING	'Global warning' is set in LMT

IMPORTANT: List of all admin groups and their states can be gathered by SNMP gets on lmt table in the OpenScape 4000/HiPath 4000 MIB.

Procadmin Alarms

The process administrator daemon **procadmin** (daemons in the MIB **processTable**) generates alarms in case of any of the daemon observed is in inactive state.

Format of the alarm is PROCM_DAEMONNAME e.g. PROCM_CMPROC_CCS.

IMPORTANT: List of all observed daemons and their states can be gathered via SNMP gets on **processTable** table in the OpenScape 4000/HiPath 4000 MIB.

Database Tables Alarms

LOGM_ACTIVITY_TABLE_THRESHOLD	threshold reached in the activity table of LogM database
LOGM_ERROR_TABLE_THRESHOLD	threshold reached in the error table of LogM database
PM_DATABASE_THRESHOLD	threshold reached in the PM database

IMPORTANT: Thresholds can be set via SNMP in dbThreshold group of the OpenScape 4000/HiPath 4000 MIB.

OpenScape 4000/HiPath 4000 Manager backup alarms

HBR_DATA_BACKUP	data backup failed

In case of logical backup fails the alarms have the format HBR_LOGICAL_BACKUPUNIT e.g. HBR_LOGICAL_CDB

FM_COMMANDFILE_SEND

Amo job cannot be sent to the switch.

Enhanced Alarms Generated on the Manager

SSO_REPLICATION

Smart switch over replication was not successful.

SWA_ACTIVATION_FAILED

Activation of the Major/Minor/FixRelease or Hotfix failed.

CM_DB_SYNCH

Database synchronization with the switch was not successful.

PM_REPORT

Performance management time controlled report was not successful.

Collection agent alarms

COL_FETCH	reception (fetch) from the switch not successful
COL_RECEIVE	conversion (transform) in received file not successful
COL_OUTPUT_FILE_PROD	production of the output file not successful
COL_PARTITION_FILLED	fetching deactivated because of full COL-Backup directory

License Management alarms

LICM_LICENSE_EXCEEDED	OpenScape 4000/HiPath 4000 license has exceeded.

License Management generates alarms based on the state of port counters and theirs thresholds.

DISK_SATURATION_THRESHOLD

Threshold on one of the monitored partitions is reached.

IMPORTANT: Partition thresholds can be set via SNMP in fileSysTable of the OpenScape 4000/HiPath 4000 MIB.

7 HISTA backup measures

Structure and organization of the HISTA database

The error message database of the HISTA function consists of 20 file pairs and a control file.

:AMD:HISTORY/INIT :AMD:HISTORY/TEXT01 :AMD:HISTORY/
INFO01 ... :AMD:HISTORY/TEXT20 :AMD:HISTORY/INFO20

The pairs are overwritten cyclically, i.e. once pair #20 has been described, the system starts again at pair #1. The TEXTnn files contain the error messages and the INFOnn files contain the appropriate research information. If a backup is only required for the error messages, the TEXTnn files must be saved (minimum information required for backup function).

Text file structure:

1st - 4th byte in the file : Length of valid data in the file Error message 1 1st
byte : Index of the error message in the file 1st word : Length of the net data of
the error message Net data (actual error message) Error message 2 Error
message n

Recommendation:

It is recommended to save all TEXTnn and INFOnn pairs as well as the file .../
INIT with the pair #20 in order to have a complete database available for use
with the HISTA. If a database of this kind is copied to a system (e.g. a reference
system) with an unconfigured C-FBTHIST file, the user can read or run a search
for the database after performing a SOFT restart of the HISTA.

Data backup:

A data backup of the error messages is only carried out at the express request
of a customer. This means that the alarm notification by the HISTA task is not
normally active. In order to be able to carry out a backup, you will need an
appropriate medium, i.e. a second HD, an MO-drive or enough free space on
the original hard disk (>2.5MB). Remote backup is not recommended since
this requires a high-speed modem. However, it may still be worthwhile if the
service center modem is fast enough or if the customer decides to initiate the
data transfer himself via the DMS file transfer function. The transmission of the
database can either be carried out via remote file transfer, or with the START-
COPY AMO and even with the HISTA AMO (START-HISTA:SEARCH,...). Once
the data backup has been carried out, the alarm must be reset with the GRA
AMO.

Remark:

In order to deactivate the HISTA alarm notification, the HISTO file must
first be deleted (DEL-HISTA) and then re-configured with ADD-HISTA
ALARMING=OFF. Before you delete the HISTO file, make sure you have a
backup (see also [Chapter 2, "AM handling of alarms"](#)).

8 Error messages

Alarm and Error Messages

[A9000](#) -- [F1000](#) -- [F2000](#) -- [F3000](#) -- [F4000](#) -- [F5000](#) -- [F6000](#) -- [F7000](#) -- [F8000](#)

8.1 A9000

[A9000](#) -- [F1000](#) -- [F2000](#) -- [F3000](#) -- [F4000](#) -- [F5000](#) -- [F6000](#) -- [F7000](#) -- [F8000](#)

A9000	A9001	A9002	A9003	A9006	A9007	A9008
A9009	A9010	A9011	A9012	A9013	A9014	A9015

A9000

NMCALARM
MINOR ALARM ON

Cause:
Service-Specific (Format 2C)

Short text:
Alarm Message

Cause:
Low-priority alarm is set.

Action:
Save error message data and contact your [Next level of support](#). The device class affected is output in the ALARM-CLASS line. In addition, the individual alarm affected is output in the line ALARM NAME.

Interpretation of auxiliary data:
The **ALARM NAME** concerned is output as clear text.
See also: [Alarm concept](#).

A9001

NMCALARM
MAJOR ALARM ON

Type:
Service-Specific (Format 2C)

Short text:
Alarm Message

Cause:
High-priority alarm is set.

Action:

The device class affected is output in the DEV-CLASS line.

Action:

Save error message data and contact your [Next level of support](#). The device class affected is output in the ALARM-CLASS line. In addition, the individual alarm affected is output in the line ALARM-NAME.

Interpretation of auxiliary data:

The ALARM NAME concerned is output as clear text.

See also: [Chapter 5, "Alarm concept"](#).

A9002

NMCALARM

MINOR ALARM OFF

Type:

Service-Specific (Format 2C)

Short text:

Alarm Message

Cause:

Low-priority alarm has been reset.

Action:

Positive acknowledgment of [A9000](#), no action necessary.

See also: [Chapter 5, "Alarm concept"](#).

A9003

NMCALARM

MAJOR ALARM OFF

Type:

Service-Specific (Format 2C)

Short text:

Alarm Message

Cause:

High-priority alarm has been reset.

Action:

Positive acknowledgment of [A9001](#), no action necessary.

See also: [Chapter 5, "Alarm concept"](#).

A9006

NMCALARM

DEVICE ALARM ON

Type:

Service-Specific (Format 2C)

Short text:

Alarm message

Cause:

The [DEVICE ALARM](#) was introduced for monitoring vital system components (e.g. lines). The system reports a failure of the system component(s) being monitored.

Action:

Save error message data and contact your [Next level of support](#). The device class affected is output in the ALARM-CLASS line.

See also: [Chapter 5, "Alarm concept"](#).

A9007

NMCALARM

DEVICE ALARM OFF

Type:

Service-Specific (Format 2C)

Short text:

Alarm message

Cause:

[DEVICE ALARM](#) has been reset.

Action:

Positive acknowledgment of [A9006](#), no action necessary.

See also: [Chapter 5, "Alarm concept"](#).

A9008

NMCALARM

MIRROR: CENTRAL GRP

Type:

Service relevant (Format 30)

Short text:

Alarm messages

Cause:

This alarm message is displayed after every module restart or switch. The alarm message contains the alarm mirror for all central SWU or SM (ADP) alarms.

Action:

Save error message data and notify your [Next level of support](#).

Interpretation of auxiliary data:

Bytes 1 to 8 contain the 64 central alarms.

See also: [Chapter 5, "Alarm concept"](#).

A9009

NMCALARM

MIRROR: SWU-PER GRP

Type:

Service relevant (Format 30)

Short text:

Alarm messages

Cause:

The alarm message is displayed after every module restart or switch. This alarm message contains the alarm mirror for all SWU periphery alarms.

Action:

Save error message data and notify your [Next level of support](#).

Interpretation of auxiliary data:

Byte 1 - 4 contains the 32 SWU periphery alarms.

See also: [Chapter 5, "Alarm concept"](#).

A9010

NMCALARM

MIRROR: SWU-LOG GRP

Type:

Service-Specific (Format 30)

Short text:

Alarm Message

Cause:

This alarm message is output after each functional system unit restart or switchover. Alarm mirror for all the logical alarms of the SWU ([SWU-LOG](#)).

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

11: Byte 1 contains the 8 individual alarms 22: Byte 2 - 65 contains the 512 destination-specific alarms 33: Byte 66 - 73 contains the 64 user-specific alarms

See also: [Chapter 5, "Alarm concept"](#).

A9011

NMCALARM

MIRROR: SM-PER GRP

Type:

Service-Specific (Format 2C)

Short text:

Alarm Message

Cause:

This alarm message is output after each functional system unit restart or switchover. Alarm mirror for all the peripheral alarms of the server/ADP ([SM-PER](#)).

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Bytes 1 - 3 contain the 24 server periphery alarms

See also: [Alarm concept](#) on page 76 and [SM periphery alarm class](#) on page 120.

A9012

NMCALARM

PER-MIR: CENTRAL GRP

Type:

Service-Specific (Format 2C)

Short text:

Alarm Message

Cause:

Alarm mirror requested via AMO GRA or external NMC/DMS command. Alarm mirror for all the central alarms of the SWU ([CENTRAL](#)) or server/ADP.

Action:

See AMO GRA.

Interpretation of auxiliary data:

see [A9008](#) and [Central alarm class](#).

See also: [Alarm concept](#) on page 76.

A9013

NMCALARM

PER-MIR: SWU-PER GRP

Type:

Service-Specific (Format 2C)

Short text:

Alarm Message

Cause:

Alarm mirror requested via AMO GRA or external NMC/DMS command. Alarm Mirror alarm for all the peripheral alarms of the SWU ([SWU-PER](#)).

Action:

See AMO GRA.

Interpretation of auxiliary data:

see [A9009](#) and [SWU periphery alarm class](#).

See also: [Chapter 5, “Alarm concept”](#).

A9014

NMCALARM

PER-MIR: SWU-LOG GRP

Type:

Service-Specific (Format 2C)

Short text:

Alarm Message

Cause:

Alarm mirror requested via AMO GRA or external NMC/DMS command. Alarm mirror for all the logical alarms of the SWU ([SWU-PER](#)).

Action:

See AMO GRA.

Interpretation of auxiliary data:

see [A9010](#) and [SWU logical alarm classes](#).

See also: [Alarm concept](#) on page 76.

A9015

NMCALARM

PER-MIR: SM-PER GRP

Type:
Service-Specific (Format 2C)

Short text:
Alarm Message

Cause:
Alarm mirror requested via AMO GRA or external NMC/DMS command. Alarm mirror for all the peripheral alarms of the server/ADP ([SM-PER](#)).

Action:
See AMO GRA.

Interpretation of auxiliary data:
see [A9011](#) and [SM periphery alarm class](#).
See also: [Alarm concept](#) on page 76.

8.2 F1000

[A9000](#) -- **F1000** -- [F2000](#) -- [F3000](#) -- [F4000](#) -- [F5000](#) -- [F6000](#) -- [F7000](#) -- [F8000](#)

F1010	F1020	F1030	F1040	F1050						

F1010

SIT:

The error number F1010 was output several times with different texts.

CMD-OPCODE UNKNOWN

Type:
Service-relevant (Format 16)

Short text:
Message from AMO to SIT

Cause:
This message is output in the case of a message from an AMO to the signaling task.

Action:
If this error message occurs frequently, save the error message data and contact your [Next level of support](#).

CS-TYP OUT OF RANGE

Type:
Service-relevant (Format --)

Short text:
Signaling task

Cause:

The signaling task receives a message with an invalid CARD SLOT TYPE specification. The relevant message is output as hex data.

Action:

Save error message data and contact your [Next level of support](#).

EVENT OUT OF SERVICE

Type:

Service-relevant (Format 16)

Short text:

Signaling task

Cause:

The signaling task receives a message whose error class is marked OUT_OF_SERVICE in the database of the operating and data server. The relevant message is output as hex data.

Action:

Save error message data and contact your [Next level of support](#).

EVT-STATE NOT DEFINED

Type:

Service-relevant (Format 16)

Short text:

Event state unknown

Cause:

The event state assigned in the ADS database of the error class is unknown to the signaling task. The relevant error message is output as a hexadecimal value.

Action:

Save error message data and contact your [Next level of support](#).

MK SF SET NOT DEFINED

Type:

Service-relevant (Format 16)

Short text:

Unidentifiable message

Cause:

The signaling task receives a message that could not be uniquely identified. The relevant message is output as hex data.

Action:

Save error message data and contact your [Next level of support](#).

NO CAB-DATA

Type:

Service-relevant (Format 00)

Short text:

Frame description data not loaded

Cause:

The cabinet description data could not be loaded. The central module cannot be queried. Effect: No display of cabinet designation. The cabinet type and frame type file may be damaged or unavailable.

Action:

Check data with AMO CONSY (DISP-CONSY and REGEN-CONSY).

NO CONFIG-DATA

Type:

Service-relevant (Format 00)

Short text:

Configuration data not loaded

Cause:

The configuration data could not be loaded. Effect: The extension level is unknown, data from central modules is incorrectly interpreted. The cabinet type and frame type file may be damaged or unavailable.

Action:

Check data with AMO CONSY (DISP-CONSY and REGEN-CONSY).

NO END INITIALIZATION

Type:

Service-relevant (Format 00)

Short text:

No end-of-initialization acknowledgement

Cause:

The signaling task waits until all jobs in the operating system have registered the end of initialization. Only then is the hyphen added in the DP display.

Action:

Save error message data and contact your [Next level of support](#). Note additional error messages.

NO FAMSIC-MBX

Type:

Service-relevant (Format 00)

Short text:

Mailbox not cataloged

Cause:

Mailbox for LDU FAMSIC not cataloged in the system. Effect: No error output for SICON.

Action:

If this error message occurs frequently, save the error message data and contact your [Next level of support](#).

NO LTG PID

Type:

Service-relevant (Format 25)

Short text:

Incorrect PROC identification

Cause:

The signaling task receives a message whose PROC identification does not belong to an LTG (Line Trunk Group). The relevant message is output as hex data.

Action:

Save error message data and contact your [Next level of support](#).

NO MBU PID

Type:

Service-relevant (Format 25)

Short text:

Incorrect PROC identification

Cause:

The signaling task receives a message whose PROC identification does not belong to an MBU (Message Buffer). The relevant message is output as hex data.

Action:

Save error message data and contact your [Next level of support](#).

NO SHELF-DATA FOR CC

Type:

Service-relevant (Format 00)

Short text:

Frame description data not loaded

Cause:

The frame description data for the relevant frame type was not loaded. Effect: No mounting pitch display for central module. The cabinet type and frame type file may be damaged or unavailable.

Action:

Check data with AMO CONSY (DISP-CONSY and REGEN-CONSY).

NO SHELF-DATA FOR CSN

Type:

Service-relevant (Format 00)

Short text:

Frame description data not loaded

Cause:

The frame description data for the relevant frame type was not loaded. Effect: No mounting pitch display for central module. The cabinet type and frame type file may be damaged or unavailable.

Action:

Check data with AMO CONSY (DISP-CONSY and REGEN-CONSY).

NO SHELF-DATA FOR GP

Type:

Service-relevant (Format 00)

Short text:

Frame description data not loaded

Cause:

The frame description data for the relevant frame type was not loaded. Effect: No mounting pitch display for central module. The cabinet type and frame type file may be damaged or unavailable.

Action:

Check data with AMO CONSY (DISP-CONSY and REGEN-CONSY).

NO SHELF-DATA FOR LTU

Type:

Service-relevant (Format 00)

Short text:

Frame description data not loaded

Cause:

The frame description data for the relevant frame type was not loaded. Effect: No mounting pitch display for central module. The cabinet type and frame type file may be damaged or unavailable.

Action:

Check data with AMO CONSY (DISP-CONSY and REGEN-CONSY).

PABX 80

Type:

Service-relevant (Format 00)

Short text:

Configuration data

Cause:

The extension level is determined on the basis of the configuration data. Effect: Central module data is wrongly interpreted if the extension level is incorrect or unknown. The error message is generated with an N for note after every restart.

Action:

The AMO DBC and AMO CONSY can be used to check the data if the extension level specified in the error message does not correspond to the system type.

PABX 180

Type:

Service-relevant (Format 00)

Short text:

Configuration data

Cause:

The extension level is determined on the basis of the configuration data. Effect: Central module data is wrongly interpreted if the extension level is incorrect or unknown. The error message is generated with an N for note after every restart.

Action:

The AMO DBC and AMO CONSY can be used to check the data if the extension level specified in the error message does not correspond to the system type.

PABX 600

Type:

Service-relevant (Format 00)

Short text:

Configuration data

Cause:

The extension level is determined on the basis of the configuration data. Effect if the extension level is incorrect or unknown: the central module data is incorrectly interpreted. The error message is generated with an N for note after every restart.

Action:

The AMO DBC and AMO CONSY can be used to check the data if the extension level specified in the error message does not correspond to the system type.

PABX 3000

Type:

Service-relevant (Format 00)

Short text:

Configuration data

Cause:

The extension level is determined on the basis of the configuration data. Effect if the extension level is incorrect or unknown: the central module data is incorrectly interpreted. The error message is generated with an N for note after every restart.

Action:

The AMO DBC and AMO CONSY can be used to check the data if the extension level specified in the error message does not correspond to the system type.

PABX ????

Type:

Service-relevant (Format 00)

Short text:

Configuration data

Cause:

The extension level is determined on the basis of the configuration data.
Effect if the extension level is incorrect or unknown: the central module data is incorrectly interpreted. The cabinet type and frame type file may be damaged or unavailable.

Action:

Check data with AMO CONSY (DISP-CONSY and REGEN-CONSY).

PID ERROR:NO A / NO B

Type:

Service-relevant (Format 25)

Short text:

Incorrect PROC identification

Cause:

The signaling task receives a message whose PROC identification does not belong to the A-half or the B-half of the system unit. The relevant message is output as hex data.

Action:

Save error message data and contact your [Next level of support](#).

SFBD FORMAT UNKNOWN

Type:

Service-relevant (Format 16)

Short text:

Format unknown

Cause:

The signaling task receives a message whose format could not be uniquely identified. The relevant message is output as hex data.

Action:

Save error message data and contact your [Next level of support](#).

SOURCE TASK UNKNOWN

Type:

Service-relevant (Format 16)

Short text:

Task sender unknown

Cause:

The signaling task receives a message whose sender is unknown. The relevant message is output as hex data.

Action:

Save error message data and contact your [Next level of support](#).

UBGDAT NOT LOADED

Type:

Service-relevant (Format 15)

Short text:

Module table not loaded

Cause:

The signaling phase could not load the module table ":PDS:APSU/BG/DAT/0/0".
The hard disk may be defective or access to the UBGDAT file may have been blocked with the AMO FUNCT.

Action:

Use STA-LIST to verify whether the UBGDAT file is available on the data carrier or damaged. If the file is disabled, enable it with AMO FUNKT.

CC SHELF NOT UNIQUE

Type:

Service-relevant

Short text:

CC shelf description data is not unique

Cause:

No unique shelf description data can be determined.

Action:

Configure data with AMO CONSY.

CAN NOT GET LOAD MEDIA

Type:

Service-relevant

Short text:

Load device not reachable

Cause:

Load device cannot be determined.

Action:

Search for further relevant error messages and check load device!

LOAD MEDIA NOT RMX HD

Type:

Service-relevant

Short text:

Load device is not a RMX hard disk

Cause:

Load device cannot be detected as RMX hard disk.

Action:

Search for further relevant error messages and check load device!

DEFINE WITH AMO CONSY

Type:

Service-relevant

Short text:

Configuration with AMO CONSY possible.

Cause:

This is an add-on information to the preceding F1010 message in order to change configuration with AMO CONSY.

Action:

Search for the preceding F1010 message and change configuration accordingly using AMO CONSY.

NO FAMAFR01-MBX

Type:

Service-relevant

Short text:

No FAM-AFR mailbox

Cause:

There is no FAM-AFR mailbox. The messages cannot be forwarded to the AFR interface.

Action:

Check AFR configuration, Save error message and contact [Next level of support](#).

F1020

SIT:

MESSAGE CLASS NOT DEFINED

Type:

Diagnosis-specific (Format 25)

Short text:

Subevent not assigned to event

Cause:

The signaling task received a message whose subevent could not be assigned to the appropriate event. The relevant message is output in the HEX data.

Action:

Save HISTO file and contact your [Next level of support](#). The error can be interpreted by system specialists by referring to the MAINLIB (PROLIB).

F1030

SIT:

MESSAGE IMPLAUSIBLE

Type:

Diagnosis-specific (Format 25)

Short text:

Error message class not in permitted range

Cause:

The signaling task has received a message whose error class is not within the range of the DB_M_RS_EVT_SET. The relevant message is output in the HEX data.

Action:

Save HISTO file and contact your [Next level of support](#).

F1040

SIT:

EVENT NOT DEFINED

Type:

Diagnosis-specific (Format 16)

Short text:

Error message class not initialized

Cause:

The signaling task has received a message whose error class has not yet been initialized. The relevant message is output in the HEX data.

Action:

Save HISTO file and contact your [Next level of support](#).

F1050

SIT:

SUB-EVENT NOT DEFINED

Type:

Diagnosis-specific (Format 00)

Short text:

Subevent not defined

Cause:

The signaling task has received a message whose subevent is not defined. The relevant message is output in the HEX data.

Error messages

F2000

Action:

Save HISTO file and contact your [Next level of support](#).

8.3 F2000

[A9000](#) -- [F1000](#) -- **F2000** -- [F3000](#) -- [F4000](#) -- [F5000](#) -- [F6000](#) -- [F7000](#) -- [F8000](#)

F2000	F2001	F2002	F2003	F2004	F2005	F2006	F2007	F2008	F2009	F2010
F2012	F2013	F2014	F2016	F2018	F2019	F2022	F2023	F2024	F2025	F2026
F2027	F2028	F2029	F2031	F2032	F2033	F2034	F2035	F2036	F2037	F2038
F2039	F2040	F2041	F2042	F2045	F2048	F2050	F2051	F2052	F2053	F2054
F2055	F2056	F2057	F2058	F2059	F2060	F2062	F2063	F2064	F2066	F2068
F2069	F2072	F2073	F2074	F2075	F2076	F2077	F2078	F2079	F2080	F2082
F2083	F2084	F2085	F2086	F2087	F2088	F2089	F2090	F2091	F2092	F2098
F2100	F2101	F2102	F2103	F2104	F2105	F2106	F2107	F2108	F2109	F2110
F2111	F2112	F2113	F2114	F2115	F2200	F2201	F2202	F2203	F2204	F2205
F2206	F2207	F2208	F2209	F2210	F2211	F2212	F2213	F2214	F2215	F2216
F2217	F2218	F2219	F2224	F2244	F2250	F2251	F2252	F2450	F2750	F2751
F2752	F2753	F2754	F2755	F2756	F2757					

F2000

OS

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

Implausible event code.

Action:

Save error message data and log file. Contact your [Next level of support](#).

F2001

OS

DISALL EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Wrong event code

Cause:

Event code valid but not allowed.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2002

OS

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state

Cause:

Implausible state.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2003

OS

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Data not expected in current state.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2004

OS

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2005

OS

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible return value received from a procedure.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2006

OS

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2007

OS

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Error in the database. Implausible data for database access. Reaction is a soft restart.

Action:

Check that the PABX completes its restart. Save error message data and log file. contact your [Next level of support](#).

F2008

OS

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F2009

OS

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2010

OS

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Negative exception code in operating system call. There may be insufficient memory for executing the AMO during peak load periods, the executed AMO may contain an error or it may be damaged. This error message is also displayed when the operating system is damaged.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2012

AM

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2013

AM

MSG HEADER FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible message header.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2014

AM

DMS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative acknowledgments by the data management system

Cause:

Negative acknowledgments by the data management system (e.g. I/O error).

Action:

Save error message data and log file. contact your [Next level of support](#).

F2016

AM

ADVISORY

Type:

Diagnosis-specific (several formats apply)

Short text:

Advisory message

Cause:

Advisory message

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F2018

OS

BOARD NOT READY

Type:

Diagnosis-specific (Format 01)

Short text:

Board not in operation

Cause:

The operating system (OS) has detected that the MDL_READY field of a dual-port RAM (DPR) no longer contains the value READY, which means that a board (IP, DCL, CCH, MBU, IOCG) is currently not operative.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F2019

OS

DPR NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Dual Port Ram

Cause:

The OS has detected that the DPR_VALID field of a dual-port RAM (DPR) no longer contains the value VALID because, for instance, a container chaining error has been found by board. No hexadecimal data is output with this message.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F2022

OS

BUSHANDLER TIMEOUT

Type:

Diagnosis-specific (Format 01)

Short text:

Bus handler (BH) reports timeout

Cause:

Bus handler (BH) reports timeout error, i.e. transmission was not complete. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command

queue again after the SP (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2023

OS

BUSHANDLER NO PARTNER

Type:

Diagnosis-specific (Format 01)

Short text:

Board failure of remote processor

Cause:

BH identifies that a message could not be transmitted because, for instance, the destination processor's board had failed. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2024

OS

BUSHANDLER CONTEXT

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data for the BH

Cause:

This means the container has been fed the wrong data for the BH by the operating system.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2025

OS

DESTINATION CATALOG

Type:

Diagnosis-specific (Format 01)

Short text:

Name not contained in index catalog

Cause:

During processor communication, a container with an index/name that was not in the receiver's index catalog was received from a firmware processor or boot. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2026

OS

DESTINATION MAILBOX

Type:

Diagnosis-specific (Format 01)

Short text:

Destination mailbox no longer exists

Cause:

During processor communication, it was found at the receiving end that the destination mailbox named in the container no longer exists or is wrong. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2027

OS

DESTINATION RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough OS resources

Cause:

Resources short for receiving messages over processor borders. Whether the message was intended for an operating system mailbox or for a user's mailbox, is of no concern as regards this error.

Source processor is the destination: Despite a wait there was neither a free buffer nor a free segment available to hold the message. The hexadecimal output contains the task batch which is to empty the mailbox, and also the address of the task currently accessing the database area.

Source processor is a node: Despite a wait there was neither a short nor a long container available for forwarding the message.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Check hardware. Save error message data and contact your [Next level of support](#).

F2028

OS

OS RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough OS resources

Cause:

The operating system did not have a free element in its internal buffer pool or a segment available, nor, despite a wait, a short or long container. Shortage of operating system resources when receiving messages over processor borders is, however, reported with error message [F2027](#). No HEX data is output with this message.

Action:

Check the IP and MBU firmware. Save error message data and contact your [Next level of support](#).

F2029

OS

MAILBOX TIMER

Type:

Diagnosis-specific (Format 01)

Short text:

Mailbox no longer exists

Cause:

When a timer runs down, the destination mailbox is found to be no longer existing.

Action:

In the HEX data, the message is output by the timer in a length of 20 bytes. Save error message data and contact your [Next level of support](#).

F2031

OS

OBJM INCONSISTENT

Type:

Diagnosis-specific (Format 01)

Short text:

Objects in OS System Catalog inconsistent

Cause:

Due to preceeding faults it may happen that a data processor (ADP, BPA or BPB) may get a request from the OS of a partner processor to update a specific entry in the Name- or Index- Systemcatalog which already holds an other, different object token.

System reaction:

The processor where the inconsistency is detected will restart to get rid of this inconsistency.

Action:

Save the HISTA messages from 1 hour before to 1 hour after the event and contact your [Next level of support](#).

Interpretation of auxiliary data:

UA: shows the code location where the inconsistency was detected and signalled. All further auxiliary data are depending on the location where the inconsistency was detected. If the preceeding HISTA gives not enough information about the real fault, the code at the signalling location can be studied for interpretation of the remaining auxiliary data. PARTNER PROCESSOR: shows the processor, usually the active BP, which requests the update of the system catalog in the processor where the inconsistency is detected and signalled.

F2032

OS

JOTA

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data in job table

Cause:

ROOT finds implausible data in the job table (JOTA). Depending on the state of the boot, the error is reported to SYSLOAD or to error analysis. It is assumed that the JOTA checksum is no longer correct.

Action:

If byte 0 of the HEX data contains the value 01, the other bytes output the layer number. If byte 0 of the HEX data contains a value >01, then byte 1 outputs the exception code (supplied by RMX in response to CREAT_JOB), the other bytes output the name of the subsystem from the job table (JOTA). Save error message data and contact your [Next level of support](#).

F2033

OS

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Error statistics overflow

Cause:

Too many plausibility errors within a certain time. The error statistics overflow.

Action:

Save error message data and contact your [Next level of support](#).

F2034

OS

SYSTEM EXCEPTN HANDLER

Type:

Diagnosis-specific (Format 01)

Short text:

Error when processing the OS Task

Cause:

The system exception handler was activated by an error.

Action:

Find the cause with further error reports. For example, stack messages with the same message ID may exist ([F2016](#)). Save error message data and contact your [Next level of support](#).

F2035

OS

INIT ERROR

Type:

Diagnosis-specific (Format 01)

Short text:

Error in OS initialization

Cause:

This error is reported to SYSLOAD, not to error analysis. The reaction is a hard restart. The hard disk may be faulty or the system program is not available or it is faulty.

Action:

Check that the PABX has restarted. contact your [Next level of support](#) if the system fails to restart.

F2036

OS

BUSHANDLER QBLOCK S

Type:

Diagnosis-specific (Format 01)

Short text:

No free short container available

Cause:

Bus handler (BH) reports that for a certain time the destination processor's dual-port RAM (DPR) did not have a short free container available to hold a message that was to be transmitted. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (SP) in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F2037

OS

BUSHANDLER QBLOCK L

Type:

Diagnosis-specific (Format 01)

Short text:

No free long container available

Cause:

BH reports that for a certain time the destination processor's DPR did not have along free container available to hold a message that was to be transmitted. The BH enables all the containers of the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the SP in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F2038

OS

BROADCAST ON, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_ON order (order to all) from the active base processor (BP) to the message buffers (MBU) was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F2039

OS

BROADCAST OFF, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_OFF order from the active BP to the MBUs was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F2040

OS

BROADCAST LONG

Type:

Diagnosis-specific (Format 01)

Short text:

Message not retrieved by MBU

Cause:

When long message was to be acknowledged by the base processor (BP) acting on behalf of the group processors (GP), it was found that this message had not yet been collected by at least one message buffer (MBU). The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. The first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2041

OS

GP IN BROADCAST MODE

Type:

Diagnosis-specific (Format 01)

Short text:

Processor communication error

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor specified in the container was a GP currently affected by the load broadcast rather than the GP designated in the load broadcast. The error is reported in the active BP.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2042

OS

DESTINATION PROCESSOR

Type:

Diagnosis-specific (Format 01)

Short text:

Destination processor not available

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor named in the container according to the directory table (DIR_TBL) was not available. The sender of the message was either a firmware processor or a data processor whose DIR_TBL was not consistent with the destination DIR_TBL.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2045

OS

MAILBX TIMER RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

After the timer had run down, the system was able to determine that the destination mailbox exists but that the message could not be transmitted due to lack of free memory.

Action:

The timer message is output in the HEX data up to a length of 20 Bytes. Save error message data and contact your [Next level of support](#).

F2048

OS

PROCESSOR INTERRUPT

Type:

Diagnosis-specific (Format 01)

Short text:

Error messages

Interrupt

Cause:

SYSLOAD has processed or output an interrupt.

Action:

Save error message data and contact your [Next level of support](#).

F2050

AM

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

Implausible event code.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2051

AM

DISALL EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Wrong event code

Cause:

Event code valid but not allowed.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2052

AM

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state

Cause:

Implausible state.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2053

AM

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Data not expected in current state.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2054

AM

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2055

AM

IMPLAUSIBLE PROC RET

Type:

Error messages

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible return value received from a procedure.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2056

AM

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2057

AM

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for database access. Reaction is a soft restart.

Action:

Check that the PABX completes its restart. Save error message data and log file. contact your [Next level of support](#).

F2058

AM

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F2059

AM

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2060

AM

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Negative exception code in operating system call. There may be insufficient memory for executing the AMO during peak load periods, the executed AMO may contain an error or it may be damaged. This error message is also displayed when the operating system is damaged.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2062

AM

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2063

AM

MSG HEADER FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible message header.

Action:

Save error message data and log file. contact your [Next level of support](#).

F2064

AM

DMS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative acknowledgments by the data management system

Cause:

Negative acknowledgments by the data management system (e.g. I/O error).

Action:

Save error message data and log file. contact your [Next level of support](#).

F2066

AM

ADVISORY

Type:

Diagnosis-specific (several formats apply)

Short text:

Advisory message

Cause:

Advisory message from administration and maintenance. In the case of the error message text PFS CHECK TASK: FEATURE COUNT ERROR it was established that the number of station / trunks set up does not correspond to the station / trunks ascertained by this task (possibly due to a modified database). The task automatically corrects this discrepancy in its list. In the case of the error message text PFS CHECK TASK: DONGLE MISSING OR READ ERROR it was established that the dongle is not plugged in or cannot be read.

For alternative error message texts please refer to [Section 8.10, "System Messages \(PFS\)"](#).

The following features can be named under FEATURE: xx:

3D	Station
3E	Exchange
3F	Tie
41	Voice compression
46	Attendant console
AM	specifies the number of stations / trunks set up
COUNTED	the number of stations / trunks ascertained

In this case no other action is necessary.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F2068

AM

BOARD NOT READY

Type:

Diagnosis-specific (Format 01)

Short text:

Board not in operation

Cause:

The operating system (OS) has detected that the MDL_READY field of a dual-port RAM (DPR) no longer contains the value READY, which means that a board (IP, DCL, CCH, MBU, IOCG) is currently not operative.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F2069

AM

DPR NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Dual Port Ram

Cause:

The AM has detected that the DPR_VALID field of a dual-port RAM (DPR) no longer contains the value VALID because, for instance, a container chaining error has been found by board. No hexadecimal data is output with this message.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F2072

AM

BUSHANDLER TIMEOUT

Type:

Diagnosis-specific (Format 01)

Short text:

Bus handler (BH) reports timeout

Cause:

Bus handler (BH) reports timeout error, i.e. transmission was not complete. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the SP (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2073

AM

BUSHANDLER NO PARTNER

Type:

Diagnosis-specific (Format 01)

Short text:

Board failure of remote processor

Cause:

BH identifies that a message could not be transmitted because, for instance, the destination processor's board had failed. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2074

AM

BUSHANDLER CONTEXT

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data for the BH

Cause:

This means the container has been fed the wrong data for the BH by the operating system.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2075

AM

DESTINATION CATALOG

Type:

Diagnosis-specific (Format 01)

Short text:

Name not contained in index catalog

Cause:

During processor communication, a container with an index/name that was not in the receiver's index catalog was received from a firmware processor or boot. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2076

AM

DESTINATION MAILBOX

Type:

Diagnosis-specific (Format 01)

Short text:

Destination mailbox no longer exists

Cause:

During processor communication, it was found at the receiving end that the destination mailbox named in the container no longer exists or is wrong. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2077

AM

DESTINATION RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

Resources short for receiving messages over processor borders. Whether the message was intended for an operating system mailbox or for a user's mailbox, is of no concern as regards this error. a. Source processor is the destination: Despite a wait there was neither a free buffer nor a free segment available to hold the message. The hexadecimal output contains the task batch which is to empty the mailbox, and also the address of the task currently accessing the database area. b. Source processor is a node: Despite a wait there was neither a short nor a long container available for forwarding the message.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2078

AM

OS RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

The operating system did not have a free element in its internal buffer pool or a segment available, nor, despite a wait, a short or long container. Shortage of operating system resources when receiving messages over processor borders is, however, reported with error message F2027. No HEX data is output with this message.

Action:

Check the IP and MBU firmware. Save error message data and contact your [Next level of support](#).

F2079

AM

MAILBOX TIMER

Type:

Diagnosis-specific (Format 01)

Short text:

Mailbox no longer exists

Cause:

When a timer runs down, the destination mailbox is found to be no longer existing.

Action:

In the HEX data, the message is output by the timer in a length of 20 bytes. Save error message data and contact your [Next level of support](#).

F2080

AM

TIME / DATE NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Check reference clock

Cause:

Error when processing the reference clock. Error only occurs in the ADS.

Action:

The exception code is output in the HEX data and may have the following meaning: H20 = TIME_NOT_VALID (Clock defective) H21 = MAC_NOT_READY (MAC board defective) H22 = BAT_OFF (Check date/time or support battery in the MAC/IOPA) When the ADS is first booted, exception codes H20 and H21 are always output on all accounts.

F2082

AM

JOTA

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data in job table

Cause:

ROOT finds implausible data in the job table (JOTA). Depending on the state of the boot, the error is reported to SYSLOAD or to error analysis. It is assumed that the JOTA checksum is no longer correct.

Action:

If byte 0 of the HEX data contains the value 01, the other bytes output the layer number. If byte 0 of the HEX data contains a value >01, then byte 1 outputs the exception code (supplied by RMX in response to CREAT_JOB), the other bytes output the name of the subsystem from the job table (JOTA). Save error message data and contact your [Next level of support](#).

F2083

AM

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Error statistics overflow

Cause:

Too many plausibility errors within a certain time. The error statistics overflow.

Action:

Save error message data and contact your [Next level of support](#).

F2084

AM

SYSTEM EXCEPTN HANDLER

Type:

Diagnosis-specific (Format 01)

Short text:

Error when processing the root job

Cause:

The system exception handler was activated by an error.

Action:

Find the cause with further error reports. Save error message data and contact your [Next level of support](#).

F2085

AM

INIT ERROR

Type:

Diagnosis-specific (Format 01)

Short text:

Error in OS initialization

Cause:

This error is reported to SYSLOAD, not to error analysis. The reaction is a hard restart. The hard disk may be faulty or the system program is not available or it is faulty.

Action:

Check that the PABX has restarted. contact your [Next level of support](#) if the system fails to restart.

F2086

AM

BUSHANDLER QBLOCK S

Type:

Diagnosis-specific (Format 01)

Short text:

No free short container available

Cause:

Bus handler (BH) reports that for a certain time the destination processor's dual-port RAM (DPR) did not have a short free container available to hold a message that was to be transmitted. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (SP) in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F2087

AM

BUSHANDLER QBLOCK L

Type:

Diagnosis-specific (Format 01)

Short text:

No free long container available

Cause:

BH reports that for a certain time the destination processor's DPR did not have along free container available to hold a message that was to be transmitted. The BH enables all the containers of the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the SP in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F2088

AM

BROADCAST ON, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_ON order (order to all) from the active base processor (BP) to the message buffers (MBU) was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F2089

AM

BROADCAST OFF, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_OFF order from the active BP to the MBUs was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F2090

AM

BROADCAST LONG

Type:

Diagnosis-specific (Format 01)

Short text:

Message not retrieved by MBU

Cause:

When long message was to be acknowledged by the base processor (BP) acting on behalf of the group processors (GP), it was found that this message had not yet been collected by at least one message buffer (MBU). The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. The first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2091

AM

GP IN BROADCAST MODE

Type:

Diagnosis-specific (Format 01)

Short text:

Processor communication error

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor specified in the container was a GP currently affected by the load broadcast rather than the GP designated in the load broadcast. The error is reported in the active BP.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2092

AM

DESTINATION PROCESSOR

Type:

Diagnosis-specific (Format 01)

Short text:

Destination processor not available

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor named in the container according to the directory table (DIR_TBL) was not available. The sender of the message was either a firmware processor or a data processor whose DIR_TBL was not consistent with the destination DIR_TBL.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F2095**F2098**

AM

PROCESSOR INTERRUPT

Type:

Diagnosis-specific (Format 01)

Short text:

Interrupt

Cause:

SYSLOAD has processed or output an interrupt.

Action:

Save error message data and contact your [Next level of support](#).

F2100

IX

MESSAGE

Type:

Service-specific (Format 17)

Short text:

XENIX error

Cause:

The following tables contain possible error messages which are divided into: Panic messages Messages with formats such as >panic: Out of swap< denote serious errors which lead to a restart of the XENIX OS. Other messages During XENIX operation, error messages which denote input errors or errors in the application programs may also be output.

Action:

Save error message data and contact your [Next level of support](#).

F2101

IX

ERROR

Type:

Service-specific (Format 17)

Short text:

Total Failure of XENIX

Cause:

Total failure of XENIX OS in the server. XENIX carries out a "REBOOT", i.e. the OS is reloaded from the hard disk.

Action:

Save error message data and contact your [Next level of support](#).

F2102

IX

UNIX MESSAGE

Type:

Service-specific (Format 17)

Short text:

Error in UNIX application

Cause:

UNIX advisory message

Action:

Save error message data and contact your [Next level of support](#).

F2103

IX

UNIX ERROR

Type:

Service-specific (Format 17)

Short text:

Error in UNIX application

Cause:

UNIX error message

Action:

Save error message data and contact your [Next level of support](#).

F2104

IX

UNIX ERROR ESCAL

Type:

Service-specific (Format 17)

Short text:

Error in UNIX application

Cause:

UNIX error message (with NMC minor alarm)

Action:Save error message data and contact your [Next level of support](#).**F2105**

IX

UNIX FATAL ERROR

Type:

Service-specific (Format 17)

Short text:

Error in UNIX application

Cause:

UNIX error message (with NMC major alarm)

Action:Save error message data and contact your [Next level of support](#).**F2106**

IX

UNIX APPL MESSAGE

Type:

Service-specific (Format 17)

Short text:

Error in UNIX application

Cause:

UNIX application advisory message

Action:Save error message data and contact your [Next level of support](#).

F2107

IX

UNIX APPL ERROR

Type:

Service-specific (Format 17)

Short text:

Error in UNIX application

Cause:

UNIX application error message

Action:

Save error message data and contact your [Next level of support](#).

F2108

IX

UNIX APPL ERROR ESCAL

Type:

Service-specific (Format 17)

Short text:

Error in UNIX application

Cause:

UNIX application error message (with NMC minor alarm)

Action:

Save error message data and contact your [Next level of support](#).

F2109

IX

UNIX APPL FATAL ERROR

Type:

Service-specific (Format 17)

Short text:

Error in UNIX application

Cause:

UNIX application error message (with NMC major alarm)

Action:

Save error message data and contact your [Next level of support](#).

F2110

IX

SW RESET ALARM

Type:

Service-specific (Format 3A)

Short text:

NMC / DMS alarm level reset

Cause:

The NMC alarm level for the UNIX SW will be reset in this UNIX server. This message is sent by the UNIX loader or by the uninterruptible power supply.

Action:

Save error message data and contact your [Next level of support](#).

F2111

IX

HW MESSAGE

Type:

Service-specific (Format 3A)

Short text:

Hardware error

Cause:

HW warning issued by the UNIX server.

Action:

Save error message data and contact your [Next level of support](#).

F2112

IX

HW ERROR

Type:

Service-specific (Format 3A)

Short text:

Hardware error

Cause:

The UNIX server detected a minor HW error.

Action:

Save error message data and contact your [Next level of support](#).

F2113

IX

HW ERROR ESCAL

Type:

Service-specific (Format 3A)

Short text:

Hardware error

Cause:

A minor error in the UNIX server has escalated to a major HW error. This measure is taken by the uninterruptible power supply.

Action:

Save error message data and contact your [Next level of support](#).

F2114

IX

HW FATAL ERROR

Type:

Service-specific (Format 3A)

Short text:

Hardware error

Cause:

The UNIX server detected a major HW error.

Action:

Save error message data and contact your [Next level of support](#).

F2115

IX

HW RESET ALARM

Type:

Service-specific (Format 3A)

Short text:

NMC / DMS alarm level reset

Cause:

The NMC alarm level for the UNIX HW will be reset in this UNIX server. This message is sent by the UNIX loader or by the uninterruptable power supply.

Action:

Save error message data and contact your [Next level of support](#).

Panic Messages		Explanation
panic:	CMX: aspb == NULL after sleep (cx_send)	Error in the CMX device driver.
panic:	CMX: cc_msg == NULL after sleep (cx_wait)	Error in the CMX device driver.
panic:	CMX: msgq full (cx_disincc)	Error in the CMX device driver.
panic:	CMX: Too many wait on sluice xxxx	Error in the CMX device driver.
panic:	CMX: unknown sigc (cx_event)	Error in the CMX device driver.
panic:	CMX: Unknow sigc (cxioctl, CX_EVENT)	Error in the CMX device driver.
panic:	DNA trap in kernel mode	Error in the XENIX OS.
panic:	fp_save: no fp_task	Error in connection with the Floating Point Emulator.
panic:	fp_COPROC: coprocessor error - with no 287	Error in connection with the Floating Point Emulator.
panic:	fp_COPROC: coprocessor switched away from fp_task	Error in connection with the Floating Point Emulator.
panic:	fp_DNA: called when we have an emulator	Error in connection with the Floating Point Emulator.
panic:	fp_OVERRUN: coprocessor overrun - with no 287	Error in connection with the Floating Point Emulator.
panic:	general protection trap	Protection error.
panic:	hdintr: IOPS errorcode received	The IOPS-FW has reported an error while attempting to access the hard disk. The error code is output immediately before this message. Since no further access to the hard disk is possible, the XENIX OS terminates.
panic:	iinit: cannot copy in superblock	Error while accessing the root file system.
panic:	Invalid TSS	Task-state-segment is invalid.
panic:	IO err in swap	I/O error during swapping.
panic:	no fs	Error in the XENIX OS (no file system)
panic:	no imt	Error in the XENIX OS (file mgmt.)
panic:	no procs	Error in the XENIX OS (task mgmt.)
panic:	Out of swap	Swap area is too small; increase the area size or reduce the number of tasks to run simultaneously.
panic:	physio: bad state	Internal error during input/output.

Error messages

panic:	RMX requesting shutdown	The RMX has started an emergency rundown of the XENIX OS. Reason: soft or hard restart of the ADS. XENIX writes the contents of the I/O buffers to the HD and terminates (without errors!).
panic:	sdfrcm: sdp->sd_inode not found	Error while accessing common data.
panic:	Segment Not Present	Segment not present.
panic:	Stack fault	Stack overflow.
panic:	Timeout table overflow	Internal table overflow. Can be caused by bad applications.
panic:	Trap in system	Processor interrupt.
panic:	unknown interrupt	Error in the XENIX OS (interrupt handling).
panic:	<iopsinit1>	Error in the XENIX OS (I/O device driver).
panic:	<iopsinit2>	
panic:	<fdinit1>	
panic:	<fdinit2>	
panic:	<fdinit3>	
panic:	<fdinit4>	
panic:	<hdinit1>	
panic:	<hdinit2>	
panic:	<hdinit3>	
panic:	<hdinit4>	
panic:	<hdinit5>	

Table Panic Messages

Other messages		Explanation
	Console login:	The console has been activated (with "enable console"), even though no V.24 interface is present on the processor board. Since all messages which would normally be displayed at the attendant console are then output at the AMT by the dependability system, the Login request also appears here. Remedy: enter "disable console".
ct_input:	ct_input: long message is too long	Cartridge could not be opened or closed. Error in communication between RMX and XENIX.
ct_input:	ct_input: no short message pointer	
ct_input:	ct_input: short message is too long	

ct_input:	ct_input: uninspected message ignored	
ct_input:	ct_input: wrong destination id	
ct_input:	ct_input: wrong source id	
ctclose:	cmd close ct failed with RMX error xxxx	The cartridge could not be closed. The error code shown was received by the device driver from RMX.
ctclose:	cmd free ct failed with RMX error xxxx	The cartridge could not be closed. The error code shown was received by the device driver from RMX.
ctclose:	hsndmp close ct failed	The cartridge could not be closed. Error in inter-task communication.
ctclose:	hsndmp free ct failed	The cartridge could not be closed. Error in inter-task communication.
ctintr:	I/O error on cardridge drive	I/O error while accessing the cartridge. The next line contains the error code and, if relevant, the sector address.
ctopen:	a second open is not allowed	The device accessed cannot be opened more than once.
ctclose:	cmd reserve ct failed with RMX error xxxx	The cartridge could not be closed. The error code shown was received by the device driver from RMX.
ctopen:	hsndmp reserve ct failed	The cartridge could not be opened. Error in communication between RMX and XENIX.
ctopen:	support task mailbox not found	Cartridge could not be opened. Error in communication between RMX and XENIX.
ctopen:	unable to catalog ct_input	Cartridge could not be opened. Error in communication between RMX and XENIX.
ctstrategy:	cardridge is for exclusive use only	The cartridge can only be opened once.
ctstrategy:	cmd open ct failed with RMX error xxxx	The cartridge could not be opened. The error code shown was received by the device driver from RMX.
ctstrategy:	hsmdmsg open ct failed	The floppy or cartridge could not be opened. Error in communication between RMX and XENIX.
fdintr:	I/O error on floppy drive	I/O error while accessing the floppy disk drive. The error code and, if relevant, the sector address are displayed in the next line.
fdintr:	timeout on cartridge drive	Connection timeout while accessing the cartridge drive. Can be caused by a defective device or cartridge.
fdintr:	timeout on floppy drive	Connection timeout while accessing the floppy disk drive. Can be caused by a defective device or floppy disk.
fdstrategy/ ctstrategy:	block number out of range	Start block number does not exist on the cartridge or floppy. Input error.
fdstrategy/ ctstrategy:	device open failed	The floppy or cartridge could not be opened. Error in communication between RMX and XENIX.

Error messages

fdstrategy/ ctstrategy:	minor device number out of range	Wrong l-node for floppy or cartridge. Remedy: Correct the "minor device number" of the device accessed.
hdintr:	harddisk timeout on unit xx partition xx	Connection timeout while accessing the hard disk. Can be caused by a defective device.
hdintr:	I/O error on hard disk xx partition xx	I/O error while accessing the hard disk. The error code and, if relevant, the sector address, is displayed in the next line.
hdopen:	minor device numer out of range	Wrong l-node for the hard disk. Remedy: Correct the "minor device number" of the accessed device.
hdstrategy:	b_blkno xxxx is too high	The start block number does not exist on the hard disk area. Input error.
NMI- routine:	a multibus timeout occurred	An NMI has occurred. Instead of the message "a multibus timeout occurred", a different cause may be output. If the NMI was not caused by XENIX (i.e. any causes apart from the multibus timeout), then the NMI is reported to the dependability system of the RMX, and output at the AMT.
tdopen:	catalog device driver failed	The terminal could not be opened. Error in communication between RMX and XENIX.
tdopen:	lookup object name filed	The terminal could not be opened. Error in communication between RMX and XENIX.

Table Other error messages

F2200

PROC

INT REGISTER

Type:

Diagnosis-specific (Format 2B)

Short text:

Interrupt message

Cause:

Interrupt message with output of registers and stack links.

Action:

See SW Systems Service. Save error message data and contact your [Next level of support](#).

F2201

PROC

INT STACK

Type:

Diagnosis-specific (Format 14)

Short text:

Interrupt message

Cause:

Output of stack at time of interrupt. This message is output before the actual message ([F2200](#)).

Action:

See SW Systems Service. Save error message data and contact your [Next level of support](#).

F2202

PROC INT

ESCALATION

Type:

Diagnosis-specific (Format 2C)

Short text:

Escalation error following multiple INT13 in Call Processing

Cause:

This message only applies to US Rel.6.4. If a predefined number of protection errors is exceeded by Call Processing, Sysload requests a soft restart instead of the usual TOP stack clean-up. The usual register values are output, as is a stack list (see also error messages [F2205](#) - [F2218](#)).

Action:

Save error message data and contact your [Next level of support](#).

F2203

PROC INT

TASK ADDRESS

Type:

Diagnosis-specific (Format 14)

Short text:

Output of Running Task Address

Cause:

Interrupt caused by task. The user address and stack pointer are indicated in the main part of the message. The auxiliary data contains the start address of the running task at the time of the interrupt.

Action:

No action necessary.

Interpretation of auxiliary data:

These always consist of a double word. The first word contains the selector and the second word the offset of the running task start address.

F2204

PROC INT

INFO TEMPORARY SUSY

Type:

Diagnosis-specific (Format 17)

Short text:

Error in temporary subsystem

Cause:

Interrupt caused by temporary subsystem. The auxiliary data indicates the selector and limit of the data and code segments of the subsystem concerned.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

The first line under the format output contains the name of the temporary subsystem. This is followed by max. two additional lines consisting of 4-byte blocks. The first word contains the selector of the code or data segment concerned, and the second word contains the appropriate limit. The subsystem mapping function allows you to search for the module which wrote the segment at the time of the error, since the selectors are uniquely assigned to the module names.

F2205

PROC INT

DIVIDE ERROR

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: Divide Error (INT 0)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2206

PROC INT

DEBUG ERROR

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: Debugger call (INT 1)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2207

PROC INT

NMI

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: NMI (INT 2)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2208

PROC INT

BREAKPOINT

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: Breakpoint (INT 3)

Cause:

Error messages

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2209

PROC INT
OVERFLOW

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: INTO-Detected Overflow (INT 4)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2210

PROC INT
BOUND ERROR

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: Bound Range Exceeded (INT 5)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2211

PROC INT
INVALID OPCODE

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: Invalid Opcode (INT 6)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2212

PROC INT

COPROC NOT AVAILABLE

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: Coprocessor Not Available (INT 7)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2213

PROC INT

DOUBLE FAULT

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: Double Fault (INT 8)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2214

PROC INT

COPROC SEG OVERRUN

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: Coprocessor Segment Overrun (INT 9)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2215

PROC INT

INVALID TSS

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: Invalid Task State Segment (INT 10)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2216

PROC INT

SEGMENT NOT PRESENT

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: Segment Not Present (INT 11)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2217

PROC INT

STACK EXCEPTION

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: Stack Exception (INT 12)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2218

PROC INT

GENERAL PROTECTION

Type:

Diagnosis-specific (Format 2C)

Short text:

Processor interrupt: General Protection (INT 13)

Cause:

Interrupt message with output of registers and stack links. Except for the subevent, this message is identical with [F2200](#). It is assigned the interrupt name.

Action:

Save error message data and contact your [Next level of support](#).

F2219

PROC INT

MULTIBUS TIMEOUT

Type:

Service-relevant (Format 27)

Short text:

Multibus timeout, bus cycle canceled due to time overflow.

Cause:

Sporadic defective components at the multibus or SW addressing error.

System reaction:

Soft restart

Action:

Save error message data and contact your [Next level of support](#).

F2224

OS

MAINTENANCE

Type:

Service-relevant (several formats relevant)

Short text:

Maintenance note, triggered by the alarm [CENTRAL:029](#) MAINTENANCE NOTE.

Cause:

This message contains a transparent text in the rule that is either self-explanatory or refers to another chapter in the service manual.

Action:

In general, the above-mentioned alarm must be deleted with an AMO after fault removal: in SWU: DEL-GRA:BP,29; in ADP: DEL-GRA:A1,29; in server V1: DEL-GRA:V1,29; If no solution is available, save the error messages associated with this alarm. Contact your [Next level of support](#).

Message texts (e.g.):

HW TIMER DEFECTIVE

A HW timer defect was detected at the processor board that is required for time measurement. Subsequent values supplied by processor load measurement are invalid. Processor load management is thus deactivated. The invalid values are marked with a * in the process load output (see also [F4464](#)). The processor board should be replaced if operating in a monoprocessing architecture. If the error continues to occur after board replacement, save error message data and contact your [Next level of support](#). When using the processor board as ADP, processor board replacement is only advisable after the error has occurred several times. If the error continues to occur after board replacement, save error message data and notify the product specialist.

HW TIMER BACK IN SERVICE

The HW timer is working again. Processor load management is reactivated.

F2244

AM

MAINTENANCE

Type:

Service-specific

Short text:

Service advisory message, initiated by the alarm [CENTRAL:029](#) MAINTENANCE NOTE.

Cause:

This message usually consists of plain text, which is either self-explanatory or refers to a specific section of the Service Manual.

Action:

The MAINTENANCE NOTE alarm must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; If this does not work, save the error messages associated with this alarm and contact your [Next level of support](#).

Message Text: ERROR: SWU-AMOS HAVE BEEN BLOCKED

Cause:

Routine database verification during configuration of additional station lines / exchange lines / tie-lines etc. shows that purchased feature quantities are already exceeded. This error is due to a manipulation of the database.

Action:

Use DIS-CODEW to determine which values have been exceeded. Transfer these values to your system specialist for evaluation. The following AMOs are not blocked: BSSU, DSSU, FUNSU, PETRA, PSTAT, REST, SDSU, USSU, ZAUSL.

F2250

PROC INT

COMMON MEMORY ALARM

Type:

Service-relevant (Format 27)

Short text:

Common memory alarm.

Cause:

Sporadic defective memory components or SW addressing error.

System reaction:

Reload.

Action:

If this error occurs repeatedly, replace the processor board.

F2251

PROC INT

NMI PCI ERROR

Type:

Service-relevant (Format 47)

Short text:

Non Maskable Interrupt at the peripheral computer interface bus (PCI BUS)

Cause:

The CPU and the connected units, such as memory or hard disk, LAN controller, etc. are connected via the peripheral computer interface bus (PCI BUS). The PCI NMI error (non maskable interrupt) occurs in the event of component or bus communication faults. The error with format 47 only occurs in the case of Pentium boards.

System reaction:

Soft restart

Action:

If this error occurs repeatedly, replace the processor board.

Interpretation of auxiliary data:

see new error message [F3176](#).

F2252

PROC INT

LOCAL MEMORY ERROR

Type:

Service-relevant (Format 47)

Short text:

Local memory error.

Cause:

Sporadic defective memory components or SW addressing error.

System reaction:

Reload.

Action:

If this error occurs repeatedly, replace the processor board.

Interpretation of auxiliary data:

see error message [F3176](#).

F2450

SD Q OFL

***** (no subevent exists)

Type:

Diagnosis-specific (no format)

Short text:

Loss of error messages.

Cause:

The SIT of the ADP is unable to accept further error messages from SYSDEP (SIT mailbox overflow). SYSDEP will queue the error messages until the SIT is able to receive messages again. If this buffer queue overflows, this is indicated by SYSDEP with this error message. This message also means that SYSDEP has begun overwriting error messages in the queue. Priority error messages such as restart messages etc. are not overwritten.

Action:

Save the error message data and contact your [Next level of support](#).

F2750

CP-MSG

MC TRACE

Type:

Service-specific (Format 02)

Short text:

Call number traced

Cause:

This message outputs the tracing station (in message field f1) and the traced station or number (in message field f2).

Action:

Save error message data. Interpret contents of fields f1 and f2.

F2751

CP-MSG

CO TRACE

Type:

(Format 2E)

Short text:

Trace job

Cause:

For INCOMING connections: A trace job printout is started by an internal user. The source exchange is prohibited from carrying out a forward release. The circuit is either released by A&M (deactivation/re-activation) or by the destination exchange. The port number of the circuit is specified in the message. For OUTGOING connections: A trace job printout is started by an external user. The line is held until it is either released by A&M (deactivation/re-activation) or by the destination exchange. The port number of the circuit is specified in the message.

Action:

Save error message data. Determine the reason for the trace job. Only release the line for call processing if not released by the destination exchange.

Interpretation of auxiliary data:

INCOMING/OUTGOING = Direction of seizure of line (or trace job internal (INCOMING) or external (OUTGOING)) STNO INTERN = Internal number
STNO EXTERN = External number

F2752

CP-MSG

RELEASE DESPITE TRACE REQUEST

Type:

Service-specific (Format 2E)

Short text:

Release from trace hold status

Cause:

A line which is being held during tracing can be released by means of an AMO or by the destination exchange. If the destination exchange releases the line within the tracing time (approx. 1 minute), this message is output.

Action:

Save error message data. Determine the reason for the trace job.

Interpretation of auxiliary data:

see [F2751](#).

F2753

CP-MSG

TRANSIT-/SATELLITE-COUNTER

Type:

Service-specific (Format 2E)

Short text:

Connection setup interrupted

Cause:

In order to avoid network loops or limit the number of paths in connections which are routed via satellite PABXs, the ISDN service maintains transit counters, which are incremented with each transit line seizure or satellite PABX path. If the counters reach a specified threshold, the connection setup is terminated.

Action:

Check the network generating data for possible loops. If no loops exist, check that the counter threshold values are not set too low, i.e. that they actually allow connections to be set up (AMO TDCSU / COT). contact your [Next level of support](#).

Interpretation of auxiliary data:

The advisory message contains the following: Address of the originating line circuit Transit counter level Satellite counter level Permitted satellite connection Length of A-number/calling line number (source) A-number Length of B-number/called line number (source) B-number

F2754

CP-MSG

PIN TRACE

Type:

Service-specific (Format 34)

Short text:

Unauthorized PIN use detected

Cause:

This message allows unauthorized PIN users to be traced. This message is output if an invalid manual PIN is entered repeatedly at the same station. The maximum number of wrong PIN entry attempts has been exceeded (see AMO PERSI).

Action:

Save error message data and contact your [Next level of support](#). Notify customer of unauthorized PIN usage.

Interpretation of auxiliary data:

STNO INTERN	Internal station number of the telephone at which the PIN entry was attempted (may also be the number of the home station, if a PIN has already been activated).
PIN	Invalid PIN number last entered.

F2755

CP-MSG

MSG WAIT CLR BY AMO

Type:

Service-specific (Format 31)

Short text:

"Message Waiting" data deleted

Cause:

The administrator deleted the message waiting data via AMO SUBFT (message waiting is a R6.3 restart feature). A message is sent to Dependability via the call trace mechanism. This results in this message being output along with the measures taken by the administrator. Only one F2755 message is output per administrator query, even if more than one device was specified in a range or chained call of AMO SUBFT. Please note that this message (F2755) is generated immediately after the message waiting data are deleted, and not after the message waiting LED(s) are switched off. The LED(s) cannot be switched off immediately because this is a background task.

Action:

Check that the LEDs are actually switched off.

F2756

CPMSG

TRACE

Type:

Diagnosis-relevant (Format 31)

Short text:

MCID or malicious call tracing of a PIN hacker.

Cause:

Malicious call tracing is a feature that can be activated with classes of service. It is used to log a malicious caller. Logging can be initiated automatically via AMO, for example, when a line is released in ringing state or by some activity of the called party during a call or after release. MCID (Malicious Call Identification) is a feature enhancement introduced after malicious call tracing. MCID introduced a number of network-wide features (delayed activation) and extended the logged output (output with forwarding information).

Action:

Save log data. The control parameters can be set for stations with the AMO COSSU and for trunks with the AMO COT.

DB_RS_E_CP_FANGEN = 0 DB_RS_E_CP_FANGEN_AMT = 1
DB_RS_E_CP_AUSL_BEI_FANGEN = 2 DB_RS_E_CP_FANGEN_PIN
= 3 DB_RS_E_CP_WP_MAX_ATTEMPTS is issued when the maximum
number of API sessions allowed has been reached (configured with
ZAND:TYPE=CIT,APIMAX=
) and an attempt is made to start another session.

F2757

CP-MSG

TRACE

Type:

Emergency call tracing (Format 49)

Short text:

Emergency Call initiated

Cause:

An Emergency Call has been initiated.

Action:

Read the printed Alarm message to identify the relevant information about the Emergency call (Calling Party, Called Party, LIN, ECN and LRTE NO).

8.4 F3000

[A9000](#) -- [F1000](#) -- [F2000](#) -- **F3000** -- [F4000](#) -- [F5000](#) -- [F6000](#) -- [F7000](#) -- [F8000](#)

F3000	F3002	F3004	F3008	F3010	F3011	F3050	F3059	F3100	F3101	F3102
F3103	F3104	F3106	F3108	F3109	F3110	F3150	F3151	F3153	F3155	F3157
F3158	F3159	F3171	F3172	F3173	F3174	F3175	F3176	F3177		

F3000

SWU-DP

PARTNER NOT READY

Type:

Service-specific (Format 00)

Short text:

Standby partner failure

Cause:

Standby partner failure.

Action:

Replace partner data processor (DP).

F3002

SWU-DP

WD0 INT DEF

Error messages

Type:

Service-specific (Format 18)

Short text:

Watchdog 0 INT test negative

Cause:

Watchdog 0 INT test negative

Action:

Replace DP.

F3004

SWU-DP

WD1 INT DEF

Type:

(Format 18)

Short text:

Watchdog 1 INT test negative

Cause:

Watchdog 1 INT test negative

Action:

Replace DP.

F3008

SWU-DP

MBTO INT DEF

Type:

Service-specific (Format 18)

Short text:

Multibus timeout

Cause:

Multibus timeout. Interrupt test negative.

Action:

Replace data processor (DP).

F3010

SWU-DP

NMI DEFECT

Type:

Service-specific (Format 18)

Short text:

Interrupt logic defective

Cause:

Interrupt logic defective

Action:

Replace DP.

F3011

SWU-DP

CHKSUM ERROR

Type:

Service-specific (Format 22)

Short text:

Checksum error

Cause:

RTO detected a checksum error during system startup. A hard restart with a reload and a new checksum test are initiated.

Action:

Check that the PABX completes the restart. Contact your [Next level of support](#) if the system fails to restart.

F3050

SWU-MEM

1 BIT ERROR

Type:

Service-specific (Format 1D)

Short text:

1-bit error

Cause:

1-bit error, corrected in memory. Event signal came from routine test organization RTO (AMO FUNSU / MEM1AREQ).

Action:

Replace M2M board if necessary. The RTO can be temporarily deactivated with the FUNSU AMO (notify your [Next level of support](#)).

F3059

SWU-MEM

PARITY ERROR

Type:

Service-specific (Format 1D)

Short text:

Parity error

Cause:

Parity error in board test by RTO (test only if RTO is activated via AMO FUNSU / MEMACEA or if a test is called up with AMO DIAG-TSU: CC, ...). Word (2 bytes) 1 and 2 specify the corrupt memory cell as a basis / offset address (in accordance with the error address output of AMO TSU). The following FF value is a filling character and is therefore not relevant. Example: F3059 Format:1D ... 0100 0000 FF

Action:

When the error occurs for the first time, a reload is triggered in the half going into standby mode in the case of a DUPLEX system. In the case of SIMPLEX systems, only the error is signaled. Consequently, you should start a reload at a convenient time. Switching off the RTO memory test does not solve the problem as the errored cell (with the bit inverter) can often be used for an update on the hard disk, or by the program that is running. This results in a reload probably during operating times. Replace board firmware if error recurs. See SW Systems Service. The RTO memory test can be temporarily deactivated with the MEMACEA parameter of the FUNSU AMO (notify your [Next level of support](#)).

F3100

SWU-IP

PROM ERROR

Type:

Service-specific (Format 1E/22)

Short text:

IP board defective

Format 1E: PROM error. IP has found an internal error, but has booted and has reported this error. Replace IP board if error is repeated. Event signal came from interface processor (IP).

Format 22: Event signal came from routine test organization.

Action:

Replace IP board if error is repeated.

F3101

SWU-IP

RAM ERROR

Type:

Service-specific (Format 1E/22)

Short text:

IP board defective

Cause:

Format 1E: RAM error. IP has found an internal error, but has booted and has reported this error. Event signal came from interface processor (IP). Format 22: Event signal came from routine test organization.

Action:

Replace IP board if error is repeated.

F3102

SWU-IP

TIMER ERROR

Type:

Service-specific (Format 1E/22)

Short text:

IP board defective

Cause:

Format 1E: Timeout. IP has found an internal error, but has booted and has reported this error. Event signal came from interface processor (IP). Format 22: Event signal came from routine test organization.

Action:

Replace IP board if error is repeated.

F3103

SWU-IP

FW ERROR

Type:

Service-specific (several formats apply)

Short text:

IP board defective

Cause:

Firmware error in interface processor (IP). Formats 1E and 22 are relevant to this message. In format 22, byte 1 contains HEX value 'EE for differentiation. The following is valid for format 1E: IP has found an internal error, but has booted and has reported this error. The following applies to format 22: Event signal came from routine test organization. Operating error in IP firmware. IP has not reacted to a status query.

Action:

Check that the IP firmware version is compatible with the SRP currently installed. Replace IP board if error is repeated.

F3104

SWU-IP

DEF

Type:

Service-specific (Format 22/29)

Short text:

IP board defective

Cause:

Bytes 0 and 1 contain information on the error (read in reverse order). Format 29: IP board is defective. Format 22: Event signal came from routine test organization. IP did not react to a status query.

Action:

Replace IP board if error is repeated.

F3106

SWU-IP

IEC BUS DOWN

Type:

Service-specific (Format 22)

Short text:

IEC bus defective

Cause:

Error on IEC bus. Message after a soft restart. The error is evaluated by error analysis.

Action:

If the error persists after the restart, check the IEC bus cable and the IP boards.

F3108

SWU-IP

HW ERROR

Type:

Service-specific (Format 1E/22)

Short text:

IP board defective.

Format 1E: Hardware error. IP has found an internal error, but has booted and has reported this error. Event signal came from interface processor (IP).

Format 22: Event signal came from routine test organization.

Action:

Replace IP board if error is repeated.

F3109

SWU-IP

BACK ON-LINE

Type:

Service-specific (Format 29)

Short text:

IP board defective

Cause:

Slave interface processor (IP) has reported to master processor again. Event signal came from interface processor (IP).

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F3110

SWU-IP

SLAVE IP DOWN

Type:

Service-specific (Format 22)

Short text:

IP board defective

Cause:

Slave interface processor is down. The error is evaluated by error analysis.

Action:

Check the connections between the IP boards. Replace IP board if error is repeated.

F3150

SWU-INT

WATCHDOG 0

Type:

Diagnosis-specific (several formats apply)

Short text:

Watchdog 0 timeout

Cause:

Repetitive error loop in high-priority task (between 0 and 34), OS deadlock, or WD0 task no longer being polled.

Action:

Save diagnosis data (stack messages and task information messages) and contact your [Next level of support](#).

Interpretation of auxiliary data:

Format 28. For watchdog timeouts, up to 5 stack messages can be output before the actual watchdog task information message. The number of task information messages is limited to 10. Task information messages and the appropriate stack messages are output in the following sequence: running task, clock task, WD0 task, nucleus task, tasks in the nucleus queue or tasks in the OS ready queue. The tasks in the OS ready queue are output in order of priority (lowest priority first). The WD timeout was only caused by the running task. However, the error cause must always be determined on the basis of the interrelationships of the tasks in the stack. Please note that although tasks awaiting resource allocation are not listed, they may still be the cause of the watchdog timeout. The system responds with a soft restart. The first task information message contains the action initiated. The individual fields are:

- PROC Physical processor number, not used
- CELL PHYS not used
- NMI LOG ADDR Address at which program sequence was interrupted
- (only useful for running task)
- NMI LOG STACK Stack address (only useful for running task)
- NMI PHYS ADDR not used
- NMI PHYS STACK not used
- TASK START ADDR Start address of task or FFFFH:FFFFH
- STATIC PRIO Static task priority assigned by user
- DYNAMIC PRIO Dynamic task priority assigned by OS
- 'RUN-TASK' Task designation, e.g. 'running task' (always output first)
- BP, IP, CS, FLAG Processor register information (only useful for running task)
- MESSAGE ID All error messages belonging to the same event have the same message ID value.

Subsequent bytes: 28 bytes of internal OS data

Please also refer to the section entitled "[SW/Interrupt/Stack message interpretation](#)"

F3151

SWU-INT

WATCHDOG 1

Type:

Diagnosis-specific (several formats apply)

Short text:

Watchdog 1 timeout

Cause:

Repetitive error loop in high-priority task (between 35 and 192).

Action:

Save diagnosis data (stack messages and task information messages) and contact your [Next level of support](#).

Interpretation of auxiliary data:

Format 28. For watchdog timeouts, up to 5 stack messages can be output before the actual watchdog task information message. The number of task information messages is limited to 10. Task information messages and the appropriate stack messages are output in the following sequence: running task, clock task, WD0 task, nucleus task, tasks in the nucleus queue or tasks in the OS ready queue. The tasks in the OS ready queue are output in order of priority (lowest priority first). The WD timeout was only caused by the running task. However, the error cause must always be determined on the basis of the interrelationships of the tasks in the stack. Please note that although tasks awaiting resource allocation are not listed, they may still be the cause of the watchdog timeout. The system responds with a soft restart. The first task information message contains the action initiated. The individual fields are:

- PROC Physical processor number, not used
- CELL PHYS not used
- NMI LOG ADDR Address at which program sequence was interrupted
- (only useful for running task)
- NMI LOG STACK Stack address (only useful for running task)
- NMI PHYS ADDR not used
- NMI PHYS STACK not used
- TASK START ADDR Start address of task or FFFFH:FFFFH
- STATIC PRIO Static task priority assigned by user
- DYNAMIC PRIO Dynamic task priority assigned by OS
- 'RUN-TASK' Task designation, e.g. 'running task' (always output first)
- BP, IP, CS, FLAG Processor register information (only useful for running task)
- MESSAGE ID All error messages belonging to the same event have the same message ID value.

Subsequent bytes: 28 bytes of internal OS data

Please also refer to the section entitled "[SW/Interrupt/Stack message interpretation](#)".

F3153

SWU-INT

MULTIBUS TIMEOUT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timeout on multibus

Cause:

Format 28. Multibus user not responding or does not exist.

Action:

Save diagnosis data (stack messages and task information messages) and contact your [Next level of support](#).

Interpretation of auxiliary data:

Up to 5 stack messages are output before the actual information message. The system responds with a soft restart. The task information message contains the action initiated. The individual fields are:

- PROC Physical processor number
- CELL PHYS Physical address
- NMI LOG ADDR Address at which program sequence was interrupted
- NMI LOG STACK Stack address at time of interrupt
- NMI PHYS ADDR not used
- NMI PHYS STACK not used
- TASK START ADDR not used
- STATIC PRIO not used
- DYNAMIC PRIO not used
- MESSAGE ID All error messages belonging to the same event have the same message ID value.

Please also refer to the section entitled "[SW/Interrupt/Stack message interpretation](#)".

F3155

SWU-INT

PARTNER INACTIVE

Type:

Diagnosis-specific (Format 00)

Short text:

Error in active controller

Cause:

Central error in the active controller. Non-active controller realizes that the active partner controller has reset the active line.

Action:

Save error message data and contact your [Next level of support](#).

F3157

SWU-INT

2BIT

Type:

Service-specific (several formats apply)

Short text:

2-bit error

Cause:

2-bit error

Action:

Switch off power and replace M2M board. Contact your [Next level of support](#) if this does not work.

F3158

SWU-INT

DATA BLOCKED

Type:

Service-specific (Format 18)

Short text:

Non-maskable interrupt blocked (NMI)

Cause:

A non-maskable interrupt cannot be acknowledged..

Action:

Switch off power and replace data processor. Contact your [Next level of support](#) if this does not work.

F3159

SWU-INT

NO DATA

Type:

Service-specific (Format 18)

Short text:

No readable data (non-maskable interrupt has occurred)

Cause:

The data processor (DP) board may be defective.

Action:

Check DP board. Switch off power and replace if necessary. Contact your [Next level of support](#) if this does not work.

F3171

SWU-INT

WD CLOCK

Type:

Service-specific (Format 18)

Short text:

Clock failure

Cause:

Failure of watchdog clock.

Action:

Switch off power and replace data processor (DP). Contact your [Next level of support](#) if this does not work.

F3172

SWU-INT

DP PARITY ERROR

Type:

Service-relevant (Format 47)

Short text:

Parity error, see [F3176](#).

Cause:

The cause can be limited to the RAM chip. See [F3176](#).

System reaction:

RELOAD only when DUPLEX system is on standby. No ACTION in the case of simplex systems

Action:

See [F3176](#)

Interpretation of auxiliary data:

See [F3176](#)

F3173

SWU-INT

MEM PARITY ERROR

Type:

Service-specific (Format 28)

Short text:

Parity error in memory board

Cause:

Parity error in read/write operation (not in connection with RTO). System responds with a hard restart.

Action:

The contents of the memory cell can only be restored by a reload. Replace board if error occurs repeatedly. Contact your [Next level of support](#) if this does not work.

Interpretation of auxiliary data:

PROC Physical processor number CELL PHYS Physical address of corrupted memory cell NMI LOG ADDR Address at which program sequence was interrupted NMI LOG STACK Stack address at time of interrupt NMI PHYS ADDR not used NMI PHYS STACK not used TASK START ADDR not used STATIC PRIO not used DYNAMIC PRIO not used

F3174

SWU-INT

DISALLOWED ADDRESS

Type:

Service-specific (several formats apply)

Short text:

Error in RAM of DP386

Cause:

Only for DP386. Processor attempted to access an invalid address outside the 24 megabytes of the on-board RAM.

Action:

Save error message data and contact your [Next level of support](#).

F3175

SWU-INT

POWER FAIL

Type:

Service-specific (several formats apply)

Short text:

Power failure

Cause:

A power failure has been detected. This message is output, if an interrupt has occurred due to a short-term power failure. No consequences for user.

Action:

Check the power supply units. Old hardware versions: check the Faston connectors on the backplane and make sure that all boards and PSUs are locked into their slots correctly.

F3176

SWU-INT

DP NMI PCI

Type:

Service-relevant (Format 47)

Short text:

Non Maskable Interrupt at the peripheral computer interface bus (PCI BUS)

Cause:

The CPU and the connected units, such as memory or hard disk, LAN controller, etc. are connected via the peripheral computer interface bus (PCI BUS). The PCI NMI error (non maskable interrupt) occurs in the event of component or bus communication faults. The error with format 47 only occurs in the case of Pentium boards.

System reaction:

Soft restart

Action:

If this error occurs repeatedly, replace the processor board.

Interpretation of auxiliary data:

The supplementary data represents extracts from the "Configuration space" of the PCI bus system and can only be interpreted by the hardware specialists. They should always be seen in conjunction with the associated stack messages.

F3177

SWU-INT

RTM RESET

Type:

Diagnosis-relevant (Format 0)

Short text:

RTM failure interrupt was triggered.

Cause:

The RTM failure interrupt was triggered because:

- 1) the RTM loadware executed a self-reset after a hard restart or Reload in order to reset all settings
- 2) the RTM loadware detected a fatal error that can only be fixed with a self-reset.
- 3) The RTM was disconnected during operation.

System reaction:

In case 1, no further action is involved. In cases 2 and 3, a hard restart is executed in order to put the RTM back in service. The hard restart leads to a switchover on a duplex system with a switchover-capable standby BP.

Action:

If the RTM detects a fatal error again after the hard restart in case 2, then the RTM is probably defective and should be replaced.

8.5 F4000

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F4005

DB

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from procedure.

Action:

Save error message data and contact your [Next level of support](#).

F4006

DB

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values for procedure call.

Action:

Save error message data and contact your [Next level of support](#).

F4008

DB

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible static data in memory.

Action:

Save error message data and contact your [Next level of support](#).

F4016

DB

ADVISORY

Type:

Diagnosis-specific (several formats apply)

Short text:

Advisory message

Cause:

Advisory message

Action:

Save error message data and contact your [Next level of support](#).

F4018

DB

BOARD NOT READY

Type:

Diagnosis-specific (Format 01)

Short text:

Board not in operation

Cause:

The operating system (OS) has detected that the MDL_READY field of a dual-port RAM (DPR) no longer contains the value READY, which means that a board (IP, DCL, CCH, MBU, IOCG) is currently not operative.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F4019

DB

DPR NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Dual Port Ram

Cause:

The OS has detected that the DPR_VALID field of a dual-port RAM (DPR) no longer contains the value VALID because, for instance, a container chaining error has been found by board. No hexadecimal data is output with this message.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F4022

DB

BUSHANDLER TIMEOUT

Type:

Diagnosis-specific (Format 01)

Short text:

Bus handler (BH) reports timeout

Cause:

Bus handler (BH) reports timeout error, i.e. transmission was not complete. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command

queue again after the SP (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4023

DB

BUSHANDLER NO PARTNER

Type:

Diagnosis-specific (Format 01)

Short text:

Board failure of remote processor

Cause:

BH identifies that a message could not be transmitted because, for instance, the destination processor's board had failed. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4024

DB

BUSHANDLER CONTEXT

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data for the BH

Cause:

This means the container has been fed the wrong data for the BH by the operating system.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4025

DB

DESTINATION CATALOG

Type:

Diagnosis-specific (Format 01)

Short text:

Name not contained in index catalog

Cause:

During processor communication, a container with an index/name that was not in the receiver's index catalog was received from a firmware processor or boot. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4026

DB

DESTINATION MAILBOX

Type:

Diagnosis-specific (Format 01)

Short text:

Destination mailbox no longer exists

Cause:

During processor communication, it was found at the receiving end that the destination mailbox named in the container no longer exists or is wrong. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4027

DB

DESTINATION RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough OS resources

Cause:

Resources short for receiving messages over processor borders. Whether the message was intended for an operating system mailbox or for a user's mailbox, is of no concern as regards this error.

Source processor is the destination: Despite a wait there was neither a free buffer nor a free segment available to hold the message. The hexadecimal output contains the task batch which is to empty the mailbox, and also the address of the task currently accessing the database area.

Source processor is a node: Despite a wait there was neither a short nor a long container available for forwarding the message.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4028

DB

OS RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough OS resources

Cause:

The operating system did not have a free element in its internal buffer pool or a segment available, nor, despite a wait, a short or long container. Shortage of operating system resources when receiving messages over processor borders is, however, reported with error message [F4027](#). No HEX data is output with this message.

Action:

Check the IP and MBU firmware. Save error message data and contact your [Next level of support](#).

F4029

DB

MAILBOX TIMER

Type:

Diagnosis-specific (Format 01)

Short text:

Mailbox no longer exists

Cause:

When a timer runs down, the destination mailbox is found to be no longer existing.

Action:

In the HEX data, the message is output by the timer in a length of 20 bytes. Save error message data and contact your [Next level of support](#).

F4030

DB

TIME / DATE NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Check reference clock

Cause:

Error when processing the reference clock. Error only occurs in the ADS.

Action:

The exception code is output in the HEX data and may have the following meaning: H20 = TIME_NOT_VALID (Clock defective) H21 = MAC_NOT_READY (MAC board defective) H22 = BAT_OFF (Check date/time or support battery in the MAC/IOPA) When the ADS is first booted, exception codes H20 and H21 are always output on all accounts.

F4032

DB

JOTA

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data in job table

Cause:

ROOT finds implausible data in the job table (JOTA). Depending on the state of the boot, the error is reported to SYSLOAD or to error analysis. It is assumed that the JOTA checksum is no longer correct.

Action:

If byte 0 of the HEX data contains the value 01, the other bytes output the layer number. If byte 0 of the HEX data contains a value >01, then byte 1 outputs the exception code (supplied by RMX in response to CREAT_JOB), the other bytes output the name of the subsystem from the job table (JOTA). Save error message data and contact your [Next level of support](#).

F4033

DB

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Error statistics overflow

Cause:

Too many plausibility errors within a certain time. The error statistics overflow.

Action:Save error message data and contact your [Next level of support](#).**F4034**

DB

SYSTEM EXCEPTN HANDLER

Type:

Diagnosis-specific (Format 01)

Short text:

Error when processing the root job

Cause:

The system exception handler was activated by an error.

Action:Find the cause with further error reports. Save error message data and contact your [Next level of support](#)**F4035**

DB

INIT ERROR

Type:

Diagnosis-specific (Format 01)

Short text:

Error in OS initialization

Cause:

This error is reported to SYSLOAD, not to error analysis. The reaction is a hard restart. The hard disk may be faulty or the system program may not exist or may be faulty.

Action:

Check that the PABX has restarted. contact your [Next level of support](#) if the system fails to restart.

F4036

DB

BUSHANDLER QBLOCK S

Type:

Diagnosis-specific (Format 01)

Short text:

No free short container available

Cause:

Bus handler (BH) reports that for a certain time the destination processor's dual-port RAM (DPR) did not have a short free container available to hold a message that was to be transmitted. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (SP) in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F4037

DB

BUSHANDLER QBLOCK L

Type:

Diagnosis-specific (Format 01)

Short text:

No free long container available

Cause:

BH reports that for a certain time the destination processor's DPR did not have along free container available to hold a message that was to be transmitted. The BH enables all the containers of the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the SP in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F4038

DB

BROADCAST ON, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_ON order (order to all) from the active base processor (BP) to the message buffers (MBU) was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F4039

DB

BROADCAST OFF, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_OFF order from the active BP to the MBUs was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F4040

DB

BROADCAST LONG

Type:

Diagnosis-specific (Format 01)

Short text:

Message not retrieved by MBU

Cause:

When long message was to be acknowledged by the base processor (BP) acting on behalf of the group processors (GP), it was found that this message had not yet been collected by at least one message buffer (MBU). The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. The first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4041

DB

GP IN BROADCAST MODE

Type:

Diagnosis-specific (Format 01)

Short text:

Processor communication error

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor specified in the container was a GP currently affected by the load broadcast rather than the GP designated in the load broadcast. The error is reported in the active BP.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4042

DB

DESTINATION PROCESSOR

Type:

Diagnosis-specific (Format 01)

Short text:

Destination processor not available

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor named in the container according to the directory table (DIR_TBL) was not available. The sender of the message was either a firmware processor or a data processor whose DIR_TBL was not consistent with the destination DIR_TBL.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4045

DB

MAILBX TIMER RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

After the timer had run down, the system was able to determine that the destination mailbox exists but that the message could not be transmitted due to lack of free memory.

Action:

The timer message is output in the HEX data up to a length of 20 Bytes. Save error message data and contact your [Next level of support](#).

F4048

DB

PROCESSOR INTERRUPT

Type:

Diagnosis-specific (Format 01)

Short text:

Interrupt

Cause:

SYSLOAD has processed or output an interrupt.

Action:

Save error message data and contact your [Next level of support](#).

F4050

CP

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

The an implausible event code as an event or subevent not expected in a particular call state. Check the trace scenario to understand deeper the cause.

Action:

Save error message data and contact your [Next level of support](#).

Trunk events will be signalled only if COT IEVT is set.

AMO DIAGS switch CP2 S02 also affects output and is like setting COT IEVT for all trunks including LCR.

For Trace stop use e.g.:

```
selmsg,stop,g1,cd1,dest,40; /* FM in FA
```

```
selmsg,stop,g1,cd2,ev,26; /* DB_QF_E_CP
```

```
selmsg,stop,g1,cd3,sevt,12; /* DB_TX_SPE_UNPL_EVT_CODE
```

```
selmsg,stop,g1,cd4,byte,11,DD /* UA Offset LowByte (e.g. UA:AABB:CCDD)
```

```
selmsg,stop,g1,cd5,byte,12,CC; /* UA Offset HighByte
```

```
selmsg,stop,g1,cd6,byte,13,BB; /* UA Selector LowByte
```

```
selmsg,stop,g1,cd7,byte,14,AA; /* UA Selector HighByte
```

F4051

CP

DISALL EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Event code disallowed

Cause:

Event code valid but not allowed.

Action:

Save error message data and contact your [Next level of support](#).

F4052

CP

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state

Cause:

Implausible state.

Action:

Save error message data and contact your [Next level of support](#).

F4053

CP

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in the current state.

Action:

Save error message data and contact your [Next level of support](#).

F4054

CP

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and contact your [Next level of support](#).

F4055

CP

IMPLAUSIBLE PROC RET

Type:

(several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:

Save error message data and contact your [Next level of support](#).

F4056

CP

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:

Save error message data and contact your [Next level of support](#).

F4057

CP

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for DataBase Access Routine.

Action:

Save error message data and contact your [Next level of support](#). For initial diagnosis, display the patch list with DIS-PATCH:SYS;. Check the installed patches against the PRB list / latest Service Infos. Check that no invalid or canceled patches are active in the system.

For Trace stop use e.g.:


```
selmsg,stop,g1,cd1,dest,40; /* FM in FA
selmsg,stop,g1,cd2,ev,26; /* DB_QF_E_CP
selmsg,stop,g1,cd3,sevt,1D; /* DB_TX_SPE_DBAR
selmsg,stop,g1,cd4,byte,11,DD /* UA Offset LowByte (e.g. UA:AABB:CCDD)
selmsg,stop,g1,cd5,byte,12,CC; /* UA Offset HighByte
selmsg,stop,g1,cd6,byte,13,BB; /* UA Selector LowByte
selmsg,stop,g1,cd7,byte,14,AA; /* UA Selector HighByte
```

F4058

CP

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F4059

CP

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F4060

CP

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

This error message is critical and can also be an indication of resource problems, which often escalate to a soft restart.

Exception-Code (EC) "0002" indicates a lack of memory i.e. no free resources can be found (e.g. a buffer for internal CP-Messages). In such cases there are only two possible causes; firstly a message loop, this will be possible to see in trace, or secondly a fault that leads to the blocking of a resource (e.g. Buffer), eventually leading to a scenario where no more resources are available!

Action:

Save error message data and contact your [Next level of support](#).

For Trace stop use e.g.:

```
selmsg,stop,g1,cd1,dest,40; /* FM in FA
```

```
selmsg,stop,g1,cd2,ev,26; /* DB_QF_E_CP
```

```
selmsg,stop,g1,cd3,sevt,1E; /* DB_TX_SPE_OS_CALL_FAULT
```

```
selmsg,stop,g1,cd4,byte,11,DD /* UA Offset LowByte (e.g. UA:AABB:CCDD)
```

```
selmsg,stop,g1,cd5,byte,12,CC; /* UA Offset HighByte
```

```
selmsg,stop,g1,cd6,byte,13,BB; /* UA Selector LowByte
```

```
selmsg,stop,g1,cd7,byte,14,AA; /* UA Selector HighByte
```

F4061

CP

MTS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Software error in MTS handler call. Switching network set with implausible data.

Action:

Save error message data and contact your [Next level of support](#).

F4062

CP

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:

Save error message data and contact your [Next level of support](#).

F4063

CP

MSG HEADER FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible message header

Cause:

Implausible message header.

Action:

Save error message data and contact your [Next level of support](#).

F4066

CP

ADVISORY

Type:

Diagnosis-relevant (several formats relevant)

Short text:

Advisory message.

Cause:

F4066 can be signalled as a Stack Data to any error message.

Other messages where EC:02017 follow a diagnosis format and some such messages are controlled via AMO DIAGS switches.

Action:

Save error message data and contact your [Next level of support](#).

For Trace stop use e.g.:

```
selmsg,stop,g1,cd1,dest,40; /* FM in FA
```

Error messages

selmsg,stop,g1,cd2,ev,26; /* DB_QF_E_CP

selmsg,stop,g1,cd3,sevt,22; /* DB_TX_SPE_HINWEIS

selmsg,stop,g1,cd4,byte,11,DD /* UA Offset LowByte (e.g. UA:AABB:CCDD)

selmsg,stop,g1,cd5,byte,12,CC; /* UA Offset HighByte

selmsg,stop,g1,cd6,byte,13,BB; /* UA Selector LowByte

selmsg,stop,g1,cd7,byte,14,AA; /* UA Selector HighByte

Byte 0 = **00** to **1C** indicates the diagnosis format. More information can be found by clicking the relevant line:

00 = Route optimization "no correlation index"

Switch: no switch; always output as incorrect

Byte 00	(= 00) Diagnosis format 00
Byte 01	Length of data
Byte 02	Correlation index = 0

01 = Route optimization "route data"

Switch: S02 for DIAGS CP

Byte 00	(= 01) Diagnosis format 01
Byte 01	Length of data
Byte 02	Correlation index
Byte 03	Code indicating the switch in which the diagnosis message will be output:

00 Requesting switch	The diagnosis message was output when the old networking record received the PARTNER_ANSWER from the new networking record (once the SETUP arrives at the new path).	
01 Terminating switch	The diagnosis message was output when the new networking record received the SEIZURE (after arrival of the FAC PR REQ).	
	Byte 04-05	Loden terminal A or C (code 00 or 01)
	Byte 06-07	Loden record old
	Byte 08-09	Loden record new
	Byte 0A-0E	Path data old (short path, path terminal, path record)
	Byte 0F-18	Path data new (long path, A_EXIT_TSL, TSL_CSN_A, TSL_CSN_B, CSN_MTS_NR, B_EXIT_TSL)
02 Same switch	The diagnosis message was output on the arrival of the FAC PR REQ in networking record C because both stations A and C are in the same node.	
	Byte 04-05	Loden terminal A
	Byte 06-07	Loden terminal C
	Byte 08-09	Loden record A

	Byte 0A-0B	Loden record C
	Byte 0C-10	Path data old A (short path, path terminal, path record)
	Byte 11A-1B	Path data old C (long path, A_EXIT_TSL, TSL_CSN_A, TSL_CSN_B, CSN_MTS_NR, B_EXIT_TSL)
	Byte 1B-24	Path data new AC (long path, A_EXIT_TSL, TSL_CSN_A, TSL_CSN_B, CSN_MTS_NR, B_EXIT_TSL)

02 = Add-on witness "on"

Switch: S03 for DIAGS CP

Byte 00	(= 02) Diagnosis format 02
Byte 01	Length of data
Byte 02	Length of caller station number
Byte 03-18	Caller station number
Byte 19	Length of name of caller
Byte 1A-37	Name of caller
Byte 38-39	Loden caller
Byte 3A	Length of initiator station number
Byte 3B-50	Initiator station number
Byte 51-52	Loden initiator
Byte 53	Length of witness station number
Byte 54-69	Witness station number
Byte 6A-6B	Loden witness

03 = Add-on witness "off"

Switch: S03 for DIAGS CP

Byte 00	(= 03) Diagnosis format 03
Byte 01	Length of data
Byte 02	Length of initiator station number
Byte 03-18	Initiator station number
Byte 19-1A	Loden initiator

04 = Least cost routing "LCR data"

Switch: no switch; always output on account of configuration error in the AMOs LODR, LDPLN, LDAT

Byte 00	(= 04) Diagnosis format 04

Error messages

Byte 01	Length of data
Byte 02	LCR error 00
Byte 03	Calling procedure
	00 = CP_P_NW_LCR_ODR_TO_NR
	01 = CP_P_NW_LCR_PROCESS_ODR
Byte 04	Outdial rule index
Byte 05-36	Outdial rule commands (DB_M_LCR_ODR_STR)
Byte 37	Outdial rule digit length
Byte 38	Filler
Byte 39-4E	Outdial rule digits
Byte 4F-61	Outdial rules (DB_M_LCR_DPLN_FIELD_STR)
Byte 62	Filler
Byte 63	max., digit number to be sent in a route
Byte 64-99	LCR data (DB_M_LCR_TRUNK_STR)

05 = Long path snag

Switch: S04 for DIAGS CP

Byte 00	(= 05) Diagnosis format 05
Byte 01	Length of data
Byte 02-03	TSL_CSN_A
Byte 04-05	EXIT_TSL_A
Byte 06-07	LODEN_A
Byte 08-09	TSL_CSN_B
Byte 0A-0B	EXIT_TSL_B
Byte 0C-0D	LODEN_B

Siehe auch [10 = Long path snag on initiating Synchronous Announcement](#).

06 = Emergency disconnect

Switch: S05 for DIAGS CP

Byte 00	(= 06) Diagnosis format 06
Byte 01	Length of data
Byte 02-03	Loden of the clearing-down device
Byte 04-19	Station number of the clearing-down device

Byte 1A-21	Filler
Byte 22-23	Loden of the selected destination
Byte 24-39	Station number of the selected destination
Byte 3A-41	Filler
Byte 42-43	Loden A of the cleared-down connection
Byte 44-59	Station number A of the cleared-down connection
Byte 5A-61	Filler
Byte 62-63	Loden B of the cleared-down connection
Byte 64-79	Station number B of the cleared-down connection
Byte 7A	Common CPB index

IMPORTANT: This message is also used to signal the release of frozen resources in the case of DIGITE. If a DIGITE still has frozen resources from the previous connection when leaving CP idle state, these are released (if possible) and signaled with this message. The CC and the UA identify the resource type. Meaning of CCs: 15299: Timeslots 15300: B-Kanäle 15301: CPB-Verweise 15302: Subunit-Verwaltung 15304: Loden-Verkettung 15306: Hinter-Subunit 15307: Timertoken This ADVISORY messages refers to the previous connection. Additional diagnosis steps are required for diagnosing the actual cause of the error. This function can be controlled with the AMO-DIAGS. It is activated by default. The function can be switched on or off with the AMO command CHA-DIAGS:procid=CC, COMP=CP,S15=ON/OFF;.

07 = Synchronous Announcement "Path search for record unsuccessful"

Switch: S06 for DIAGS CP

Synchrone announcement cannot be assigned / no assignable device

Byte 00	(= 07) Diagnosis format 07
Byte 01	Length of data
Byte 02-03	Loden of the requesting device
Byte 04	Device type of the requesting device
Byte 05	Number of Loden
Byte 06	Attempts to find free Loden
Byte 07	Attempts to seize path
Byte 08	Path type
Byte 09	CSN

Error messages

Byte 0A-0B	TSL_CSN_A
Byte 0C-0D	A_EXIT_TSL
Byte 0E	LTG_A
Byte 0F-10	TSL_CSN_B
Byte 11-12	B_EXIT_TSL
Byte 13-14	Loden B
Byte 15	LTG_B
Byte 16	Announcement type
Byte 17	Repetition factor
Byte 18	Return tone
Byte 19	Reason for announcement
	00 = DB_ASY_RSN_DID
	01 = DB_ASY_RSN_DISA
	02 = DB_ASY_RSN_SUF_DIAL_BUSY
	03 = DB_ASY_RSN_SUF_DIAL_NO_ANS
	04 = DB_ASY_RSN_ANN_BUSY
	05 = DB_ASY_RSN_ANN_NO_ANS
	06 = DB_ASY_RSN_CO_ANN_VPL
	07 = DB_ASY_RSN_WAIT_VPL_NO_ANS
	08 = DB_ASY_RSN_WAIT_SA_AO
	09 = DB_ASY_RSN_ANN_PSM
Byte 1A	Attribute
	00 = DB_ASY_ATTR_OFF
	01 = DB_ASY_ATTR_REQUESTED
	02 = DB_ASY_ATTR_WAIT_IN_WAITQ
	03 = DB_ASY_ATTR_WAITP_IN_WAITQ
	04 = DB_ASY_ATTR_ON_IN_WAITQ
	05 = DB_ASY_ATTR_ON_IN_ACTQ
	06 = DB_ASY_ATTR_TONE_1_NOQ
	07 = DB_ASY_ATTR_TONE_2_NOQ
	08 = DB_ASY_ATTR_TONE_3_NOQ

	09 = DB_ASY_ATTR_END_NOQ
Byte 1B	Cycle information
Byte 1C	Check information

08 = Synchronous Announcement "No announcement buffer available"

Switch: S06 for DIAGS CP

Wrong dimensioning / synchronous announcement works with restrictions

Byte 00	(= 08) Diagnosis format 08
Byte 01	Length of data
Byte 02-03	Loden of the clearing-down device
Byte 04	Device type
Byte 05	Announcement type
Byte 06	Number of Loden in announcement type

09 = Synchronous Announcement "Entry in queue not possible"

Switch: S06 for DIAGS CP

Software error / Synchronous announcement temporarily blocked

Byte 00	(= 09) Diagnosis format 09
Byte 01	Length of data
Byte 02-03	Loden of the requesting device
Byte 04	Device type of the requesting device
Byte 05	Number of Loden in type
Byte 06	Number of Loden in queue
Byte 07	Reject reason
	00 = DB_ASY_RES_OK
	01 = DB_ASY_RES_LOPDEN_NOT_FOUND
	02 = DB_ASY_RES_INVALID_LODEN
	03 = DB_ASY_RES_UNKNOWN_DEVICE
	04 = DB_ASY_RES_ALRDY_IN_WAITQ
	05 = DB_ASY_RES_ALRDY_IN_ACTQ
	06 = DB_ASY_RES_WAITQ_FULL
	07 = DB_ASY_RES_ACTQ_FULL
	08 = DB_ASY_RES_QUEUE_EMPTY

Error messages

	09 = DB_ASY_RES_NO_BUFFER_FOUND
	0A = DB_ASY_RES_UNKNOWN_ERROR
Byte 08	Path type
Byte 09	CSN
Byte 0A-0B	TSL_CSN_A
Byte 0C-0D	A_EXIT_TSL
Byte 0E	LTG_A
Byte 0F-10	TSL_CSN_B
Byte 11-12	B_EXIT_TSL
Byte 13-14	Loden B
Byte 15	LTG_B
Byte 16	Announcement type
Byte 17	Repetition factor
Byte 18	Return tone
Byte 19	Reason for announcement
Byte 1A	Attribute
Byte 1B	Cycle information
Byte 1C	Check information

0A = Synchronous Announcement "General error message"

Switch: S06 for DIAGS CP

Unclear error profile / Sporadic errors in synchronous announcement

Byte 00	(= 0A) Diagnosis format 0A
Byte 01	Length of data
Byte 02-03	Loden of the requesting device
Byte 04	Device type of the requesting device
Byte 05	Number of Loden in type
Byte 06	Path type
Byte 07	CSN
Byte 08-09	TSL_CSN_A
Byte 0A-0B	A_EXIT_TSL
Byte 0C	LTG_A

Byte 0D-0E	TSL_CSN_B
Byte 0F-10	B_EXIT_TSL
Byte 11-12	Loden B
Byte 13	LTG_B
Byte 14	Announcement type
Byte 15	Repetition factor
Byte 16	Return tone
Byte 17	Reason for announcement
Byte 18	Attribute
Byte 19	Cycle information
Byte 1A	Check information

0B = Synchronous Announcement "Switch from start/stop to continuous mode"

Switch: S11 for DIAGS CP

Pure diagnosis to optimize dimensioning of announcement devices

Byte 00	(= 0B) Diagnosis format 0B
Byte 01	Length of data
Byte 02	Announcement type
Byte 03	Number of Loden of the relevant announcement type
Byte 04	Number of type 1 Loden in queue
	00 = Queue is empty
	00-31 = Number of Loden in queue
	32 = Queue is full
	FF = Loden in queue is corrupt
Byte 05	Number of requestors for 1st. announcement device
Byte 06	Number of requestors for 2nd. announcement device
Byte 07	Number of requestors for 3rd. announcement device
Byte 08	Number
Byte 09	Number
Byte 0A	Number
Byte 0B	Number of requestors for last announcement device

0C = Synchronous Announcement "No valid announcement type found"

Switch: S06 for DIAGS CP

Error messages

Administration (SYNCA) error / No connection to synchronous announcement device

Byte 00	(= 0C) Diagnosis format 0C
Byte 01	Length of data
Byte 02-03	Loden of the requesting device
Byte 04	Device type of the requesting device
Byte 05	Reason for announcement
Byte 06	VBZ
Byte 07	Last digit dialed

0D = Multiple code calling "invalid CPB"

Switch: S08 for DIAGS CP

Byte 00	(= 0D) Diagnosis format 0D
Byte 01	Length of data
Byte 02-03	TMOM Loden
Byte 04	TMOM status
Byte 05-06	CPB-IDX paging memory
Byte 07-1C	Station number in paging memory
Byte 1D	Number of paging attempts
Byte 1E-1F	Loden of pager
Byte 20	Status of pager
Byte 21	Device type of pager
Byte 22-23	ACT_CPB_IDX
Byte 24-25	BACK_CPB_IDX
Byte 26	ACT_CPB-Valid
Byte 27	BACK_CPB-Valid
Byte 28-29	Loden B in the CPB
Byte 2A-3F	Station number B in the CPB
Byte 40-55	DEST_Nr. in the CPB
Byte 56	FACILITY
Byte 57	FACILITY_ATTRIBUTE
Byte 58	FACIL_KZP

0E = VPL-AO full

Switch: S13 for DIAGS CP

Byte 00	(= 0E) Diagnosis format 0E
Byte 01	Length of data
Byte 02	Attendant group
Byte 03	Night service variants
	00 = DB_GS_C_PAR_VARIANT_DAY
	01 = DB_GS_C_PAR_VARIANT1
	02 = DB_GS_C_PAR_VARIANT2
	03 = DB_GS_C_PAR_VARIANT3
	04 = DB_GS_C_PAR_VARIANT4
	05 = DB_GS_C_PAR_VARIANT5
	06 = DB_GS_C_PAR_VARIANT6
	07 = DB_GS_C_PAR_VARIANT7
	08 = DB_GS_C_PAR_VARIANT8

0F = Error on feature stack operation

Switch: -

Byte 00	(= 0F) Diagnosis format 0F
Byte 01	Length of data
Byte 02	Stack pointer
Byte 03-04	Feature stack 1
Byte 03	Feature state
Byte 04	Feature code
	00 = DB_FEA_CO_BASIC_CALL
	01 = DB_FEA_CO_NV_BASIC_CALL
	02 = DB_FEA_CO_RSL
	03 = DB_FEA_CO_SONDEREINR
	04 = DB_FEA_CO_SONDEREINR_RSL
	05 = DB_FEA_CO_ANKL_AUFS
	06 = DB_FEA_CO_ANKL_AUFS_RSL
	07 = DB_FEA_CO_RR_NETW
	08 = DB_FEA_CO_RR_NETW_RSL

Error messages

	09 = DB_FEA_CO_AUL_NETW
	0A = DB_FEA_CO_AUL_NETW_RSL
	0B = DB_FEA_CO_RWS_NETW
	0C = DB_FEA_CO_RWS_NETW_S0
	0D = DB_FEA_CO_RWS_NETW_NV
	0E = DB_FEA_CO_RWS_NETW_RSL
	0F = DB_FEA_CO_RWS_NETW_RSL_S0
	10 = DB_FEA_CO_CENTRAL_ATND
	11 = DB_FEA_CO_CENTRAL_ATND_RSL
	12 = DB_FEA_CO_STATUSABFRAGE
	13 = DB_FEA_CO_INVOKE
	14 = DB_FEA_CO_DATAG
	15 = DB_FEA_CO_SETUP_D_CHL
	16 = DB_FEA_CO_E_OVER_DISC
	17 = DB_FEA_CO_HOLD
	18 = DB_FEA_CO_WA_DPNSS
	19 = DB_FEA_CO_ROUTE_OPT
	1A = DB_FEA_CO_LCR
	1B = DB_FEA_CO_SR_SAVE_CALL
	1C = DB_FEA_CO_CALL_TO_ATND:
	1D = DB_FEA_CO_THREE_PARTY
	1E = DB_FEA_CO_TSC_SERVER_MWI
	1F = DB_FEA_CO_REMOTE_CFU
	20 = DB_FEA_CO_TRANSFER
	21 = DB_FEA_CO_GF
	22 = DB_FEA_CO_TSC
	23 = DB_FEA_CO_CSN7
	24 = DB_FEA_CO_RR_NETW_INTW
	25 = DB_FEA_CO_CALL_TO_ACD
	26 = DB_FEA_CO_CALL_TO_ACD_RSL
	27 = DB_FEA_CO_HOLD_BEFORE_ACT

	28 = DB_FEA_CO_GPUN_OUT
	29 = DB_FEA_CO_GPUN_IN
	2A = DB_FEA_CO_ECT
	2B = DB_FEA_CO_RWSATRF_NETW
	2C = DB_FEA_CO_NW_MAINTENANCE
	2D = DB_FEA_CO_ACD_SVR_SAM
	2E = DB_FEA_CO_REMOTE_XFER
	2F = DB_FEA_CO_DIR_PICK_UP
	30 = DB_FEA_CO_CTL5
	31 = DB_FEA_CO_DIRECTED_CALL_PARK
	32 = DB_FEA_CO_TTS
	33 = DB_FEA_CO_KONF_HARD_HOLD
	34 = DB_FEA_CO_HARDHOLD_SYSPARK
Byte 05-06	Feature stack 2
Byte 07-08	Feature stack 3
Byte 09-0A	Feature stack 4
Byte 0B-0C	Feature stack 5

10 = Long path snag on initiating Synchronous Announcement
Switch: S04 for DIAGS CP

Byte 00	(= 10) Diagnosis format 10
Byte 01	Length of data
Byte 02-03	Loden of the requesting device
Byte 04	Device type of the requesting device
Byte 05	Number of Loden for announcement type = 0
Byte 06	Path type
Byte 07	CSN
Byte 08-09	TSL_CSN_A
Byte 0A-0B	A_EXIT_TSL
Byte 0C	LTG_A
Byte 0D-0E	TSL_CSN_B
Byte 0F-10	B_EXIT_TSL

Error messages

Byte 11-12	Loden B
Byte 13	LTG_B
Byte 14	Announcement type
Byte 15	Repetition factor
Byte 16	Return tone
Byte 17	Reason for announcement
Byte 18	Attribute
Byte 19	Cycle information
Byte 1A	Check information

11 = Error on VF overflow group

Switch: S13 for DIAGS CP

Byte 00	(= 11) Diagnosis format 11
Byte 01	Length of data
Byte 02	VF group:

The UELGR parameter in the AMO UEGR points to a nonexistent VF group for the VF group output here. or: There is a loop with respect to the assigned overflow VF groups.

12 = ACL-G

Switch: S13 for DIAGS CP

Advance feature - not yet used.

Byte 00: (= 12) Diagnosis format 12

13 = Network-wide call pickup groups

Switch: -

Byte 00	(= 13) Diagnosis format 13
Byte 01	Length of data
Byte 02	Reason for diagnostic output:
	00 = Shortage of local resources
	01 = Signaling from remote link rejected:
Byte 03-04	Local group number
Byte 05-1E	Data remote link:
Byte 05	Length of code
Byte 06-1B	Code
Byte 1C-1D	Group number

Byte 1E	Set signaling:
	00 = No signaling
	01 = Send AUN signaling
	02 = Receive AUN signaling
	03 = Send and receive AUN signaling
	04 = Send park signaling
	05 = Send AUN + park signaling
	06 = Receive AUN signaling, send park signaling
	07 = everything
Byte 1F	Cause of error:
	00 = DB_RE_DUPL_INVOCATION
	01 = DB_RE_UNRECOGNIZED_OPER
	02 = DB_RE_MISTYPED_ARGUMENT
	03 = DB_RE_RESS_LIMITATION
	04 = DB_RE_INITIATOR_REL
	05 = DB_RE_UNREC_LINKED_IDENT
	06 = DB_RE_LINKED_RESP_UNEXPEC
	07 = DB_RE_UNEXP_CHILD_OPER
	08 = DB_RE_NO_ERROR

14 = CP-ADVISORY flagtrace

The call code 15312 is to be added to the flagtrace output via the interface CP-ADVISORY for the purpose of unique identification. The CP-ADVISORY flagtrace is output in four different cases:

- 1) Acknowledgement of external nodes which were transited by a flagtrace connection initiated by the local node. (transit and end nodes)
- 2) The flagtrace code point is dialed at a terminal at the local system.
- 3) At a digital circuit which is operated with CorNetNQ and received the flagtrace activation for a connection. This can take place both forwards in an incoming seizure and backwards in an outgoing connection.
- 4) If a station marked as static for the flagtrace (selected via AMO Trace) is seized by a flagtrace connection, then a CP-ADVISORY is also output in order to indicate bothway flagtrace activation.

Both the call code 15312 and byte 0 = 14H signal that the CP-ADVISORY refers to a CP-ADVISORY flagtrace.

Byte 01	indicates the length of the data structure

Error messages

Byte 02	is the discriminating digit used for distinguishing the above cases: Byte 2 = 0 Byte 2 = 1 Byte 2 = 2 Byte 2 = 3

Display of acknowledgements for transited node

Byte 00	Diagnosis format 14 (always 14H -> CP-ADVISORY flagtrace)
Byte 01	Always C7H <=> Length of data structure
Byte 02	0 -> Output of acknowledgement from a node transited by a flagtrace connection
Byte 03-04	Separator bytes initialized with 00 00
Byte 05-78	Call_ID of the traced connection type DB_M_NW_INV_CALL_ID_STR 5-41 Global ID 42-78 Leg ID
Byte 79-80	Separator bytes initialized with 00 00
Byte 81-141	DiagData element type DB_M_NW_DIAG_DATA_STR 81 Present indicator for the following 3 elements 82-86 Node number 87-119 Node code 120-140 UPARM (QSig-specific link in a message)

Display of flagtrace activation using a code

Byte 00	Diagnosis format 14 (always 14H -> CP-ADVISORY flagtrace)
Byte 01	Always C7H <=> Length of data structure
Byte 02	1 -> Display indicating that a local station dialed the flagtrace code number
Byte 03-04	Separator bytes initialized with 00 00
Byte 05	Length of the station number of the A station (if not available 0)
Byte 06-27	Station number of the A station (initialized with 0F)
Byte 28-29	Loden of the A station (if not available 0)
Byte 30-31	Line of the A station (if not available 0)
Byte 32-33	Separator bytes initialized with 00 00
Byte 34	Station number of the B station (if not available 0)
Byte 35-56	Station number of the B station (initialized with 0F)
Byte 57-58	Loden of the B station (if not available 0)
Byte 59-60	Line of the B station (if not available 0)

Display of flagtrace activation via an external connection

Byte 00	Diagnosis format 14 (always 14H -> CP-ADVISORY flagtrace)
Byte 01	Always C7H <=> Length of data structure
Byte 02	2 -> Display indicating that flagtracing was activated externally
Byte 03-04	Separator bytes initialized with 00 00

Byte 05	Length of the station number of the A station (if not available 0)
Byte 06-27	Station number of the A station (initialized with 0F)
Byte 28-29	Loden of the A station (if not available 0)
Byte 30-31	Line of the A station (if not available 0)
Byte 32-33	Separator bytes initialized with 00 00
Byte 34	Station number of the B station (if not available 0)
Byte 35-56	Station number of the B station (initialized with 0F)
Byte 57-58	Loden of the B station (if not available 0)
Byte 59-60	Line of the B station (if not available 0)
Byte 61-62	Separator bytes initialized with 00 00
Byte 63-136	Call ID of the traced connection type DB_M_NW_INV_CALL_ID_STR 63-99 Global ID 100-136 Leg ID
Byte 137-138	Separator bytes initialized with 00 00
Byte 139-200	Trace operation of the type DB_M_NW_TRACE_STR that was activated by the flagtracer 141-145 Node number of the node in which the flagtrace was activated 146-138 Node code of the node in which the flagtrace was activated

Display indicating bothway flagtrace activation

Byte 00	Diagnosis format 14 (always 14H -> CP-ADVISORY flagtrace)
Byte 01	Always C7H <=> Length of data structure
Byte 02	3 -> Display indicating that a local station was marked statically and dynamically for flagtracing
Byte 03-04	Separator bytes initialized with 00 00
Byte 05	Length of the station number of the A station (if not available 0)
Byte 06-27	Station number of the A station (initialized with 0F)
Byte 28-29	Loden of the A station (if not available 0)
Byte 30-31	Line of the A station (if not available 0)
Byte 32-33	Separator bytes initialized with 00 00
Byte 34	Station number of the B station (if not available 0)
Byte 35-56	Station number of the B station (initialized with 0F)
Byte 57-58	Loden of the B station (if not available 0)
Byte 59-60	Line of the B station (if not available 0)

15h = Service function not complete

Switch: none

Error messages

Byte 00: (= 15) Diagnosis format 15

This message is output if the dynamic section is unable to accept any more internal messages. The length of the data is 10 bytes.

16h = Implausible component in the UMI message received

Switch: none

Byte 00	(= 16) Diagnosis format 16	
Byte 01	Length of data = 4	
Byte 02	Type of component:	
	00 = DB_GEN_COMP_OP	(OPERATION)
	01 = DB_GEN_COMP_UOP	
	02 = DB_GEN_COMP_NOI	
	03 = DB_GEN_COMP_UNOI	
	04 = DB_GEN_COMP_NFE_DEST	
	05 = DB_GEN_COMP_NFE_SRC	
Byte 03	APDU	
	00 = DB_ROSE_APDU_INV	(INVOKE)
	01 = DB_ROSE_APDU_RR	(RETURN RESULT)
	02 = DB_ROSE_APDU_RE	(RETURN ERROR)
	03 = DB_ROSE_APDU_REJ	(REJECT)
Byte 04	SERVICE (from mode DB_M_NW_SERVICE_SET)	
Byte 05	OPERATION (mode depends on SERVICE)	

17h = Answer/attendant code missing

Switch: none

Byte 00	(= 17) Diagnosis format 17	
Byte 01	Length of data	
Byte 02	AC group (value 0-15 from DB_M_ATTENDANT_GROUP_RNG mode)	
Byte 03	Digit analysis result missing (from DB_M_WABE_KZP_SET mode)	

18h = TTS timer expiry

Switch: none

Byte 00	(= 18) Diagnosis format 18	
Byte 01	Length of data = 12	
Byte 02-05	Call ID for relevant connection	

Byte 06-07	Source trunk loden
Byte 08-09	Source trunk Itgline
Byte 10-11	Destination trunk loden
Byte 12-13	Destination trunk Itgline

19h = UMI processing for TCOM

Switch: S06 for DIAGS CP

Byte 00	(= 19) Diagnosis format 19
Byte 01	Length of data
Byte 02-03	Caller's LODEN
Byte 04	Caller state
Byte 05	Caller's device type (CP device type)
Byte 06	Previous caller state
Byte 07	New caller state
Byte 08	Caller's Take off Label
Byte 09-10	CAUSE, CAUSE_DESCR (from CP_M_UMI_CAUSE_STR mode)
Byte 11-21	Announcement buffer (from DB_M_ASY_ANN_BUFF_STR mode)

1Ah = (Alternate Route Processing)

Switch: CP_DIAG_FM_ALRT_INF

Byte 00	(= 1A) Diagnosis format 1A
Byte 01	Length of data
Byte 02-03	Caller's LODEN
Byte 04	Caller's DEVICE TYPE
Byte 05-06	Called party's LODEN
Byte 07	Called party's DEVICE TYPE
Byte 08	Called party's SOURCE GROUP
Byte 09	LENGTH of station number called
Byte 10-31	Station number called
Byte 32	Reason for alternative routing
Byte 33	Reason for rejection
Byte 34-56	Alternate routing number, individually for APEM
Byte 57-84	Alternate routing number, SG for APEM

Error messages

Byte 85-107	Alternate routing number, individually for OOS
Byte 108-135	Alternate routing number, SG for OOS
Byte 136	IP address for gateway

1Bh = Error in Large Enterprise GateKeeper
Switch: CP_DIAG_FM_GK

Byte 00	(= 1B) Diagnosis format 1B
Byte 01	Length of data
Byte 02	Error Type (CP_M_GK_ADV_SET) 00 - CP_GK_LOC_GW_REG_FAIL , /* LOCAL GATEWAY REGISTRATION FAILED */ 01 - CP_GK_REM_GW_REG_FAIL , /* REMOTE GATEWAY REGISTRATION FAILED */ 02 - CP_GK_GW_TMP_NOT_AVAIL
Byte 03-04	Gateway Number (from AMO GKREG)
Byte 05	Gateway Own Number (length)
Byte 06-27	Gateway Own Number (digits)
Byte 28-41	Gateway Own Number (type) DB_M_NW_CALL_NO_TYPE_STR
Byte 42-43	Gateway Attributes (DB_M_AM_LEGK_GW_ATTR_PST)
Byte 44-46	Used LCR Dialplan
Byte 46-48	Gateway Line
Byte 49	Reject Reason DB_M_CP_NW_Q_REJECT_SET 00 - DB_RE_DUPL_INVOCATION, /*DUPLICATE INVOCATION */ 01 - DB_RE_UNRECOGNIZED_OPER, /*UNRECOGNIZED OPERATION */ 02 - DB_RE_MISTYPED_ARGUMENT, /*MISTYPED ARGUMENT */ 03 - DB_RE_RESS_LIMITATION, /*RESSOURCE LIMITATION */ 04 - DB_RE_INITIATOR_REL, /*INITIATOR RELEASING */ 05 - DB_RE_UNREC_LINKED_IDENT, /*UNRECOGNIZED LINK IDENTIFIER */ 06 - DB_RE_LINKED_RESP_UNEXPEC, /*LINKED RESPONSE UNEXPECTED */ 07 - DB_RE_UNEXP_CHILD_OPER, /*UNEXPECTED CHILD OPERATION */ 08 - DB_RE_NO_ERROR);

1Ch = ONS diagnosis
Switch: CP_DIAG_FM_ONS_DIAG

Byte 00	(= 1C) Diagnosis format 1C
Byte 01	Length of data
Byte 02-03	ONS group number (from AMO AUN)

Byte 04	ONS-Membertype (DB_M_CP_ONS_ROLE_SET)
Byte 05-06	ONS Master's LODEN
Byte 07	ONS calltype (CP_M_ONS_CTYPE_SET)
Byte 08	ONS state (CP_M_ONS_STATE_SET)
Byte 09-10	Best free ONS station (loden)
Byte 11-12	Best busy ONS station (loden)
Byte 13	SMPF (CP_M_ONS_SMPF_SET)
Byte 14	Group reroute (BOOL)
Byte 15	Reroute activation (CP_M_ONS_UFB_REROUT_SET)
Byte 16	Length of the external ONS station number
Byte 17-38	External ONS station number (REMAC in the AMO AUN)

F4068

CP

BOARD NOT READY

Type:

Diagnosis-specific (Format 01)

Short text:

Board not in operation

Cause:

The operating system (OS) has detected that the MDL_READY field of a dual-port RAM (DPR) no longer contains the value READY, which means that a board (IP, DCL, CCH, MBU, IOCG) is currently not operative.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. Contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F4069

CP

DPR NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Dual Port Ram

Cause:

The AM has detected that the DPR_VALID field of a dual-port RAM (DPR) no longer contains the value VALID because, for instance, a container chaining error has been found by board. No hexadecimal data is output with this message.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. Contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F4072

CP

BUSHANDLER TIMEOUT

Type:

Diagnosis-specific (Format 01)

Short text:

Bus handler (BH) reports timeout

Cause:

Bus handler (BH) reports timeout error, i.e. transmission was not complete. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the SP (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4073

CP

BUSHANDLER NO PARTNER

Type:

Diagnosis-specific (Format 01)

Short text:

Board failure of remote processor

Cause:

BH identifies that a message could not be transmitted because, for instance, the destination processor's board had failed. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system

program (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4074

CP

BUSHANDLER CONTEXT

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data for the BH

Cause:

This means the container has been fed the wrong data for the BH by the operating system.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4075

CP

DESTINATION CATALOG

Type:

Diagnosis-specific (Format 01)

Short text:

Name not contained in index catalog

Cause:

During processor communication, a container with an index/name that was not in the receiver's index catalog was received from a firmware processor or boot. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4076

CP

DESTINATION MAILBOX

Type:

Diagnosis-specific (Format 01)

Short text:

Destination mailbox no longer exists

Cause:

During processor communication, it was found at the receiving end that the destination mailbox named in the container no longer exists or is wrong. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4077

CP

DESTINATION RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

Resources short for receiving messages over processor borders. Whether the message was intended for an operating system mailbox or for a user's mailbox, is of no concern as regards this error.

Source processor is the destination: Despite a wait there was neither a free buffer nor a free segment available to hold the message. The hexadecimal output contains the task batch which is to empty the mailbox, and also the address of the task currently accessing the database area.

Source processor is a node: Despite a wait there was neither a short nor a long container available for forwarding the message.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4078

CP

OS RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

The operating system did not have a free element in its internal buffer pool or a segment available, nor, despite a wait, a short or long container. Shortage of operating system resources when receiving messages over processor borders is, however, reported with error message [F4077](#). No HEX data is output with this message.

Action:

Check the IP and MBU firmware. Save error message data and contact your [Next level of support](#).

F4079

CP

MAILBOX TIMER

Type:

Diagnosis-specific (Format 01)

Short text:

Mailbox no longer exists

Cause:

When a timer runs down, the destination mailbox is found to be no longer existing.

Action:

In the HEX data, the message is output by the timer in a length of 20 bytes. Save error message data and contact your [Next level of support](#).

F4080

CP

TIME / DATE NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Check reference clock

Cause:

Error when processing the reference clock. Error only occurs in the ADS.

Action:

The exception code is output in the HEX data and may have the following meaning: H20 = TIME_NOT_VALID (Clock defective) H21 = MAC_NOT_READY (MAC board defective) H22 = BAT_OFF (Check date/time or support battery in the MAC/IOPA) When the ADS is first booted, exception codes H20 and H21 are always output on all accounts.

F4082

CP

JOTA

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data in job table

Cause:

ROOT finds implausible data in the job table (JOTA). Depending on the state of the boot, the error is reported to SYSLOAD or to error analysis. It is assumed that the JOTA checksum is no longer correct.

Action:

If byte 0 of the HEX data contains the value 01, the other bytes output the layer number. If byte 0 of the HEX data contains a value >01, then byte 1 outputs the exception code (supplied by RMX in response to CREAT_JOB), the other bytes output the name of the subsystem from the job table (JOTA). Save error message data and contact your [Next level of support](#).

F4083

CP

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Error statistics overflow

Cause:

Too many plausibility errors within a certain time. The error statistics overflow.

Action:

Save error message data and contact your [Next level of support](#).

F4084

CP

SYSTEM EXCEPTN HANDLER

Type:

Diagnosis-specific (Format 01)

Short text:

Error when processing the root job

Cause:

The system exception handler was activated by an error.

Action:

Find the cause with further error reports. Save error message data and contact your [Next level of support](#).

F4085

CP

INIT ERROR

Type:

Diagnosis-specific (Format 01)

Short text:

Error in OS initialization

Cause:

This error is reported to SYSLOAD, not to error analysis. The reaction is a hard restart.

Action:

Check that the PABX has restarted. contact your [Next level of support](#) if the system fails to restart.

F4086

CP

BUSHANDLER QBLOCK S

Type:

Diagnosis-specific (Format 01)

Short text:

No free short container available

Cause:

Bus handler (BH) reports that for a certain time the destination processor's dual-port RAM (DPR) did not have a short free container available to hold a message

that was to be transmitted. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (SP) in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F4087

CP

BUSHANDLER QBLOCK L

Type:

Diagnosis-specific (Format 01)

Short text:

No free long container available

Cause:

BH reports that for a certain time the destination processor's DPR did not have along free container available to hold a message that was to be transmitted. The BH enables all the containers of the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the SP in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F4088

CP

BROADCAST ON, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_ON order (order to all) from the active base processor (BP) to the message buffers (MBU) was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F4089

CP

BROADCAST OFF, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_OFF order from the active BP to the MBUs was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F4090

CP

BROADCAST LONG

Type:

Diagnosis-specific (Format 01)

Short text:

Message not retrieved by MBU

Cause:

When long message was to be acknowledged by the base processor (BP) acting on behalf of the group processors (GP), it was found that this message had not yet been collected by at least one message buffer (MBU). The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. The first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4091

CP

GP IN BROADCAST MODE

Type:

Diagnosis-specific (Format 01)

Short text:

Processor communication error

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor specified in the container was a GP currently affected by the load broadcast rather than the GP designated in the load broadcast. The error is reported in the active BP.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4092

CP

DESTINATION PROCESSOR

Type:

Diagnosis-specific (Format 01)

Short text:

Destination processor not available

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor named in the container according to the directory table (DIR_TBL) was not available. The sender of the message was either a firmware processor or a data processor whose DIR_TBL was not consistent with the destination DIR_TBL.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4095

CP

MAILBX TIMER RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

After the timer had run down, the system was able to determine that the destination mailbox exists but that the message could not be transmitted due to lack of free memory.

Action:

The timer message is output in the HEX data up to a length of 20 Bytes. Save error message data and contact your [Next level of support](#).

F4098

CP

PROCESSOR INTERRUPT

Type:

Diagnosis-specific (Format 01)

Short text:

Interrupt

Cause:

SYSLOAD has processed or output an interrupt.

Action:

Save error message data and contact your [Next level of support](#).

F4100

DH

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

Implausible event code.

Action:

Save error message data and contact your [Next level of support](#).

F4101

DH

DISALL EVT CODE

Type:

Diagnosis-specific (several formats apply)

Error messages

Short text:

Event code disallowed

Cause:

Event code valid but not allowed.

Action:

Save error message data and contact your [Next level of support](#).

F4102

DH

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state

Cause:

Implausible state.

Action:

Save error message data and contact your [Next level of support](#).

F4103

DH

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in the current state.

Action:

Save error message data and contact your [Next level of support](#).

F4104

DH

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and contact your [Next level of support](#).

F4105

DH

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:

Save error message data and contact your [Next level of support](#).

F4106

DH

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:

Save error message data and contact your [Next level of support](#).

F4107

DH

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for database access. Reaction is a soft restart.

Action:

Save error message data and contact your [Next level of support](#).

F4108

DH

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F4109

DH

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F4110

DH

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

Negative exception code for OS calls.

Action:

Save error message data and contact your [Next level of support](#).

F4111

DH

MTS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Software error in MTS handler call. Switching network set with implausible data.

Action:

Save error message data and contact your [Next level of support](#).

F4112

DH

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:

Save error message data and contact your [Next level of support](#).

F4113

DH

MSG HEADER FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible message header

Cause:

Implausible message header.

Action:

Save error message data and contact your [Next level of support](#).

F4116

DH

ADVISORY

Type:

Diagnosis-specific (several formats apply)

Short text:

Advisory message

Cause:

Advisory message.

Action:

Save error message data and contact your [Next level of support](#).

F4118

DH

BOARD NOT READY

Type:

Diagnosis-specific (Format 01)

Short text:

Board not in operation

Cause:

The operating system (OS) has detected that the MDL_READY field of a dual-port RAM (DPR) no longer contains the value READY, which means that a board (IP, DCL, CCH, MBU, IOCG) is currently not operative.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F4119

DH

DPR NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Dual Port Ram

Cause:

The OS has detected that the DPR_VALID field of a dual-port RAM (DPR) no longer contains the value VALID because, for instance, a container chaining error has been found by board. No hexadecimal data is output with this message.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F4122

DH

BUSHANDLER TIMEOUT

Type:

Diagnosis-specific (Format 01)

Short text:

Bus handler (BH) reports timeout

Cause:

Bus handler (BH) reports timeout error, i.e. transmission was not complete. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the SP (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4123

DH

BUSHANDLER NO PARTNER

Type:

Diagnosis-specific (Format 01)

Short text:

Board failure of remote processor

Cause:

BH identifies that a message could not be transmitted because, for instance, the destination processor's board had failed. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4124

DH

BUSHANDLER CONTEXT

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data for the BH

Cause:

This means the container has been fed the wrong data for the BH by the operating system.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4125

DH

DESTINATION CATALOG

Type:

Diagnosis-specific (Format 01)

Short text:

Name not contained in index catalog

Cause:

During processor communication, a container with an index/name that was not in the receiver's index catalog was received from a firmware processor or boot. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4126

DH

DESTINATION MAILBOX

Type:

Diagnosis-specific (Format 01)

Short text:

Destination mailbox no longer exists

Cause:

During processor communication, it was found at the receiving end that the destination mailbox named in the container no longer exists or is wrong. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4127

DH

DESTINATION RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough OS resources

Cause:

Resources short for receiving messages over processor borders. Whether the message was intended for an operating system mailbox or for a user's mailbox, is of no concern as regards this error.

Source processor is the destination: Despite a wait there was neither a free buffer nor a free segment available to hold the message. The hexadecimal

output contains the task batch which is to empty the mailbox, and also the address of the task currently accessing the database area.

Source processor is a node: Despite a wait there was neither a short nor a long container available for forwarding the message.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4128

DH

OS RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough OS resources

Cause:

The operating system did not have a free element in its internal buffer pool or a segment available, nor, despite a wait, a short or long container. Shortage of operating system resources when receiving messages over processor borders is, however, reported with error message [F4127](#). No HEX data is output with this message.

Action:

Check the IP and MBU firmware. Save error message data and contact your [Next level of support](#).

F4129

DH

MAILBOX TIMER

Type:

Diagnosis-specific (Format 01)

Short text:

Mailbox no longer exists

Cause:

When a timer runs down, the destination mailbox is found to be no longer existing.

Action:

In the HEX data, the message is output by the timer in a length of 20 bytes. Save error message data and contact your [Next level of support](#).

F4130

DH

TIME / DATE NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Check reference clock

Cause:

Error when processing the reference clock. Error only occurs in the ADS.

Action:

The exception code is output in the HEX data and may have the following meaning: H20 = TIME_NOT_VALID (Clock defective) H21 = MAC_NOT_READY (MAC board defective) H22 = BAT_OFF (Check date/time or support battery in the MAC/IOPA) When the ADS is first booted, exception codes H20 and H21 are always output on all accounts.

F4132

DH

JOTA

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data in job table

Cause:

ROOT finds implausible data in the job table (JOTA). Depending on the state of the boot, the error is reported to SYSLOAD or to error analysis. It is assumed that the JOTA checksum is no longer correct.

Action:

If byte 0 of the HEX data contains the value 01, the other bytes output the layer number. If byte 0 of the HEX data contains a value >01, then byte 1 outputs the exception code (supplied by RMX in response to CREAT_JOB), the other bytes output the name of the subsystem from the job table (JOTA). Save error message data and contact your [Next level of support](#).

F4133

DH

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Error statistics overflow

Cause:

Too many plausibility errors within a certain time. The error statistics overflow.

Action:

Save error message data and contact your [Next level of support](#).

F4134

DH

SYSTEM EXCEPTN HANDLER

Type:

Diagnosis-specific (Format 01)

Short text:

Error when processing the root job

Cause:

The system exception handler was activated by an error.

Action:

Find the cause with further error reports. Save error message data and contact your [Next level of support](#).

F4135

DH

INIT ERROR

Type:

Diagnosis-specific (Format 01)

Short text:

Error in OS initialization

Cause:

This error is reported to SYSLOAD, not to error analysis. The reaction is a hard restart. The hard disk may be faulty or the system program may not exist or may be faulty.

Action:

Check that the PABX has restarted. contact your [Next level of support](#) if the system fails to restart.

F4136

DH

BUSHANDLER QBLOCK S

Type:

Diagnosis-specific (Format 01)

Short text:

No free short container available

Cause:

Bus handler (BH) reports that for a certain time the destination processor's dual-port RAM (DPR) did not have a short free container available to hold a message that was to be transmitted. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (SP) in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F4137

DH

BUSHANDLER QBLOCK L

Type:

Diagnosis-specific (Format 01)

Short text:

No free long container available

Cause:

BH reports that for a certain time the destination processor's DPR did not have along free container available to hold a message that was to be transmitted. The BH enables all the containers of the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the SP in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F4138

DH

BROADCAST ON, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_ON order (order to all) from the active base processor (BP) to the message buffers (MBU) was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F4139

DH

BROADCAST OFF, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_OFF order from the active BP to the MBUs was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F4140

DH

BROADCAST LONG

Type:

Diagnosis-specific (Format 01)

Short text:

Message not retrieved by MBU

Cause:

When long message was to be acknowledged by the base processor (BP) acting on behalf of the group processors (GP), it was found that this message had not yet been collected by at least one message buffer (MBU). The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. The first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4141

DH

GP IN BROADCAST MODE

Type:

Diagnosis-specific (Format 01)

Short text:

Processor communication error

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor specified in the container was a GP currently affected by the load broadcast rather than the GP designated in the load broadcast. The error is reported in the active BP.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4142

DH

DESTINATION PROCESSOR

Type:

Diagnosis-specific (Format 01)

Short text:

Destination processor not available

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor named in the container according to the directory table (DIR_TBL) was not available. The sender of the message was either a firmware processor or a data processor whose DIR_TBL was not consistent with the destination DIR_TBL.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4145

DH

MAILBX TIMER RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

After the timer had run down, the system was able to determine that the destination mailbox exists but that the message could not be transmitted due to lack of free memory.

Action:

The timer message is output in the HEX data up to a length of 20 Bytes. Save error message data and contact your [Next level of support](#).

F4148

DH

PROCESSOR INTERRUPT

Type:

Diagnosis-specific (Format 01)

Short text:

Interrupt

Cause:

SYSLOAD has processed or output an interrupt.

Action:

Save error message data and contact your [Next level of support](#).

F4150

PP

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

Implausible event code.

Action:

Save error message data and contact your [Next level of support](#).

F4151

PP

DISALL EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Event code disallowed

Cause:

Event code valid but not allowed.

Action:

Save error message data and contact your [Next level of support](#).

F4152

PP

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state

Cause:

Implausible state.

Action:

Save error message data and contact your [Next level of support](#).

F4153

PP

Type:

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in the current state.

Action:

Save error message data and contact your [Next level of support](#).

F4154

PP

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and contact your [Next level of support](#).

F4155

PP

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:

Save error message data and contact your [Next level of support](#).

F4156

PP

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:

Save error message data and contact your [Next level of support](#).

F4157

PP

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for database access. Reaction is a soft restart.

Action:

Save error message data and contact your [Next level of support](#).

F4158

PP

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F4159

PP

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F4160

PP

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

Negative exception code for OS calls.

Action:

Save error message data and contact your [Next level of support](#).

F4161

PP

MTS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Software error in MTS handler call. Switching network set with implausible data.

Action:

Save error message data and contact your [Next level of support](#).

F4162

PP

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:

Save error message data and contact your [Next level of support](#).

F4163

PP

MSG HEADER FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible message header

Cause:

Implausible message header.

Action:

Save error message data and contact your [Next level of support](#).

F4166

PP

ADVISORY

Type:

Diagnosis-specific (several formats apply)

Short text:

Advisory message

Cause:

Advisory message.

Action:

Save error message data and contact your [Next level of support](#).

F4168

PP

BOARD NOT READY

Type:

Diagnosis-specific (Format 01)

Short text:

Board not in operation

Cause:

The operating system (OS) has detected that the MDL_READY field of a dual-port RAM (DPR) no longer contains the value READY, which means that a board (IP, DCL, CCH, MBU, IOCG) is currently not operative.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. Contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F4169

PP

DPR NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Dual Port Ram

Cause:

The AM has detected that the DPR_VALID field of a dual-port RAM (DPR) no longer contains the value VALID because, for instance, a container chaining error has been found by board. No hexadecimal data is output with this message.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. Contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F4172

PP

BUSHANDLER TIMEOUT

Type:

Diagnosis-specific (Format 01)

Short text:

Bus handler (BH) reports timeout

Cause:

Bus handler (BH) reports timeout error, i.e. transmission was not complete. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the SP (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4173

PP

BUSHANDLER NO PARTNER

Type:

Diagnosis-specific (Format 01)

Short text:

Board failure of remote processor

Cause:

BH identifies that a message could not be transmitted because, for instance, the destination processor's board had failed. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4174

PP

BUSHANDLER CONTEXT

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data for the BH

Cause:

This means the container has been fed the wrong data for the BH by the operating system.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4175

PP

DESTINATION CATALOG

Type:

Diagnosis-specific (Format 01)

Short text:

Name not contained in index catalog

Cause:

During processor communication, a container with an index/name that was not in the receiver's index catalog was received from a firmware processor or boot. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4176

PP

DESTINATION MAILBOX

Type:

Diagnosis-specific (Format 01)

Short text:

Destination mailbox no longer exists

Cause:

During processor communication, it was found at the receiving end that the destination mailbox named in the container no longer exists or is wrong. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4177

PP

DESTINATION RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

Resources short for receiving messages over processor borders. Whether the message was intended for an operating system mailbox or for a user's mailbox, is of no concern as regards this error.

Source processor is the destination: Despite a wait there was neither a free buffer nor a free segment available to hold the message. The hexadecimal output contains the task batch which is to empty the mailbox, and also the address of the task currently accessing the database area.

Source processor is a node: Despite a wait there was neither a short nor a long container available for forwarding the message.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4178

PP

OS RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

The operating system did not have a free element in its internal buffer pool or a segment available, nor, despite a wait, a short or long container. Shortage of operating system resources when receiving messages over processor borders is, however, reported with error message [F4177](#). No HEX data is output with this message.

Action:

Check the IP and MBU firmware. Save error message data and contact your [Next level of support](#).

F4179

PP

MAILBOX TIMER

Type:

Diagnosis-specific (Format 01)

Short text:

Mailbox no longer exists

Cause:

When a timer runs down, the destination mailbox is found to be no longer existing.

Action:

In the HEX data, the message is output by the timer in a length of 20 bytes. Save error message data and contact your [Next level of support](#).

F4180

PP

TIME / DATE NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Check reference clock

Cause:

Error when processing the reference clock. Error only occurs in the ADS.

Action:

The exception code is output in the HEX data and may have the following meaning: H20 = TIME_NOT_VALID (Clock defective) H21 = MAC_NOT_READY (MAC board defective) H22 = BAT_OFF (Check date/time or support battery in the MAC/IOPA) When the ADS is first booted, exception codes H20 and H21 are always output on all accounts.

F4182

PP

JOTA

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data in job table

Cause:

ROOT finds implausible data in the job table (JOTA). Depending on the state of the boot, the error is reported to SYSLOAD or to error analysis. It is assumed that the JOTA checksum is no longer correct.

Action:

If byte 0 of the HEX data contains the value 01, the other bytes output the layer number. If byte 0 of the HEX data contains a value >01, then byte 1 outputs the exception code (supplied by RMX in response to CREAT_JOB), the other bytes output the name of the subsystem from the job table (JOTA). Save error message data and contact your [Next level of support](#).

F4183

PP

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Error statistics overflow

Cause:

Too many plausibility errors within a certain time. The error statistics overflow.

Action:

Save error message data and contact your [Next level of support](#).

F4184

PP

SYSTEM EXCEPTN HANDLER

Type:

Diagnosis-specific (Format 01)

Short text:

Error when processing the root job

Cause:

The system exception handler was activated by an error.

Action:

Find the cause with further error reports. Save error message data and contact your [Next level of support](#).

F4185

PP

INIT ERROR

Type:

Diagnosis-specific (Format 01)

Short text:

Error in OS initialization

Cause:

This error is reported to SYSLOAD, not to error analysis. The reaction is a hard restart.

Action:

Check that the PABX has restarted. Contact your [Next level of support](#) if the system fails to restart.

F4186

PP

BUSHANDLER QBLOCK S

Type:

Diagnosis-specific (Format 01)

Short text:

No free short container available

Cause:

Bus handler (BH) reports that for a certain time the destination processor's dual-port RAM (DPR) did not have a short free container available to hold a message that was to be transmitted. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (SP) in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F4187

PP

BUSHANDLER QBLOCK L

Type:

Diagnosis-specific (Format 01)

Short text:

No free long container available

Cause:

BH reports that for a certain time the destination processor's DPR did not have along free container available to hold a message that was to be transmitted. The BH enables all the containers of the associated command queue and disables this queue with its block byte. Containers are only chained to the

command queue again after the SP in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F4188

PP

BROADCAST ON, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_ON order (order to all) from the active base processor (BP) to the message buffers (MBU) was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F4189

PP

BROADCAST OFF, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_OFF order from the active BP to the MBUs was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F4190

PP

BROADCAST LONG

Type:

Diagnosis-specific (Format 01)

Short text:

Message not retrieved by MBU

Cause:

When long message was to be acknowledged by the base processor (BP) acting on behalf of the group processors (GP), it was found that this message had not yet been collected by at least one message buffer (MBU). The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. The first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4191

PP

GP IN BROADCAST MODE

Type:

Diagnosis-specific (Format 01)

Short text:

Processor communication error

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor specified in the container was a GP currently affected by the load broadcast rather than the GP designated in the load broadcast. The error is reported in the active BP.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4192

PP

DESTINATION PROCESSOR

Type:

Diagnosis-specific (Format 01)

Short text:

Destination processor not available

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor named in the container according to the directory table (DIR_TBL) was not available. The sender of the message was either a firmware processor or a data processor whose DIR_TBL was not consistent with the destination DIR_TBL.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4195

PP

MAILBX TIMER RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

After the timer had run down, the system was able to determine that the destination mailbox exists but that the message could not be transmitted due to lack of free memory.

Action:

The timer message is output in the HEX data up to a length of 20 Bytes. Save error message data and contact your [Next level of support](#).

F4198

PP

PROCESSOR INTERRUPT

Type:

Diagnosis-specific (Format 01)

Short text:

Interrupt

Cause:

SYSLOAD has processed or output an interrupt.

Action:

Save error message data and contact your [Next level of support](#).

F4200

CDR

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

Implausible event code.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4201

CDR

DISALL EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Event code disallowed

Cause:

Event code valid but not allowed.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4203

CDR

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in the current state.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4204

CDR

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4205

CDR

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4206

CDR

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in a procedure call.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4207

CDR

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for database access. Reaction is a soft restart.

Action:

Save error message data and contact your [Next level of support](#).

F4208

CDR

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4209

CDR

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4210

CDR

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

Negative exception code for OS calls.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4212

CDR

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4213

CDR

MSG HEADER FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible message header

Cause:

Implausible message header.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4214

CDR

DMS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative acknowledgments by the data management system

Cause:

Negative acknowledgments by the data management system (e.g. I/O error).

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F4216

SM-CR

ADVISORY

Type:

Diagnosis-specific (several formats apply)

Short text:

Advisory message of the call data recording system

Cause:

This advisory message always refers to an error in call data recording. Possible causes: Tariff tables with AMO TTBL incorrectly configured, Type of call data recording per carrier with AMO GEFE incorrectly configured, Tariff table with AMO TTBL incorrectly configured (group 0 for display), Tariffs with AMO TTBL incorrectly configured. Advisory messages ([F6166](#)) can be output in the auxiliary data line, e.g. with the following text: " GE: TARIFF TABLE ENTRY WRONG " (incorrect tariff table entry (group 0) or empty tariff list).

Action:

Check the appropriate CDR component defined by the advisory text in the auxiliary data.

Interpretation of auxiliary data:

The auxiliary data contains 141 bytes.

Auxiliary data (without "Charge Calculation Not Possible")

except: "Charge Calculation Not Possible"

Byte 00-11 = PIN Number Byte 12-15 = TRUNK_NO Number of exchange trunk seized Byte 12-13 = LTG Line Number Byte 14-15 = Subunit/ISDN B-channel Byte 16-19 = TRUNK_POS Physical address of exchange trunk seized (LTG-LTU-SLOT-CCT) Byte 20 - 25 = CONN_ROUT_CODE Customer-specific route code Byte 26 = SWITCH_PROCESS Identifies the call progress stage in the switching process 0 Empty 1 End after: seizure 2 End after: call section identifier 3 End after: Virtual call section 4 Call section after: seizure 5 Call section after: call section identifier 6 Section after: virtual call section 7 Virtual call section after: seizure 8 Virtual call section after: call section identifier 9 Virtual call section after: virtual call section 10 END_AFTER_START 11 SECT_AFTER_START Byte 27 = CONN_SERVICE_IND Communication service of connection 0 Voice 1 Teletext 2 Videotex 3 Fax 4 Data 5 Telex via TTC (interworking) Byte 28 = CONN_NETWORK Specifies the network in which the call was set up 0 Analog network 1 IDN 2 ISDN 3 Analog 4 Digital Byte 29 = CONN_SPEED Transmission speed, values 0-133 Byte 30 = ATTND_GROUP Attendant group of calling party and chargee, values from 0-16 Byte 31-52 = PAYING_PARTY Number of chargee, values 0-15 per byte Byte 53 = NODE_ID.TYPE Type of node 0 TYPE_UNKNOWN 1 NODE_ID_NOT_PRESENT 2 LEVEL0_NODE_NO 3 LEVEL1_NODE_NO 4 LEVEL2_NODE_NO 5 RESERVE_5 6 RESERVE_6 7 RESERVE_7 Byte 54 = NODE_ID.Level2 Node identification, sub-domain, values from 0-15 Byte 55 = NODE_ID.Level1 Node identification, domain, values from 0-127 Byte 56-57 = NODE_ID.Level0 Node identification, node number, values from 0-999 Byte 58-59 = CURR_MESSAGE_NR User system current message number, values from 0-65535 Byte 60-61 = CONN_CHARGE_UNITS Connection charge units, values from 0-65535 Byte 62-64 = MARK1 Bit string for selection features, bits 0-21 used. The bits are divided among the three bytes as follows: - Byte 1: bits 8-15 - Byte 2: bits 0-7 - Byte 3: bits 0-5: bits 16-21 Significance of set bits as follows: BIT 0 Local connection BIT 1 Toll connection BIT 2 Chargee = ATND BIT 3 Chargee = MTLC BIT 4 Chargee = Night Station BIT 5 User with CDRS authorization BIT 6 User with CDRS authorization BIT 7 Poss. ambiguous connection data BIT 8 CDRATND for connections set up by attendant BIT 9 CDRATND for connections set up by user BIT 10 TTX notification authorization BIT 11 Night status(per ATND group) BIT 12 Limit section exceeded BIT 13 Connection setup via S&F unit BIT 14 TRUNK_ID BIT 15 TIE_LINE, BIT 16 GEI_AUTH BIT 17 EXPENSIVE BIT 18 INTERN, BIT 19 DINCOMING, BIT 20 OUTGOING, BIT 21 AMOUNT_FROM_NET Byte 65 = CALL_ID.NODE_NO.TYPE; see byte 53 Byte 66 = CALL_ID.NODE_NO.LEVEL_2; see byte 54 Byte 67 = CALL_ID.NODE_NO.LEVEL_1; see byte 55 Byte 68-69 = CALL_ID.NODE_NO.LEVEL_0; see bytes 56-57 Byte 70-73 = CALL_ID.SEQU_NO ID number of current connection Byte 74-77 = CONN_CHARGE_AMOUNT Call charges in currency amounts Byte 78 = CARRIER_ZONE.CARRIER Carrier, values 0-9 Byte 79 = CARRIER_ZONE.ZONE Distance zone, values 0-220, see TTBL

AMO Description, under: DA_M_CG_ZONE_TYPE_SET,1 Byte
 80 = SUPPL_SERVICE Supplementary service, under which the chargeable call was set up 0 NOT_DEFINED 1 NORMAL_CALL
 2 CONSULTATION_CALL 3 CALL_TRANSFER 4 CALL_BACK 5
 CALL_FWD_BUSY 6 CALL_FWD_UNCONDIT 7 CALL_FWD_NOREPLY
 8 CALL_PICKUP 9 CONFERENCE 10 OVERRIDE 11 HUNTING_GROUP
 12 MAIL_BOX 13 PAGING 14 DICTATION 15 CREDIT_CARD_CHRG 16
 REVERSE_CHARGING 17 CALL_DEFLECTION 18 DOOR_OPENING_SYS
 Byte 81-92 = IDENT_CARD Personal identification number Byte 93
 = IDENT_CARD_COPIN Class of PIN, values 0-8 Byte 94 = CAUSE
 Reason for connection clear-down, values 0-149 Byte 95 = B_CHNL_CNT
 Number of 64-Kbit-channels of a connection, values 0-30 Byte 96 =
 RECORD_POINT Recording point of the call data recording system 0
 TRANSIT 1 BREAKOUT 2 ORIGIN 3 ORIGIN_BREAKOUT 4 BREAKIN
 Byte 97 = TRANSIT_COUNT Number of transit nodes, values 0-31 Byte
 98-105 = see bytes 12 - 19 Byte 98-99 : INCOMING_TRUNK_NO.LTG_Line
 Byte 100-101 : Byte 102 : INCOMING_TRUNK_POS.LTG Byte 103 :
 INCOMING_TRUNK_POS.LTU Byte 104 : INCOMING_TRUNK_POS.EBT
 (SLOT) Byte 105 : INCOMING_TRUNK_POS.Satz (Circuit) Byte 106 =
 TARTYP Time-of-day-segment of connection setup 0 DAY 1 NIGHT1 2 NIGHT2
 3 NIGHT3 4 NIGHT4 The following two fields are two mutually exclusive
 possibilities! Byte 107-129 = DESTINATION_NR Dialed destination number
 for connection Byte 107: Length of destination number, possible values 0-22
 Byte 108-129: each byte shows one 'digit' of the DESTNO, between 0 and 15
 Byte 130-136 = CONN_TIME_END_ABS_EXC End of connection Byte 130 :
 Year (0-99) Byte 131 : Month (1-12) Byte 132 : Day (1-31) Byte 133 : Hour
 Byte 134 : Minute Byte 135 : Second Byte 136 : 1/10 second Byte 137-140 =
 CONN_TIME_EXC Connection duration Byte 137 : Hours Byte 138 : Minutes
 Byte 139 : Seconds Byte 140 : 1/10 second

Auxiliary data for "Charge Calculation Not Possible":

F4216, UA: 0000:3D74:72ED, last block of error message: Charge Info Byte 0:
 CC-State Byte 1: Charge Case (0-4): 0: charge case not defined 1: AOC-D 2:
 AOC-E 3: AOC-S 4: charge case Zone Byte 2: Type of Charge(0-3) 0: charge
 type currency 1: charge type units 2: free of charge 3: type not available Byte
 3: Type of Info (0-2) 0: type info increment 1: type info subtotal 2: type info total
 Byte 4: Bill ID Present (TRUE/FALSE) Byte 5: Bill ID Set (0-7) Byte 6: Units
 Count (0-32) (usually 1 or 2) Byte 7-13 = Units Array (1) Byte 7: Units Available
 (TRUE/FALSE) Byte 8-11: Units (number of transmitted units) Byte 12: Unit
 Type Present Byte 13: Unit Type (0-16) Byte 14-128 = Units Array (2-32), as for
 Units Array(1)

Advisory Message with Exception Address UA:0000:3D74:8F97

The error message was caused by calling the charge calculation without a valid connection block. Save the error message data and contact your [Next level of support](#). The last block of the error message has the following structure: Byte 0 = CC-State Byte 1-9 = CALL_ID Byte 10-13 = TRUNK_NR Number of exchange trunk seized Byte 14 = CONNTYPE Byte 15-47 = CHARGE_INFO, 32 Bytes of Charge Info: Byte 15: Charge Case (0-4): 0: charge case not defined 1: AOC-D 2: AOC-E 3: AOC-S 4: charge case Zone Byte 16: Type of Charge(0-3) 0: charge type currency 1: charge type units 2: free of charge 3: type not available Byte 17: Type of Info (0-2) 0: type info increment 1: type info subtotal 2: type info total Byte 18: Bill ID Present (TRUE/FALSE) Byte 19: Bill ID Set (0-7) Byte 20: Units Count (0-32) (usually 1 or 2) Byte 21-27 = Units Array (1) Byte 21: Units Available (TRUE/FALSE) Byte 22-25: Units (number of transmitted units) Byte 26: Unit Type Present Byte 27: Unit Type (0-16) Byte 28-47 = Units Array (2-32),

as for Units Array(1) Byte 48-49 = CB-IDX Byte 50-53 = CB-PTR, Pointer to current Connection Block Byte 54-76 = CONN_CHARGE First 32 bytes of Connection Charge

Advisory Message with Exception Address UA:0000:4878:0312:

The preceding F4216 message contains the CP error message. Byte 66 is the node number transmitted by CP, this number is outside the range (6 bytes). Save error message data and contact your [Next level of support](#).

Advisory Message with Exception Address UA:0000:4878:89A1:

The preceding F4216 message contains the CP error message. The error occurs when two seizure messages are sent by the SWU. Save error message data and contact your [Next level of support](#).

F4218

CDR

BOARD NOT READY

Type:

Diagnosis-specific (Format 01)

Short text:

Board not in operation

Cause:

The operating system (OS) has detected that the MDL_READY field of a dual-port RAM (DPR) no longer contains the value READY, which means that a board (IP, DCL, CCH, MBU, IOCG) is currently not operative.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F4219

CDR

DPR NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Dual Port Ram

Cause:

The OS has detected that the DPR_VALID field of a dual-port RAM (DPR) no longer contains the value VALID because, for instance, a container chaining error has been found by board. No hexadecimal data is output with this message.

Action:

Check the IP, DCL, CCH, MBU, and IOCG boards. Replace the defective board. contact your [Next level of support](#) if all boards appear to be okay or if the error persists.

F4222

CDR

BUSHANDLER TIMEOUT

Type:

Diagnosis-specific (Format 01)

Short text:

Bus handler (BH) reports timeout

Cause:

Bus handler (BH) reports timeout error, i.e. transmission was not complete. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the SP (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4223

CDR

BUSHANDLER NO PARTNER

Type:

Diagnosis-specific (Format 01)

Short text:

Board failure of remote processor

Cause:

BH identifies that a message could not be transmitted because, for instance, the destination processor's board had failed. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (in its own processor) has reset the block byte of the corresponding queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4224

CDR

BUSHANDLER CONTEXT

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data for the BH

Cause:

This means the container has been fed the wrong data for the BH by the operating system.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4225

CDR

DESTINATION CATALOG

Type:

Diagnosis-specific (Format 01)

Short text:

Name not contained in index catalog

Cause:

During processor communication, a container with an index/name that was not in the receiver's index catalog was received from a firmware processor or boot. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4226

CDR

DESTINATION MAILBOX

Type:

Diagnosis-specific (Format 01)

Short text:

Destination mailbox no longer exists

Cause:

During processor communication, it was found at the receiving end that the destination mailbox named in the container no longer exists or is wrong. The error is signaled at the receiving end.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4227

CDR

DESTINATION RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough OS resources

Cause:

Resources short for receiving messages over processor borders. Whether the message was intended for an operating system mailbox or for a user's mailbox, is of no concern as regards this error.

Source processor is the destination: Despite a wait there was neither a free buffer nor a free segment available to hold the message. The hexadecimal output contains the task batch which is to empty the mailbox, and also the address of the task currently accessing the database area.

Source processor is a node: Despite a wait there was neither a short nor a long container available for forwarding the message.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4228

CDR

OS RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough OS resources

Cause:

The operating system did not have a free element in its internal buffer pool or a segment available, nor, despite a wait, a short or long container. Shortage of operating system resources when receiving messages over processor borders is, however, reported with error message [F4227](#). No HEX data is output with this message.

Action:

Check the IP and MBU firmware. Save error message data and contact your [Next level of support](#).

F4229

CDR

MAILBOX TIMER

Type:

Diagnosis-specific (Format 01)

Short text:

Mailbox no longer exists

Cause:

When a timer runs down, the destination mailbox is found to be no longer existing.

Action:

In the HEX data, the message is output by the timer in a length of 20 bytes. Save error message data and contact your [Next level of support](#).

F4230

CDR

TIME / DATE NOT VALID

Type:

Diagnosis-specific (Format 01)

Short text:

Check reference clock

Cause:

Error when processing the reference clock. Error only occurs in the ADS.

Action:

The exception code is output in the HEX data and may have the following meaning: H20 = TIME_NOT_VALID (Clock defective) H21 = MAC_NOT_READY (MAC board defective) H22 = BAT_OFF (Check date/time or support battery in the MAC/IOPA) When the ADS is first booted, exception codes H20 and H21 are always output on all accounts.

F4232

CDR

JOTA

Type:

Diagnosis-specific (Format 01)

Short text:

Implausible data in job table

Cause:

ROOT finds implausible data in the job table (JOTA). Depending on the state of the boot, the error is reported to SYSLOAD or to error analysis. It is assumed that the JOTA checksum is no longer correct.

Action:

If byte 0 of the HEX data contains the value 01, the other bytes output the layer number. If byte 0 of the HEX data contains a value >01, then byte 1 outputs the exception code (supplied by RMX in response to CREAT_JOB), the other bytes output the name of the subsystem from the job table (JOTA). Save error message data and contact your [Next level of support](#).

F4233

CDR

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Error statistics overflow

Cause:

Too many plausibility errors within a certain time. The error statistics overflow.

Action:

Save error message data and contact your [Next level of support](#).

F4234

CDR

SYSTEM EXCEPTN HANDLER

Type:

Diagnosis-specific (Format 01)

Short text:

Error when processing the root job

Cause:

The system exception handler was activated by an error.

Action:

Find the cause with further error reports. Save error message data and contact your [Next level of support](#).

F4235

CDR

INIT ERROR

Type:

Diagnosis-specific (Format 01)

Short text:

Error in OS initialization

Cause:

This error is reported to SYSLOAD, not to error analysis. The reaction is a hard restart.

Action:

Check that the PABX has restarted. contact your [Next level of support](#) if the system fails to restart.

F4236

CDR

BUSHANDLER QBLOCK S

Type:

Diagnosis-specific (Format 01)

Short text:

No free short container available

Cause:

Bus handler (BH) reports that for a certain time the destination processor's dual-port RAM (DPR) did not have a short free container available to hold a message that was to be transmitted. The BH enables all the containers in the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the system program (SP) in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F4237

CDR

BUSHANDLER QBLOCK L

Type:

Diagnosis-specific (Format 01)

Short text:

No free long container available

Cause:

BH reports that for a certain time the destination processor's DPR did not have along free container available to hold a message that was to be transmitted. The BH enables all the containers of the associated command queue and disables this queue with its block byte. Containers are only chained to the command queue again after the SP in its own processor has reset the block byte of the associated queue with ON_W_RESET_QBLOCK.

Action:

Not more than the first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#). Check MBU firmware. Note related error messages.

F4238

CDR

BROADCAST ON, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_ON order (order to all) from the active base processor (BP) to the message buffers (MBU) was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F4239

CDR

BROADCAST OFF, NO ACK

Type:

Diagnosis-specific (Format 01)

Short text:

Broadcast not acknowledged by at least one MBU

Cause:

The BROADCAST_OFF order from the active BP to the MBUs was not acknowledged punctually by at least one MBU. The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. In the HEX data, defective MBUs (if any) are stated first, the PIDs of such defective MBUs second. Save error message data and contact your [Next level of support](#).

F4240

CDR

BROADCAST LONG

Type:

Diagnosis-specific (Format 01)

Short text:

Message not retrieved by MBU

Cause:

When long message was to be acknowledged by the base processor (BP) acting on behalf of the group processors (GP), it was found that this message had not yet been collected by at least one message buffer (MBU). The error is reported in the active BP.

Action:

Check the MBU boards and replace defective boards. The first 64 bytes of the container that has not been transmitted are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4241

CDR

GP IN BROADCAST MODE

Type:

Diagnosis-specific (Format 01)

Short text:

Processor communication error

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor specified in the container was a GP currently

affected by the load broadcast rather than the GP designated in the load broadcast. The error is reported in the active BP.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4242

CDR

DESTINATION PROCESSOR

Type:

Diagnosis-specific (Format 01)

Short text:

Destination processor not available

Cause:

During processor communication it was found at the receiving end (active BP) that the destination processor named in the container according to the directory table (DIR_TBL) was not available. The sender of the message was either a firmware processor or a data processor whose DIR_TBL was not consistent with the destination DIR_TBL.

Action:

The first 64 bytes of the transmitted container are output in the HEX data. Save error message data and contact your [Next level of support](#).

F4245

CDR

MAILBX TIMER RESOURCES

Type:

Diagnosis-specific (Format 01)

Short text:

Not enough resources

Cause:

After the timer had run down, the system was able to determine that the destination mailbox exists but that the message could not be transmitted due to lack of free memory.

Action:

The timer message is output in the HEX data up to a length of 20 Bytes. Save error message data and contact your [Next level of support](#).

F4248

CDR

PROCESSOR INTERRUPT

Type:

Diagnosis-specific (Format 01)

Short text:

Interrupt

Cause:

SYSLOAD has processed or output an interrupt.

Action:

Save error message data and contact your [Next level of support](#).

F4250

DEP

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

Implausible event code.

Action:

Save error message data and contact your [Next level of support](#).

F4251

DEP

DISALL EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Event code disallowed

Cause:

Event code valid but not allowed.

Action:

Save error message data and contact your [Next level of support](#).

F4252

DEP

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state

Cause:

Implausible state.

Action:

Save error message data and contact your [Next level of support](#).

F4253

DEP

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in the current state.

Action:

Save error message data and contact your [Next level of support](#).

F4254

DEP

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and contact your [Next level of support](#).

F4255

DEP

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:Save error message data and contact your [Next level of support](#).**F4256**

DEP

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in a procedure call.

Action:Save error message data and contact your [Next level of support](#).**F4257**

DEP

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for database access.

Action:Reaction is a soft restart. Save error message data and contact your [Next level of support](#).

F4258

DEP

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Database inconsistent

Cause:

Database inconsistencies detected during soft restart (ACTION=HREXSRRE).

Action:

Reaction is a hard restart. Save error message data and contact your [Next level of support](#).

F4259

DEP

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F4260

DEP

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

Negative exception code for OS calls. In this error message the user address is the only place to find the relevant user as long as the call and exception codes refer directly to the OS call. The HEX data then reflects the last error analysis input message.

Action:

Save error message data and contact your [Next level of support](#).

F4261

DEP

MTS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Software error in MTS handler call. Switching network set with implausible data.

Action:

Save error message data and contact your [Next level of support](#).

F4262

DEP

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:

Save error message data and contact your [Next level of support](#).

F4263

DEP

MSG HEADER FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible message header

Cause:

Implausible message header.

Action:

Save error message data and contact your [Next level of support](#).

F4265

DEP

DEP SWU USER

Type:

Diagnosis-specific (several formats apply)

Short text:

Software error in SWU dependability.

Cause:

The contents of the stack can be output in the HEX data with this message. In conjunction with a processor interrupt ([F4298](#)), the system outputs 5 messages whose stack data can be interpreted.

Action:

Save error message data and contact your [Next level of support](#).

F4266

DEP

ADVISORY

Type:

Diagnosis-relevant (several formats relevant)

Short text:

Advisory message from the SW complex dependability system

Cause:

The dependability system outputs advisory messages for different reasons. The messages are partially text-driven. Messages containing the following texts are RTO messages: The message text identifies the three different message types:

- Primary test error messages from the RTO.
- RTO test result after 'specific text jobs' by the error analysis system FA.
- Task messages from the error analysis system FA-RTO in the CC (e.g. check HWY's after LTG restart).

- 1) Format 40: Message contains the output (trace) of all messages to FA-RTO (LTG) in the supplementary data. The output at the operating terminal of messages to FA-RTO can be activated with the AMO DIAGS (FA switch 04):
CHA-DIAGS:LTG . . , FA , , , , , ON ;

2) Format 42: Message contains advisory text output for several FA features

- LAN Monitoring feature (i.e. one switchover if no AP is connected) uses following advisory texts:

Switchover has been triggered:

NO AP SHELF CONNECTED PARTNER CC AVAILABLE SWITCHOVER INITIATED

Switchover is rejected because of AMO ZANDE switch NOLANMON:

NO AP SHELF CONNECTED, SWITCHOVER REJECTED: CHECK AMO ZANDE NOLANMON

Switchover is rejected because already one switchback has been triggered before:

NO AP SHELF CONNECTED, SWITCHOVER REJECTED: NO FURTHER SWITCHBACK

Switchover is rejected because LAN link of partner CC is down:

NO AP SHELF CONNECTED, SWITCHOVER REJECTED: STANDBY LAN LINK IS DOWN

Switchover is rejected because partner CC is not standby:

NO AP SHELF CONNECTED, SWITCHOVER REJECTED: PARTNER IS NOT STANDBY

- HW link supervision feature (i.e. switchover if active LAN link is down and standby LAN link is up):

Switchover has been triggered:

LAN SEGMENT LINK DOWN PARTNER CC HAS LINK UP SWITCHOVER INITIATED

Switchover is rejected because LAN link of partner CC is down:

LAN SEGMENT LINK DOWN SWITCHOVER REJECTED: STANDBY LAN LINK IS DOWN

Switchover is rejected because partner CC is not standby:

LAN SEGMENT LINK DOWN SWITCHOVER REJECTED: PARTNER IS NOT STANDBY

- If AM Update task detects a problem at the cross channel to the standby CC, FA triggers a hard restart of the standby CC and displays the following advisory:

AM UPDATE PROBLEMS SPORADIC ERROR ON CCH CC ACTIVE FORCED HARD RESTART OF CC STBY

3) Other formats: Advisory message with different causes from other dependability system components; for example

- Advisory message in the case of restart signaling with the last order for error analysis or basic restart signaling.
- Advisory message for device control DC-CC with format C: e.g. *** MESSAGE *** SRMV EXECUTED FOR: LD:01-01-025-002 This message indicates that after soft blocking, the relevant unit, e.g. record is now permanently blocked. The subscriber cannot be sure that the relevant unit is no longer seized by the switching system until this

message is received. This message always comes first for the unit (board, trunk, terminal) for which a soft lock (preliminary lock) was set.

Remark: If a preliminary lock was set with an AMO, additional maintenance activates should not be performed until this message is received.

- Statistic messages about loading IPDA via FTP (Format 49). The file which is loaded via FTP and the affected IDPA shelf are displayed in clear text, e.g.

End of file transfer :PDS:HD-INFO to IPDA shelf: 17

For more information, see [F4464](#), if output in F4266 as text before the PROCESSOR LOAD status data.

Format 40: Evaluate supplementary data.

Other format: Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Format 41: Restart reasons will be output in plaintext.

F4293

DEP

POSTLOAD ACTION

Type:

Diagnosis-specific (Format 23)

Short text:

Postloading active

Cause:

If defective boards are detected during loading, a second attempt is made to start the boards with a postloading run.

Action:

Check that error message [F4294](#) is output (indicates that postloading has been completed).

F4294

DEP

POSTLOAD END

Type:

Diagnosis-specific (Format 00)

Short text:

Postloading completed

Cause:

Postloading is completed.

Action:

Save error message data and contact your [Next level of support](#).

F4298

DEP

PROCESSOR INTERRUPT

Type:

Diagnosis-specific (Format 01)

Short text:

Interrupt

Cause:

Sysload or interrupt handler has processed or output an interrupt.

Action:

Save error message data and contact your [Next level of support](#).

F4352

REC

COMMON ERROR

Type:

Diagnosis relevant (Format 24)

Short text:

Recovery error occurred when saving connection data.

Cause:

Save, unsave, save process, recovery. General recovery error occurred when saving connection data. Error message indicates a number of diverse "less serious" recovery errors. The interpretation of the hexadecimal data for this message provides more detailed information about these diverse errors. Display on MAP: "AL1/SX", IOPA: "C3/C4" is illuminated (see [Chapter 5, "Alarm concept"](#)).

Action:

Save error message data and contact your [Next level of support](#). Additional traces are required, depending on the completeness of the data and the errors reported. A trace with the following trace requirements should be performed (duplex): Standby trace CC on: ST = 6C (CP) and DT = 5A (Sipro-CC) Standby trace LTG on: ST = 5A (Sipro-CC) and DT = 5B (Sipro-LTG). The length of the trace data should be 300 bytes.

The supplementary data is based on the structure DB_M_QF_EVENT_STR. Starting with byte 5, the structure is DB_M_QF_SEV_REC_STR.

Several of these related messages are displayed when certain errors occur and usually contain the data for device A and device B. Within the

structure DB_M_QF_SEV_REC_STR, the device data is described by the DB_M_QS_SILI_POOL_STR as of byte 47. Byte 15/16 shows the number of part messages and the actual number of messages. Similarly, byte 42 provides information on the type of message data (DEV_A, DEV_B: data for device A or B; DEV_A_ALT, DEV_B_ALT: data for device A or B of the previous connection).

The DB_M_QF_SEV_REC_STR was modified so that only a maximum of 6 partial messages can now be displayed. In this case, the first three partial messages describe the data of device A, and the next 3 describe the data of device B (all with an identical MESSAGE-ID).

IMPORTANT: The byte offsets listed below are only valid till HiPath 4000 V1.0 and will no longer apply as of HiPath 4000 V2.0.

F4353

REC

INCONSISTENT

Type:

Diagnosis-specific (Format 24)

Short text:

Inconsistency in save list

Cause:

This error message occurs when an inconsistency is detected in the save list (entry of established connections). This list is checked while saving, deleting and re-establishing connection data. The inconsistency is usually that only one data record (instead of a pair) exists in the save file, or that partner references are either incomplete or missing. This error leads to a soft restart.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Structure of the auxiliary data same as for [F4352](#).

F4355

REC

NO DCL RESPONSE

Type:

Diagnosis-specific (Format 24)

Short text:

DCL board defective

Cause:

After a soft restart the DCL (data communication link) is prompted to poll the peripherals again. If it fails to respond, this error message will activate a hard start (DCL may be defective).

Action:

Replace DCL if defective. If this does not work, save error message data and contact your [Next level of support](#).

F4376

REC

NO CPB AVAILABLE

Type:

Diagnosis-specific (Format 24)

Short text:

No call processing buffer available

Cause:

No call processing buffer available.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Structure of the auxiliary data same as for [F4352](#).

F4377

REC

NO CP RESPONSE

Type:

Diagnosis-specific (Format 24)

Short text:

No acknowledgment from call processing

Cause:

No acknowledgment from call processing (only for 3000 systems).

Action:

Save error message data and contact your [Next level of support](#).

F4378

REC

NO MBU RESPONSE

Type:

Diagnosis-specific (Format 24)

Short text:

No acknowledgment received from message buffer unit

Cause:

No acknowledgment received from message buffer unit(s) (MBUs).

Action:

Check the connections (bus cable) and replace the MBU board(s) if defective. If this does not work, save error message data and contact your [Next level of support](#).

F4379

REC

NO PP RESPONSE

Type:

Diagnosis-specific (Format 24)

Short text:

No acknowledgment from peripheral processing

Cause:

No acknowledgment from peripheral processing.

Action:

Save error message data and contact your [Next level of support](#).

F4380

REC

NO LTG RESPONSE

Type:

Diagnosis-specific (Format 42)

Short text:

No response from LTG

Cause:

No response from (one) LTG.

Action:

Check connecting cables to see whether LTG has really failed.

F4382

REC

NO LTG RESPONDING

Type:

Diagnosis-specific (Format 42)

Short text:

No serviceable line trunk group

Cause:

No serviceable line trunk group (LTG) found, soft restart of common control (SR CC).

Action:

Check reason why no functioning LTG can be found. Often, this is due to the CC undergoing a soft restart after a voltage drop. If this is not the case, check the MBU board. If you cannot find the cause, save the error message data and contact your [Next level of support](#).

F4383

REC

LTG DEF

Type:

Diagnosis-specific (Format 42)

Short text:

LTG does not start

Cause:

LTG does not start. Possible power supply problems (incompatible partial voltages).

Action:

Check the LTG hardware (boards, bus cable). Old hardware versions: check that the Faston connectors on the backplane are locked in correctly.

F4384

REC

ADMIN TAB IMPLAUSIBLE

Type:

Diagnosis-specific (Format 24)

Short text:

Implausibility in line trunk group

Cause:

Implausible data found in recovery status management during soft restart in line trunk group (SR LTG).

Action:

Initiate a soft restart, hard restart or reload of the LTG. If this does not work, save the error message data and contact your [Next level of support](#).

F4385

REC

END CC SOFT RESTART

Type:

Diagnosis-specific (Format 24)

Short text:

End of soft restart (advisory)

Cause:

End of common control soft restart (SR CC).

Action:

If you cannot find the cause of the CC soft restart, save the error message data and contact your [Next level of support](#).

F4386

REC

END LTG SOFT RESTART

Type:

Diagnosis-specific (Format 42)

Short text:

End of soft restart (advisory)

Cause:

End of line/trunk group soft restart (SR LTG).

Action:

If you cannot find the cause of the LTG soft restart, save the error message data and contact your [Next level of support](#).

F4387

REC

END CC SR CLEAN-UP

Type:

Diagnosis-specific (Format 24)

Short text:

Connection release end message (advisory)

Cause:

End message of connection release during soft restart of common control (SR CC). Full CP operation ensured as of now.

Action:

If you cannot find the cause of the CC soft restart, save the error message data and contact your [Next level of support](#).

F4388

REC

END LTG SR CLEAN-UP

Type:

Diagnosis-specific (Format 42)

Short text:

End of connection release (advisory)

Cause:

End of connection release during SR of LTG. Full CP operation in LTG ensured as of now.

Action:

If you cannot find the cause of the LTG soft restart, save the error message data and contact your [Next level of support](#).

F4389

REC

LTG SOFT RESTART ABORT

Type:

Diagnosis-specific (Format 42)

Short text:

SR of LTG aborted

Cause:

SR of LTG was aborted (advisory).

Action:

Initiate a soft restart, hard restart or reload of the LTG, if this does not work, save the error message data and contact your [Next level of support](#).

F4390

REC

END SBR LTG

Type:

Diagnosis-specific (Format 42)

Short text:

End message from standby restoration (advisory)

Cause:

End message from standby restoration of LTG.

Action:

If you cannot find the cause of the standby restoration, save the error message data and contact your [Next level of support](#).

F4391

REC

END SBR CC

Type:

Diagnosis-specific (Format 24)

Short text:

End message from standby restoration (advisory)

Cause:

End message from standby restoration of common control (CC).

Action:

If you cannot find the cause of the standby restoration, save the error message data and contact your [Next level of support](#).

F4392

REC

END SBR CSN

Type:

Diagnosis-specific (Format 42)

Short text:

End message from standby restoration (advisory)

Cause:

End message from standby restoration of central switching network (CSN).
Message only for H3000 systems.

Action:

If you cannot find the cause of the standby restoration, save the error message data and contact your [Next level of support](#).

F4397

REC

PD INVALID

Type:

Diagnosis relevant (Format 24)

Short text:

The protocol discriminator (PD) cannot be converted.

Cause:

Error is detected during a soft restart or when saving. A default PD value is entered. The error may be caused by using the AMO PRODE.

Action:

Save error message data and contact your [Next level of support](#). The product specialist will help you to run a call processing trace on the corresponding trunk or PEN.

The supplementary data structure is the same as for [F4352](#), with the exception that there is no B device data available.

Byte 177 = PD (DB_M_NW_PD_SET)

F4398

REC

NO NW DYN DEV TABLE DH

Type:

Diagnosis-specific (Format 24)

Short text:

No device memory

Cause:

No device memory DH pool element available for an NW circuit. Error is detected during a current soft restart or SAVE procedure and leads to a hard restart in the relevant LTG.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

The auxiliary data has the same structure as [F4352](#), with the difference that no B-device data is available.

F4399

REC

NO GSP

Type:

Diagnosis-specific (Format 24)

Short text:

No device memory

Cause:

This error occurs if the dynamic device memories cannot be accessed while saving, deleting and restoring the established connection data. This error leads to a soft restart.

Action:

Save error message data and contact your [Next level of support](#).

F4400

VECO

DEV CP, BAD SEIZURE

Type:

Diagnosis relevant (Format 24)

Short text:

Blocked device in the device memory.

Cause:

Blocked device in the call processing (CP) device memory. The CPH bit is set but the device is in the "idle" state in the device handler (DH) and in preprocessing (PP). An activation message is sent to call processing.

System reaction:

The CP device memory has been enabled by VECO.

Action:

Save error message data and contact your [Next level of support](#).

AMO DIAGS switches:

cha-diags:comp=veco,s00=on; /* activate VECO faster

Trace stop example:

selmsg,stop,g1,cd1,dest,40; /* FM in FA (DB_M_CP_EVT_CODE_SET)

selmsg,stop,g1,cd2,ev,2C; /* DB_QF_E_VECO

selmsg,stop,g1,cd3,sevt,00; /* DB_QF_E_VECO_GER_CP_FBEL

IMPORTANT: VECO error messages can be analyzed more accurately by accelerating the VECO system in a laboratory

test (AMO DIAGS). There is a very high risk attached to the acceleration of the VECO system in a running customer system. This process may only be performed, therefore, following consultation with the product specialists. Please note also that the acceleration of the VECO system produces side effects and error profiles that are a direct result of this acceleration process. Example: A subscriber who has idle status for more than approximately 2-4 minutes is activated by the VECO system.

The supplementary data is based on the structure DB_M_QF_EVENT_STR. Starting with byte 5, the structure is DB_M_QF_SEV_VECO_STR. Data initialized with H'FF is basic initialization data and, therefore, does not have to be evaluated. The device PEN is displayed explicitly in the header of the error message. The most important data of this message is listed below. This can be used to make preliminary clarifications on site regarding the type of connection and the devices involved. Which bytes are populated depends on the VECO message type signalled. The HISTA messages can also be pasted into trace tools like Message Doctor to decode automatically. A product specialist must be consulted for a more detailed analysis.

Byte 0	=	Destination task
Byte 1	=	Source task
Byte 5	=	Subevent
		(start of DB_M_QF_SEV_VECO_STR)
		Byte 5 = values not equal to 14/15
Byte 6-7	=	Offset (error message code)
Byte 8-9	=	Base
Byte 12-15	=	(LODAD_PACKED)
Byte 12-13	=	LODAD_PACKED.LTG_LINE
Byte 14	=	LODAD_PACKED.SU
Byte 15	=	LODAD_PACKED.DI (CRI)
Byte 16-19	=	(LODAD_BOARD)
Byte 16-17	=	LODAD_BOARD.LTG_LINE
Byte 18	=	LODAD_BOARD.SU
Byte 19	=	LODAD_BOARD.DI (CRI)
Byte 22	=	CP LineType
Byte 23	=	CP MultLineType
Byte 24	=	CP BusType
Byte 25-26	=	LODEN
Byte 27-28	=	Dynamic LODEN

Error messages

Byte 29	=	CP Device Type
Byte 30	=	CP State
Byte 31	=	FEATURE_CODE
Byte 32	=	FEATURE_STATE
Byte 33-43	=	FEATURE_STACK
Byte 44-46	=	QC Status (Powerset)
Byte 47	=	DEP Info (Powerset)
Byte 48	=	Station Number.Length
Byte 49-54	=	Station Number.Digits
Byte 55-56	=	DTI
Byte 57-58	=	Dynamic DTI
Byte 59	=	DH Device Type
Byte 60	=	DH State Actual
Byte 62-63	=	VT Sequence No.
Byte 65-66	=	Conference Number
Byte 70	=	DH State Old
Byte 73	=	CBM TYPE PERIPHERY
Byte 74	=	CBM TYPE CC
Byte 75-80	=	LW CBM COUNTERS
Byte 81-86	=	CC CBM COUNTERS
Byte 87-89	=	CBM PATH
Byte 90-98	=	AP CONNECTION DATA

F4401

VECO

DEV DH, BAD SEIZURE

Type:

Diagnosis-specific (Format 26)

Short text:

Blocked device in device memory

Cause:

Blocked device found in device handler device memory (DH), i.e. the device handler bit is set but the same device is in idle state in the call processing device memory (CPH).

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Auxiliary data has same structure as for [F4400](#).

F4402

VECO

BAD LINE PATH SEIZURE

Type:

Diagnosis-specific (Format 24)

Short text:

Blocked short path

Cause:

Blocked short path found, i.e., path seized but no associated device can be identified. Auxiliary data may point to cause (DH Device Type). The appropriate bit for the blocked short path is reset in the device memory.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Auxiliary data has same structure as for [F4400](#).

F4403

VECO

B-CHAN, BAD SEIZURE

Type:

Diagnosis-specific (Format 24)

Short text:

Blocked B-channel

Cause:

Blocked B-channel found without associated device. The appropriate bit for the blocked B-channel is reset in the device memory.

Action:

Save error message data and contact your [Next level of support](#).

AMO DIAGS switches:

cha-diags:comp=veco,s13=on; /* B-Channel seizure and release in trace

Trace stop example:

```
selmsg,stop,g1,cd1,dest,40; /* FM in FA (DB_M_CP_EVT_CODE_SET)
```

```
selmsg,stop,g1,cd2,ev,2C; /* DB_QF_E_VECO
```

```
selmsg,stop,g1,cd3,sevt,03; /* DB_QF_E_VECO_BCHL_FBEL
```

Interpretation of auxiliary data:

Auxiliary data has same structure as for [F4400](#).

F4404

VECO

CODE RCVR, BAD SEIZURE

Type:

Diagnosis-specific (Format 24)

Short text:

Blocked code receiver

Cause:

Blocked code receiver found without associated device. The appropriate bit for the blocked code receiver is reset in the device memory.

Action:

Save error message data and contact your [Next level of support](#).

F4405

VECO

DIALTONE RCVR,BAD SEIZ

Type:

Diagnosis-specific (Format 24)

Short text:

Dial tone receiver

Cause:

Blocked dial tone receiver found without associated device. The appropriate bit for the blocked dial tone receiver is reset in the device memory.

Action:

Save error message data and contact your [Next level of support](#).

F4406

VECO

CONF, BAD SEIZURE

Type:

Diagnosis-specific (Format 24)

Short text:

Blocked conference status byte

Cause:

Blocked conference user found without associated devices. The appropriate bit for the blocked conference user is reset in the device memory and the circuit is released.

Action:

Save error message data and contact your [Next level of support](#).

F4407

VECO

NO DH ANSWER

Type:

Diagnosis relevant (Format 24)

Short text:

No response to test job

Cause:

No response to test performed by device handler (DH). Timeout (5 min.) elapsed. The error can be caused by board loadware (LW) which does not provide confirmation.

Action:

Save error message data and contact your [Next level of support](#).

The supplementary data structure is the same as for [F4400](#). If LODEN (bytes 25-26) and dyn. LODEN (bytes 27-28) have the H'9999 value, then there was a delayed DH confirmation after the timeout.

F4408

VECO

LTG RESET ERROR

Type:

Diagnosis-specific (Format 42)

Short text:

LTG reset task not completed

Cause:

One of the reset tasks in the LTG has not completed, e.g. due to timeout. In 3000 systems, the LTG carries out a soft restart.

Action:

Save error message data and contact your [Next level of support](#).

F4410

VECO

CP INCONSISTENT

Type:

Diagnosis-specific (Format 24)

Short text:

Inconsistent CP Statuses

Cause:

Status of sub-unit (SU) and main device inconsistent. This error message only concerns attendant consoles. A release message is sent to the call processing device memory in these cases.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Auxiliary data has same structure as for [F4400](#).

F4411

VECO

CODE SENDER, BAD SEIZ

Type:

Diagnosis-specific (Format 24)

Short text:

Blocked code transmitter

Cause:

Blocked code transmitter found in the device handler. The appropriate bit for the blocked code transmitter is reset in the device memory.

Action:

Save error message data and contact your [Next level of support](#).

F4412

VECO

CONS TEST ERROR

Type:

Diagnosis-specific (Format 24)

Short text:

Inconsistencies in memories

Cause:

Inconsistencies detected when comparing the device search memory with the device memory. The appropriate bit is reset in the device search memory.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Auxiliary data has same structure as for [F4400](#).

F4413

VECO

MFC SEND/RCVR,BAD SEIZ

Type:

Diagnosis-specific (Format 24)

Short text:

Blocked MFC transmitter/receiver

Cause:

Blocked MFC transmitter or MFC receiver found in the device handler. The appropriate bit for the blocked MFC transmitter/receiver is reset in the device memory.

Action:

Save error message data and contact your [Next level of support](#).

F4414

VECO

CC RESET ERROR

Type:

Diagnosis-specific (Format 24)

Short text:

CC reset task not completed

Cause:

A common control (CC) reset task has not completed.

Action:

Save error message data and contact your [Next level of support](#).

F4415

VECO

NW CR, BAD SZ

Type:

Diagnosis-specific (Format 24)

Short text:

LODEN/DTI entry missing

Cause:

A call reference is allocated in a digital NW circuit, but no corresponding LODEN/ DTI entry exists. The VECO resets the appropriate bit for the call reference.

Action:

Save error message data and contact your [Next level of support](#).

AMO DIAGS switches:

cha-diags:procid=cc,comp=cp,s14=on; /* CPB-INDEX

cha-diags:comp=veco,s00=on; /* activate VECO faster

cha-diags:comp=veco,s15=on; /* CPB seizure and release in trace

Trace stop example:

selmsg,stop,g1,cd1,dest,40; /* FM in FA (DB_M_CP_EVT_CODE_SET)

selmsg,stop,g1,cd2,ev,2C; /* DB_QF_E_VECO

selmsg,stop,g1,cd3,sevt,0F; /* DB_QF_E_VECO_NW_CR_FBEL

Interpretation of auxiliary data:

Auxiliary data has same structure as for [F4400](#).

F4416

VECO

NW CR CP, BAD SZ

Type:

Diagnosis-specific (Format 24)

Short text:

No valid LODEN

Cause:

No logical device number is found for an allocated call reference in the CP device memory. The VECO resets the appropriate bit for the call reference.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Auxiliary data has same structure as for [F4400](#).

F4417

VECO

NW CR DH, BAD SZ

Type:

Diagnosis-specific (Format 24)

Short text:

No valid DTI

Cause:

No valid DTI is found for an allocated call reference in the DH device memory. The VECO resets the appropriate bit for the call reference.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Auxiliary data has same structure as for [F4400](#).

F4418

VECO

SB CRI CP BADSZ

Type:

Diagnosis-specific (Format 24)

Short text:

No valid LODEN

Cause:

No valid LODEN can be found for a functional terminal with the allocated call reference in the CP device memory. The VECO resets the appropriate bit for the call reference.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Auxiliary data has same structure as for [F4400](#).

F4419

VECO

SB CRI DH BADSZ

Type:

Diagnosis-specific (Format 24)

Short text:

No valid DTI

Cause:

No valid DTI is found for a functional terminal with the allocated call reference in the DH device memory. The VECO resets the appropriate bit for the call reference.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Auxiliary data has same structure as for [F4400](#).

F4420

VECO

BAD LINK PATH SEIZURE

Type:

Diagnosis-specific (Format 24)

Short text:

Blocked long path

Cause:

Blocked long path found, i.e., path seized but no associated device can be identified. Auxiliary data may point to cause (CP Device Type). The appropriate bit for the blocked long path is reset in the device memory.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Auxiliary data has same structure as for [F4400](#).

F4421

VECO

STATISTIC CC

Type:

Diagnosis relevant (Format 24)

Short text:

Statistics threshold value exceeded

Cause:

Once the statistics threshold value of a VECO error class has been reached, all error counters are listed according to their CP device type. CC error counters, that are only registered together in CC, are at the beginning of the statistics data.

Action:

Overflow-causing messages are printed in advance. Save error message data and contact your [Next level of support](#).

NOTICE: VECO statistics can be activated or implemented with the AMO PSTAT.

The supplementary data is configured as follows:

Byte 0	=	Destinationtask
Byte 1	=	Sourcetask
Byte 5	=	Subevent
		(Start of DB_M_QF_SEV_VECO_STR)
		Byte 5 = 14
		(VECO_STATIST_CC)
Byte 6-7	=	Offset (error message code)
Byte 8-9	=	Base
Byte 12	=	CP_ERR_CLASS
Byte 13-24	=	(CP_LAST_RESET)
Byte 13	=	Hours
Byte 14	=	Minutes
Byte 15	=	Seconds
Byte 18	=	Day
Byte 19	=	Month
Byte 20-21	=	Year
Byte 25	=	CP_BCHL_CNTR
Byte 26	=	CP_NW_CR_CNTR
Byte 27	=	CP_SB_CRI_CNTR
Byte 28-118	=	CP_CNTR
		ARRAY (DB_M_CP_DEVICE_TYPE_SET)

F4422

VECO

STATISTIC LTG

Type:

Diagnosis relevant (Format 24)

Short text:

Statistic threshold value exceeded

Cause:

Once the statistics threshold value of a VECO error class has been reached, all error counters are listed according to their DH device types. The DH error counters, that are only registered together in the LTG, are at the beginning of the statistic data.

Action:

Overflow-causing error messages are printed in advance. Save error message data and contact your [Next level of support](#).

NOTICE: VECO statistics can be activated or implemented with the AMO PSTAT.

The supplementary data is configured as follows:

Byte 0	=	Destinationtask
Byte 1	=	Sourcetask
Byte 5	=	Subevent
		(Start of DB_M_QF_SEV_VECO_STR)
		Byte 5 = 15 (VECO_STATIST_LTG)
Byte 6-7	=	Offset (error message code)
Byte 8-9	=	Base
Byte 12	=	DH_ERR_CLASS
Byte 13-24	=	(DH_LAST_RESET)
Byte 13	=	Hours
Byte 14	=	Minutes
Byte 15	=	Seconds
Byte 18	=	Day
Byte 19	=	Month
Byte 20-21	=	Year
Byte 25	=	DH_NW_CR_CNTR

Byte 26	=	DH_SB_CRI_CNTR
Byte 27	=	DH_SIU_CNTR
Byte 28-118	=	DH_CNTR
		ARRAY (DB_M_DH_GERAETE_TYPE_SET)

F4424

VECO

CPB, BAD SEIZURE

Type:

Diagnosis relevant (Format 24)

Short text:

Blocked call processing buffer found

Cause:

The call processing buffer was not enabled when a connection was cleared down by the switch.

System reaction:

Call processing buffer is enabled by VECO.

Action:

Save error message data and contact your [Next level of support](#).

AMO DIAGS switches:

cha-diags:procid=cc,comp=cp,s14=on; /* CPB-INDEX

cha-diags:comp=veco,s00=on; /* activate VECO faster

cha-diags:comp=veco,s15=on; /* CPB seizure and release in trace

Trace stop example:

selmsg,stop,g1,cd1,dest,40; /* FM in FA (DB_M_CP_EVT_CODE_SET)

selmsg,stop,g1,cd2,ev,2C; /* DB_QF_E_VECO

selmsg,stop,g1,cd3,sevt,17; /* DB_QF_E_VECO_CPB_FBEL

Byte 0	=	Destinationtask
Byte 1	=	Sourcetask
Byte 5	=	Subevent
		(Start of DB_M_QF_SEV_VECO_STR)
		Byte 5 = 17 (VECO_CPB_FBEL)
Byte 6-7	=	Offset (Code position of error message)
Byte 8-9	=	Base

Error messages

Byte 12-15	=	(LODAD_PACKED)
Byte 12-13	=	LODAD_PACKED.LTG_LINE
Byte 14	=	LODAD_PACKED.SU
Byte 15	=	LODAD_PACKED.DI (CRI)
Byte 16-17	=	CPB_INDEX
Bytes 18-175	=	Structure of MODE DB_M_DIAG_CPB_DATA_STR
Bytes 176-187	=	Structure of MODE DB_M_CPB_DIAGNOSIS_STR. This data is only valid, if CP diagnosis switch 14 is set.

F4425

VECO

CBM RESOURCE PER BADSZ

Type:

Diagnosis relevant (Format 24)

Short text:

Bad CBM seizure in periphery.

Cause:

There is no corresponding CBM seizure in CC to an existing CBM seizure in periphery.

System reaction:

VECO releases the resource.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

For analysing the data see [F4400](#).

F4426

VECO

CBM RESOURCE CC BADSZ

Type:

Diagnosis relevant (Format 24)

Short text:

Bad CBM seizure in CC.

Cause:

There is no corresponding CBM seizure in periphery to an existing CBM seizure in CC.

System reaction:

VECO releases the resource.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

For analysing the data see [F4400](#).

F4427

VECO

CBM RESOURCE TSL BADSZ

Type:

Diagnosis relevant (Format 24)

Short text:

Defective CBM seizure of HWY/TSL.

Cause:

CBM is seized for a path but the device table for the corresponding LODEN is not seized anymore or the LODEN is invalid.

This error message will be outputted when the VECO has found a problem with IPDA resources, this message is usually signalled if half or no paths, cross talk or bad call quality are experienced by IPDA devices. With the signalling of the error message, all resources are released. If the customer is complaining of call disconnects, the release of resources by the PERI task can be disabled by cha-diags:procid=cc,veco=cp,s07=on; This switch then defines that no resources should be released when the error is signalled, however please note because the resources will be no longer released when an error is discovered, the customer may begin to notice the half or no paths, cross talk or bad quality calls.

System reaction:

VECO enables the resource.

Action:

Save error message data and contact your [Next level of support](#).

Trace stop example:

AMO DIAGS switches:

cha-diags:comp=db,s03=on; /* MTS Path messages

cha-diags:comp=dh,s03=on; /* DNIL Path messages

Increase VECO check frequency:

cha-ctime:typeswu=vecotime,cbmnxtbd=3; /* Increase IPDA PERI task speed

selmsg,stop,g1,cd1,dest,40; /* FM in FA (DB_M_CP_EVT_CODE_SET)

selmsg,stop,g1,cd2,ev,2C; /* DB_QF_E_VECO

selmsg,stop,g1,cd3,sevt,1A; /* DB_QF_E_VECO_CBM_TSL_BADSZ

Interpretation of auxiliary data:

For analysing the data see [F4400](#).

F4428

VECO

CBM NO PERI ANSWER

Type:

Diagnosis relevant (Format 24)

Short text:

No answer from LW to VECO request.

Cause:

The loadware of the affected board (e.g. LTUCC, NCUI) does not respond on a request of VECO.

System reaction:

Only signaling.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

For analysing the data see [F4400](#).

F4429

VECO

EXT PERI BADSZ

Type:

Diagnosis relevant (Format 24)

Short text:

Bad seizure for external connections on peripheral board.

Cause:

VECO detected that there are bad seizures in periphery (NCUI, STMI) for connections to the external network. One of the resources (Echo Cancellation, Voice Compression or Voice Activity Detection) is only reserved in the DB and not on the board for the proofed wa. Therefore, an inconsistency exists between the data of the NCUI or STMI and the DB.

System reaction:

VECO releases the bad connections.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

For analysing the data see [F4400](#).

F4430

VECO

INT PERI BADSZ

Type:

Diagnosis relevant (Format 24)

Short text:

Bad seizure for internal connections on peripheral board.

Cause:

VECO detected that there are bad seizures in periphery (NCUI) for internal connections.

System reaction:

VECO releases the bad connections.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

For analysing the data see [F4400](#).

F4431

VECO

EXT CC BADSZ

Type:

Diagnosis relevant (Format 24)

Short text:

Bad seizure for external connections in CC.

Cause:

VECO detected that there are bad seizures in CC for connections to the external network.

System reaction:

VECO releases the bad connections.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

For analysing the data see [F4400](#).

F4432

VECO

INT CC BADSZ

Type:

Diagnosis relevant (Format 24)

Short text:

Bad seizure for internal connections in CC.

Cause:

VECO detected that there are bad seizures in CC for internal connections.

System reaction:

VECO releases the bad connections.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

For analysing the data see [F4400](#).

F4433

VECO

HHS MTS TIMER EXPIRED

Type:

Diagnosis-specific (Format 24)

Short text:

No answer from PP to VECO request.

Cause:

The component PreProcessing does not respond on a request of VECO. With this request the MTS data should be read from RTM board.

System reaction:

Only signalling.

Action:

Save error message data and contact your next level of support.

Interpretation of auxiliary data:

For analysing the data see [F4400](#).

F4434

VECO

CYCLE END

Type:

Diagnosis-specific (Format 24)

Short text:

All resources have been checked.

Cause:

All resources have been checked (advisory message). The output of this message is set at the operating terminal via AMO DIAGS (VECO switch S06).

System reaction:

Only signalling.

Action:

Save error message data and contact your next level of support.

F4435

VECO

IPDA CYCLE END

Type:

Diagnosis-specific (Format 24)

Short text:

All IPDA resources have been checked.

Cause:

All IPDA resources have been checked (advisory message). The output of this message is set at the operating terminal via AMO DIAGS (VECO switch S06).

System reaction:

Only signalling.

Action:

Save error message data and contact your next level of support.

F4436

VECO

DIAGNOSIS ADVISORY

Type:

Diagnosis-specific (Format 24)

Short text:

Advisory message.

Cause:

Advisory message. When Resource Manager is configured sometimes connections will be blocked if no resources are free. In such a case an F4436

advisory message is signalled. Usually the reason for the error message is a correct one and defined by configuration i.e. more connections are attempting to use a path than are allowed in the AMO GKTOP configuration or that a DMC connection was restricted via the AMO GKTOP attribute NODMC. In some rarer cases, the advisory is signalled due to hanging bandwidth, meaning a DIS-GKTOP will show bandwidth is used even though no connections are active over the specific path.

System reaction:

Only signalling.

Action:

Save error message data and contact your next level of support.

F4436 M4 N1327 NO ACT BPA VECO DIAGNOSIS ADVISORY 06-11-30
14:59:14

ALARM CLASS:CENTRAL:024

CC:65535 EC:65535 UA:**DBDB**:0001 SP:FFFF:FFFF LD:01-18-007-019

DT:40 ST:13 SN:FF01 CEVT:2C CSEV:20 CST:5A

FORMAT:24 MESSAGE-ID: 02580

401301FF 2C200100 **DBDB**140A 580A3C00 0152001B 0104A60D A30D005A
5A5A5A5A

5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A
5A5A5A5A 5A5A5A5A

5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A
5A5A5A5A 5A5A5A5A

5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A
5A5A5A5A 5A5A5A5A

5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A
5A5A5A5A 5A5A5A5A

5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A
5A5A5A5A 5A5A5A5A

5A5A5A5A 5A5A5A5A

IMPORTANT: The Error message will also be signalled if the sector attribute **NO DMC** is set.

Connntype description

- 00=IPDA_CONN_MASTER
- Not enough bandwidth for a IPDA-Master connection.
- 01=DMC_CONN
- Not enough bandwidth for the DMC connection (master connection ok).
- 02=REM_HFA_SUBSCR
- Not enough bandwidth for the Mobile HFA phone.
- 03=HFA_HFA (Byte)

- Not enough bandwidth for a HFA-HFA connection.

Error Address: DBDB (Word)

MessageID (Word)

LTG_LINE->PEN of Ext.A (Word)

Sector Attribute (Powerset:DB_M_RESM_SSPA_SCT_ATT_SET) (Word)

Sector where lack of resources was recognized (Word)

Configured Bandwidth (Byte)

LTGLINE A (word)

LTGLINE B (word)

Filler

DB_M_RESM_SSPA_SCT_ATT_SET = SET (	
416 -- /* SECTOR IN: */	
416 -- DB_RESM_SSPA_HFA_1 ,	/* SECTION ENDPOINT 1 TO HHS/AP */
416 -- DB_RESM_SSPA_HFA_2 ,	/* SECTION ENDPOINT 2 TO HHS/AP */
416 -- DB_RESM_SSPA_IPDA ,	/* SECTION HHS-AP OR AP-AP */
416 -- DB_RESM_SSPA_TRK ,	/* OUTGOING TRUNK SECTOR PATH */
416 -- DB_RESM_SSPA_DMC ,	/* DMC SECTOR PATH */
416 -- DB_RESM_SSPA_SRC ,	/* SECTION OF THE SOURCE SECTOR */
416 -- DB_RESM_SSPA_DEST ,	/* SECTION OF THE DESTINATION SECTOR */
417 -- DB_RESM_SSPA_EXCL_SECTOR,	/* ASSOCIATED SECTOR HAS TO BE EXCLUDED */
417 --	/* AND IGNORED ON BANDWIDTH COUNTING */
417 -- DB_RESM_SSPA_WAN_DIR_CONN,	/* SECTOR WITH THE ATTRIBUT DIRECT WAN */
417 --	/* CONNECTION FOR MC/DMC, WHICH IS THE */
417 --	/* CURRENT WAN CONNECTION SECTOR IN THE */
417 --	/* SECTOR PATH */

F4450

SYS

OVERLOAD

Type:

Diagnosis-specific (Format 00)

Short text:

Call processing buffer shortage

Cause:

Call processing (CP) reports a call processing buffer (CPB) shortage. CPBs are used for storing the connection data for established connections. A resource shortage of this type either means that the system traffic capacity is exhausted (too many connections), or indicates a program error. The system responds by rejecting all further initial seizure attempts while the CPB shortage continues.

Action:

Check which acknowledgment message is output, [F4451](#) or [F4452](#). If this error occurs repeatedly, the following actions are necessary: Frequent occurrence in conjunction with [F4452](#) usually indicates a program error. Save the error message data and contact your [Next level of support](#). Frequent occurrence in conjunction with [F4451](#) may mean that the system cannot cope with peak traffic requirements, i.e. the system traffic capacity was not properly dimensioned. Check whether this may be the case before assuming a program error. Use the ZAND AMO to monitor the number of call processing buffers seized over a specific time (upper/lower threshold values can also be modified), or use the DIMSU AMO to display the current values.

F4451

SYS

END OF OVERLOAD

Type:

Diagnosis-specific (Format 00)

Short text:

End of call processing buffer shortage

Cause:

Call processing (CP) reports end of call processing buffer (CPB) shortage, i.e., connections have been terminated and the associated call processing buffers have been released.

System reaction:

system permits new seizures.

Action:

See [F4450](#).

F4452

SYS

OVERLOAD SUPV. TIMEOUT

Type:

Diagnosis-specific (Format 00)

Short text:

No end of CPB shortage

Cause:

End of CPB shortage is not reported within a specific interval.

System reaction:

system reacts with a restart.

Action:

See [F4450](#).

F4453

SYS

CP MBX OVERLOAD

Type:

Diagnosis-specific (Format 00)

Short text:

CP mailbox overload

Cause:

The number of allocated CP event buffers in the PP/DH pool exceeds a specified threshold (overload strategy).

The situation can also occur with the initial loading (Inbetriebnahme) of the system. Although the system will recover and load overtime, the recommended mitigation is to deactivate all shelves and load them one by one.

System reaction:

system activates overload safeguard routine.

Action:

Check which acknowledgment message is output, [F4454](#) or [F4455](#).

F4454

SYS

CP MBX OVERLOAD END

Type:

Diagnosis-specific (Format 00)

Short text:

End of CP mailbox overload

Cause:

The number of allocated CP event buffers in the PP/DH pool has dropped back below the specified threshold (overload strategy). Positive acknowledgment of [F4453](#).

System reaction:

system deactivates overload safeguard routine.

Action:

No action necessary.

F4455

SYS

CP MBX SUPV. TIMEOUT

Type:

Diagnosis-specific (Format 00)

Short text:

No end of CP mailbox overload

Cause:

End of CP mailbox overload is not reported within a specific interval ([F4454](#)).

System reaction:

system reacts with a restart.

Action:

If this error message occurs frequently, save the error message data and contact your [Next level of support](#).

F4456

SYS

DYNAMIC OVERLOAD

Type:

Diagnosis-specific (Format 00)

Short text:

Start of dynamic overload

Cause:

Start of dynamic overload (processor overload).

System reaction:

all further initial seizure attempts are rejected.

Action:

Check that positive acknowledgment is output ([F4457](#)). Save error message data and contact your [Next level of support](#).

F4457

SYS

END OF DYNAM. OVERLOAD

Type:

Diagnosis-specific (Format 00)

Short text:

End of dynamic overload

Cause:

End of dynamic overload (processor overload).

System reaction:

system permits new seizures.

Action:

Positive acknowledgment of [F4456](#).

F4458

SYS

DH MBX OVERLOAD

Type:

Diagnosis-specific (Format 00)

Short text:

DH mailbox overload

Cause:

The number of buffer elements used in the PP/DH receive pool exceeds a specified threshold (overload strategy).

System reaction:

system activates overload safeguard routine.

Action:

Check which acknowledgment message is output, [F4459](#) or [F4460](#).

F4459

SYS

DH MBX OVERLOAD END

Type:

Diagnosis-specific (Format 00)

Short text:

End of DH mailbox overload

Cause:

The number of buffer elements used in the PP/DH receive pool has dropped back below the specified threshold (overload strategy). Positive acknowledgment of [F4458](#).

System reaction:

system deactivates overload safeguard routine.

Action:

No action necessary.

F4460

SYS

DH MBX SUPV. TIMEOUT

Type:

Diagnosis-specific (Format 00)

Short text:

No end of DH mailbox overload

Cause:

The lower threshold for ([F4459](#)) is not reached within a specific interval. A program error may have occurred.

System reaction:

system reacts with a restart.

Action:

If this error message occurs frequently, save the error message data and contact your [Next level of support](#).

F4461

SYS

TRANSIT CTR OVERFLOW

Type:

Service-specific (Format 22)

Short text:

Overflow of TRANSIT counter

Cause:

Connection setup canceled through TRANSIT counter overflow. The TRANSIT counter counts the number of transit nodes involved in a connection setup in a meshed network. The connection setup is canceled if this counter reaches a specific threshold value, in order to prevent "endless" route seizures (network loops). This error can occur if a network is not correctly configured, i.e., network loops or invalid alternate routes are configured.

Action:

The HEX data output with this error message can be used to pinpoint the invalid transit routes or network loops and re-configure the network accordingly. If the network configuration is okay, check whether the counter threshold is set too low (AMO TDCSU, parameter TRACOUNT, or AMO COT).

Interpretation of auxiliary data:

Byte 0 = Length of following data (max 93 Bytes) Byte 1-4 = Address of incoming connection circuit (LODAD_PACKED) Byte 5 = Transit counter Byte 6 = Satellite counter Byte 7 = Satellite connection Byte 8 = Length of A-station number Byte 9-30 = Source station number (A-STN) 22 digits Byte 31 = Length of B-station number Byte 32-53 = Destination station number (B-STN) 22 digits Byte 54-93 = Auxiliary data

F4462

SYS

SATELLITE CTR OVERFLOW

Type:

Service-specific (Format 22)

Short text:

Overflow of SATELLITE counter

Cause:

Connection setup canceled through SATELLITE counter overflow. The SATELLITE counter counts the number of satellite route seizures attempted during a connection setup in a meshed network. The connection setup is canceled if this counter reaches a specific threshold value, in order to prevent unwarranted delay times.

Action:

The HEX data output with this error message can be used to pinpoint the unnecessary SAT routes and re-configure the network accordingly. If the network configuration is okay, check whether the counter threshold is set too low (AMO TDCSU, parameter SATCOUNT, or AMO COT) .

Interpretation of auxiliary data:

see [F4461](#).

F4463

SYS

CAS DIVERT OVERFLOW

Type:

Service-specific (Format 22)

Short text:

Overflow of CAS call diversion counter

Cause:

Overflow of CAS call diversion counter in a meshed network. A network loop has occurred: attendant calls are being forwarded to an attendant console in the CAS group by the night station, despite the fact that the night service option has been activated (looped, multiple call forwarding).

Action:

The HEX data output with this error message can be used to pinpoint the network loops and re-configure the network accordingly. Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 = Length of HEX data (max. 72 Bytes) Byte 1-4 = Address of calling device (LODAD-PACKED) Byte 5 = CAS diversion counter Byte 6 = ATND group number dialed by caller Byte 7 = Currently activated night option of this ATND group Byte 8-9 = Node number (1st CAS call diversion) Byte 10 = Length of call number (1st CAS call diversion) Byte 11-32 = Call number (1st CAS call diversion) 22 digits Byte 33-72 = Auxiliary data

F4464

SYS

LOAD MEASUREMENT DATA

Type:

Diagnosis-relevant (Format 17, 48, 49)

Short text:

Processor load with average value or ZAUSL differences.

Cause:

Output of processor load with average value or the ZAUSL differences. The output of this diagnosis information was started with the AMO DIAGS.

System reaction:

None

Action:

No action required. Advisory message is acknowledgement to start the AMO DIAGS.

Interpretation of auxiliary data:

Scenario 1: Processor load:

CPU LOAD (HIGH PRIO) IN 0.1% OVER ALL CLASSES:

17	16	14	14	14	14	15	15	15	15	14	15
116	114	13	14	14	14	14	14	14	13	14	14
13	13	13	14	14	14	14	14	14	14	14	14
14	14	14	14	14	14	14	14	13	13	14	14
14	14	14	14	14	14	14	19	19	49	48	13

Meaning:

The processor load for all tasks up to a fixed upper priority is noted every 1.5 seconds (realtime priority).

decimal, in thousandth The output is performed on a class-specific basis. In other words, the system software tasks are assigned specific classes and measured separately. There is one load measurement value per class for tasks up to the upper priority (HIGH PRIO) and one load measurement value per class for all tasks (TOTAL LOAD).

If a HW timer defect was detected at the processor board, the load measurement values delivered are incorrect; these values are marked with an * in the output (for more information see [F4704](#)).

There is also a message with the average values for all classes for the last 3 minutes:

AVERAGE VALUE (HIGH PRIO) IN 0.1% OVER ALL CLASSES: 0014

AVERAGE VALUE IN 0.1% PER CLASS:

0	1	2	3	4	5	6	7	8	9	(CLASSES)
0010	0000	0000	0003	0000	0000	0000	0000	0000	0000	(HIGH PRIO)
0010	0982	0000	0007	0000	0000	0000	0000	0000	0000	(TOTAL)

Scenario 2: ZAUSL differences:

ZAUSL DIFFERENCES 1/2:

000000	000006	000000	000000	000000	000000	000000	000000	000000	000000
000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
000000	000000	000000	000000	000000	000000	000000	000000	000000	000000
000000	000000	000000	000000	000000	000000	000000	000000	000000	000000

The system contains counters for specific events. Every message indicates the difference between the current counter status and the status indicated in the previous message (in 3-minute intervals).

6-digit, decimal Events in the order of occurrence (see also AMO ZAUSL):

DB_M_TM_EREIGNIS_SET:

DB_M_TM_EREIGNIS_SET = SET (

DB_TM_EREIGN_BEL_EG_GEH, /* Terminal seizure */

DB_TM_EREIGN_CP_EVT , /* Call processing events */

DB_TM_EREIGN_GET_CPB , /* Call processing buffers */

DB_TM_EREIGN_BEL_EXT_KOM, /* Incoming trunk seizure */

DB_TM_EREIGN_BEL_EXT_GEH, /* Outgoing trunk seizure */

DB_TM_EREIGN_BEL_VF_ORGAN_A, /* Attendant pressed A-KEY300 - seizure */

DB_TM_EREIGN_BEL_VF_ORGAN_M, /* Attendant pressed M-KEY300 - seizure */

DB_TM_EREIGN_BEL_VF_ORGAN_R, /* Attendant pressed R-KEY300 - seizure */

DB_TM_EREIGN_D_INT_SEIZ , /* Seizures for internal data calls */

DB_TM_EREIGN_D_IC_SEIZ , /* Seizures for incoming data calls */

DB_TM_EREIGN_D_OG_SEIZ , /* Seizures for outgoing data calls */

DB_TM_EREIGN_D_LI_ORG_ATMP, /* Data call origination attempts from internal data lines */

DB_TM_EREIGN_D_LI_CPL_CALS, /* Internal data calls which are completed successfully */

DB_TM_EREIGN_D_LINE_BUSY, /* Internal data calls which fail to complete - called data line busy */

DB_TM_EREIGN_D_LINE_NOANS, /* Internal data calls which fail to complete - calling side disconnects before called side answers */

DB_TM_EREIGN_D_MP_ATMP_FAI, /* Failed data call attempts from devices assigned to Modem pools (because of calls terminating to vacant numbers, calls blocked due to invalid class of service, interdigit timeouts (partial dial), prematurely abandoned calls, and Modem Pool congestion) */

DB_TM_EREIGN_SMDR_INSF_BUF, /* SMDR buffer could not be obtained, therefore no voice call record generated */

DB_TM_EREIGN_DMDR_INSF_BUF, /* DBDR buffer could not be obtained, therefore no data call record generated */

DB_TM_EREIGN_RNGI_BEN , /* Individual speed dialing - use */

DB_TM_EREIGN_ZIELT_BEN , /* Destination keys - use */

DB_TM_EREIGN_NAMENST_BEN, /* Name/repertory keys - use */

DB_TM_EREIGN_DIREKTRUF_BEN, /* Automatic DSS keys - use */

DB_TM_EREIGN_AUL_EINSCH , /* Call forwarding - activate */

DB_TM_EREIGN_AK_AS_DURCHF , /* Call forwarding/override - carry OUT */

DB_TM_EREIGN_BERUM_DURCHF , /* COS changeover - carry OUT */

DB_TM_EREIGN_ARS_EINSCH , /* Do not disturb - activate */

DB_TM_EREIGN_VKONV_EINBER , /* Variable CONF. - initiate */

DB_TM_EREIGN_WW_BEN , /* Automatic redial - use */

DB_TM_EREIGN_RR_EINR , /* Callback/trunk queuing - create*/

DB_TM_EREIGN_NF_D_STBYQUE , /* Data Standby Queue feature activated*/

DB_TM_EREIGN_NF_M_D_SP_IND, /* Manual Data Speed Indication feature activated */

DB_TM_EREIGN_NF_M_CHAR_IND, /* Manual Character Indication feature activated */

DB_TM_EREIGN_NF_M_MOD_SEL , /* Manual Modem Selection feature activated */

DB_TM_EREIGN_NF_SVN_REDIAL, /* Saved Number Redial feature activated without feature button */

DB_TM_EREIGN_F_SW_TO_DATA , /* Switch-to-Data feature activated with feature button */

DB_TM_EREIGN_F_SW_TO_VOICE, /* Switch-to-Voice feature activated with feature button */

DB_TM_EREIGN_MISCHKOM_DURCHF /*Mixed communication - carry out */);

DB_TM_EREIGN_NCT_INV_SUCC, /* MCI-NCT INVOCATION SUCCESSFUL */

DB_TM_EREIGN_NCT_INV_FAIL, /* MCI-NCT INVOCATION FAILURE */

DB_TM_EREIGN_PP_OUT_EVT, /* Count on messages to DCL */

DB_TM_EREIGN_PP_IN_EVT, /* Count on messages from DCL */

DB_TM_EREIGN_REROUT_EVT, /* Rerouting events */

DB_TM_EREIGN_TRANS_ATT_EVT, /* Transit call attempts */

DB_TM_EREIGN_SAVE_CONN_EVT, /* Attempts to save two party connections*/

DB_TM_EREIGN_OUT_ACL_MSG, /* Messages from the ACL complex */

DB_TM_EREIGN_IN_ACL_MSG, /* Messages to the ACL complex */

DB_TM_EREIGN_INT_DYN_OVL, /* Number of 1.5s intervals in dynamic overload */

DB_TM_EREIGN_DYN_OVL_BEG, /* Number of times the switch goes from non-overload to a dynamic overload condition */

DB_TM_EREIGN_CALL_ATT_OVL, /* Number of calls of the procedure DB_T_DH_S_UEBERLAST if the overload bit is set */

DB_TM_EREIGN_ADAPT_ALL, /* ALL EVENTS FOR AM ADAPT */

DB_TM_EREIGN_ADAPT_NEG_TIM, /* EVENTS FOR AM ADAPT, THAT HAVE BEEN NEGATIVELY ACKNOWLEDGED BECAUSE OF TIMEOUT*/

DB_TM_EREIGN_ADAPT_NEG_NUM, /* EVENTS FOR AM ADAPT, THAT HAVE BEEN NEGATIVELY ACKNOWLEDGED BECAUSE OF NUMBER OF WAITING MESSAGES */

DB_TM_EREIGN_UPDATE_SEGMTS, /* SEGMENTS UPDATED FROM ACTIVE CC TO STBY CC BY AM UPDATE STARTED BY AM UPDATE */

DB_TM_EREIGN_PARTN_DB_INKO, /* SPOT CHECK COUNTER FOR INKONSISTENT PARTNER DB */

DB_TM_EREIGN_PARTN_DB_KONS, /* SPOT CHECK COUNTER FOR CONSISTENT PARTNER DB */

DB_TM_EREIGN_RES_56,

DB_TM_EREIGN_RES_57,

DB_TM_EREIGN_RES_58,

DB_TM_EREIGN_RES_59,

DB_TM_EREIGN_RES_60.

Interpretation of the above example:

The counter difference is 6 for the second criterion in DB_M_TM_EREIGNIS_SET. This criterion is, however, DB_TM_EREIGN_CP_EVT with the meaning "Call processing events", i.e. the counter for the call processing events increased by 6 in the last 3 minutes.

F4465

SYS

CP CBM RESOURCES CC

Type:

Service relevant (Format 43)

Short text:

Information about the CBM resources in CC.

Cause:

This message shows if CBM resources which are counted in CC are low or run out. The message is reported by call processing (CP).

System reaction:

The message is signaled. An alarm is generated.

Action:

No special action necessary. This message serves as an indicator of CBM resource consumption in the system. If the CBM resources too often are low or exhausted, the system design has to be checked.

CBM resource type	00H RESOURCES EXHAUSTED
	01H RESOURCES UNDER LOW LEVEL
	02H RESOURCES OVER HIGH LEVEL
	03H RESOURCES AT MAXIMUM
CBM CC counters:	Actual CBM counters in CC.
text string:	Error text as ASCII string, delivered by LW.
auxiliary data:	Auxiliary data delivered by LW, displayed as HEX values.

F4466

SYS

VECO CBM RESOURCES CC

Type:

Service relevant (Format 43)

Short text:

Information about the CBM resources in CC.

Cause:

This message shows if CBM resources which are counted in CC are low or run out. The message is reported by VECO.

System reaction:

The message is signaled. An alarm is generated.

Action:

No special action necessary. This message serves as an indicator of CBM resource consumption in the system. If the CBM resources too often are low or exhausted, the system design has to be checked.

CBM resource type	00H RESOURCES EXHAUSTED
	01H RESOURCES UNDER LOW LEVEL
	02H RESOURCES OVER HIGH LEVEL
	03H RESOURCES AT MAXIMUM
CBM CC counters:	Actual CBM counters in CC.
text string:	Error text as ASCII string, delivered by VECO.
auxiliary data:	Auxiliary data delivered by VECO, displayed as HEX values.

F4500

AMO

RESTART

Type:

Service-specific (Format 18)

Short text:

Restart initiated by AMO

Cause:

Error analysis (FA) is to make a restart in a certain control unit at the request of an AMO.

Action:

Restart will be carried out by the system.

F4501

AMO

RELOAD

Type:

Service-specific (Format 18)

Short text:

Reload initiated by AMO

Cause:

Error analysis (FA) is to make a reload in a certain control unit at the request of an AMO.

Action:

Reload will be carried out by the system

F4502

AMO

SYS RESTART

Type:

Service-specific (Format 18)

Short text:

Restart initiated by AMO

Cause:

Error analysis (FA) is to make a system restart at the request of an AMO.

Action:

Restart will be carried out by the system.

F4503

AMO

PS NODE

Type:

Service-specific - US-specific (Format 29)

Short text:

Periodical switching of SWU via time task

Cause:

A periodical switching of the SWU was executed. An SR CC was initiated via specific AMO events.

Action:

No action necessary (the periodical switching function can be enabled or disabled with the SYSDA AMO).

F4505

AMO

PS CANCEL

Type:

Service-specific - US-specific (Format 29)

Short text:

The timer for periodical SWU switching was cancelled

Cause:

The time task for periodical SWU switching was cancelled; the timer for the next period was activated.

Action:

No action necessary (the periodical switching function can be enabled or disabled with the SYSDA AMO).

F4506

AMO

SOFT RESTART

Type:

Service-specific (Format 29)

Short text:

Soft restart initiated by AMO

Cause:

Soft restart initialized by REST AMO.

Action:

Soft restart will be carried out by the system.

F4507

AMO

LTUR HARD RESTART

Type:

Service-specific (Format 18)

Short text:

Hard restart initiated by AMO

Cause:

LTUR hard restart requested via AMO. This confirms that the task was accepted.

Action:

Hard restart will be carried out by the system.

F4508**F4509**

AMO

LTUR RELOAD

Type:

Service-specific (Format 18)

Short text:

Reload initiated by AMO

Cause:

LTUR reload requested via AMO. This confirms that the task was accepted.

Action:

Reload will be carried out by the system.

F4604

DB

MAINTENANCE

Type:

Service-specific

Short text:

Trace job via TRACS AMO

Cause:

The trace job was started with the trace conditions defined in the TRACS AMO. The trace situation created with the AMO has occurred. This message usually consists of plain text, which is either self-explanatory or explained in the auxiliary data or refers to a specific section of the Service Manual.

Action:

The alarm **CENTRAL:029** MAINTENANCE NOTE must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; In order to be able to evaluate the trace job, your system specialist needs the error message data. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

START = The trace job was started via AMO. The functional system unit concerned and the trace point are shown in the auxiliary data. STOP = The trace point defined by AMO has been reached. The trace job for a specific functional system unit has been stopped. The unit concerned is output in the auxiliary data, together with the trace point. STOP ALL = The trace point defined by AMO has been reached. The trace job has been stopped for all functional system units. The unit concerned is output in the auxiliary data, together with the trace point. STOP PETRA = The trace point defined by AMO has been reached. The trace job in the peripheral has been stopped. The unit concerned is output in the auxiliary data, together with the trace point.

F4624

CP

MAINTENANCE

Type:

Service-specific

Short text:

Service advisory message, initiated by the alarm [CENTRAL:029](#)
MAINTENANCE NOTE.

Cause:

This message usually consists of plain text, which is either self-explanatory or refers to a specific section of the Service Manual.

Action:

The MAINTENANCE NOTE alarm must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; If this does not work, save the error messages associated with this alarm and contact your [Next level of support](#).

F4644

DH

MAINTENANCE

Type:

Service-specific

Short text:

Service advisory message, initiated by the alarm [CENTRAL:029](#)
MAINTENANCE NOTE.

Cause:

This message usually consists of plain text, which is either self-explanatory or refers to a specific section of the Service Manual.

Action:

The MAINTENANCE NOTE alarm must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; If this does not work, save the error messages associated with this alarm and contact your [Next level of support](#).

F4664

PP

MAINTENANCE

Type:

Service-specific

Short text:

Service advisory message, initiated by the alarm [CENTRAL:029](#)
MAINTENANCE NOTE.

Cause:

This message usually consists of plain text, which is either self-explanatory or refers to a specific section of the Service Manual.

Action:

The MAINTENANCE NOTE alarm must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; If this does not work, save the error messages associated with this alarm and contact your [Next level of support](#).

F4684

CG

MAINTENANCE

Type:

Service-specific

Short text:

Service advisory message, initiated by the alarm [CENTRAL:029](#) MAINTENANCE NOTE.

Cause:

This message usually consists of plain text, which is either self-explanatory or refers to a specific section of the Service Manual. Example (if data records cannot be written): "CDB-POOL 60% FULL" "CDB-POOL 70% FULL" "CDB-POOL 75% FULL, LOSS OF INTERNAL CONN." "CDR: CDB POOL FULL - LOSS OF DATA IN SWU"

Action:

The MAINTENANCE NOTE alarm must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:A1,29; V1 server: DEL-GRA:V1,29; If you are unable to find the cause of the error, save the error messages associated with this alarm and contact your [Next level of support](#). Interpreting auxillary messages: The following error messages, for example, appear if data records cannot be output: "CDB-POOL 60% FULL" "CDB-POOL 70% FULL" "CDB-POOL 75% FULL, LOSS OF INTERNAL CONN." "CDR: CDB POOL FULL - LOSS OF DATA IN SWU" Possible actions for above example:

- 1) Selection group inactive? (SELS AMO)
 - CDRC file full and no reserve device assigned? (GEZAB AMO)
 - Output device blocked ? Check output device
 - File area full? (INFO AMO)
 - Highway between SWU and ADS okay?

F4703

DEP

STATISTIC OVERFLOW

Type:

Diagnosis-relevant (Format 0)

Short text:

Statistics overflow.

Cause:

Too many errors have occurred within a brief time interval:

- 1) Soft restarts
- 2) • SW errors

Action:

If the error occurs frequently, save the error messages and contact a product specialist.

F4704

DEP

MAINTENANCE

Type:

Service-relevant (Format 34)

Short text:

Maintenance note, triggered by the MAINTENANCE NOTE alarm.

Cause:

This message contains a transparent text in the rule that is either self-explanatory, refers to another service manual chapter or is described below.

Action:

In general, the above-mentioned alarm should be deleted with an AMO after fault removal:

in SWU: DEL-GRA:BP,29;

Save the error messages associated with this alarm if no solution is available. Notify the product specialist.

Note: See also [F4704 Handling](#)

Message texts:

HW TIMER DEFECTIVE

Cause:

A HW timer defect was detected at the processor board that is required for time measurement. Subsequent values supplied by processor load measurement are invalid. Processor load management is thus deactivated. The incorrect values are marked with a * in the case of processor load output (for more information, see [F4464](#)).

System reaction:

None

Action:

Save error message data and notify product specialist. Processor board replacement is recommended.

HW TIMER BACK IN SERVICE

Cause:

The HW timer defect is not detected for a specific period of time. It is thus assumed that the HW timer is working again. Processor load management is reactivated.

System reaction:

None

Action:

Save error message data and notify product specialist. Processor board replacement is recommended.

RTO TEST ERROR

Cause:

Connection loss between WAML and ADP. The result of the RTO test of the WAML connection via the internal LAN to the ADP was negative (LOOP DATA ERR) as confirmed by the FA. See also self-explanatory message text in the error message!

Action:

Use AMO TSU to check if the connection to the ADP is still defective: PR-TSU: CONWADP;

Soft lock of WAML with AMO: DEACT-BSSU:mv, ...;

ACT-BSSU: ul, ...;

Check the physical connection (cable) to the ADP.

Retry Test : PR-TSU: CONWADP;

Delete the maintenance alarm with AMO: DEL-GRA: BP,29;

FIREWALL ALARM

Cause:

A LAN user with no class of service to be 'routed' by the WAML sends a data packet to the WAML

Action:

Check configuration (AMO LANC), if the originator use is to have access via the WAML. If this LAN subscriber is not to have access via the WAML, determine the user (hacker?).

Interpretation of auxiliary data:

All known data for the unauthorized LAN user is output in plaintext so that the cause can quickly be determined.

MAC address, source-IP-address (sender address), destination-IP-address, ISDN NO (station number of the sender if he/she can access the WAML via the ISDN)

ERROR/LOG BUFFER FULL

Cause:

Continuous overflow of error or LOG buffer (see previous messages [F5955](#) or [F5956](#)).

Action:

Read out data with AMO PETRA. For address and length, see previous message F5955 or F5956. Notify the product specialist.

Interpretation of auxiliary data:

see F5955 or F5956.

LAN CONTROLLER DEFECT NO ACCESS TO INTERNAL LAN

Cause:

Hardware error. The LAN controller is set in the direction 'Atlantic' LAN is not possible (internal LAN). This LAN interface was put out of service by the LW. Destinations at this interface cannot be accessed any longer.

Action:

Take the board out of service and put it back in service manually; Board replacement.

Interpretation of auxiliary data:

see [F5959](#).

LAN CONTROLLER DEFECT NO ACCESS TO EXTERNAL LAN

Cause:

Hardware error. The LAN controller is set in the direction 'external' LAN is not possible. This LAN interface was put out of service by the LW. Destinations at this interface cannot be accessed any longer.

Action:

Take the board out of service and put it back in service manually; Board replacement.

Interpretation of auxiliary data:

see [F5960](#).

CONFIGURATION ERROR SLMAR

Cause:

see alarm text and associated error message [F5503](#).

Action:

Reconfiguring with the AMO SCSU, parameter: PULSTYP

SLMAR: EXTENDED SUBSCRIBER LOOP

Cause:

The resistance on the long station line of an SLMAR connection is too high. Calls are not possible or quality is very low.

Action:

The line resistance is to be decreased, e.g by

- checking/performing maintenance on the subscriber line
- laying new lines with lower resistance
- shortening the subscriber line (relocate terminals)

- installing amplifiers, etc.

ROUTER CONNECTION INTERRUPTED - SEE SYSTEM MANAGER REPORT

Cause:

The ISDN data connection between 2 Trading E groups was interrupted. The problem may originate in the local system, in transit on the connection or in the remote system.

Action:

Clarify whether the appropriate SLMY is still in service in the partner group. Clarify whether an ISDN board (e.g. SLMS) failed in the home or remote system.

The system manager must be consulted for more information and notes.

Interpretation of auxiliary data:

No supplementary data

TRADEBOARD E DOWN - SEE SYSTEM MANAGER REPORT

Cause:

A Tradeboard E failed, it cannot be accessed by the SLMY.

Action:

See system manager for additional information and notes.

Clarify whether Tradeboard E can still be reached via LAN and establish its status.

If still accessible via LAN: Check the cables to the MUXY,

Terminal replacement

If multiple terminals on the same MUXY fail: Check the MUXY, its power supply and cabling.

Interpretation of auxiliary data:

No supplementary data

IDLE LEVEL TIMER EXPIRED - SEE F8120

Cause:

A continuous loop was found in a low-priority task in the programming code.

Action:

Save diagnosis data (stack and task information messages) relating to the error message F8120 and notify the product specialist. After diagnosis, perform as soft restart with the AMO REST.

Interpretation of auxiliary data:

see [F8120](#)

CLOCK GENERATOR DOES NOT SUPPORT AECB

Cause:

An AECB was configured with the AMO REFTA, although it is not possible to connect an AECB to the clock generator.

Action:

Deleting the AECB configuration with an AMO: DEL-REFTA:AECB;
CLOCK GENERATOR DOES NOT SUPPORT FRONT REFERENCE

Cause:

A front reference was configured with the AMO REFTA, although it is not possible to connect a front reference to the clock generator.

Action:

Deleting the front reference configuration with an AMO: DEL-REFTA:FRONT;
AECB NOT CONFIGURED WITH AMO REFTA

Cause:

An AECB was connect to or removed from the clock generator, although the AECB was not configured with the AMO REFTA.

Action:

Configuring the AECB with an AMO: ADD-REFTA:AECB;
FRONT REFERENCE NOT CONFIGURED WITH AMO REFTA

Cause:

A front reference was connected to or removed from the clock generator, although the front reference was not configured with the AMO REFTA.

Action:

Configuring the front reference with an AMO: ADD-REFTA:FRONT;
CONFIGURATION OF SIGNALING ADDRESS MISSING

Cause:

An AP has been configured with AMO UCSU but the parameter APIPADR has not yet been configured with AMO APRT

Action:

Configuring the missing parameter with AMO APRT
ROUTE FOR SIGNALING CONNECTION COULD NOT BE ADDED

Cause:

A route for the signaling connection to an AP could not be inserted to the route table of the BP. The ERROR CODE is 0036H if the gateway is not reachable. The ERROR CODE 0037H means that the gateway of an already inserted route entry has been changed.

Action:

Checking and correcting the IP addresses with AMO UCSU or AMO APRT.
ROUTE FOR SIGNALING CONNECTION COULD NOT BE CHANGED

Cause:

An error occurred when the route entry for the signaling connection to an AP has been changed from primary path to survivability path or vice versa for feature signaling survivability.

Action:

Checking and correcting the IP addresses with AMO UCSU.

ROUTE FOR SIGNALING CONNECTION COULD NOT BE DELETED

Cause:

An error occurred when the route entry for the signaling connection to an AP has been deleted.

Action:

No action required.

ROUTE FOR TAP CONNECTION COULD NOT BE ADDED

Cause:

A route for the TAP connection to an AP could not be inserted to the route table of the BP.

Action:

Checking and correcting the IP addresses with AMO UCSU or AMO APRT.

ROUTE FOR TAP CONNECTION COULD NOT BE CHANGED

Cause:

An error occurred when the route entry for the TAP connection to an AP has been changed from primary path to survivability path or vice versa for feature signaling survivability.

Action:

Checking and correcting the IP addresses with AMO UCSU.

ROUTE FOR TAP CONNECTION COULD NOT BE DELETED

Cause:

An error occurred when the route entry for the TAP connection to an AP has been deleted.

Action:

No action required.

ROUTE FOR SUPERVISORY CONNECTION COULD NOT BE ADDED

Cause:

A route for the supervisory connection to an AP could not be inserted to the route table of the BP for feature signaling survivability.

Action:

Checking and correcting the IP addresses with AMO UCSU or AMO APRT.

ROUTE FOR SUPERVISORY CONNECTION COULD NOT BE DELETED

Cause:

An error occurred when the route entry for the supervisory connection to an AP has been deleted.

Action:

No action required.

ROUTE FOR RTO CONNECTION COULD NOT BE ADDED

Cause:

A route for the RTO test connection to an AP could not be inserted to the route table of the BP for feature signaling survivability.

Action:

Checking and correcting the IP addresses with AMO UCSU or AMO APRT.

ROUTE FOR RTO CONNECTION COULD NOT BE DELETED

Cause:

An error occurred when the route entry for the RTO test connection to an AP has been deleted.

Action:

No action required.

CONFIGURATION OF SURVIVABILITY PATH MISSING

Cause:

With AMO STMIB the signaling path switch mode SIGPTHSW has been configured with the value EXTEND or SURVONLY but signaling survivability has not yet been configured for the AP.

Action:

Action: Either changing with AMO STMIB the signaling path switch mode SIGPTHSW back to default value STD or configuring the missing survivability configuration with AMO APRT.

F4706

DEP

RESTART LEVEL

Type:

Service-specific (Format 41)

Short text:

Type of restart carried out

Cause:

This SWU error message replaces [F4266](#) (advisory message with HEX data). This message is always output by dependability following a restart, and describes the type of restart in plain text as well as a possible restart escalation. Example: RESTART TYPES: HARD RESTART / SOFT RESTART A soft restart was requested, which escalated to a hard restart.

Action:

This message is intended as an advisory and helps determine the reason for the restart. Evaluate preceding error messages.

F4750

REC

NO RESP FROM LTUR

Type:

Service-specific (Format)

Short text:

No response from LTUR

Cause:

Dynamic overload or faulty LTUR. Error message is output by defective LTUR.

Action:

Replace board. If this does not work, save the error message data and contact your [Next level of support](#).

F4751

REC

NO RESP FROM SCAN

Type:

Service-specific (Format)

Short text:

No response from LTUR

Cause:

Dynamic overload or faulty LTUR. Error message is output by defective LTUR.

Action:

Replace board. If this does not work, save the error message data and contact your [Next level of support](#).

F4752

REC

NO RESPONSE SR LTUR

Type:

Service-specific (Format 24)

Short text:

No response from LTG subsystem

Cause:

Error in transport layer between CC and LTG. Error message indicates LTG concerned.

Action:

Analyze environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4753

REC

NO LTU REPLY

Type:

Service-specific (Format)

Short text:

No response from LTUR

Cause:

None of the LTUs associated with an LTG is responding. Possible reason: dynamic overload. Error message is output by affected LTG.

Action:

Analyze environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4754

REC

(UN)SAVE UNDETERMINED

Type:

Diagnosis-specific (Format 24)

Short text:

Invalid save list

Cause:

The device memories assigned to a stored connection are marked as "saved" in the CC standby half of the SWU, but entered in the save list under the wrong SAVE TYPE.

Action:

The standby CC half executes a hard restart. If this error message occurs frequently, save the error message data and contact your [Next level of support](#).

F4755

REC

SAVELIST INCONSISTENT

Type:

Diagnosis-specific (Format 24)

Short text:

No partner for saved device

Cause:

A saved device connection without a corresponding connection partner has been detected in the save list during the call processing database recovery. This error only occurs in soft restarts of simplex CCs.

Action:

The inconsistency is corrected by the PABX without further error messages. If this error message occurs repeatedly, save error message data and contact your [Next level of support](#).

F4756

REC

2PTY CONNECTION EXISTS

Type:

Diagnosis-specific (Format 24)

Short text:

Saved connection deleted

Cause:

One of the communication partners of a connection to be saved is already marked as saved.

Action:

The old save connection will be deleted by the PABX, and the new connection saved instead. If this does not work, save the error message data and contact your [Next level of support](#).

F4757

REC

DEVICE BUSY

Type:

Diagnosis-specific (Format 24)

Short text:

Device busy

Cause:

Device is already busy. This error message usually appears in conjunction with [F4756](#). The message is sent from the standby LTG.

Action:

Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4758

REC

DEVICE IDLE

Type:

Diagnosis-specific (Format 24)

Short text:

Device is already released

Cause:

Device is already released. This message is sent from the standby LTG half.

Action:Save error message data and contact your [Next level of support](#).**F4759**

REC

NO CPB USED

Type:

Diagnosis-specific (Format 24)

Short text:

CPB not released

Cause:

No CPB can be released, or CPB is already released.

Action:Save error message data and contact your [Next level of support](#).**F4760**

REC

NO S0 DYN DEVICE TABLE

Type:

Diagnosis-specific (Format 24)

Short text:

No dynamic device memory

Cause:

No dynamic device memory available for saving device data.

Action:The standby half of the SWU-CC executes a hard restart. Save error message data and contact your [Next level of support](#).

F4761

REC

NO IGNORED

Type:

Diagnosis-specific (Format 24)

Short text:

Connection not saved

Cause:

One of the devices of a connection which is to be saved cannot be saved.

Action:

The connection data will not be saved. Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4762

REC

SAVELIST OVERFLOW

Type:

Diagnosis-specific (Format 24)

Short text:

Connection not saved

Cause:

Insufficient memory for saving a connection. The connection data will not be saved.

Action:

Use AMO DIMSU to enlarge the save list. EINR-DIMSU:TYPE=CC2,SILI=<value> (FRG variant) or AMO DIMEN (US variant). Minimum value for SILI (number of memory elements) = 2 * number CPB. In the case of ACD / ACL applications, increase in accordance with the system configuration.

F4763

REC

PATH ALREADY IDLE

Type:

Diagnosis-specific (Format 24)

Short text:

Path already released

Cause:

The system has attempted to release the connection path of a saved connection which was either already released or not seized in the first place. This message occurs in normal operation.

Action:

Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4764

REC

PATH ALREADY BUSY

Type:

Diagnosis-specific (Format 24)

Short text:

Path busy

Cause:

The system attempts to seize the path of a saved connection and finds that it already busy. This error message may occur in normal operation and also during a simplex CC soft restart.

Action:

Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4765

REC

B-CHAN ALREADY IDLE

Type:

Diagnosis-specific (Format 24)

Short text:

B-channel already released

Cause:

The system has attempted to release the B-channel of a saved connection which was either already released or not seized in the first place. This error message occurs in normal operation.

Action:

Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4766

REC

B-CHAN ALREADY BUSY

Type:

Diagnosis-specific (Format 24)

Short text:

B-channel busy

Cause:

The system attempts to seize the B-channel of a saved connection, only to find it already busy. This error message may occur in normal operation and also during a simplex CC soft restart.

Action:

Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4767

REC

LODEN MISMATCH IN CP

Type:

Diagnosis-specific (Format 24)

Short text:

LODENs do not match

Cause:

The system discovers that the LODENs of the saved devices do not match on erasing the connection data.

Action:

Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4768

REC

CPB IDX MISMATCH IN CP

Type:

Diagnosis-specific (Format 24)

Short text:

Invalid CPB-indices

Cause:

Connection to be saved has invalid CPB indices in the device memories.

Action:

The connection will not be saved. Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4769

REC

NO RESPONSE DD UPDATE

Type:

Diagnosis-specific (Format 24)

Short text:

LTG update not acknowledged

Cause:

LTG dynamic data update during Standby Restoration is not acknowledged.

Action:

Save error message data and contact your [Next level of support](#)

F4770

REC

INVALID SAVETYPE

Type:

Diagnosis-specific (Format 24)

Short text:

Invalid save list

Cause:

Invalid SAVE TYPE entry in the save list for a saved device.

Action:

The save element will be deleted. Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4771

REC

LODEN 0 OR IDENT IN CP

Type:

Diagnosis-specific (Format 24)

Short text:

Invalid LODEN

Cause:

Connection to be saved or deleted has invalid LODEN entries: (LODEN = 0 or LODEN A = LODEN B).

Action:

The connection will not be saved (i.e. deleted). Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4772

REC

CONNECTION MISMATCH

Type:

Diagnosis-specific (Format 24)

Short text:

Invalid partner LODEN

Cause:

Connection to be deleted has an invalid partner LODEN.

Action:

The device with the valid LODEN will be deleted. Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4773

REC

PARTNER NOT IN SAVELST

Type:

Diagnosis-specific (Format 24)

Short text:

Device is not saved

Cause:

The system attempts to delete a saved connection of which one of the devices is no longer saved (no entry found).

Action:

Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4776

REC

SAVED 1PTY EXIST

Type:

Diagnosis-specific (Format 24)

Short text:

Already saved as single device

Cause:

One of the call parties is already in the save list, as a single device.

Action:

This save list entry is deleted, and the two-party call to be saved is saved. Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4777**F4778**

REC

INVALID TSL

Type:

Diagnosis-specific (Format 24)

Short text:

Invalid route data

Cause:

The connection to be saved has invalid route data.

Action:

The connection will not be saved. Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4779

REC

SEQUENCE ERROR

Type:

Diagnosis-specific (Format 24)

Short text:

Unexpected sequence

Cause:

Different save types have been carried out in an unexpected sequence.

Action:

The saved data is deleted, and the new data to be saved is saved. Analyze frequency of occurrence and environment. If this does not work, save the error message data and contact your [Next level of support](#).

F4780

REC

NO RESOURCES

Type:

Diagnosis-relevant (Format 24)

Short text:

Error in the standby processor, no CP or DH data buffer

Cause:

When saving a connection for Nx64, no CP or DH data buffer is available.

System reaction:

The CC standby (SWU) causes a hard restart.

Action:

Analyze the frequency and scope of the error message. Save error message data and contact your [Next level of support](#).

F4781

REC

NO NW DYN DEVICE TABLE

Type:

Diagnosis-relevant (Format 24)

Short text:

No dynamic NW device memory

Cause:

When saving a D-channel connection, no dynamic pool device buffer can be seized in the CP for networking.

System reaction:

The CC standby (SWU) causes a hard restart.

Action:

Analyze the frequency and scope of the error message. Check the DIMSU settings. Save error message data and contact your [Next level of support](#).

F4782

REC

PARTIAL RESOURCES

Type:

Diagnosis-relevant (Format 24)

Short text:

Not all resources for a connection available.

Cause:

When saving a connection, all resources cannot be seized. The backup was still performed.

System reaction:

Soft restart only after corresponding statistics overflow

Action:

Analyze the frequency and scope of the error message. Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 5 specifies the subevent (hexadecimal): 74 costibuffer is already seized.

F4783

REC

UPD COSTI MISMATCH

Type:

Diagnosis relevant (Format 24)

Short text:

Mismatch of costi buffer index for a saved connection.

Cause:

The costi buffer index to update does not match the index in the save list.

System reaction:

Only signalling.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

For analysing the data see [F4352](#).

Error messages

F5000

8.6 F5000

A9000 -- F1000 -- F2000 -- F3000 -- F4000 -- **F5000** -- F6000 -- F7000 -- F8000

F5000	F5001	F5002	F5003	F5004	F5019	F5020	F5021	F5030	F5031	F5032
F5033	F5034	F5035	F5036	F5037	F5038	F5039	F5041	F5042	F5043	F5044
F5045	F5046	F5047	F5050	F5051	F5052	F5053	F5054	F5055	F5056	F5057
F5058	F5059	F5060	F5061	F5062	F5063	F5064	F5065	F5066	F5067	F5068
F5069	F5070	F5071	F5072	F5073	F5074	F5075	F5076	F5100	F5101	F5103
F5104	F5105	F5106	F5107	F5112	F5130	F5133	F5134	F5135	F5136	F5140
F5141	F5160	F5161	F5162	F5163	F5164	F5165	F5166	F5167	F5168	F5169
F5170	F5171	F5173	F5180	F5181	F5182	F5183	F5200	F5201	F5220	F5222
F5225	F5227	F5228	F5229	F5230	F5232	F5233	F5234	F5235	F5236	F5237
F5238	F5240	F5241	F5242	F5243	F5250	F5251	F5252	F5253	F5254	F5255
F5256	F5257	F5258	F5259	F5260	F5262	F5263	F5264	F5265	F5266	F5267
F5268	F5269	F5270	F5271	F5272	F5273	F5274	F5275	F5276	F5278	F5279
F5291	F5293	F5294	F5296	F5297	F5304	F5305	F5306	F5307	F5308	F5309
F5310	F5311	F5312	F5313	F5314	F5315	F5316	F5325	F5326	F5327	F5328
F5329	F5330	F5331	F5332	F5333	F5334	F5335	F5336	F5337	F5338	F5339
F5340	F5343	F5344	F5345	F5346	F5347	F5348	F5349	F5350	F5351	F5352
F5353	F5354	F5355	F5356	F5358	F5359	F5371	F5372	F5373	F5374	F5376
F5377	F5388	F5389	F5390	F5391	F5395	F5396	F5397	F5398	F5399	F5401
F5403	F5404	F5405	F5406	F5407	F5409	F5410	F5411	F5412	F5413	F5414
F5415	F5416	F5417	F5418	F5420	F5421	F5422	F5423	F5424	F5425	F5426
F5427	F5428	F5429	F5431	F5432	F5433	F5434	F5439	F5440	F5444	F5445
F5446	F5447	F5448	F5449	F5450	F5451	F5452	F5453	F5454	F5455	F5457
F5458	F5459	F5460	F5461	F5462	F5463	F5470	F5471	F5472	F5473	F5474
F5475	F5476	F5477	F5479	F5500	F5501	F5502	F5503	F5504	F5505	F5506
F5510	F5511	F5512	F5520	F5521	F5523	F5524	F5525	F5526	F5527	F5528
F5530	F5533	F5534	F5535	F5536	F5537	F5538	F5539	F5540	F5553	F5554
F5556	F5557	F5558	F5559	F5560	F5563	F5564	F5566	F5567	F5568	F5569
F5570	F5572	F5573	F5574	F5575	F5576	F5577	F5582	F5584	F5585	F5586
F5587	F5588	F5589	F5590	F5591	F5592	F5607	F5608	F5609	F5623	F5624

F5625	F5626	F5627	F5628	F5629	F5630	F5631	F5632	F5633	F5634	F5635
F5636	F5637	F5640	F5644	F5645	F5646	F5647	F5648	F5649	F5650	F5651
F5680	F5681	F5682	F5683	F5684	F5685	F5687	F5688	F5689	F5690	F5691
F5692	F5693	F5694	F5695	F5696	F5697	F5698	F5700	F5701	F5713	F5714
F5715	F5716	F5717	F5718	F5719	F5730	F5731	F5732	F5733	F5734	F5735
F5736	F5737	F5738	F5739	F5740	F5741	F5742	F5743	F5744	F5745	F5746
F5747	F5748	F5749	F5750	F5751	F5752	F5753	F5754	F5755	F5756	F5757
F5758	F5759	F5760	F5761	F5762	F5763	F5764	F5765	F5766	F5767	F5768
F5769	F5770	F5771	F5772	F5773	F5774	F5775	F5776	F5777	F5778	F5780
F5781	F5800	F5801	F5802	F5803	F5804	F5805	F5806	F5810	F5813	F5814
F5815	F5816	F5817	F5818	F5819	F5821	F5826	F5827	F5828	F5829	F5831
F5847	F5848	F5849	F5850	F5851	F5852	F5853	F5854	F5855	F5870	F5871
F5872	F5873	F5874	F5875	F5876	F5877	F5878	F5879	F5880	F5881	F5882
F5900	F5901	F5902	F5903	F5904	F5905	F5906	F5907	F5908	F5909	F5915
F5916	F5917	F5918	F5919	F5920	F5921	F5922	F5923	F5924	F5950	F5951
F5952	F5953	F5954	F5955	F5956	F5957	F5958	F5959	F5960	F5961	F5962
F5963	F5964	F5965	F5984	F5985	F5986	F5987	F5988	F5989	F5990	F5991
F5992	F5993	F5994	F5995	F5996	F5997	F5998	F5999			

F5000

XCNL

PROM ERROR

Type:

Service-specific (Format 1E/22)

Short text:

PROM error

Format 1E: PROM error. Cross channel has detected an internal error, but has booted and has reported this error / if error is repeated, replace board CCH.

Format 22: Error was reported by the routine test organization.

Action:

If error occurs repeatedly (Format 1E), replace CCH board.

F5001

XCNL

RAM ERROR

Type:

Service-specific (Format 1E/22)

Short text:

RAM error

Format 1E: RAM error in cross channel (CCH). CCH has detected an internal error, but has booted and has reported this error / if error is repeated, replace board CCH.

Format 22: Error was reported by the routine test organization.

Action:

If error occurs repeatedly, replace CCH board.

F5002

XCNL

TIMER ERROR

Type:

Service-specific (Format 1E/22)

Short text:

Timer error

Format 1E: Timeout in cross channel (CCH). Cross channel has detected an internal error, but has booted and has reported this error / if error is repeated, replace board CCH.

Format 22: Error was reported by the routine test organization.

Action:

Replace CCH BP.

F5003

XCNL

FW ERROR

Type:

Service-specific (several formats apply)

Short text:

Firmware error

Cause:

Firmware error in cross channel (CCH). Formats 1E and 22 are relevant for this message. For the sake of differentiation, byte 1 contains HEX value 'EE' in format 22.

Format 1E: cross channel has detected an internal error, but has booted and has reported this error.

Format 22: cross channel has not reacted to a status query. Error was reported by the routine test organization.

Action:

Replace CCH BP if error is repeated.

F5004

XCNL

DEF

Type:

Service-specific (Format 18/22)

Short text:

Cross channel defective

Format 18: Cross channel (CCH) defective / replace board CCH.

Format 22: Error was reported by the routine test organization. CCH has not answered the status query.

Action:

Replace CCH board.

F5019

XCNL

BACK ON-LINE

Type:

Diagnosis-specific (Format 00)

Short text:

Cross channel reports back

Cause:

Cross channel board reports back again.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5020

XCNL

XCNL OR IEC DOWN

Type:

Diagnosis-specific (Format 22)

Short text:

No response from CCH board

Cause:

No response from remote (partner) cross channel board. Cross channel board or IEC bus defective.

Action:

Replace CCH board.

F5021

XCNL

EC DOWN

Type:

Diagnosis-specific (Format 18/22)

Short text:

IEC bus defective

Cause:

Connection setup possible, but traffic not correct, IEC bus possibly defective.

Action:

Check the hardware (e.g. cables and shelves). If this does not work, save the error message data and contact your [Next level of support](#).

F5030

DCL

PROM ERROR

Type:

Service-specific (several formats apply)

Short text:

PROM error

Cause:

PROM error. DCL detects an internal error and reports it either in its own error message or in a status acknowledgment to error analysis. Format 1E and format 22 may be relevant for this message. If the first two HEX items contain

'01EE, this message is a status acknowledgment. If the contents are anything else, this message will be sent as an error message and interpreted according to the format.

Format 22: Error reported by the routine test organization.

Action:

Start test with TSU AMO. If test completes with negative results, check the hardware (e.g. cables and shelves) and replace DCL if all else fails.

F5031

DCL

RAM ERROR

Type:

Service-specific (several formats apply)

Short text:

RAM error

Cause:

RAM error. DCL detects an internal error and reports it either in its own error message or in a status acknowledgment to error analysis. If the error is repeated, replace the DCL board.

- 1) Format 1E and format 22 may be relevant for this message. If the first two HEX items contain '01EE, this message is a status acknowledgment. If they contain anything else, this message will be sent as an error message and interpreted according to format.

- Format 22: Error reported by the routine test organization.

Action:

Start test with TSU AMO. If test completes with negative results, replace DCL.

F5032

DCL

TIMER ERROR

Type:

Service-specific (several formats apply)

Short text:

Timer error

Cause:

Timeout. DCL detects an internal error and reports it either in its own error message or in a status acknowledgment to error analysis. If the error is repeated, replace the DCL.

- 1) Format 1E and format 22 may be relevant for this message. If the first two HEX items contain '01EE, this message is a status acknowledgment. If they contain anything else, this message will be sent as an error message and interpreted according to format.

- Format 22: Error reported by the routine test organization.

Action:

Start test with TSU AMO. If test completes with negative results, replace DCL.

F5033

DCL

FW ERROR

Type:

Service-specific (several formats apply)

Short text:

Firmware error

Cause:

DCL detects an internal error and reports it either in its own error message or in a status acknowledgment to error analysis. If the error is repeated, replace DCL.

- 1) Format 1E and format 22 may be relevant for this message. If the first two HEX items contain '01EE, this message is a status acknowledgment. If they contain anything else, this message will be sent as an error message and must be interpreted according to format.

- Format 22: Error reported by the routine test organization.

Action:

Start test with TSU AMO. If test completes with negative results, replace DCL.

Interpretation of auxiliary data:

If a manual soft restart is initiated via DCL, two F5033 messages are output in addition to [F2019](#). These will have format 22 and contain the following auxiliary data: first F5033 - Byte 7 and 8: 00FE second F5033 - Byte 7 and 8: 0040

F5034

DCL

NO POLLING

Type:

Service-specific (Format 18)

Short text:

DCL is not polling

Cause:

DCL does not poll the peripherals. This may be because there are not enough free containers (<5) for transporting messages. This message is output after a soft DCL restart.

Action:

If the error is repeated, start test with TSU AMO. If test completes with negative results, check the hardware (e.g. cables and shelves) and replace DCL if all else fails.

F5035

DCL

POLLING AGAIN

Type:

Service-specific (Format 18)

Short text:

DCL is polling again

Cause:

DCL is polling the peripherals again.

Action:

Positive acknowledgment without action.

F5036

DCL

MSG NOT PLAUS

Type:

Diagnosis-specific (Format 18)

Short text:

Implausible message (SW error)

Cause:

The DCL has received a message it cannot interpret from the peripherals or group processor. This message is packed in an array of 50 bytes and forwarded transparently to DEP-S.

Action:

The sender and, hence, the cause can be ascertained from the implausible message. Save error message data and contact your [Next level of support](#).

Byte 7	=	Error code
	01	Invalid message length (CMDQ1)

Error messages

	02	Invalid SHELF_NO
	03	Invalid PBC_ADDR
	04	Invalid message length (CMDQ0)
	05	Invalid EVENT_CODE
	06	Invalid SUB_EVT_CODE
	07	not used
	08	Invalid SHELF_NO or RESET_TYP
	09	Invalid SHELF_NO in 'send_al'
	10	Invalid SHELF_NO and PBC_ADDR in 'part_poll'
	11	Invalid SHELF_NO in 'start_poll_shelf'
	12	Invalid SHELF_NO in 'stop_poll_shelf'
	13	Invalid BYTE_CNT in 'Uplink Signaling Data'
	14	Invalid BYTE_CNT in 'LP Result Control'
	Values 01 to 03 relate to CMDQ1, values 04 to 12 relate to CMDQ, values 13 and 14 are internal QDCL values.	
Byte 8-45	=	Internal dual port RAM data (DPR)
Byte 48-95	=	Implausible message which led to error

F5037

DCL

DATA OVERFLOW

Type:

Diagnosis-specific (Format 18)

Short text:

Data overflow in DCL

Cause:

Data overflow in the DCL, i.e. the DCL does not acknowledge the initialization message. Message after a soft DCL restart.

Action:

Save error message data and contact your [Next level of support](#).

F5038

DCL

DMA ERROR

Type:

Diagnosis-specific (Format 18)

Short text:

DMA controller of DCL defective

Cause:

DCL's DMA (Direct Memory Access) controller is defective. Message after a soft DCL restart. If the error is repeated, look for the cause in the DCL. Replace DCL board if necessary.

Action:

If the error is repeated, start test with TSU AMO. If test completes with negative results, replace DCL.

F5039

DCL

DEF

Type:

Service-specific (Format 18/22)

Short text:

DCL board defective

1) Format 18: DCL defective. Message after a soft DCL restart. If the error is repeated, look for the cause in the DCL. Replace DCL board if necessary. This error message can also be output together with [F5100](#) and possibly [F5042](#), and then indicates a clock generator failure.

- Format 22: Error reported by the routine test organization. The DCL has not acknowledged the status query.

Action:

If the error is repeated, start test with TSU AMO. If test completes with negative results, replace DCL.

F5041

DCL

PBC DEF

Type:

Service-specific (Format 1F)

Short text:

DCL soft restart

Cause:

Message indicating defective PBCs of the DCL.

Action:

Error messages

If the error is repeated, start test with TSU AMO. If test completes with negative results, replace DCL.

Message indicating defective PBCs after booting:

Byte 0	=	Length of relevant bytes
Byte 1	=	H'EE
Byte 2-n	=	Interpretation acc. to DB_M_QF_LTG_SPERR_ELEM_STR

Message indicating defective PBCs in normal operation:

Byte 0	=	DCL status byte
	Bit 0 = 1	then PBC 0 defective
	Bit 1 = 1	then PBC 1 defective
	Bit 2 = 1	then PBC 2 defective
	Bit 3 = 1	then PBC 3 defective
	Bit 4 = 1	then DMA defective
	Bit 5 = 1	then polling disabled
Byte 1	=	Currently defective PBC of the DCL.

Message after a soft DCL restart. If the error is repeated, look for the cause in the DCL. Replace DCL board if necessary.

F5042

DCL

HDLC DEFECT

Type:

Service-specific (Format 22)

Short text:

HDLC link defective

Cause:

This LTUC/DCL error is reported by the error analysis system if a number of boards on the same shelf report out-of-service within a short period of time. This error is also reported (together with [F5100](#) and [F5039](#)) if the clock generator fails or if, as a result of an interrupted HDLC connection (cable), call processing switches to the better standby CC half

Action:

See also [F5044](#), [F5045](#) and [F5046](#). Check hardware (shelf, LTUC and DCL boards).

F5043

DCL

DCL RELOAD REQUEST

Type:

Service-specific (Format 18)

Short text:

Error in DCL loadware

Cause:

DCL reloaded due to an error in the DCL loadware.

Action:

The DCL triggered an interrupt that resulted in a hard restart with a reload of the DCL loadware via the interrupt handler (INTH), fault analysis (FA) and SYSLOAD. Save error message data and contact your [Next level of support](#).

F5044

DCL

HDLC LAYER1 NPR

Type:

Service-specific (Format 22)

Short text:

HDLC link interrupt

Cause:

After a restart CC it was determined that at least one HDLC path to a configured LTU has been interrupted. This results in a 'HW Partially Defective' in FA (active CC changeover to standby CC, or restart in the standby half).

Action:

To clear this error, either the faulty HDLC connections (cables) must be restored, or the corresponding LTU(s) must be blocked via AMO. See also [F5042](#), [F5045](#), and [F5046](#). Check hardware (shelf, LTUC and DCL boards).

F5045

DCL

HDLC LAYER1 LEFT

Type:

Service-specific (Format 22)

Short text:

HDLC link lost

Cause:

The DCL in the standby CC signals a lost HDLC connection to an LTU (cable interruption).

Action:

See also [F5042](#), [F5044](#), and [F5046](#). Check hardware (shelf, LTUC and DCL boards).

F5046

DCL
NEW HDLC LAYER1

Type:

Service-specific (Format 22)

Short text:

HDLC link restored

Cause:

The DCL in the standby CC signals a restored HDLC connection to an LTU.

Action:

See also [F5042](#), [F5044](#), and [F5045](#).

F5047

DCL
SPOR ERROR

Type:

Service-specific (Format 22)

Short text:

Sporadic error in QDCL

Cause:

A status check of the QDCL showed a sporadic error (QDCL background test).

Action:

The type of error is shown in the status byte. Save error message data and contact your [Next level of support](#).

Byte 0	=	5F (95 dec.) Length of the suppl. data
Byte 35	=	Status byte
	01	Checksum error in the code storage area
	02	Read/write error in the data storage area
	04	Error during WD expiry test

F5050

MBU

PROM ERROR

Type:

Service-specific (Format 22)

Short text:

PROM error

Cause:

Error reported by the RTO, or error message is output in conjunction with [F5053](#) as additional information.

Action:

If error F5050 is not output in conjunction with error [F5053](#) (within 2 seconds), the message indicates that the RTO has detected a defective MBU. Replace MBU. If errors F5050 and [F5053](#) are output simultaneously (within 2 seconds), the message contains additional auxiliary data which is important for the development department. In this case, save the error message data and contact your [Next level of support](#).

F5051

MBU

RAM ERROR

Type:

Service-specific (Format 22)

Short text:

RAM error

Cause:

Error reported by the RTO or MBU firmware.

Action:

Replace MBU.

F5052

MBU

TIMER ERROR

Type:

Service-specific (Format 22)

Short text:

Timer error

Cause:

Error reported by the RTO or MBU firmware.

Action:

If error F5052 does not occur in conjunction with [F5053](#) (# 2 seconds), the message indicates that the RTO has detected a defective MBU. Replace MBU. If errors F5052 and [F5053](#) are output simultaneously (within 2 seconds), this indicates a connection loss between the CC and the LTG. The two error messages will also contain additional auxiliary data which is important for the development department, if the cause of the connection loss lies in the MBU or in one of its associated system units. In this case, save the error message data and contact your [Next level of support](#). The data is not significant if the cause of the connection loss lies in an error of the CC or LTG.

F5053

MBU

FW ERROR

Type:

Service-specific (Format 1E/22)

Short text:

Firmware error in MBU

Cause:

See also [F5050](#) and [F5052](#). MBU has detected an internal error, but was able to complete booting and then report the error.

Action:

If error is repeated, check firmware status against firmware list and upgrade FW if necessary. If this does not work, replace MBU board. If error persists, save error message data and contact your [Next level of support](#).

F5054

MBU

HW ERROR

Type:

Service-specific (Format 22)

Short text:

MBU hardware error

Cause:

Error reported by the RTO or MBU firmware.

Action:

Check firmware status against firmware list and upgrade FW if necessary. If this does not work, replace MBU board. If error persists, save error message data and contact your [Next level of support](#).

F5055

MBU

MBU OR HDLC DOWN

Type:

Service-specific (Format 22)

Short text:

MBU or HDLC link defective

Cause:

Message buffer unit (MBU) or HDLC links defective. Message can also occur in conjunction with an LTG block.

Action:

Check MBU, message distributor (MD) or cabling, replace if necessary.

F5056

MBU

IOCC DOWN

Type:

Service-specific (Format 22)

Short text:

IOCC not responding

Cause:

IOCC no longer responding to a request. Either the central switching network (CSN) is defective or deactivated, or the HDLC highway to the CSN is defective.

Action:

Check CSN and cabling, replace if necessary.

F5057

MBU

IOCG DOWN

Type:

Service-specific (Format 22)

Short text:

IOCG not responding

Cause:

IOCG no longer responding to a request. Either the LTG is deactivated, or the HDLC highway to the IOCG is defective, or the IOCG itself is defective.

Action:

Check LTG/IOCG and cabling, replace if necessary.

F5058

MBU

IOCC BACK ON-LINE

Type:

Service-specific (Format 22)

Short text:

IOCC responding again

Cause:

IOCC answers again. Positive acknowledgment of error message [F5056](#).

Action:

Positive acknowledgment without action.

F5059

MBU

IOCG BACK ON-LINE

Type:

Service-specific (Format 22)

Short text:

IOCG responding again

Cause:

IOCG answers again. Positive acknowledgment of error message [F5057](#).

Action:

Positive acknowledgment without action.

F5060

IOCC

MTS OR CR DEF

Type:

Service-specific (Format 18)

Short text:

Failure of all MTS boards or CR on IOCC

Cause:

Failure of all MTS boards or clock repeater (CR) on the IOCC board

Action:

Check appropriate board, replace if necessary.

F5061

IOCC

MTS DEF

Type:

Service-specific (Format 18)

Short text:

Timeslot or MTS defective

Cause:

Timeslot or MTS board has failed

Action:

Check MTS board and replace if necessary.

F5062

IOCC

WATCHDOG TIMEOUT

Type:

Diagnosis-specific (Format 29)

Short text:

Watchdog timeout

Cause:

Watchdog timeout on the IOCC board.

Action:

Error analysis (FA) keeps statistics to this effect. Save error message data and contact your [Next level of support](#).

F5063

IOCC

SUM POWER FAIL

Type:

Service-specific (Format 29)

Short text:

Feed power failure

Cause:

Summation counter (for voltage fluctuations) signals failure of a feed voltage in the system (inverter or charging rectifier output).

Action:

Check power supply and appropriate voltages. Old hardware versions: check that the Faston connectors on the backplane are locked in correctly.

F5064

IOCC

RESOURCES

Type:

Service-specific (Format 29)

Short text:

IOCC resource shortage

Cause:

IOCC short of resources.

Action:

Save error message data and contact your [Next level of support](#). Note related error messages.

F5065

IOCC

NEW ACTIVE

Type:

Service-specific (Format 29)

Short text:

IOCC active

Cause:

IOCC has assumed the activity.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5066

IOCC

BOTH CSN ACT

Type:

Service-specific (Format 19)

Short text:

IOCC partner active

Cause:

An IOCC signals that both partners are active.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#)

F5067

IOCC

HDLC CC SBY DEF

Type:

Service-specific (Format 29)

Short text:

HDLC link to standby CC interrupted

Cause:

HDLC connection to standby common control (standby CC) is interrupted.

Action:

Check HDLC connection. Also check rest of hardware (shelf and cables).

F5068

IOCC

DEF

Type:

Service-specific (several formats apply)

Short text:

CCG reference clock failed

1) Format 18: failure of clock reference signal from CCG.

- Format 22: Error in status word query. The error is reported by the routine test organization. For the sake of differentiation, the HEX data

Error messages

contains H'EE in byte 1, then a series of items describing the disabled and defective CSN elements, and the CSN status.

Action:

Replace defective element when located.

Byte 0	=	Length of relevant bytes
Byte 1	=	EE (Interpret bytes 4 to 7 only if byte 1 = H'EE)
Byte 2	=	00 CSN half is active and okay
	01	CSN half is active and partially defective
	02	CSN half is active and defective
	03	CSN half is passive and okay
	04	CSN half is passive and partially defective
	05	CSN half is passive and defective

The following bytes are relevant for standard cabinet systems:

Byte 6-9	=	Status of MTS boards
	00	okay
	01	defective
Byte 6	=	Status of MTS 0, board 0 (SLOT 85 or 91)
Byte 7	=	Status of MTS 0, board 1 (SLOT 79 or 97)
Byte 8	=	Status of MTS 1, board 0 (SLOT 73 or 103)
Byte 9	=	Status of MTS 1, board 1 (SLOT 67 or 109)

The following bytes are relevant for modular cabinet systems:

Byte 10-16	=	Status of the MTS boards
	00	okay
	01	defective
Byte 10	=	Status of MTS64 board 1 (SLOT 118)
Byte 11	=	Status of MTS64 board 2 (SLOT 111)
Byte 12	=	Status of MTS64 board 3 (SLOT 104)
Byte 13	=	Status of MTS64 board 4 (SLOT 97)
Byte 14	=	Status of MTS64 board 5 (SLOT 90)
Byte 15	=	Status of MTS64 board 6 (SLOT 83)
Byte 16	=	Status of MTS64 board 7 (SLOT 76)

F5069

IOCC

IOCG DEF

Type:

Service-specific (Format 18)

Short text:

IOCG defective

Cause:

IOCG board is defective or cannot supply a clock.

Action:

Replace IOCG board.

F5070

IOCC

CCG DEF

Type:

Service-specific (several formats apply)

Short text:

CCG defective

1) Format 18: clock repeater (CR) of the central clock generator (CCG) is defective.

- Format 22: byte 1 contains H'EE for differentiation. Status of IOCC is bad.

Action:

Action depends on the evaluation of the HEX data. Save the error message data and contact your [Next level of support](#). Check CCG board and replace if necessary.

Interpretation of bytes 2 to 3 only if contents of byte are 1 H'EE.

Byte 0	=	Length of relevant byte
Byte 1	=	EE (Interpret bytes 2 and 3 only if byte 1 = H'EE)
Byte 2	=	CCG-A Status (DB_M_QF_PROC_STATE_SET)
	00	CCG-A active, hardware okay
	01	CCG-A active, hardware partially defective
	02	CCG-A active, hardware defective
	03	CCG-A is not active, hardware okay
	04	CCG-A is not active, hardware partially defective

Error messages

	05	CCG-A is not active, hardware defective
Byte 3	=	CCG-B status (DB_M_QF_PROC_STATE_SET)
	00	CCG-B active, hardware okay
	01	CCG-B active, hardware partially defective
	02	CCG-B active, hardware defective
	03	CCG-B is not active, hardware okay
	04	CCG-B is not active, hardware partially defective
	05	CCG-B is not active, hardware defective

F5071

IOCC

CCG FAIL

Type:

Service-specific

Short text:

Error on CCG

Cause:

Central clock generator (CCG) has identified an error in the reference input.

Action:

Check CCG board and replace if necessary.

F5072

IOCC

CCG NO CLOCK

Type:

Service-specific (Format 18)

Short text:

No clock signal from CCG

Cause:

Central clock generator (CCG) can no longer send clock signal.

Action:

Check CCG board and replace if necessary.

F5073

IOCC

CCG ON-LINE

Type:

Service-specific (Format 29)

Short text:

CCG okay again

Cause:

Defective central clock generator (CCG) is okay again.

Action:

Positive acknowledgment without action.

F5074

IOCC

CCG REF LOSS

Type:

Service-specific (Format 29)

Short text:

Loss of external reference clock

Cause:

Central clock generator (CCG) has lost external clock reference signal.

Action:

Check external clock source.

F5075

IOCC

CCG REF OK

Type:

Service-specific (Format 29)

Short text:

Synchronized to external reference clock

Cause:

Central clock generator (CCG) has been synchronized with an external clock reference signal.

Action:

Error messages

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5076

IOCC

IMPLAUSIBLE MSG

Type:

Service-specific (Format 22)

Short text:

Implausible message to IOCC

Cause:

IOCC has received an implausible message. The container with the implausible message is reflected in the HEX data (F1-F2-F3).

Action:

Save error message data and contact your [Next level of support](#).

F5100

CLOCK

NOT READY

Type:

Service-specific (Format 1A)

Short text:

PCG not in order

Cause:

Error in internal communication with clock generator.

System reaction:

system automatically carries out a hard restart.

Action:

Replace clock generator board if error is signaled again after restart.

F5101

CLOCK

DEFECT

Type:

Service-specific (Format 1A/22)

Short text:

Clock signal detection error

Format 1A: This message is output on duplex systems., if

- 1) active clock generator has detected a clock frequency, but the standby clock generator has not (false clock)
 - active clock generator fails to detect clock signal for synchronization which has been detected by the standby clock generator.

System reaction:

System automatically carries out a hard restart.

Format 22: This message is only output in systems with CCG clock generator boards, if

- switch to CCG slave was not successful.
- CCG master and CCG slave identify different clock signals (i.e., CCG master or slave defective, or CCG MUX not properly adjusted).

System reaction:

system switches over to AUTONOMOUS CLOCK (see also [F5556](#)).

- Format 1A: Replace clock generator board if error is signaled again after restart.
- Format 22: Initiate system restart to test whether error can be eliminated. If the error is signaled again after the restart, replace the clock generator.

F5103

CLOCK

PROM ERROR

Type:

Service-specific (Format 1A)

Short text:

Clock generator PROM error

Cause:

Clock generator has detected a PROM error.

System reaction:

This is treated as a system hardware error. Duplex systems: system carries out a hard restart, if standby CC half has better HW status.

Action:

Replace clock generator board.

F5104

CLOCK

RAM ERROR

Type:

Service-specific (Format 1A)

Short text:

Clock generator RAM error

Cause:

Clock generator has detected a RAM error.

System reaction:

this is treated as a system hardware error. Duplex systems: system carries out a hard restart, if standby CC half has better HW status.

Action:

Initiate system restart to test whether error can be eliminated. If the error is signaled again after the restart, replace the clock generator

F5105

CLOCK

PROC ERROR

Type:

Service-specific (Format 1A)

Short text:

Clock generator processor error

Cause:

Clock generator has detected a processor error.

System reaction:

this is treated as a system hardware error. Duplex systems: system carries out a hard restart, if standby CC half has better HW status.

Action:

Initiate system restart to test whether error can be eliminated. If the error is signaled again after the restart, replace the clock generator

F5106

CLOCK

MASTER/SLAVE ERROR

Type:

Service-specific (Format 1A)

Short text:

Master/slave error

Cause:

Clock generator has detected a master/slave switchover error.

System reaction:

no automatic response.

Action:

Initiate system restart to test whether error can be eliminated. If the error is signaled again after the restart, replace the clock generator

F5107

CLOCK

CKA ERROR

Type:

Service-specific (Format 1A)

Short text:

System clock error

Cause:

Clock generator has detected a system clock failure.

System reaction:

system automatically carries out a hard restart.

Action:

Replace clock generator board if error is signaled again after restart.

F5112

CLOCK

CLOCK NOT RECOGNIZED

Type:

Service-specific (Format 22)

Short text:

Reference clock missing

Cause:

Clock generator cannot identify external reference clock despite valid source.

System reaction:

error counter of clock source is incremented, and search for new circuit is carried out.

Action:

If the error occurs frequently on a particular circuit, check the clock source.

F5130

SM/UNIT

ON-LINE

Type:

Service-specific (Format 29)

Short text:

Server restart end

Cause:

End-of-restart of a service module. Either the TCS or the VMS (not the ADS) has executed an independent restart.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5133

SM/UNIT

CDC DISABLE

Type:

Service-specific (Format 29)

Short text:

Server disabled via AMO.

Cause:

Server disabled via AMO.

Action:

Determine why server was disabled and enable server again via AMO.

F5134

SM/UNIT

RESTART BEG

Type:

Service-specific (Format 29)

Short text:

Server restart

Cause:

Beginning of independent restart of either the TCS or the VMS (not the ADS).

Action:

Save error message data and contact your [Next level of support](#).

F5135

SM/UNIT

RESTART DUE TO SERVER

Type:

Diagnosis-specific (Format 22)

Short text:

SWU restart

Cause:

SWU has carried out a restart at the request of a server.

Action:

Save error message data and contact your [Next level of support](#).

F5136

SM/UNIT

STATISTIC

Type:

Diagnosis-specific (Format 22)

Short text:

Counter overflow

Cause:

Counter overflow for server restarts.

Action:

Determine the cause of the frequent restarts. Save error message data and contact your [Next level of support](#).

F5140

POW SUPL

POWER SUPPLY DEF

Type:

Service-specific (Format 00)

Short text:

Inverter failure

Cause:

Error messages

Inverter failure on the LTU shelf, CC shelf or in the server. An LTU failure, CC partner failure or server failure occurs simultaneously.

Action:

Check power supply. End of inverter failure signaled with [F5141](#).

F5141

POW SUPL

POWER SUPPLY OK

Type:

Service-specific (Format 00)

Short text:

Inverter okay

Cause:

Inverter in order again.

Action:

Positive acknowledgment of [F5140](#).

F5160

IOCG

PROM ERROR

Type:

Service-specific (Format 1E/22)

Short text:

PROM error.

Cause:

Error reported by the RTO or board FW. This message is output after booting and contains the errors that led to the IOCG restart. The error code and the error address of the operating system on the IOCG boards are output in the HEX data.

Action:

If the error is repeated, check the IOCG board and replace if necessary..

F5161

IOCG

RAM ERROR

Type:

Service-specific (Format 1E/22)

Short text:

RAM error

Cause:

Error reported by the RTO or board FW. This message is output after booting and contains the errors that led to the IOCG restart. The error code and the error address of the operating system on the IOCG boards are output in the HEX data.

Action:

If the error is repeated, check the IOCG board and replace if necessary.

F5162

IOCG

TIMER ERROR

Type:

Service-specific (Format 1E/22)

Short text:

Timer error

Cause:

Error reported by the RTO or board FW. This message is output after booting and contains the errors that led to the IOCG restart. The error code and the error address of the operating system on the IOCG boards are output in the HEX data.

Action:

If error is repeated, check firmware status against firmware list and upgrade FW if necessary. If this does not work, replace IOCG board. If error persists, save error message data and contact your [Next level of support](#).

F5163

IOCG

SW ERROR

Type:

Service-specific (Format 1E/22)

Short text:

Software error

Cause:

Error reported by the RTO or board FW. This message is output after booting and indicates the error that led to the IOCG restart.

Action:

If error is repeated, check firmware status against firmware list and upgrade FW if necessary. If this does not work, replace IOCG board. If error persists, save error message data and contact your [Next level of support](#).

F5164

IOCG

HW ERROR

Type:

Service-specific (Format 1E/22)

Short text:

Hardware error

Cause:

Error reported by the RTO or board FW (clock problems). This message is output after booting and contains the error that has led to the IOCG restart. The error code and the error address of the operating system on the IOCG boards are output in the HEX data.

Action:

If error is repeated, check firmware status against firmware list and upgrade FW if necessary. If several IOCG boards report this error at the same time, this can indicate a problem with the central clock source (NCG).

F5165

IOCG

MBU OR HDLC DOWN

Type:

Service-specific (Format 22)

Short text:

MBU or HDLC defective

Cause:

Message buffer unit (MBU) or HDLC path defective. This message can also indicate that the SWU is undergoing a restart or is deactivated.

Action:

If all IOCG and IOCC boards report this error at the same time, check the MBU board and replace if necessary. If this error is reported by several IOCG boards, but is not reported by an IOCC at the same time, this indicates a defective message distribution board. Check the MD board and replace if necessary. If error is limited to one single IOCG, check cabling or IOCG board and replace if necessary.

F5166

IOCG

DEF

Type:

Service-specific (Format 22)

Short text:

Status query not acknowledged

Cause:

IOCG can no longer be initialized. Error reported by the routine test organization. The IOCG has not acknowledged the status query.

Action:

Check the IOCG board and replace if necessary.

F5167

IOCG

MBU ON-LINE

Type:

Service-specific (Format 22)

Short text:

IOCG on-line again

Cause:

IOCG has contact again with the common control (CC).

Action:

Positive acknowledgment without action.

F5168

IOCG

CLOCK REPEATER DEF

Type:

Service-specific (Format 18)

Short text:

Clock repeater defective

Cause:

IOCG's clock repeater (CR) defective.

Action:

Check IOCG board and replace if necessary.

F5169

IOCG

PARTNER DOWN

Type:

Service-specific (Format 18)

Short text:

IOCG defective

Cause:

IOCG power failure or defect detected in the partner half of the LTG.

Action:

Check power supply and replace IOCG if necessary.

F5170

IOCG

LOGIC ACTIVE

Type:

Service-specific (Format 22)

Short text:

IOCG output active

Cause:

Status of active logic changed. The remote partner of the reporting IOCG has driven its output inactive, LTG half of reporting IOCG is active.

Action:

Check reason for status change in partner half.

F5171

IOCG

LOGIC NOT ACTIVE

Type:

Service-specific (Format 22)

Short text:

IOCG output inactive

Cause:

Status of active logic changed. The remote partner of the reporting IOCG has driven its output active.

Action:

No action necessary.

F5173

IOCG

END OF FAIL

Type:

Service-specific (Format 22)

Short text:

IOCG clock repeater okay again

Cause:

Errors reported by the clock repeater no longer exist.

Action:

Byte 0 of the HEX data indicates the IOCG state.

The IOCG state is indicated by whichever bit is set (1)

Byte 0	=	IOCG status byte (convert to binary)
	Bit 0	Clock repeater alarm A, CKA missing.
	Bit 1	Clock repeater alarm B, FMB missing.
	Bit 2	Clock repeater alarm C, voltage outside the proper range.
	Bit 3	Clock repeater alarm D, no feedback.
	Bit 4	Clock repeater alarm E, no alarm signal to CKA or FMB.
	Bit 5	Clock repeater alarm F, summation of alarms C, D and E.
	Bit 6	Power alarm of partner board.

F5180

HWY

DEF

Type:

Diagnosis-specific (Format 21/22)

Short text:

Highway failure

Cause:

The RTO reports a highway failure, after several tests (RTO test only if activated via AMO FUNSU / LTUAHWYA, CSNHWYA). Format 21 is output with action = OUT_SERV. This is followed by format 22 with the RTO trace message. The RTO trace message is not further explained here.

Action:

Remember that a defective highway ("DEF" status) can only be restored to READY state by a hard restart of the LTG (3000 systems) or CC half (all other systems) concerned, i.e., highways cannot be switched (activated/deactivated) via AMO.

Since a highway failure can be caused by HW errors of the MTS, the LTUC or the connecting cable between these boards, the impact of the error must first be defined. In each case, use the SDSU AMO to display how many HWYs and quarter shelves are defective per board.

The following actions are recommended for localizing the error. The urgency of these measures depends on the remaining HWY resources per board or quarter-shelf.

In **duplex** systems, the highways can be initially restored by initiating a switchover to the standby LTG half (3000 systems) or standby CC half (all other systems), provided the LTUC and the connecting cable to the MTS of the standby half are okay. To eliminate the LTUC as the source of the error in a **duplex** system, proceed as follows:

Initiate an LTG switchover (3000 systems) or CC switchover (other systems) and test the status of each affected highway with the TSU AMO

Repeat step 1, switching back to the original LTG or CC half.

If the TSU tests in both halves indicate defunct highways in the LTU, the LTUC is the most probable source of the error. Replace the LTUC. If the TSU tests indicate defunct highways in one system half only, initiate a switchover to the good system half and continue with the error localization procedures in the bad system half, as follows: 1. Check cables and replace as necessary 2. Replace MTS board The system half concerned must be switched to standby first !

In **simplex** systems, the actions depend on the system type (600 systems or 80 systems)

- 1) 600 systems: proceed according to error probability, i.e., replace cables first, replace MTS if this does not work and replace LTUC only if all else fails.
 - 80 systems: if only LTU1 is affected, replace SCC board. If LTU2 is affected, follow the procedure for 600 systems.

If action is OUT_SERV (Format 21):

Byte 0	=	LTG (0-31)
Byte 1	=	LTU (1-xx)
Byte 2	=	HWY (1-xx)
Byte 3	=	TSL (0-xx)

F5181

HWY

TSL DEF

Type:

Diagnosis-specific (Format 21/22)

Short text:

Timeslot failure

Cause:

The RTO reports a timeslot failure (RTO test only if activated via AMO FUNSU / LTUAHWYA, CSNHWYA). Format 21 is output with action = OUT_SERV. This is followed by format 22 with the RTO trace message.

- 1) This error can also be caused by boards which do not have the restart capability provided by Hicom 3000 V3.1 loadware. In these loadware versions, timeslots can remain out of service after the restart. The following boards are affected: SLMA (Q2041, Q2057), SLMB8, TMBM (Q2052), TMX21, (Q2027). This error cannot be corrected via loadware update. Instead, a workaround solution exists in the form of a deactivation of the HWY test using AMO FUNSU.
- 2) This error message is also displayed if a faulty TSL was found during the analysis of a trunk error signaled by the RTO (reference test with a different trunk on another module with the original HWY / TSL identified an error). The name of the module with the trunk originally tested, which is normally not defective, appears in the message header.

Action:See [F5180](#).**F5182**

HWY

TSL SPORAD

Type:

Diagnosis-specific (Format 21/22)

Short text:

Sporadic timeslot failure

Cause:

The RTO reports a sporadic timeslot failure (RTO test only if activated via AMO FUNSU / LTUAHWYA, CSNHWYA). Format 21 is output with action = OUT_SERV. This is followed by format 22 with the RTO trace message.

Action:See [F5180](#).**F5183**

HWY

TESTTR TIMEOUT

Type:

Diagnosis-specific (Format 21)

Short text:

Error messages

Timeout on highway test

Cause:

The RTO reports a highway test timeout (RTO test only if activated via AMO FUNSU / LTUAHWYA, CSNHWYA).

Action:

If hard restart is unsuccessful, replace SIU board. If this does not work, replace connecting cable between MTS and LTUC or replace LTUC board.

F5200

MTS

BOARD DEFECTIVE

Type:

Service-specific (Format 21)

Short text:

MTS board defective

Cause:

MTS defective. Event signal came from the MTS handler.

Action:

Replace MTS board.

Byte 0	=	LTG (0-31)
Byte 1	=	LTU (00-07)
Byte 2	=	HWY
Byte 3	=	Timeslot

F5201

HWYS DEFECT

Type:

Service-relevant (Format 22)

Short text:

LTU highways defective

Cause:

Defective highways were detected by RTO test in one or more LTUs on an MTS/SICOE module. State set to DEF. Total defects of relevant LTUC unavailable.

Replace highway cable on relevant LTUC. Perform hard restart on active processor

Replace the MTS or SICOE module when the highways are reset to DEF.

- MTS: if defective highways (see supplementary data) in LTU shelf 1 - 7,
- SICOE: if LTU shelves 8 - 15 are effected.

Representation of the defective highways as a hexadecimal value of an 8 bit strip:

Example:

1) highways 0 and 7 are defective

- 1st and 8th bit in byte 1 are set
- hexadecimal represented as 81

Byte 0	=	10 (16dec) length of supplementary data
Byte 1	=	HWY 0 - 7
Byte 2	=	HWY 8 - 15
Byte 3	=	HWY 16 - 23
.....		
Byte 16	=	HWY 120 - 127

F5220

SIU

DEF

Type:

Service-relevant (Format 20/22/43)

Short text:

SIU defect

Cause:

Format 20: SIU boards defective. All terminals are powered (but no dial tone).

Format 22: SIU micro processor error reported by the RTO. Format 43: SIU part on NCUI board defective.

System reaction:

Format 43: The AP is locked. (Format 43: TDS TEST FAILED: The AP is locked and put back into service.

Action:

Format 20/22: Replace SIU board. Format 43: NCUI board has to be replaced.

Format 43: TDS TEST FAILED: If the error occurs again, replace NCUI board.

F5222

SIU

SPORAD

Type:

Error messages

Service-specific (Format 20/22)

Short text:

Sporadic error

Cause:

Format 20: Sporadic error. Only for statistics. Format 22: Sporadic SIU microprocessor error reported by the routine test organization.

Action:

Format 22: Check board and replace if necessary.

F5225

SIU

PER DEF

Type:

Service-specific (Format 20)

Short text:

SIU peripherals defective

Cause:

SIU peripherals defective.

Action:

Replace board.

F5227

SIU

INIT ERROR

Type:

Service-specific (Format 20)

Short text:

Initialization error

Cause:

SIU board initialization error.

Action:

Evaluate auxiliary data.

Interpretation of auxiliary data:

Byte 2	Initialization error (DB_M_QC_ERROR_SET)	
	39	Board in service (can occur if byte 3 = H'0B)

	3A	Wrong board or board incorrectly configured (see F5242)
	3B	Board not present
	3C	Board defective
	3D	Board correctly configured (see F5243)
	3E	SIU NOT LOADED, SIU portion on RTM (DSCXL) could not be loaded (see Byte 3 LOAD_RESULT 2A, 2B, 2C)
Byte 3	Error loading the loadware (DB_M_LC_LOAD_RESULT_SET)	
	00	Defective board, board self test negative
	01	Board not loaded (error on the board)
	02	Error loading the loadware to the board, checksum verification negative, hardware error on the board or loadware error on the HD.
	03	Board OK (can also occur if byte 0 = H'3A)
	04	Loadware loaded
	05	Loadware not found on HD
	06	Loadware on HD faulty or corrupt
	07	Board not available (NPR)
	0B	Loadware not found or board not in PIT load table
	0C	Negative PGL load result
	0D	Negative PGL286 load result, PGL286 timer expired
	0F	Board is configured but not inserted
	10	Board available, but load operation not yet acknowledged by board
	11	LW is loaded, now load the data
	18	Cancel the load operation
	19	Board sent no load acknowledgement
	1A	Wrong board (see F5242)
	1B	No response from ADS
	1C	Retrieval of a buffered load task
	1D	Cancel a load operation due to insufficient resources
	1E	Message could not be sent or received
	F1	Board not loaded (in the case of individual commissioning with USSU: Wrong board or load interruption or missing load acknowledgement)
	2A	MISSING HD FILES, File on HD not found (e.g., Loadware file for tones)
	2B	UNPL FILE CONTENTEND, Contents of file on HD is not plausible

	2C	FTP LOGON PROBLEM

F5228

SIU

CON RESP

Type:

Service-specific (Format 20)

Short text:

Transmission error

Cause:

Transmission error on the HDLC link.

Action:

Check the appropriate hardware, depending on the system type (shelf and HDLC link).

F5229

SIU

TEST DEF

Type:

Service-specific (Format 20/22)

Short text:

Test transmitter/receiver defective

1) Format 20: Test transmitter/receiver defective.

- Format 22: Reported by the RTO.

Action:

Format 20: replace board

F5230

SIU

BAD DIALTONE

Type:

Service-specific (Format 20/22)

Short text:

Bad external dial tone

- 1) Format 20: Bad external dial tone.
 - Format 22: Reported by the RTO.

Action:

Format 20: replace board

F5232

SIU

BAD PULSED TONE

Type:

Service-specific (Format 20/22)

Short text:

Bad cadenced tone (internal dial tone)

- 1) Format 20: Bad cadenced tone (internal dial tone)
 - Format 22: Reported by the RTO.

Action:

Format 20: replace board

F5233

SIU

DTR DEF

Type:

Service-specific (Format 20/22)

Short text:

Dial tone receiver defective

- 1) Format 20: Dial tone receiver of SIU defective. No exchange dial tone.
 - Format 22: Reported by the RTO.

Action:

Format 20: replace board

F5234

SIU

OUT (ATTENDANCE LIST)

Type:

Service-specific (Format 20)

Short text:

Error messages

Board not plugged

Cause:

Board pulled out, i.e. the board is no longer on the DCL's attendance list.

Action:

Replug board.

F5235

SIU

IN (ATTENDANCE LIST)

Type:

Service-specific (Format 20)

Short text:

Board replugged

Cause:

Board back on DCL attendance list.

Action:

Positive acknowledgment without action.

F5236

SIU

PER EVT ERROR

Type:

Service-specific (Format 20)

Short text:

Implausible message from SIU

Cause:

Peripheral processing has received an implausible message from the SIU firmware.

Action:

Check SIU board and replace if necessary.

F5237

SIU

MP EVT ERROR

Type:

Service-specific (Format 20)

Short text:

SIU cannot interpret message

Cause:

SIU firmware cannot interpret an incoming message.

Action:

Check SIU board and replace if necessary.

F5238

SIU

FUNCT DEF (FUNCT. DEF.)

Type:

Service-specific (Format 20/22)

Short text:

SIU defective

- 1) Format 20: SIU function bad.
- 2) a) Format 22: Reported by the routine test organization.

Action:

Format 20: replace board.

Additional HEX data is signaled with the following interpretation for the 80CMX-DSC:

Byte 0-4	:	Insignifcant data.
Byte 5	:	Length of subsequent auxiliary data:
Byte 6	:	Bit 0: LRC error for announcements
	Bit 6:	LRC error for MOH:
	Bit 7:	HW error: replace DSC80
Byte 7-37	:	Only to be interpreted by the loadware developers.

F5240

SIU

CS DEF

Type:

Service-specific (Format 22)

Short text:

Code transmitter defective

Cause:

Error messages

Code transmitter of SIU board defective. No dialing possible for DTMF telephones.

Action:

Replace SIU board.

F5241

SIU
CR DEF

Type:

Service-specific (Format 22)

Short text:

Code receiver defective

Cause:

Code transmitter of SIU board defective. No dialing possible for DTMF telephones.

Action:

Replace SIU board.

F5242

SIU
CONFIG ERROR

Type:

Service-relevant (Format 20)

Short text:

SIU incorrectly configured

Cause:

The central SIU board was incorrectly configured or an incorrect board type was connected. The boot operation was not completed.

Action:

A hard restart is performed if the error is not rectified within a specific period of time (20 min.).

Interpretation of auxiliary data:

SICOE special case: There is a model with and without MTS extension.

Byte 2	Initialization error (DB_M_QC_ERROR_SET)	
	3A	Incorrect board or board incorrectly configured
	3B	Board not present

	3C	Board defective
	3D	Board correctly configured (see F5243)
Byte 3	Error loading the loadware (DB_M_LC_LOAD_RESULT_SET)	
	00	Defective board, board self test negative
	01	Board not loaded (error on the board)
	02	Error loading the loadware to the board, checksum verification negative, hardware error on the board or loadware error on the HD.
	03	Board OK (can also occur if byte 0 = H'3A)
	04	Loadware loaded
	05	Loadware not found on HD
	06	Loadware on HD faulty or corrupt
	07	Board not available (NPR)
	0B	Loadware was not found or board not in PIT load table
	0C	Negative PGL load result
	0D	Negative PGL286 load result, PGL286 timer expired
	0F	Board is configured but not inserted
	10	Board available, but load operation not yet acknowledged by board
	11	LW is loaded, now load the data
	18	Cancel the load operation
	19	Board sent no load acknowledgement
	1A	Wrong board
	1B	No response from ADS
	1C	Retrieval of a buffered load task
	1D	Cancel a load operation due to insufficient resources
	1E	Message could not be sent or received
	1F	Board not loaded (in the case of individual commissioning with USSU: Wrong board or load interruption or missing load acknowledgement)

F5243

SIU

CONFIG OK

Type:

Service-specific (Format 20)

Error messages

Short text:

Board configuration corrected

Cause:

The configuration error on the central SIU board was corrected. Startup was completed.

Action:

Positive acknowledgment without action.

Byte 2	=	Initialization error (DB_M_QC_ERROR_SET)
	3A	Wrong board or board incorrectly configured (F5242)
	3B	Board not inserted
	3C	Board defective
	3D	Board configuration corrected (F5243)
Byte 3	=	Error during LW initialization (DB_M_LC_LOAD_RESULT_SET)
	00	Defective board, board self-test negative
	01	Board not loaded (fault on board)
	02	Error during loadware initialization on board, checksum verification negative, hardware fault on board or loadware error on hard disk.
	03	Board okay (can also occur if byte 0 = H'3A)
	04	Loadware loaded
	05	Loadware not found on hard disk
	06	Loadware on hard disk defective or corrupted
	07	Board not present (NPR)

F5250

DCL

COP READY

Type:

Diagnosis-specific (Format H'42)

Short text:

DSC80: message Co-processor (CoP) ready

Cause:

Information on the last restart of the DSC80 co-processor is displayed if a co-processor error (see [F5251](#), [F5252](#), [F5255](#), [F5257](#)) is followed by a restart. This message is always output in conjunction with the message relating to the cause of the error and is only required for interpretation by loadware developers.

Action:

No action necessary.

F5251

DCL

COP HARD ERROR

Type:

Diagnosis-specific (Format H'42)

Short text:

DSC80: critical error in co-processor (CoP)

Cause:

A critical error has occurred on the co-processor (P68340) of the DSC80. This error always results in a hard restart, since the co-processor cannot run. If the same error recurs during the subsequent restart, the restart is delayed for one hour. Other possible messages are available in the HW-DPR contents or a COP ready message ([F5250](#)) for interpretation by the loadware developers and/or a message indicating a delayed restart.

Action:

Save the error message and contact your [Next level of support](#). In certain circumstances, the problem may be solved by replacing the DSC80 board and/or the loadware on the hard disk.

F5252

DCL

COP EXCEPTION

Type:

Diagnosis-specific (Format H'42)

Short text:

DSC80: Co-processor (CoP) program conflict

Cause:

A program conflict (exception situation) has occurred on the co-processor (P68340) of the DSC80. This error is treated statistically. In the event of a statistics overflow, a soft restart is initiated. Other possible messages are available in the HW-DPR contents or a COP ready message ([F5250](#)) for interpretation by the loadware developers.

Action:

Save the error message and contact your [Next level of support](#).

F5253

DCL

MP ERROR

Type:

Diagnosis-specific (Format H'42)

Short text:

DSC80: error in process of the micro-processor (MP)

Cause:

The MP has come across an internal error, e.g. DPR invalid, OS Call Fault or an earlier QDLC-CMP exception. Up to two (logically associated) messages may be sent. The system's response varies according to the gravity of the error: it performs a soft restart, increments the statistics, or does not respond at all.

Action:

Save error message and contact your [Next level of support](#).

F5254

DCL

MP PGL ERROR

Type:

Diagnosis-specific (Format H'42)

Short text:

DSC80: micro-processor program loader error (PGL)

Cause:

The micro-processor (MP) has come across a program loader error. Up to two (logically associated) messages may be sent. The error causes a hard restart.

Action:

Save error message and contact your [Next level of support](#). In certain circumstances the problem may be solved by replacing the loadware on the hard disk.

F5255

DCL

MP COP FATAL ERROR

Type:

Diagnosis-specific (Format 42)

Short text:

DSC80: micro-processor (MP) detects a fatal co-processor error (CoP).

Cause:

The MP has come across a time overflow error in the co-processor of the DSC80. This error indicates that the co-processor has previously responded to the MP. Up to two (logically associated) messages may be sent.

System reaction:

The error causes a hard restart.

Action:

Save error message and contact your [Next level of support](#).

F5256

DCL

MP COP UNEXP RESULT

Type:

Diagnosis-specific (Format H'42)

Short text:

DSC80: micro-processor (MP) receives an unexpected result code from the co-processor (CoP).

Cause:

An unexpected result code was returned by the co-processor (LP). Up to two (logically associated) messages may be sent.

Cause:

This error causes a soft restart.

Action:

Save error message and contact your [Next level of support](#).

F5257

DCL

MP COP STARTUP ERROR

Type:

Diagnosis-specific (Format H'42)

Short text:

DSC80: co-processor (CoP) time overflow during startup.

Cause:

The micro-processor (MP) returns a co-processor error (time overflow) before the co-processor reaches normal operational status. Up to two (logically associated) messages may be sent.

System reaction:

The error causes a hard restart and the co-processor loadware may be reloaded under certain conditions.

Action:

Save message and contact your [Next level of support](#) verständigen.

F5258

DCL
HSR ADVISORY

Type:
Service-relevant (format 42)

Short text:
Advisory message from the HiPath Signaling Router (HSR) SW complex

Cause:
The HiPath Signaling Router (HSR) outputs an advisory message when a problem with the IP signaling connection to an AP is detected.

System reaction:
The HSR requests one of two possible reactions:

- Minor errors are signaled only.
- Fatal errors are signaled and additionally a hard restart is executed.

Action:
Depends on the error code in line 2. If the error cannot be resolved, save the error message data and contact a product specialist.

Interpretation of auxiliary data:
The auxiliary data comprises diagnosis data entered by the HSR for the product specialist. The error code in line 2 is output additionally as text.

Examples:

```
H'C615
F5258 E8 N1297 NO ACT   BPB   DCL       HSR ADVISORY           02-10-21 16:29:16
ALARM CLASS:CENTRAL:016
FORMAT:42  MESSAGE-ID: 05063  MESSAGE 01 OF 01
ADDR: A200:13B7  ERROR-CODE: C615
0A28
    19                                     ls_no
25
    00
    67008025090F0000                     socket_handle
    C77B00C8                             ip_addr
199.123.0.200
    03                                     connection_state
conn_established
    3400584F                             tpi_ptr_byte_count
    00                                     receive_state
wait_for_header
    FFFF0000                             receive_buffer
    0300                                tcpip_conn_setup_tries
    6404                                tcpip_local_port_addr
1124
    BA00                                blockade_count
186
```


01		action_ncui_has_to_do
reload		
01		action_ncui_has_done
reload		
14		
number_send_buffer_in_queue	20	
70D21424		link_first_send_buffer
10111424		link_last_send_buffer
14		max_send_buffer_used
20		
14		send_buffer_limit
20		
5802		max_wait_time_send
600		
FF FF0000		send_al_msg_tok
FFFF0000		send_al_tim_tok
FFFF0000		resp_mbx_tok_al
FFFF0000		stop_conn_msg_tok
FF		
FF0000		stop_conn_tim_tok
FFFF0000		conn_repeat_tim_tok
FFFF0000		conn_resp_tim_tok
00		al_state
02		send_receive_permission
receive_allowed		
01		data_in_buffer
TRUE		
6D020000		single_msg_discarded
621		
00000000		multi_msg_discarded
A31E2B02		
timestamp_tpi_send_not_ok		
		FFFFFFFFFFFF
H'C618		
F5258 E8 N4113 NO ACT BPA DCL HSR ADVISORY	02-10-23 13:58:00	
ALARM CLASS:CENTRAL:016		
FORMAT:42 MESSAGE-ID: 01190 MESSAGE 01 OF 01		
ADDR: A200:10DC ERROR-CODE: C618		
2900		
11		ls_no
17		
0		
4300802501020000		socket_handle
430102B4		ip_addr
67.1.2.180		
03		connection_state
conn_established		
3400A858		tpi_ptr_byte_count
00		receive_state
wait_for_header		

Error messages

	FFFF0000	receive_buffer
	5B00	tcpip_conn_setup_tries
	6404	tcpip_local_port_addr
1124		
	BC0B	blockade_count
3004		
01		action_ncui_has_to_do
reload		
01		action_ncui_has_done
reload		
05		
number_send_buffer_in_queue	5	
30335471		link_first_send_buffer
	F0495471	link_last_send_buffer
	05	max_send_buffer_used
5		
	14	send_buffer_limit
20		
	5802	max_wait_time_send
600		
	FF FF0000	send_al_msg_tok
	FFFF0000	send_al_tim_tok
	FFFF0000	resp_mbx_tok_al
	FFFF0000	stop_conn_msg_tok
	FF	
FF0000		stop_conn_tim_tok
	FFFF0000	conn_repeat_tim_tok
	FFFF0000	conn_resp_tim_tok
	00	al_state
	02	send_receive_permission
receive_allowed		
	01	data_in_buffer
TRUE		
	2400 0000	single_msg_discarded
36		
	03000000	multi_msg_discarded
	AC859A00	
timestamp_tpi_send_not_ok		
	FFFFFFFFFFFF	

H'0C280 - Wrong NCUI-LW on HD:

The LW/cryptlib version on the hard disk is incorrect. It cannot be used to encrypt messages to NCUI.

H'0C281 - Cryptlib call fault:

cryptlib is a program library for decrypting or encrypting signaling messages during active signaling encryption (CHANGE - SIPCO:TYPE=SECURITY, IPDAENCR=YES;) This error may be due to: HW and/or SW error in the BP. This error may be due to faulty SW (faulty or incorrectly copied APS), faulty patches, HW errors in the BP or errors when loading the SW. Solution: Check the system history and monitor for further implausible error messages in order to isolate the error. If the error occurs without warning and without any changes to or reconfiguration of the software, it is likely that the BP (or power supply) is defective (bit flip/read error in the RAM or CPU cache). Other implausible error messages can then also be expected. In the case of bit flips in the RAM, the error may not disappear until a reload is performed. If the error still remains even after the BP is reloaded (reload following escalation), this may be due to the APS on the HD or a patch installed on the HD. An error may also repeatedly occur when loading the SW. Other implausible error messages can then also be expected here. If the HSR SW detects this error, you can expect that it will no longer be possible to encrypt or decrypt messages. The SW attempts to correct this by way of reinitialization via restart. The error is recognized by the fact that central cryptlib data is no longer plausible. In individual cases, it may also happen that "only" connection-specific data is no longer plausible. In such cases, the SW attempts connection-specific repairs. If this is not successful, it can be assumed that the problem is not just occurring sporadically, but globally. This is determined by statistical analysis in the HSR. 9 errors only are reported during a specific unit of time, the 10th error then leads to a repair attempt via a hard restart, with the aim of repairing the cryptlib again. In most cases, the following applies: save the error message data and contact a product specialist.

H'0C282 - AP security inconsistent:

The switches for signaling and voice encryption were modified using the AMO SIPCO. As a result, new TCP/IP connections to the AP shelves were established with the new values while the previous values remain valid for the previous connections. Repair: renew all TCP/IP connections, e.g. by performing a soft restart of the active BP. Repair: Check the file ":PDS:apsp/lrg/lga0/pzkncl40" on the HHD and replace with the newest version.

F5259

DCL

AP CONNECTION NEW

Type:

Diagnosis-relevant (Format 40)

Short text:

Connection to Access Point restored.

Cause:

After the loss of connection or a restart/reload, an attempt was made to set up a connection to the access point again.

System reaction:

None.

Action:

No action required.

F5260

CONF

CONTR RESP ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5260 = [F5340](#)

F5262

CONF

DATA OVERFLOW

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5262 = [F5342](#)

F5263

CONF

HDLC ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5263 = [F5343](#)

F5264

CONF

HW ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5264 = [F5344](#)

F5265

CONF

INIT ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5265 = [F5345](#)

F5266

CONF

LOOP DATA ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5266 = [F5346](#)

F5267

CONF

MP EC ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5267 = [F5347](#)

F5268

CONF

MP LW ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5268 = [F5348](#)

F5269

CONF

MSG NOT TRANSMITTABLE

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5269 = [F5349](#)

F5270

CONF

SECONDARY IN ATTEND L

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5270 = [F5350](#)

F5271

CONF

PER ADDR ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5271 = [F5351](#)

F5272

CONF

PER EVT ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5272 = [F5352](#)

F5273

CONF

REGISTER ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5273 = [F5353](#)

F5274

CONF

SECONDARY OUT ATTEND L

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5274 = [F5354](#)

F5275

CONF

SPOR ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5275 = [F5355](#)

F5276

CONF

STATUS WORD ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5276 = [F5356](#)

F5278

CONF

TIME ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5278 = [F5358](#)

F5279

CONF
PIT ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5279 = [F5359](#)

F5291

CONF
STAT OVERFLOW

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5291 = [F5371](#)

F5293

CONF
STOP NEW SEIZURES

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5293 = [F5373](#)

F5294

CONF
START NEW SEIZURES

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5294 = [F5374](#)

F5296

CONF
DFE ERROR

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5296 = [F5376](#)

F5297

CONF
RMS LEFT

Note: The description of this error message corresponds to the description of the following error message from the BOARD area: F5297 = [F5377](#)

F5304

LTUC

CONTR RESP

Type:

Service-specific (Format 22)

Short text:

Control response error.

Cause:

Control response error from LTUC board. PP performs a routine PBC control response check. PP received an errored control response byte from the PBC of the LTUC. The PBC may be defective since the FW and the MP are not affected. The PBC command of the job message is reflected in the HEX data and the contents of the PBC control response register are output.

System reaction:

resets shelf on DCL, blocks the LTUC and attempts to start up.

1) Switch LTU off/on with USSU AMO,

- Check LTUC with routine test order,
- Switch LTU power off/on (= reset LTUC)
- Replace LTUC board if necessary.

Byte 0	=	02 Length of the subsequent related data
Byte 1	=	PBC job message command
Byte 2	=	PBC control response register

F5305

LTUC

HW ERROR

Type:

Service relevant (Format 22, Format 43)

Short text:

Error in the LTUC hardware.

Cause:

The trigger is recognized by the LTUC firmware. A defective LTU power supply may be the cause of this error.

System reaction:

The system attempts to put the LTUC board back into service after one minute. The LTUC board is blocked and an attempt to put it back into service is initiated.

Action:

Disconnect the LTU power supply and replace the LTUC board if it did not start up. Check the LTU power supply.

Interpretation of auxiliary data:

Format 22: interpretation is done like till now. Format 43: The auxiliary data bytes in hexadecimal value are replaced by a more meaningful text message. EXT messages ersetzt. Je to Ursache (Reason) gibt VZANL verschiedene Erläuterungsfelder:

Reason: 00H MICROPROCESSOR ERROR Reason: 01H EPROM ERROR
Reason: 02H RAM ERROR Reason: 03H PBC ERROR Reason: 04H MUSAC1 DEFECTIVE Reason: 05H MUSAC2 DEFECTIVE Reason: 06H NO ACTIVE SIGNAL Reason: 07H MUSAC1 AND 2 DEFECTIVE Reason: 08H not used
Reason: 09H PLL1 DEFECTIVE Reason: 0AH PLL2 DEFECTIVE Reason: 0BH BOTH PLL DEFECTIVE Reason: 0CH BUFFER OVERFLOW Reason: 0DH MUSAC3 DEFECTIVE Reason: 0EH MUSAC4 DEFECTIVE Reason: 0FH ALL MUSACS DEFECTIVE

No more information on these information texts is available at present.

Reason: 10H WRONG CBM PARAMETER

Type:

Service relevant

Short text:

Error in the configuration of CBM parameters.

Cause:

The configuration of CBM parameters does not match the number or type of the available CBM modules on the board (LTUCC, NCUI). After startup of the board, the LW is able to recognize wrong configured CBM parameters. This can happen although the parameters will be checked on plausibility by the AMOs.

System reaction:

The affected CBM module on the board is locked and an alarm is generated.

Action:

The wrong parameters have to be corrected by the service and the board has to be loaded again.

CBM module:	00H-07H	Number of affected CBM module on the board
Wrong parameter:	00H	A/U-LAW CONVERSION
	01H	ECHO CANCELLATION
	02H	VOICE COMPRESSION
	03H	TOO LESS MODULES
text string:		Error description text filled in by board LW.
auxiliary data:		Diagnosis data filled in by board LW for product specialist.

Reason: 11H CBM MODULE DEFECTIVE (LW) Reason: 12H CBM MODULE DEFECTIVE (RTO)

Type:

Error messages

Service relevant

Short text:

Defective CBM module on the board.

Cause:

During operation the board LW recognizes a defective CBM module (e.g. SILEC chip) during routine monitoring. The defective CBM module may also be detected by RTO.

System reaction:

An alarm is generated. **LTUCC board:** The CBM module is locked. All existing calls with a/μ-conversion and/or echo cancellation are rerouted to normal HWYs. No switching to another CBM module with free CBM resources is intended. **NCUI board:** The CBM module is locked. No CBM functionality is available any longer. No call from the AP shelf to the IP network are possible any longer.

Action:

The whole board has to be replaced.

CBM module:	00H-07H	Number of affected CBM module on the board
HWY/TSL table:		All HWY/TSLs of the defective CBM module (32 x 3Bytes: 1Byte TSL and 2Bytes HWY); This table is only valid for LTUCC, not for NCUI.
text string:		Error description text filled in by board LW.
auxiliary data:		Diagnosis data filled in by board LW for product specialist.

Reason: 13H NO CBM RESOURCES Reason: 14H WRONG CBM CONNECTION DATA

Type:

Service relevant

Short text:

No CBM resources available on the board.

Cause:

A CP switching order arrives at LTUC after the defect of a CBM module has been recognized by LW, but the resources have not been corrected in the SWU database yet. This situation can occur also when the CBM resources (counters etc.) diverges in LTUC and SWU database.

System reaction:

The CBM resources in SWU and LTUC will be synchronized for this shelf. From this time on CP has to reject calls for a/μ-conversion because of lack of CBM resources or use the normal HWYs without CBM when only echo cancellation is required.

Action:

The complete LTUCC board has to be replaced.

CBM Path:	HWY/TSL of failed call

CBM Type:	xxxxxxx1	a/μ-conversion has to be applied to this TSL
	xxxxxx1x	Echo Cancellation has to be applied to this TSL
	xxxxx1xx	a/μ-conversion and/or echo cancellation are performed on the channel of a SIDEDEC that is configured for 32 ms echo cancellation.
	xxxx1xxx	a/μ-conversion and/or echo cancellation are performed on the channel of a SIDEDEC that is configured for 64 ms echo cancellation.
	xxx1xxxx	a/μ-conversion and/or echo cancellation are performed on the channel of a SIDEDEC that is configured for 128 ms echo cancellation.
	xx1xxxxx	The channel for the byte manipulation of this TSL is located on a SIDEDEC that is defective. It is assumed that no more byte manipulation is performed, the byte manipulation describing bits above are kept for testing purposes.
	x1xxxxxx	The VECO flag will be set at any time that CP changes the kind of byte manipulation by setting or resetting one of the byte manipulation describing bits above. Changing the SIDEDEC-defect-bit (previous bit) will not influence the VECO flag.
	e.g.: 00001010	Echo cancellation on, SIDEDEC configured for 64 ms echo cancellation.
CBM LW counters:		Actual CBM counters of LW. (Only for error 13H No CBM resources).
CBM CC counters:		Actual CBM counters in CC. (Only for error 13H No CBM resources).
text string:		Error text as ASCII string, delivered by LW.
auxiliary data:		Auxiliary data delivered by LW, displayed as HEX values.

Reason: 15H 19 INCH EXPANSION BOX EXISTS

Type:

Service relevant.

Short text:

The expansion box for 19inch NBCS AP does not exist.

Cause:

This message should never be signaled because it describes the normal working operation.

System reaction:

An alarm is generated.

Action:

No action necessary.

Interpretation of auxiliary data:

No auxiliary data available.

Reason: 16H 19 INCH EXPANSION BOX NOT EXIST

Type:

Service relevant.

Short text:

The expansion box for 19inch NBCS AP does not exist.

Cause:

The expansion box of a 19inch NBCS AP does not exist or is not connected to the 19inch base box or is not powered on. This error message is only signaled if peripheral boards are configured in the expansion box. It is not signaled if there are no peripheral boards configured and therefore the expansion box is not necessary at all.

System reaction:

An alarm is generated.

Action:

It has to be checked if the expansion box is not connected to the base box or if it is not powered on or if it is missing at all. The expansion box has to be installed.

Interpretation of auxiliary data:

No auxiliary data available.

Reason: 17H POWER SUPPLY ERROR Reason: 18H POWER SUPPLY OK

Type:

Service relevant.

Short text:

Power supply error/ok

Cause:

17H: A power supply module in a peripheral shelf is defective. This error message indicates a problem with the power supply module for a standard LTU shelf (DC or AC signal from a power supply unit) as well as for a 19inch LTU (power supply signal of the base box or the expansion box). fault messages weist ASC on Problem WITH dem Power supply module für one STANDARD LTUboardtype (DC oder AC-Signal einer Stromversorgungseinheit) and auch für one 19 Zoll LTU (Stromversorgungssignal der Basisbox oder der Erweiterungsbox) hin. **18H:** The power supply module is ok. This message is not sent during normal startup because then this is the normal operation mode. Starts gesendet, weil VZANL sich DANS um VERB normalen Betriebsmodus handelt. It is only sent after the power supply error has been signaled and the power supply module has been replaced. It is only sent after the power supply error has been signaled and the power supply module has been replaced. ersetzt wurde.

System reaction:

An alarm is generated.

Action:

The affected defective power supply module has to be replaced immediately to avoid further damages.

Power supply module	00H	DC POWER SUPPLY
	01H	AC POWER SUPPLY

	02H	19 INCH BASE BOX POWER SUPPLY
	03H	19 INCH EXPANSION BOX POWER SUPPLY

Reason: 19H FAN ERROR Reason: 1AH FAN OK

Type:

Service relevant.

Short text:

Fan error/ok.

Cause:

19H: A fan module in the 19inch LTU is defective. **1AH:** The fan module is ok. This message is only sent for a fan module which has been defective before. defekt war. The message is not sent after normal startup because this is the normal operation mode. Betriebsmodus CURR.

System reaction:

An alarm is generated.

Action:

The affected defective fan module has to be replaced immediately to avoid further damages

FAN module:	00H	19 INCH BASE BOX FAN 1
	01H	19 INCH BASE BOX FAN 2
	02H	19 INCH EXPANSION BOX FAN 1
	03H	19 INCH EXPANSION BOX FAN 2

Reason: 1BH RESET REASON

Type:

Service relevant.

Short text:

LTU control board reset reason (NCUI)

Cause:

There exist some resets of the LTUC control board which are initiated by the control board itself. The system software does not know these resets. With this message, the LTU control board signals the reason for the reset after the board is coming up again.

System reaction:

Only signaling.

Action:

No special action necessary.

Reset type:	00H	BOARD HARD RESET
	01H	BOARD SOFT RESET

Error messages

Reset reason:	00H	WATCHDOG EXPIRED
	01H	PUSH BUTTON
	02H	PROCESSOR INTERRUPT LW
text string	Error text as ASCII string, delivered by LW.	
auxiliary data	Auxiliary data delivered by LW, displayed as HEX values.	

Reason: 1CHCBM MOULE DEFECTIVE (SELFTEST)

Type:

Service relevant

Short text:

Defective CBM module on the board.

Cause:

After startup the selftest recognizes a defective CBM module (e.g. SIDEC chip).

System reaction:

An alarm is generated. **NCUI board:** The CBM module is locked. No CBM functionality is available any longer. No call from the AP shelf to the IP network are possible any longer.

Action:

The whole board has to be replaced.

CBM module:	00H-07H	Number of affected CBM module on the board
HWY/TSL table:		All HWY/TSLs of the defective CBM module (32 x 3Bytes: 1Byte TSL and 2Bytes HWY); This table is only valid for LTUCC, not for NCUI.
text string:		Error description text filled in by board LW.
auxiliary data:		Diagnosis data filled in by board LW for product specialist.

Reason: 1DH NO CP PATH RESOURCES IN PERIPHERY

Type:

Service relevant

Short text:

No CP path resources in periphery

Cause:

The loadware of the LTU control board has detect that there were not enough CP resources on the board to establish a requested call. The resource management between loadware and system software diverges. The path resource type addresses the exact resource which is different.

System reaction:

VECO checks the differences in resource management and releases call attempts which are not properly seized.

Action:

No special action necessary.

Path resource type:	00H	A/U-LAW CONVERSION
	01H	ECHO CANCELLATION
	02H	VOICE COMPRESSION
	03H	ATM EXTERNAL NETWORK PATH
	04H	IP EXTERNAL NETWORK PATH
text string:		Error description text filled in by board LW.
auxiliary data:		Diagnosis data filled in by board LW for product specialist.

Reason: 1EH MUSAC_A ERROR (LW)

Type:

Service relevant

Short text:

MUSAC_A device defective.

Cause:

The loadware of the LTU control board (NCUI) has detected a defective MUSAC_A device during normal operation. Calls can no longer be properly established.

System reaction:

The whole LTU control board is locked and set to DEF. This affects also the whole LTU shelf. The LTU control board is added to the 'in service task' to try starting up the board after some minutes.

Action:

If the board and the LTU comes up properly after the 'in service task', the MUSAC_A error was a result of a driver access and is now solved. If the board does not come up properly, an INIT ERROR is sent. The board has to be replaced.

text string:	Error description text filled in by board LW.
auxiliary data:	Diagnosis data filled in by board LW for product specialist.

Reason: 1FH RG/WG ACTIVE Reason: 20H RG/WG INACTIVE

Type:

Service relevant

Short text:

RG/WG active/inactive

Cause:

1FH: The LTU control board loadware has detected the signal of a RG/WG board or modul (In a 19inch shelf only a RG module is possible). eines RG/WG-Moduls (ANKE einer 19"boardtype CURR nur on RG-Modul möglich) erkannt. This message should never be displayed, because it describes the normal

Error messages

operation mode. This message should never be displayed, because it describes the normal operation mode. **20H:** The control board loadware has not detected the signal of a RG/WG board or modul (In a 19inch shelf only a RG module is possible). eines RG/WG-Moduls (ANKE einer 19"boardtype CURR nur on RG-Modul möglich) erkannt. This message is only displayed, if the affected signal is really needed. This message is only displayed, if the affected signal is really needed. The RG signal is needed if a SLMA board is configured, the WG signal is needed if a TMLBL/TMBCT board is configured. wird benötigt, wenn one SLMA-Baugruppe konfiguriert wird, RKOABS WG-Signal wird benötigt, wenn one TMLBL/TMBCT-Baugruppe konfiguriert wird.

System reaction:

1FH: DC status of appropriate SYN signal is set. **20H:** DC status of appropriate SYN signal is set. An alarm is generated.

Action:

1FH:No special action necessary. **20H:**Check if the necessary RG/WG board or RG module is mounted. boot-ix is installed Replace the defective RG/ WG board or RG module.

RG/WG device:	00H	RG STANDARD BOARD
	01H	WG STANDARD BOARD
	02H	RG IN 19 INCH BASE BOX
	03H	RG IN 19 INCH EXPANSION BOX

Reason: 21H TOO MANY RG/WG INSERTED

Type:

Service relevant

Short text:

Too many RG/WG devices mounted

Cause:

The LTU control board loadware in a standard LTU shelf has detected, that too many RG/WG devices are mounted. It is physically possible in a standard LTU shelf to mount a RG/WG module on the backplane additionally to a inserted RG/WG board. But this would lead to damaging one or both devices and therefore is not allowed.

System reaction:

The LTU control board loadware does not initialise the RG/WG board. An alarm is generated.

Action:

Unmount the RG/WG board to avoid damaging.

RG/WG device:	00H	RG STANDARD BOARD
	01H	WG STANDARD BOARD

Reason: 22H AP SIU ERROR (LW) Reason: 23H AP CG EROR (LW) Reason: 24H AP DCL ERROR (LW)

Type:

Service relevant

Short text:

22H: AP SIU error (detected during normal operation by LW) **23H:** AP CG error (detected during normal operation by LW) **24H:** AP DCL error (detected during normal operation by LW)

Cause:

The loadware of the LTU control board (NCUI) in a NBCS AP shelf has detected a defective SIU/CG/DCL part on the board during normal operation. A proper operation of the LTU is no longer possible.

System reaction:

The whole LTU control board is locked and set to DEF. This affects also the whole LTU shelf. The LTU control board is added to the 'in service task' to try starting up the board after some minutes.

Action:

If the board and the LTU comes up properly after the 'in service task', the SIU/CG/DCL error was a result of a driver access and is now solved. If the board does not come up properly, an INIT ERROR is sent. The board has to be replaced.

text string:	Error description text filled in by board LW.
auxiliary data:	Diagnosis data filled in by board LW for product specialist.

Reason: 25H AP V24 ERROR (LW) Reason: 26H AP ETHERNET ERROR (LW) Reason: 27H AP V24 ERROR (SELFTEST) Reason: 28H AP ETHERNET ERROR (SELFTEST)

Type:

Service relevant

Short text:

25H: AP V24 interface error (detected during normal operation by LW) auxiliary data: **26H:** AP Ethernet interface error (detected during normal operation by LW) durch auxiliary data) **27H:** AP V24 interface error (detected during startup by board selftest) Eigentest erkannt) **28H:** AP Ethernet interface error (detected during startup by board selftest) The board is added to the 'in service task'.

Cause:

The loadware or the selftest of the LTU control board (NCUI) in a NBCS AP shelf has detected an error on the V24/Ethernet interface on the board. If a V24 interface error occurs, the survivability path for NBCS can not be set up properly and/or the direct service access is impossible. If an Ethernet interface error occurs, the connection of an NBCS AP shelf to the IP network is no longer possible. If survivability is configured, the AP can still establish internal calls.

System reaction:

An alarm is generated.

Action:

Error messages

Sometimes a reset of the AP shelf solves the problem. The reset is not automatically started, because the shelf is able to operate partially with the error. Therefore the reset should be done manually when no calls are affected. If the reset of the AP shelf does not solve the problem, the LTU control board is really defective and has to be replaced.

text string:	Error description text filled in by board LW.
auxiliary data:	Diagnosis data filled in by board LW for product specialist.

Reason: 29H ETHERNET INTERFACE ERROR

Type:

Service-relevant

Short text:

29H Ethernet interface error (LAN connection no longer available)

Cause:

The LW detected an interruption on the Ethernet interface. If a connection to the IP network is set up over the second Ethernet interface, the board switches over to this second interface. Ethernet-Schnittstelle one Connection Private or IP-Netzwerk besteht, wird ASC der boardtype ASC diese 2. interface umgeschaltet.

System reaction:

The error is signaled and an alarm is generated.

Action:

Find out the cause of the Ethernet connection failure and correct it.

Interpretation of auxiliary data:

text string: Error description text filled in by board LW.

F5306

LTUC

IN (ATTENDANCE LIST)

Type:

Service-specific (Format 22)

Short text:

LTUC is back on the attendance list

Cause:

LTUC is in service once more and is back on the attendance list. Event signal came from DCL firmware.

System reaction:

starts up the LTUC

Action:

Positive acknowledgment without action.

Interpretation of auxiliary data:

can only be interpreted by your system specialist.

F5307

LTUC

INIT ERROR

Type:

Service relevant (Format 23)

Short text:

Initialization error

Cause:

LTUC board initialization error. LTUs that are not put into service are signaled with this message during the LTG boot operation.

System reaction:

LTUC already set as defective by DC.

Action:

Deactivate LTU and replace LTUC if load error is linked to the LTUC defect. Otherwise, perform procedure for tracing errors on the basis of the causes in byte 0 and byte 1 supplementary data.

Interpretation of auxiliary data:

Byte 1	Error loading the loadware (DB_M_LC_LOAD_RESULT_SET)
00	Defective board, board self-test negative
01	Board not loaded (error on the board)
02	Transmission error when loading the loadware to the board (checksum verification negative, hardware error on the board or loadware error on the HD)
03	Board OK (can also occur if byte 0 = H'3A)
04	Loadware loaded
05	Loadware not found on HD
06	Loadware on HD faulty or corrupt
07	Board not available (NPR)
08	Data not loaded
09	Copy operation terminated by RAM in the Flash.
0A	Loadware container loaded
0B	Loadware not found or board not in PIT load table
0C	Negative PGL load result

Error messages

0D	Negative PGL load result, PGL timer expired
0E	LW container greater than block
0F	Board is configured but not inserted
10	Board available, but load operation not yet acknowledged by board
11	Per. SIU: LW is loaded, now load the data
24	attend list not valid (The NCUI has not returned the attendant list about
25	wrong LTU type (Configuration of NCUI does not match the NBCS AP shelf type where it is plugged in; 19inch <-> standard shelf)
27	missing ID acknowledge (The NCUI in NBCS AP does not respond to a PIT ID check)

F5308

LTUC

OUT OF ATTENDANCE LIST

Type:

Service-specific (Format 22)

Short text:

LTUC is no longer on attendance list

Cause:

LTUC board has been pulled out, i.e. it is no longer on the attendance list. Alternatively, the LTUC board may be defective or the LTU power supply has failed. Event signal came from DCL firmware.

System reaction:

locks the LTUC

Action:

Re-plug LTUC board or replace, if necessary. Check LTU power supply

Interpretation of auxiliary data:

can only be interpreted by your system specialist.

F5309

LTUC

LOOP DATA ERROR

Type:

Service-specific (Format 18/22)

Short text:

RTO: Test loop insertion error

Cause:

Format 18: Test loop insertion error. Format 22: The RTO error message is entered in the HEX data.

Action:

Format 18: Replace board. Format 22: The LTUC and, hence, the shelf are automatically disabled.

Interpretation of auxiliary data:

Format 22:

Byte 0	=	Length of the auxiliary data
Byte 1	=	Destination Task
Byte 2	=	Source Task
	40	FA Main Task
	4D	RTO Task FA Peripheral
	4E	RTO Task AM
	4F	RTO Task RA Central
	50	RTO Task RA Peripheral 1
	51	RTO Task RA Peripheral 2
	52	RTO Task RA Peripheral 3
Byte 3	=	Processor Number
Byte 4	=	Counter
Byte 5	=	FA Event
	2D	RTO
Byte 6	=	FA Subevent Code
	00	RTO EP
	01	ZD LTU-HWY
	02	ZD CSN-HWY
	03	ZD SIU-DTO
	04	ZD SIU-PTO
	05	ZD SIU-CS/CR
	06	ZD CIR
	07	ZD SIUP-CS/CR
	08	ZD SIU-TST
	10	LTG Start

Error messages

	14	ZD TERM
Byte 7-8	=	LTG-LINE
Byte 19	=	LTG
Byte 20	=	LTU
Byte 21	=	PBC
Byte 22	=	CIR
Byte 23	=	B-Channel
Byte 24	=	Loop Back
Byte 25	=	Highway
Byte 26	=	Timeslot
Byte 27	=	First RTO Event
Byte 30	=	Curr RTO Event
Byte 31	=	User
	00	FA
	01	RA
	02	AM
	03	TDS
	04	EEA
Byte 32	=	Response Event
	2D	RTO
Byte 33	=	Test Result
	05	Test O.K.
	09	Loop Data Error
	0A	Status Word Error
	0D	Time Error (Time Out)
	0E	Tone Error
	0F	No Change Error

F5310

LTUC

MP EC ERROR

Type:

Diagnosis-specific (Format 22)

Short text:

Implausible event code received by LTUC

Cause:

The LTUC firmware has received a message from peripheral processing (PP) with an invalid event code (EC). The event signal came from the LTUC firmware.

System reaction:

signaling only.

Action:

Possible software error in system or firmware. Immediate action not possible; contact your [Next level of support](#).

Interpretation of auxiliary data:

for LTUC: Byte 0 = 01 Length of the subsequent related data Byte 1 = Implausible event code Interpretation of auxiliary data for LTUC: Byte 0 = Length of the subsequent related data (max. 32 bytes) Byte 1 = Implausible event code Byte 2-32 = Implausible message from PP to the LTUC MP. Can only be interpreted by your system specialist.

F5311

LTUC

PER EC ERROR

Type:

Diagnosis-specific (Format 22)

Short text:

Implausible event code from LTUC

Cause:

Peripheral processing (PP) received a message from the peripheral firmware with an implausible event code EC. The event signal came from peripheral processing in the LTUC.

System reaction:

signaling only.

Action:

Immediate action not possible; contact your [Next level of support](#).

Interpretation of auxiliary data:

for LTUC Byte 0 = 01 Length of the subsequent related data Byte 1 = Implausible event code Interpretation of auxiliary data for LTUC: Byte 0 = Length of the subsequent related data (max. 32 bytes) Byte 1 = Implausible event code Byte 2-32 = Invalid message from PP to the LTUC MP. Can only be interpreted by your system specialist.

F5312

LTUC

REGISTER ERROR

Type:

Service-specific (Format 18/22)

Short text:

RTO: peripheral board controller (PBC) error

Cause:

Format 18: Error in the code check register of the peripheral board controller (PBC). Replace appropriate board. Format 22: The entire error message sent by the RTO is entered in the HEX data.

Action:

Format 18: Replace appropriate board. Format 22: The board is automatically disabled.

Interpretation of auxiliary data:

Format 22: see [F5309](#).

F5313

LTUC

SPOR ERROR

Type:

Service-specific (Format 22)

Short text:

RTO: Sporadic error

Cause:

ACTION=NO ACT; sporadic error (advisory). ACTION=OUT SERV; sporadic error in conjunction with disable message generated due to peripheral error counter overflow. The RTO message is entered in the HEX data.

Action:

LTUC is disabled temporarily and subsequently reloaded. Replace board. If this does not work, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

for format 22, see [F5309](#).

F5314

LTUC

STATUS WORD ERROR

Type:

Service-specific (Format 22)

Short text:

RTO: RAM/PROM error.

Cause:

The LTUC and, as a result, the shelf are locked away. The entire message sent by the RTO is entered in the HEX data.

Action:

Replace appropriate board.

Interpretation of auxiliary data:

Format 22: see [F5309](#).

F5315

LTUC

TEST OK

Type:

Service-specific (Format 22)

Short text:

RTO: LTUC okay again.

Cause:

LTUC startup was interrupted by soft restart, startup repeated by CDC.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Format 22: see [F5309](#).

F5316

LTUC

TIME ERROR

Type:

Service-specific (Format 18/22)

Short text:

RTO: Timeout error

Cause:

Format 18: Timeout error. No response to routine test. System places the shelf out of service. Can sometimes be caused by LTU power failure. Alternatively,

an LTUC or SLMB failure may have been caused by adjacent TMBD or TMOM boards. The TMBD or TMOM boards must not be installed directly adjacent to an LTUC or SLMB. Another possibility is that the functional earth of the shelf does not correspond to the required values. Format 22: The RTO message is entered in the HEX data.

Action:

Switch shelf off and then on again, check shelf power supply.

Interpretation of auxiliary data:

Format 22: see [F5309](#).

F5325

LTUC

RGEN/ACGEN INSERTED

Type:

Service-specific (Format 18)

Short text:

Ring generator or AC generator board plugged

Cause:

Peripheral ringing/ac power generator board has been plugged in. Event signal came from LTUC firmware.

System reaction:

the RGEN or WGEN is released.

Action:

Positive acknowledgment without subsequent action.

F5326

LTUC

RGEN/ACGEN REMOVED

Type:

Service-specific (Format 18)

Short text:

RGEN or WGEN (ACGEN) have been unplugged

Cause:

Peripheral ringing/ac power generator board has been pulled out. Event signal came from LTUC firmware.

System reaction:

blocks the RGEN or WGEN. The boards programmed by RGEN (WGEN) are UNACH.

Action:

Replug board, replace if necessary.

F5327

LTUC

RGEN SYN OFF)

Type:

Service-specific (Format 18)

Short text:

SYN1 clock of RGEN missing

Cause:

No LTUC SYN1 clock (ringing current synchronization clock) from RGEN. Event signal came from LTUC firmware. Positive acknowledgment with [F5334](#).

System reaction:

blocks the RGEN

Action:

Replug RGEN board, replace if necessary. Check clock supply line. The error may be in the clock input of the LTUC; check LTUC.

F5328

LTUC

ACGEN SYN OFF

Type:

Service-specific (Format 18)

Short text:

SYN2 clock of ACGEN missing

Cause:

No LTUC SYN2 clock (AC synchronization clock) from ACGEN. Event signal came from LTUC firmware. Positive acknowledgment with [F5335](#).

System reaction:

locks the WGEN.

Action:

Plug in ACGEN board, replace if necessary. Check clock supply line. The error may be in the clock input of the LTUC; check LTUC.

F5329

LTUC

RGEN OVERLOAD

Type:

Service-specific (Format 23)

Short text:

Ringing current generator overloaded

Cause:

The ringing current generator is temporarily overloaded. If the overload does not end within 30 seconds, this will be interpreted as a board failure.

System reaction:

only signals overload.

Action:

- If these error messages frequently recur in a particular system, you should first replace the RGEN board. - Also check RG outputs during replacement for short-circuit connections. - If board failures persist, the system configuration must be revised (relocate some of the analog stations to other shelves).

F5330

LTUC

AC GEN OVERLOAD

Type:

Service-specific (Format 23)

Short text:

Alternating current generator overloaded

Cause:

The alternating current generator is temporarily overloaded. If the overload does not end within 30 seconds, this will be interpreted as a board failure.

System reaction:

only signals overloads.

Action:

- If these error messages frequently recur in a particular system, you should first replace the ACGEN board. - Also check ACGEN outputs during replacement for short-circuit connections. - If board failures persist, the system configuration must be revised (relocate some of the AC dialing circuits to other shelves).

F5331

LTUC

DEF

Type:

Service-specific (Format 18)

Short text:

LTUC board defective.

Cause:

Analysis of overall clock supervision reveals that the LTUC board is defective.
(Input clock, output clock, MUX or shelf distribution)

System reaction:

locks the LTUC and attempts to start up.

- Check LTUC clock signals. - Switch LTUC board off and back on via shelf rectifier (power-on reset). - Switch off LTU power and replace LTUC board. See also [F5333](#).

F5332

LTUC

STBY CLOCK DEF

Type:

Service-specific (Format 18)

Short text:

Standby clock supply defective for all LTUCs

Cause:

Analysis of overall clock supervision reveals that the standby clock supply for all LTUCs is defective.

System reaction:

signals only.

Action:

Check clock supply of entire standby half of shelf.

F5333

LTUC

STBY DEF

Type:

Service-specific (Format 18)

Short text:

Standby part of the LTUC board defective.

Cause:

Analysis of overall clock supervision concludes that the standby input level of the LTUC board is defective, but also that this error did not adversely affect system operation until after switchover.

System reaction:

locks the LTUC after switchover.

- Check LTUC board clocks
- Switch LTUC board on/off via shelf rectifier (power-on reset)
- Initiate system restart and check whether error is repeated
- Switch off LTU power and replace LTUC board.

F5334

LTUC

RGEN SYN ON

Type:

Service-specific (Format 18)

Short text:

SYN1 clock from RGEN okay again.

Cause:

LTUC SYN1 clock (ringing current generator synchronization clock) is available again. Event signal came from LTUC firmware.

System reaction:

starts up the RGEN

Action:

Positive acknowledgment of [F5327](#).

F5335

LTUC

ACGEN SYN ON

Type:

Service-specific (Format 18)

Short text:

SYN2 clock from ACGEN okay again.

Cause:

LTUC SYN2 clock (AC generator synchronization clock) is available again. Event signal came from LTUC firmware.

Action:

Positive acknowledgment of [F5328](#).

F5336

LTUC

RMS

Type:

Service-specific (several formats apply)

Short text:

RMS2 remote switch error

Cause:

Remote switch error (RMS2), reported by DIUR. Format 18: (entire RMS) ACTION=IN SERV means that the entire RMS is back in service. ACTION=OUT SERV means that the entire RMS is out-of-service. In both cases, further messages may come from the connected PCM highways (see below).

System reaction:

signals only. Format 38 and 39: Layer 1 error of the PCM highway. ACTION=NO ACT. The reason for the error (Byte 3) is output in plain text.

System reaction:

locks the circuit and the time slot when a frame is lost, no signal, AIS alarm, remote alarm and bit error rate too high. Format 22: Layer 2 error and all other errors. ACTION=NO ACT.

Action:

Remedial measures depend on the evaluation of the HEX data.

Interpretation of auxiliary data:

Format 38 and 39: Byte 0 = Message length (max. 100 bytes) Byte 1 = Error location (01 = PCM highway) Byte 2 = Error type (01 = Layer 1 protocol) Byte 3 = Detailed layer 1 error type 01 Pulse frame loss (LOST FRAME) 02 No signal (NO SIGNAL) 03 A/S alarm report signal (A/S ALARM) 04 Remote alarm (REMOTE ALARM) 05 Bit error rate too high (MAX ERROR) 06 PCM highway OK (L1 READY) Byte 4-12 = Remaining error codes in hexadecimal Byte 13? = Individual auxiliary data Interpretation of auxiliary data: Format 22: Byte 0 = Message length (max. 100 bytes) Byte 1 = Error location (see following table) Byte 2 = Error type (see following table) Byte 3 = Detailed error type (see following table) Byte 4-12 = Remaining error codes in hexadecimal Byte 13? = Individual auxiliary data

Table 26: Evaluation of F5336 for Format 22 of RMS2

Byte 1	Byte 2	Byte 3
[01] PCM Highway	[02] Layer 2 error	[01] No partner
		[02] Partner restored
		[03] Message cannot be sent
[02]RMS Shelf or [03] Main system	[03] Message from RG	[01] Clock error
		[02] Clock restored
	[04] Message from PCG	[01] Bad reference clock
		[02] No reference clock
		[03] Other message from PCG

Error messages

Byte 1	Byte 2	Byte 3
		[04] PCG synchronized
		[05] Hardware error
	[05] Message from power supply	[01] Power failure
		[02] Battery operation
		[03] Mains power operation
	[06] Message from DIUR	[01] FW error
		[02] Message cannot be sent
		[03] HW error
		[04] DIUR reset
		[05] DIUR port error(RS232)
		[06] DIUR Port okay (RS232)
		[07] man. intervention (RS232)
		[08] FW error
		[09] POD error
		[0A] DIUR Vers./Country info.
		[0B] Acknowledgment
		[0C] Partner incompatible
	[07] Message to main system	[00 - 07] Internal messages from RMS
	[08] Message from main sys. to NMC	[00] No response from DIUR

F5337

LTUC

MUSAC DEFECT

Type:

Service-relevant (Format 22)

Short text:

MUSAC chip defective

Cause:

A MUSAC chip in the LTUCE / LTUCX is defective. Traffic restriction in proportion to the number of failed speech highways. The trigger is recognized

by the firmware / loadware of the LTUCE / LTUCX or the SCC and reported by the loadware to the system. 1. 80CM/80CMX special case: There is only one MUSAC chip on the SCC board. A MUSAC failure means total shelf failure. If the 2nd shelf is not available, total system failure! 2. 80CXE system special case The DSCX board contains two MUSAC chips. The highways are distributed evenly on these chips. Failure of one of the two MUSAC chips reduces the potential traffic volume by 50%. Failure of both MUSAC chips means total base shelf failure. Total system failure occurs if there are no expansion shelves available.

In the case of partial traffic restriction: Information only

In the case of total failure: Hard restart

Action:

Deactivate LTU and replace board.

Byte 0	05	Length of the following relevant data
Byte 1	Status byte	
	0D	Third MUSAC chip is defective (LTUCX only)
	0E	Fourth MUSAC chip is defective (LTUCX only)
	0F	All MUSAC chips are defective (in 80CXE: both MUSAC chips in the DSCX are defective)
	04	First MUSAC chip defective
	05	Second MUSAC chip is defective
Byte 2-5	4 defective highways	
	Special case in the case of LTUCE in 600C or 600EC:	
Byte 4-5	FF FF missing highways:	
	System 600C Only half of the highways are in the 4th shelf.	
	System 600EC Only half of the highways are in the 7th and 8th shelf.	

In the case of an LTUCX, the failure of the third or fourth MUSAC chip (0D, 0E) is reported even if the highways assigned are currently not in use. This is the case if there is no 'overlay' LTU configured for the relevant basic LTU. The reported MUSAC is also defective in this case and has to be replaced in order to avoid problems with later configurations of the 'overlay' LTU. FF FF FF FF in byte 2-5 signals that at present, no highways are assigned to the relevant MUSAC.

F5338

LTUC

MTSC DEFECT

Type:

Service-specific (Format 22)

Short text:

MTSC component defective

Cause:

An MTSC component on the LTUC is defective. The highways on one LTU half have failed. Event signal came from the LTUC firmware.

System reaction:

locks the relevant highways.

Action:

Switch off LTU and replace board

Interpretation of auxiliary data:

Byte 0 = 05 Length of the subsequent related data Byte 1 = Status byte 04 1st MUSAC component defective 05 2nd MUSAC component defective Byte 2 - 5 = 4 Defective highways Special case for LTUCE in 600C or 600EC: Byte 4-5 = FF FF Lost highways System 600C: The 4th shelf contains only half the highways. System 600EC: The 7th and 8th shelves contain only half the highways

F5339

LTUC

PLL REDUNDANCE LOSS

Type:

Service-specific (Format 22)

Short text:

PLL component of LTUCE defective

Cause:

A redundant PLL component is defective. Event signal came from the LTUCE firmware.

System reaction:

board has been changed over to the other PLL circuit.

Action:

Replace board at next opportunity.

Interpretation of auxiliary data:

Byte 0 = 01 Length of the subsequent related data Byte 1 = Status byte 09 1st PLL component defective 0A 2nd PLL component defective

F5340

BOARD

CONTR RESP ERROR

Type:

Service-specific (Format 22)

Short text:

Control response error.

Cause:

Control response error from a peripheral board. PP has received an errored control response byte from the PBC of the board during a routine PBC control response check. This indicates a defective PBC, since the FW and the MP are not affected. The PBC command of the job message is reflected in the HEX data and the contents of the PBC control response register are output.

System reaction:

locks the board and attempts to start up. If the board is currently loading, this procedure is aborted.

Action:

- Deactivate/activate board with BSSU AMO - Check board with routine test order - Unplug/replug board (power-on reset) - Replace board if error persists.

Interpretation of auxiliary data:

Byte 0 = 02 Length of the subsequent related data Byte 1 = PBC job message command Byte 2 = PBC control response register

F5343

BOARD

HDLC ERROR

Type:

Service-specific (Format 22)

Short text:

HDLC link error.

Cause:

Message is output if the HDLC link of a peripheral board is defective. Errors on the HDLC shelf highway are detected by the data communication link (DCL) and reported to the error analysis system (FA).

Action:

Check backplane connectors of peripheral board for proper fit and function. Replace board if necessary. Check the HDLC shelf highway for errors.

Interpretation of auxiliary data:

Byte 0 = 64H maximum length 100 Bytes Byte 1-22 = Message from DCL to FA is printed. Error types: HDLC error: Byte 13 = 00H Error in HDLC path Byte 14 = 01-06 Polling error detected CR2X error (special case): Byte 13 = C2H Control response error. Message was not acknowledged or acknowledgment not transmitted by peripheral, due to overload or line (path) error.

F5344

BOARD

HW ERROR

Type:

Service relevant (Format 22 and 43)

Short text:

Hardware fault on a peripheral board

Cause:

A hardware fault on a board was detected by the board self-test. This message can also appear as a result of an overflow of the SLMB16 board central queue. The cause of the error can be read in the status text. The status text is no longer relevant for analog boards. The RLI ROLM board (USA) uses a different status text.

System reaction:

The board is blocked and an attempt to put it back into service is initiated.

Action:

Plug in/plug out the board; replace the board if the error re-occurs.

Format 22:

- 1) Analog boards: not relevant
- 2) Digital boards

Byte 0	= 1	Length of the following data
Byte 1	=	Status byte (MP_DIG_STATUSBYTE)
	FF	Normal State
	FE	RAM Error
	FD	HDLC Error Channel 0
	FB	HDLC Error Channel 1
	F7	HDLC Error Channel 2
	EF	HDLC Error Channel 3
	DF	PBC Error: CI Channel Information
	BF	PBC Error: Undefined State
	F7	SLMB16 Board Queue Overflow

1) Digital RLI ROLM board

Byte 0	=	1 Length of the following data
Byte 1	=	Status byte (MP_DIG_STATUSBYTE)
	FF	Normal State

	FE	Microprocessor Error
	FD	Checksum Error
	FB	BIC-Failure
	F7	Watchdog Error
	EF	Card_ID Error
	DF	RAM Error
	BF	TDM Buffer Overflow
	F7	FW Error

Format 43:

In format 43 fault scenarios are described by a meaningful REASON text. Depending on the REASON there are additional description fields:

Reason: 00H WRONG CBM PARAMETER

Type:

Service relevant

Short text:

Error in the configuration of CBM parameters.

Cause:

The configuration of CBM parameters does not match the number or type of the available CBM modules on the board (STMI). After startup of the board, the LW is able to recognize wrong configured CBM parameters. This can happen although the parameters will be checked on plausibility by the AMOs.

System reaction:

The affected CBM module on the board is locked and an alarm is generated.

Action:

The wrong parameters have to be corrected by the service and the board has to be loaded again.

Interpretation of auxiliary data:

CBM module:	00H-07H	Number of affected CBM module on the board
Wrong parameter:	00H	A/U-LAW CONVERSION
	01H	ECHO CANCELLATION
	02H	VOICE COMPRESSION
	03H	TOO LESS MODULES
text string:		Error description text filled in by board LW.
auxiliary data:		Diagnosis data filled in by board LW for product specialist.

Error messages

Reason: 01H CBM MOULE DEFECTIVE (SELFTEST), Reason: 02H CBM MODULE DEFECTIVE (LW)

Type:

Service relevant

Short text:

Defective CBM module on the board.

Cause:

After startup or during operation the board selftest or the board LW recognizes a defective CBM module (e.g. SIDEC chip) by routine monitoring. SIDEC chip).

System reaction:

An alarm is generated. STMI board: The whole board is locked because no functionality is available any longer.

Action:

The whole board has to be replaced.

Interpretation of auxiliary data:

CBM module:	00H-07H	Number of affected CBM module on the board
HWY/TSL table:		All HWY/TSLs of the defective CBM module
		(32 x 3Bytes: 1Byte TSL and 2Bytes HWY);
		This table is only valid for LTUCC, not for STMI.
text string:		Error description text filled in by board LW.
auxiliary data:		Diagnosis data filled in by board LW for product specialist

Reason: 03H NO CP PATH RESOURCES IN PERIPHERY

Type:

Service relevant

Short text:

No CP path resources in periphery

Cause:

The loadware of the board has detect that there were not enough CP resources on the board to establish a requested call. The resource management between loadware and system software diverges. The path resource type addresses the exact resource which is different.

System reaction:

VECO checks the differences in resource management and releases call attempts which are not properly seized.

Action:

No special action necessary.

Interpretation of auxiliary data:

Path resource type:	00H	A/U-LAW CONVERSION
	01H	ECHO CANCELLATION
	02H	VOICE COMPRESSION
	03H	ATM EXTERNAL NETWORK PATH
	04H	IP EXTERNAL NETWORK PATH
text string:		Error description text filled in by board LW.
auxiliary data:		Diagnosis data filled in by board LW for product specialist.

Reason: 04 H AP ETHERNET ERROR (SELFTEST), Reason: 05 H AP ETHERNET ERROR (LW)

Type:

Service relevant

Short text:

04H: Ethernet interface error (detected during startup by board selftest) **05H:** Ethernet interface error (detected during normal operation by LW)

Cause:

The loadware or the selftest of the board (STMI) has detected an error on the Ethernet interface on the board. If an Ethernet interface error occurs the connection of the board with the IP network is no longer possible. Therefore the board does no longer function. The board is added to the 'in service task' and a new board startup is tried after some minutes.

System reaction:

The whole board is locked. An alarm is generated. The board is added to the 'in service task'.

Action:

If the board does not come up with the 'in service task', the board has to be replaced.

Interpretation of auxiliary data:

text string:	Error description text filled in by board LW.
auxiliary data:	Diagnosis data filled in by board LW for product specialist.

Reason: 06H ETHERNET INTERFACE ERROR

Type:

Service-relevant

Short text:

06H: Ethernet interface error (LAN connection no longer available)

Cause:

The LW detected an interruption on the Ethernet interface. If a connection to the IP network is set up over the second Ethernet interface, the board switches

over to this second interface. Ethernet interface one Connection Private or IP Network besteht, wird ASC der boardtype ASC diese 2. interface umgeschaltet.

System reaction:

The error is signaled and an alarm is generated.

Action:

Find out the cause of the Ethernet connection failure and correct it.

Interpretation of auxiliary data:

text string: Error description text filled in by board LW.

F5345

BOARD

INIT ERROR

Type:

Service-specific (Format 23)

Short text:

Peripheral board initialization error

Cause:

A peripheral board cannot be loaded. The causes may be traced to the board, but it may also be found to be the transmission of the LW from the hard disk to the board. The board is not necessarily a special board if the HW ID H'999 (HW-ID of the special board) is signaled. It can also be a normal board that was inserted in the slot of the ring generator/alternative current generator. With message text DEF ON REQUEST (Byte 1): Restart of originally active HFA board in the DEFECT state after reconfiguration of the affected stations to the standby board.

System reaction:

Board already blocked by DC and in service trial if HW ID is correct. With message text DEF ON REQUEST (Byte 1): The board is started up in the DEFECT state.

Action:

Check the slot of the connected board. If required, regenerate slot with AMO BCSU. Replace board if load error is linked to board error. Otherwise, perform procedure for tracing errors on account of the causes in byte 0 and byte 1 supplementary data. With message text DEF ON REQUEST (Byte 1): Replace board. Byte 0 and byte 1 are output by means of text support.

Table for the values of byte 0 = initialization error (DB_M_QC_ERROR_SET):

Table 27: Values of byte 0 = initialization error (DB_M_QC_ERROR_SET)

Hex value	Output text	Interpretation
3A	WRONG BOARD TYPE	Wrong board
3B	BOARD NOT PRESENT	Board not present

Hex value	Output text	Interpretation
3C	BOARD DEFECTIVE	Board defective

Table for values of byte 1 = loadware loading error
(DB_M_LC_LOAD_RESULT_SET)

Table 28: Values of byte 1 = loadware loading error (DB_M_LC_LOAD_RESULT_SET)

Hex value	Output text	Interpretation
00	BOARD HW ERROR	Defective board, board self test negative
01	NEGATIVE LOAD ACK	Board not loaded (error on the board)
02	TRANSMISSION ERROR	Transmission error when loading the loadware to the board (checksum verification negative, hardware error on the board or loadware error at the hard disk)
03	LOAD ACK OK	Board OK (can also occur if byte 0 = H'3A)
04	-	Loadware loaded
05	-	Loadware not found on the HD
06	-	Loadware on HD faulty or corrupt
07	-	Board not available (NPR)
08	BOARD DATA NOT LOADED	Board data not loaded
09	COPY ENDED	Copy operation terminated by RAM in the Flash
0A	RECORD LOADED	Loadware container loaded
0B	LW NOT FOUND	Loadware not found or board not in PIT load table
0C	LW NOT READABLE	Negative PGL load result
0D	PGL TIMER	Negative PGL load result, PGL timer expired
0E	CONT GREATER BLOCK	LW container greater than block
F0	BOARD NOT PRESENT	Board is configured but not inserted
10	LOADING	Board available, but load operation not yet acknowledged by board
11	DATA TO BE LOADED	Per. SIU: LW is loaded, now load the data
12	DATA NOT READABLE	Invalid data container reference
13	EXT LOADING	Preliminary load acknowledgement for an external board to be loaded
14	EXT LOAD ACK OK	permanent positive load acknowledgement from an external loaded board
15	EXT NEGATIVE LOAD OK	External board to be loaded not loaded (Error on the board)

Error messages

Hex value	Output text	Interpretation
16	BOARD ALIVE	External board to be loaded provides information about an on-going load operation
17	EXT MISSING LOAD ACK	External board to be loaded did not send load acknowledgement
18	TRANSM BREAK ERROR	Cancel the load operation
19	MISSING LOAD ACK	Board sent no load acknowledgement
1A	ID COMPARISON FAILED	Wrong board
1B	NO ADS RESPONSE	No response from ADS
1C	QUEUED ORDER CANCELLED	Retrieval of a buffered load task
1D	ORDER REJECTED Q OVFL	Cancel a load operation due to insufficient resources
1E	INTERNAL MSG PROBLEM	Message could not be sent or received
F1	BOARD NOT LOADED	Board not loaded (in the case of individual commissioning: wrong board or load interruption or missing load acknowledgement)
31	DEF ON REQUEST	Restart of originally active HFA board in the DEFECT state after reconfiguration of the affected stations to the standby board; see also F5880 . Replace board.

F5346

BOARD

LOOP DATA ERROR

Type:

Service-specific (Format 18/22)

Short text:

RTO: Test loop insertion error

Cause:

Format 18: Test loop insertion error. The board is automatically disabled.
Format 22: The message from the RTO to FA is output in the HEX data.

Action:

Replace board specified in slot information (LTG:).

Interpretation of auxiliary data:

Format 22: see [F5309](#).

F5347

BOARD

MP EC ERROR

Type:

Diagnosis-specific (Format 22)

Short text:

Implausible event code received by peripheral board.

Cause:

The firmware of the peripheral board concerned has received a message from peripheral processing (PP) with an invalid event code (EC). The event signal came from the board firmware.

System reaction:

statistics, signaling.

Action:

Possible software error in system or firmware. No immediate action possible; contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 = Length of the subsequent related data (max. 32 bytes) Byte 1 = Implausible event code Byte 2-32 = Implausible message from PP to the MP of the board. Can only be interpreted by your system specialist.

F5348

BOARD

MP LW ERROR

Type:

Diagnosis-specific (Format 22)

Short text:

Error in microprocessor loadware.

Cause:

A loadware or hardware error has been detected in an analog or digital peripheral board. This error message can also be caused by a line error. Event signal came from the firmware of the board concerned.

System reaction:

statistics and signaling. All messages with error numbers other than F5348 are described separately. See deviating numbers in the section 'Interpretation of auxiliary data'.

Action:

- Deactivate/activate board, unplug/replug board (power-on reset) and check whether error recurs. - If error recurs, check line. Replace board if no other error found. - If error persists, contact your [Next level of support](#).

Error messages

Byte 0	=	Length of relevant bytes to follow
Byte 1	=	Error type (DB_M_EE_LW_ERR_CODE_SET)
	00	Invalid function
	01	Invalid event code (F5631)
	02	Invalid OF branch
	03	Timeout
	04	List overflow (F5731)
	05	Scan overflow (F5401)
	06	PBC error following test
	07	No procedure
	08	Watchdog timeout (F5732)
	09	Invalid parameter (also: line error)(F5409)
	0a	Checksum error (F5733)
	0B	DB_EE_MP_DUMMY_1
	0C	TMCL: SIP processor failure
	0D	TMCL: SIP processor incorrectly plugged (loose)
	0E	DB_EE_MP_DUMMY_4
	0F	DB_EE_MP_DUMMY_5
	10	Pulse extended by the system
	11	Code extended by the system
	12	Pulse extended by exchange
	13	Code extended by exchange
	14	HDB3 code error
	15	Bit error
	16	Bit slip
	17	AIS alarm from exchange
	18	LTC board not found
	19	Write protection error
	1A	End of line alarm (F5624)
	1B	Line alarm idling (F5625)
	1C	Line alarm for outgoing connections (F5626)

	1D	Line alarm for incoming connections (F5627)
	1E	No release acknowledgment (F5628)
	1F	ASIC error of microprocessor (F5735)
	20	No microprocessor resources (F5734)
	21	Logic error
Byte 2 - 14	=	Loadware information from microprocessor

NOTICE: Can only be interpreted by your system specialist.

F5349

BOARD

MSG NOT TRANSMITTABLE

Type:

Service-specific (Format 22)

Short text:

Message cannot be transmitted to peripheral board.

Cause:

The data communication link (DCL) has made repeated, unsuccessful attempts to dispatch a message to a peripheral board (includes LTUC, SIU, CONF, PSIO). This error can also occur if the board is out of service, i.e., if it has only just been removed from the attendance list. The board concerned is blocked, and a restart attempt is initiated after 1 minute. Possible error causes include a protocol error or a HW error on the board (e.g. PBC defective). The error message can also be caused by a drastic overload of the board loadware.

System reaction:

the board concerned is locked and a restart attempt is initiated after 1 minute.

Action:

Unplug/replug board (power-on reset). If error recurs, replace board. If error persists, save the error message data and contact your [Next level of support](#).

Note: This message may also refer to a board in a remote shelf that cannot be contacted (in error message see PEN address line for RMS instead of LTU). The auxiliary data should then be interpreted as in the case of format 38/39 in F5336.

F5350

BOARD

SECONDARY IN ATTEND L

Type:

Service-specific (Format 22)

Short text:

Board is back on attendance list

Cause:

The peripheral board concerned is back on the attendance list of the DCL. This message is output when a board is plugged into the correct slot or when the LTU power is turned back on. The event signal came from the firmware of the data communication link (DCL).

System reaction:

restarts the peripheral board.

Action:

Positive acknowledgment of [F5354](#).

F5351

BOARD

PER ADDR ERROR

Type:

Diagnosis-specific (Format 22)

Short text:

Message corrupted

- 1) Peripheral processing (PP) has received a message with an invalid source address (wrong PBC address). This is noticed by the TOP (task organization program) if no board is found or the wrong board type is detected at the address, or if the address is out of range. Event signal came from PP.
- 2) The QDCL detects an invalid LTU number or an invalid PBC number in a direct message from one SLMC board to another SLMC board. [F5873](#) is signaled with BOARD DEST ADDR NOT PLAUS.

System reaction:

statistics.

Action:

Possible loadware error. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Special case for cause b): message from QDCL
Byte 00 = Message length
Byte 01 = 40 Destination task FA
Byte 02 = AE Source task QDCL
Byte 05 = 1A BOARD
Byte 06 = 04 DB_QF_E_BOARD_DEST_ADDR_NPL
Byte 11 = LTU_NO of the sender
Byte 12 = PBC_NO of the sender
Byte 18 = FF Code for direct message from SLMC to SLMC via DCL
Byte 19 = LTU_NO of the destination board (possible error in address)
Byte 20 = PBC_NO of the destination board (possible error in address)

F5352

BOARD

PER EVT ERROR

Type:

Diagnosis-specific (Format 22)

Short text:

Implausible message from peripheral board to PP

Cause:

Implausible message received by peripheral processing (PP) from the microprocessor of a peripheral board. Event signal came from PP.

System reaction:

statistics.

Action:

Possible FW error. No immediate action possible. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 = Length of relevant data to follow (max. 32 bytes) Byte 1-32 = Implausible message from board MP to PP. Can only be interpreted by your system specialist.

F5353

BOARD

REGISTER ERROR

Type:

Service-specific (Format 18/22)

Short text:

RTO: Error in code check register

Cause:

Format 18: Error in the code check register of the peripheral board controller (PBC). The board is automatically disabled. Format 22: The message from the RTO to FA is output in the HEX data.

Action:

Replace board concerned.

Interpretation of auxiliary data:

Format 22: see F5309.

F5354

BOARD

SECONDARY OUT ATTEND L

Type:

Service-specific (Format 22)

Short text:

Board not plugged

Cause:

Board has been unplugged or has been placed out of service due to a board error, and is therefore no longer on the attendance list of the DCL. Positive acknowledgment with F5350. Error message F5308 LTUC OUT OF ATTENDANCE LIST is reported, in all cases (i.e., no individual message per board).

System reaction:

locks the board after NPR

- Insert board in slot specified in slot information (LTG:).
- If a board already exists, replug board if loose or replace if defective.

F5355

BOARD

SPOR ERROR

Type:

Service-specific (Format 22)

Short text:

RTO: Sporadic error

Cause:

ACTION=NO ACT: sporadic error (advisory). ACTION=OUT OF SERV: sporadic error in conjunction with disable message generated due to peripheral error counter overflow. Board is entered in the IBP (startup procedure task) list and RTO message is output in the HEX data.

Action:

Note related error messages. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Format 22: see F5309.

F5356

BOARD

STATUS WORD ERROR

Type:

Service-specific (Format 22)

Short text:

RTO: RAM/PROM error.

Cause:

The board is automatically disabled due to a RAM/PROM error. The RTO message is entered in the HEX data.

Action:

Replace board.

Interpretation of auxiliary data:

Format 22: see F5309.

F5358

BOARD

TIME ERROR

Type:

Service-specific (Format 18/22)

Short text:

RTO: Timeout

Cause:

Format 18: Timeout, no response to routine test order. ACTION=RESET indicates the board was automatically reset. The functional earth of the shelf may not correspond to the required values. Format 22: Board is entered in the IBP (startup procedure task) list and RTO message is output in the HEX data.

Action:

Check functional earth.

Interpretation of auxiliary data:

Format 22: see F5309.

F5359

BOARD

PIT ERROR

Type:

Service-specific (Format 23)

Short text:

PIT load error

Cause:

Load error of the peripheral initialization task. Connection between PIT and DCL or peripheral processing lost while loading the peripherals.

System reaction:

message output about the fatal error on level 2 of the FA with the relevant response.

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 = Length of data to follow Byte 1 = Error type
(DB_M_QF_SEV_PIT_SET) 00 PIT received no acknowledgment from PP
01 DCL was not polling 02 DCL failed to transmit attendance list 03 DCL failed to acknowledge shelf reset of LTG 04 DCL failed to transmit polling acknowledgment for shelf 05 DCL transmitted wrong polling acknowledgment for shelf type Byte 2 = Load task (DB_M_LC_PER_INIT_EVT_SET) Byte 3 = HDLC path Byte 4 = PCB number Special scenario Byte 1 = 00: PIT received no acknowledgment from PP, followed by further data Byte 0 = 59 Length of data to follow Byte 1 = 00 PIT received no acknowledgment from PP Byte 2 = Load task (DB_M_LC_PER_INIT_EVT_SET) Byte 3 = HDLC path Byte 4 = PCB number Byte 5 = Type of data Byte 6-7 = Board_ID Byte 8 = PP_Board_Type Byte 9-58 = Message from PIT to PP

F5371

BOARD

STAT OVERFLOW

Type:

Service-specific (Format 22)

Short text:

Statistics counter overflow (threshold value overstepped)

Cause:

Statistics counters monitor the alarms on this board. The board has been placed out of service due to too many alarms. Counter sequence: each alarm increments the error counter by 1. Alarm pairs (alarm set and alarm reset message) also increment a specific alarm pair counter by 1, even if the alarm is reset correctly. One of the statistics counters has reached its threshold, and the board has been placed out of service by dependability (status: DEF). As a rule, the counter level is reset after overflow, so that the board is not immediately blocked again when re-activated via AMO or when replaced. In addition, the counter level is decremented at set intervals (minutes).

System reaction:

locks the board in the DEF status.

Action:

Unplug/re-plug board concerned (power-on reset). If one of the statistics counters overflow again, replace the board.

Interpretation of auxiliary data:

Byte 0 = Counter level of alarm pair counter (standard) Byte 1 = Counter level of single alarm counter (standard) Byte 2 = Counter level of single alarm counter (optional) Byte 3 = Counter level of single alarm counter (optional) Byte 4 = Statistics class 0 - 20. Different threshold values exist depending on the board type. Byte 5 = Number of counter which has overflowed 00 Alarm pair counter (standard) 01 Single alarm counter (standard) 02 Single alarm counter (optional) 03 Single alarm counter (optional) Byte 6-7 = Threshold value of overflowed counter (MAX_COUNT) Byte 8-9 = Reset value of overflowed counter (COUNT_ACTION) Byte 10 = Type of threshold value reached 00 Alarm pair (standard) 01 Single alarm (standard) 02 Single alarm (optional) 03 Single alarm (optional) Byte 11-12 = Decrementing time interval, in minutes (MAX_TIME_COUNT) Byte 13-14 = Decrementing value (DECREMENT) Byte 15-80 = Message to FA which led to statistics overflow

F5372

BOARD

BACK IN SERVICE

Type:

Service-relevant (Format 18/43)

Short text:

Board back in service

Cause:

Following a defect, the board was put back into service after multiple attempts and a preset block timeout. The board is then monitored in case any further failures occur. If a new defect occurs during this monitoring time, it is put back into service on a trial basis after a longer block time. In ACTION = INSTRIAL (in service trial) putting into service on a trial basis (Format 43) In ACTION = IN SERV (in service), putting into service is permanent, the monitoring period is over. (Format 18)

System reaction:

Board goes from DEF to READY

Action:

Positive message, no action required.

Interpretation of auxiliary data:

Text only for format 43: TRIAL NO: 1 = current number of attempts to put the system into service (max. 8)

F5373

F5373

BOARD

STOP NEW SEIZURES

Type:

Service-specific (Format 18)

Short text:

No outgoing calls possible on peripheral board

Cause:

Overload situation on the board. Outgoing calls are no longer possible; existing connections are preserved. At the end of the overload the system outputs message F5374 if no data is lost; otherwise, the board is automatically reset.

System reaction:

new seizures not possible

Action:

If this error recurs frequently, save the error message data and contact your [Next level of support](#).

F5374

BOARD

START NEW SEIZURES

Type:

Service-specific (Format 18)

Short text:

Overload end

Cause:

End of board overload since no new lines have been seized.

System reaction:

outgoing calls are possible once more.

Action:

Positive acknowledgment of F5373, no action necessary.

F5376

BOARD

DFE ERROR

Type:

Service-specific (Format 22)

Short text:

DFE error (Data Front End)

Cause:

The SLMR (Rolm board) has a DFE error.

System reaction:

statistics

Action:

No specific action. If the error persists contact your [Next level of support](#)..

Interpretation of auxiliary data:

Byte 0 = Total length of data (3 bytes plus DFE auxiliary data) Byte 1 = DFE error Byte 2 = Length of DFE auxiliary data Byte 3 = DFE channel number Byte 4-91 = DFE auxiliary data

F5377

BOARD

RMS LEFT

Type:

Service-specific (Format 22)

Short text:

Board removed from the attendance list

Cause:

- Board of RMS shelf is not plugged or not correctly plugged. - Board error on a remote RMS shelf caused board to be removed from attendance list.

System reaction:

blocks the board in NPR status.

Action:

- Replug board if it has been unplugged. - Unplug/replug board, test, replace board if necessary.

F5388

CIRCUIT

EARTH BEGIN

Type:

Service-specific (Format 18)

Short text:

Start of ground leakage on main station line.

Cause:

Ground leakage on a-wire or b-wire of a main PABX loop circuit (main station line). Event signal came from the DH. Positive acknowledgment with [F5389](#).

System reaction:

line alarm for the HAS circuit.

Action:

Test line to satellite PABX. Alternatively, the board providing the main station interface in the main PABX or the satellite PABX may be defective.

See also [Section 8.14, "Device names"](#).

F5389

CIRCUIT

EARTH END

Type:

Service-specific (Format 18)

Short text:

End of ground leakage on main station line

Cause:

End of ground leakage on main PABX loop circuit (main station line). Event signal came from the DH. Positive acknowledgment of [F5388](#) with automatic startup.

System reaction:

end of the line alarm for the HAS circuit.

Action:

Positive acknowledgment, no action necessary.

See also [Section 8.14, "Device names"](#).

F5390

CIRCUIT

END SHORT CIRCUIT

Type:

Service-specific (Format 18)

Short text:

End of short-circuit on station line

Cause:

Board has detected end of ground short on user circuit, and has switched feed signal back to active low. Positive acknowledgment of [F5403](#) with automatic startup.

System reaction:

end of lock on circuit.

Action:

Positive acknowledgment, no action necessary.

See also [Section 8.14, "Device names"](#).

F5391

CIRCUIT

EXT DIALTONE ERROR

Type:

Service-specific (Format 18)

Short text:

No external dial tone

Cause:

No external dial tone (i.e. no outward dialing to exchange). Exchange or tie line may have a breakage or is otherwise interrupted. Event signal came from device handler.

System reaction:

signals only.

Action:

Check line, user circuit and remote system; check configuration if no other error found.

See also [Section 8.14](#), “Device names”.

F5395

CIRCUIT

START UP ERROR

Type:

Service-specific (Format 22)

Short text:

Attendant console self-test error.

Cause:

Error found by attendant console self-test while booting. Event signal came from the ATND device handler.

System reaction:

locks the attendant console and delays startup.

Action:

Reset ATND, replace if necessary.

Interpretation of auxiliary data:

Byte 0 = Length of data to follow (always 1) Byte 1 = REASON_AC (error cause) 80 Master 81 Master 82 Keyboard 83 External error

See also [Section 8.14](#), “Device names”.

F5396

CIRCUIT

IDLE LOOP ERROR

Type:

Service-specific (Format 22)

Short text:

Attendant console self-test error.

Cause:

Error found by attendant console self-test. Event signal came from the ATND device handler.

System reaction:

locks the attendant console and delays startup.

Action:

Check the attendant console. Action: reset ATND, replace if necessary.

Interpretation of auxiliary data:

Byte 0 = Length of data to follow (always 1) Byte 1 = REASON_AC (error cause) 84 Master 85 Master 86 Keyboard 87 External error

See also [Section 8.14](#), "Device names".

F5397

CIRCUIT

INIT ERROR

Type:

Service-specific (Format 22)

Short text:

Initialization error

Cause:

Initialization error of a board circuit.

Action:

Action depends on the evaluation of the HEX data.

System reaction:

circuit already locked by DC.

Interpretation of auxiliary data:

In byte 1 of the hexadecimal output, the error is displayed according to the structure DB_M_LC_LOAD_RESULT_SET. Interpretation as for [F5307](#), only byte 1 relevant.

See also [Section 8.14](#), "Device names".

F5398

CIRCUIT

LINE DISCONNECTED

Type:

Service-specific (Format 22)

Short text:

U* line switched off

Cause:

Line switched off by SLMD firmware. If the SLMD board is unable to receive messages from the CTE, e.g. because the terminal has been switched off or disconnected, the CTE will release any terminal connections and deactivate the U* interface on the system side. The U* interface is re-activated either by the CTE or by the call processing system (CP). Positive acknowledgment is output with message [F5404](#).

System reaction:

the board switches off the subscriber line.

Action:

Check line and terminal.

Interpretation of auxiliary data:

Byte 0 = Length of data to follow (always 2) Byte 1 = REASON_L1 (error cause)

Byte 2 = REASON_L2 (error cause)

See also [Section 8.14](#), “Device names”.

F5399

CIRCUIT

LINE ALARM BEG

Type:

Service-relevant (Format 43)

Short text:

Start of line alarm.

Cause:

Start of line alarm for a trunk or tie circuit. The trunk/tie line may have been interrupted. The error message F5400 is issued if the port is back in service. Special case ADASE: The messages with reason 01H and reason 02H are only sent in the case of ADASE.

System reaction:

Line alarm.

Action:

Check line for interruption and incorrect connection. If necessary, arrange for the partner to be checked (CO / tie). Special case ADASE: If necessary, activate the 1200 Hz permanent test tone on the system side (ADASE signaling feature) and in cooperation with personnel at the partner, search for/measure or observe the reaction of the partner's 1200 Hz recipient.

Interpretation of auxiliary data:

(text-driven)

- REASON: 00H GENERAL LINE ALARM BEGIN General line alarm
- REASON: 01H LINE ALARM BEGIN, NO SIGNAL Start of line alarm, no test impulse signal received.
- REASON: 02H LINE ALARM BEGIN, F2 SIGNAL Line alarm start, F2 test signals received.

F5401

CIRCUIT

MP SCAN OVERFLOW

Type:

Service-specific (Format 22)

Short text:

Too many scan events

Cause:

Too many scan events for a circuit within a certain time unit. In the case of SLMA and SLMA1 boards, the second, associated circuit is also disabled (DUAL-SLIC). The second circuit on the board is calculated on the basis of the circuit number output in the HEX data, as follows: circuit number plus 8, or circuit number minus 8.

System reaction:

locks the circuit and delays startup.

Action:

Check circuit and terminal. Check line for breakage or interruption, short-circuit connections or extraneous voltages.

Interpretation of auxiliary data:

see [F5348](#).

See also [Section 8.14](#), "Device names".

F5403

CIRCUIT

SHORT CIRCUIT

Type:

Service-specific (Format 18)

Short text:

Short-circuit on user port

Cause:

Board has detected overcurrent on user port and has switched feed to active high. Positive acknowledgment with [F5390](#).

System reaction:

lock for the circuit.

Action:

Check circuit, terminal and board.

See also [Section 8.14](#), "Device names".

F5404

CIRCUIT

LINE ACTIVATED

Type:

Service-specific (Format 18)

Short text:

U* line active again

Cause:

SLMD line active again, i.e. terminal has been plugged back in. The U* interface is re-activated either by the CTE or by the call processing system (CP).

System reaction:

end of the line alarm.

Action:

Positive acknowledgment of [F5398](#), [F5405](#) and [F5410](#), without action.

See also [Section 8.14](#), "Device names".

F5405

CIRCUIT

LINE TIMEOUT

Type:

Service-specific (Format 18)

Short text:

No response from service module / U* line

Cause:

SLMD receives no answer from the service module or from the U* line. Positive acknowledgment with [F5404](#).

System reaction:

locks the circuit and delays startup.

Action:

Check service module and U* line.

See also [Section 8.14, "Device names"](#).

F5406

CIRCUIT

SPOR ERROR

Type:

Service-specific (Format 43)

Short text:

RTO: Sporadic error during routine test operation

Cause:

ACTION=NO ACT: sporadic error (advisory). ACTION=OUT OF SERV: sporadic error in conjunction with disable message generated due to peripheral error counter overflow. Circuit is disabled and RTO message is output in the HEX data. Device names, test carried out and test result are output as plain text.

Action:

Note related, previous error messages.

Interpretation of auxiliary data:

Format 43: see [F5309](#).

See also [Section 8.14, "Device names"](#).

F5407

CIRCUIT

TEST ERROR

Type:

Service-specific (Format 18/43)

Short text:

RTO: routine test error

Cause:

Format 18: Error detected during routine test. Format 43: invalid or implausible firmware parameters on an analog board. The RTO message is output in HEX data. Device names, test carried out and test results are output in plain text (Format 43).

Action:

Format 18: Error detected by routine test. Replace board. Format 43: The circuit is automatically disabled. Check circuit parameters via AMO.

Interpretation of auxiliary data:

Format 18/43: see [F5309](#).

See also [Section 8.14](#), "Device names".

F5409

CIRCUIT

MP INVALID PARA

Type:

Service-specific (Format 22)

Short text:

Invalid microprocessor parameters

Cause:

Invalid or bad parameters detected by microprocessor of an analog board. LW or system software error.

System reaction:

resets the circuit.

Action:

Save error message data and contact your [Next level of support](#). Bytes 1-12 of the HEX-data contain information on the microprocessor (see [F5348](#)).

See also [Section 8.14](#), "Device names".

F5410

CIRCUIT

SYNC FAIL

Type:

Service-specific (Format 18)

Short text:

Loss of synchronization on U* line

Cause:

SLMD detects loss of synchronization or line alarm on the U* line, e.g. because terminal has been switched off or disconnected. Slot information (LTG:) is included. Positive acknowledgment with [F5404](#).

System reaction:

locks the circuit. Unlocks the CI channel.

Action:

Check line and terminal.

See also [Section 8.14, “Device names”](#).

F5411

CIRCUIT

L1 SPOR ERROR

Type:

Service-specific (Format 22)

Short text:

Sporadic layer 1 error

Cause:

Short line alarm. Sporadic layer 1 error in digital networking circuit or for ATM circuits of all operating modes. It can refer to one circuit or all circuits of a board (see circuit information).

Action:

Check line or localize error with protocol tester.

Byte 0	=	Error type (DB_M_QF_CIR_L1_ERR_SET)
	00	Corruption on line (bit slip)
	01	Corruption on line (bit error rate > 10 E-6)
	02	Corruption on line (bit error rate > 10 E-3)
	03	Line interrupt (loss of frame)
	04	Line interrupt (loss of signal)
	05	Error signaling from partner (alarm indication)
	06	Error signaling from partner (remote alarm)
	07	No circuit data loaded
	08	L1 of cannot be activated or is not active (only for S0 bus)
	09	Message overflow (USA) (only for S0 bus)
	0A	Invalid message (USA) (only for S0 bus)
	0B	Error signaling from partner system (remote alarm CRC4)
DIU-CAS: errors in 64 kbit/s signaling channel		
	0C	Error signaling from partner system (remote alarm)
	0D	Line interrupt, frames corrupted
	0E	Error signaling from partner system (alarm indication signal)
	0F	Line interrupt (no signal)
T1- BOARD in USA:		

	10	Loss of Signal
	11	Max Error Secs
	12	Red Alarm LFA
	13	Red Alarm LMA
	14	Yellow Alarm RFA
	15	Yellow Alarm RMA
	16	AIS Alarm (Blue)
	17	Channel Fault
ATM (for explanation of error types, see F5412)		
	1B	ATM cell lost
	1C	Bit stuffing error
	1D	Transmit FIFO overflow
	1E	Receive FIFO overflow
	1F	Fault at the UTOPIA interface
	20	Signal label mismatched
Byte 1,2	=	Number of errors reported
Byte 3	=	Length of data to follow
Byte 4-90	=	Reported errors, in sequence

See also [Section 8.14](#), “Device names”.

F5412

CIRCUIT

L1 ERROR

Type:

Service-relevant (Format 22/36)

Short text:

Layer 1 error(s) (line alarm)

Cause:

There is a fault on layer 1 of the line.

- Networking circuit only (Format 36).
- This message is also used for ATM circuits in all operating modes. It can refer to a circuit or all circuits on the board (see circuit information).

System reaction:

Layers 1 to 3 blocked. Increase reference clock error counter. In the case of NO DATA LOADED, the element is put out of and put back into service with a load operation.

Action:

Check line, check partner, if necessary, replace board.

Byte 0 = Error type (DB_M_QF_CIR_L1_ERR_SET)

See also [Section 8.14](#), "Device names".

Message texts:

REASON: 00H BIT SLIP

Cause:

Bit slip (LOCAL ALARM)

REASON: 02H BIT ERR RATE -3

Cause:

Bit error rate >10 E-3 (LOCAL ALARM)

REASON: 03H LOST FRAME

Cause:

Frame loss (LOCAL ALARM)

REASON: 04H NO SIGNAL

Cause:

No signal on the line (LOCAL ALARM)

REASON: 05H AIS

Cause:

Alarm indication signal from partner (AIS ALARM)

REASON: 06H REMOTE ALARM

Cause:

Remote alarm from partner (DISTANT ALARM)

REASON: 07H NO DATA LOADED

Cause:

Record data not loaded (no line alarm)

REASON: 0BH REMOTE ALARM CRC4

Cause:

Remote alarm CRC4 from partner (DISTANT ALARM)

Only for DIUCAS: Error in signaling channel with 64kbit/s

REASON: 0CH REMOTE ALARM 64K

Cause:

Remote alarm from partner (DISTANT ALARM)

REASON: 0DH LOST FRAME 64K

Cause:

Frame loss (LOCAL ALARM)

REASON: 0EH AIS 64K

Cause:

Alarm indication signal from partner (AIS ALARM)

REASON: 0FH NO SIGNAL 64K

Cause:

No signal on the line (LOCAL ALARM)

T1 BOARD in USA only:

IMPORTANT: The following description only applies to US-specific hardware.

Byte 0 = Error type (DB_M_QF_CIR_L1_ERR_SET)

REASON: 10H LOSS OF SIGNAL

Cause:

Loss of signal detected for greater than the specified interval.

REASON: 11H MAX ERROR SECS

Cause:

The maximum number of errored seconds has been detected for the specified interval.

REASON: 12H RED ALARM LFA

Cause:

The board is in a red alarm condition (detected locally) due to loss of single frame synchronization.

REASON: 13H RED ALARM LMA

Cause:

The board is in a red alarm condition (detected locally) due to loss of multi-frame synchronization.)

REASON: 14H YELLOW ALARM RFA

Cause:

The board is in a yellow alarm condition (detected remotely) due to loss of single frame synchronization.

REASON: 15H YELLOW ALARM RMA

Cause:

The board is in a yellow alarm condition (detected remotely) due to loss of multi-frame synchronization.

REASON: 16H AIS ALARM (BLUE)

Cause:

The board is in blue alarm condition because it is receiving an AIS signal from the network.

REASON: 17H CHANNEL FAULT

Only for ATM:

REASON: 19H PORTSWITCHING: BOARD IN ATM-HUB MISSING

Type:

Service-relevant

Cause:

Board in the system's ATM hub not connected, occurs in ports witching operating mode in the case of STMA.

Action:

Check the system's ATM hub, verify that all necessary subscriber line boards are connected/cabled/check for hardware errors.

REASON: 1BH ATM CELL LOST

Cause:

ATM cell loss (LOCAL ALARM)

Action:

Check line, check partner e.g.

- Reception level in permitted range?
- SONET/SDH - STM1 mode correct?
- Bit rate on the partner side correctly reserved - policing?

If OK: Replace board.

REASON: 1CH BIT STUFFING ERROR

Cause:

Bit overstuffing (LOCAL ALARM)

Action:

Check line, check partner (e.g. receipt level in permitted range? SONET/SDH - STM1 mode correct?) If both OK: Replace board

REASON: 1DH TRANSMIT FIFO OVERFLOW

Cause:

FIFO overflow on send (LOCAL ALARM)

Action:

Replace board

REASON: 1EH RECEIVE FIFO OVERFLOW

Cause:

FIFO overflow on receipt (LOCAL ALARM)

Action:

Check parameter "CELL Delay Variation time"; if necessary increase if the error occurs frequently (result: Increased delay in voice connections, possible echo problems) If parameter OK: Replace board

REASON: 1FH UTOPIA INTERFACE FAULT

Cause:

Error at the UTOPIA interface (LOCAL ALARM)

Action:

Replace board

REASON: 20H SIGNAL LABEL MISMATCHED

Cause:

The partner does not operate the interface in ATM mode. (LOCAL ALARM)

Action:

Check partner and arrange correct installation.

REASON: 21H SUBBOARD CONFIGURATION MISMATCH

Cause:

Subboard at STMA2 board incorrectly configured. Configuration data does not correspond to subboard type.

Action:

Check subboard type and associated configuration data.

F5413

CIRCUIT

L2 SPOR ERROR

Type:

Service-specific (Format 22)

Short text:

Sporadic layer 2 error

Cause:

Sporadic layer 2 error in digital networking circuit.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#).

Byte 0	=	Error type (DB_M_QF_CIR_L2_SPO_ERR_SET)	
		00	Level 2 is reset
		01	Short-term blocking of level 2
		02	Error LAPD protocol
Byte 1,2	=	Number of errors reported	
Byte 3	=	Length of data to follow	

Error messages

Byte 4-90	=	Reported errors, in sequence

Byte 4 is in fact the ASCII code of the error (character map under Windows can be used to convert this).

With the ASCII code, then look up the error in Table II.1/Q.921 and go from there:

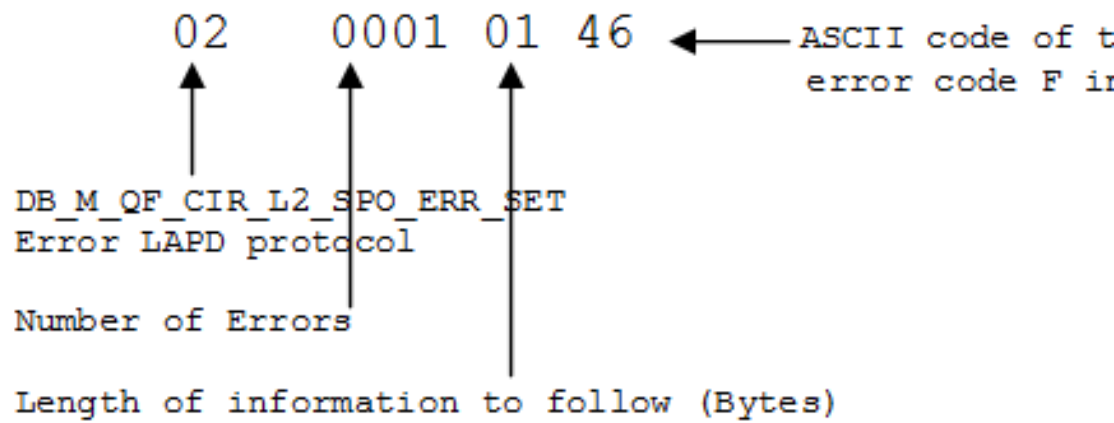


Table 29: Table II.1/Q.921 - Management Entity Actions for MDL-Error-Indications

Error Type	Error Code	Error Condition	Affected States (Note 1)	Network Management Action
Receipt of unsolicited response	A	Supervisory (F=1)	7	Error log
	B	DM (F=1)	7, 8	Error log
	C	UA (F=1)	4, 7, 8	TEI removal procedure or TEI check procedure; then, if TEI: • free, remove TEI • single, no action • multiple, TEI removal procedure
	D	UA (F=0)	4, 5, 6, 7, 8	
	E	Receipt of DM response (F=0)	7, 8	Error log
Peer initiated re-establishment	F	SABME	7, 8	Error log

Error Type	Error Code	Error Condition	Affected States (Note 1)	Network Management Action
Unsuccessful retransmission (N200 times)	G	SABME	5	TEI check procedure; then, TEI: • free, remove • single, error I • multiple, TEI removal procedure
	H	DIS	6	
	I	Status enquiry	8	Error log
Other	J	N(R) error	7, 8	Error log
	K	Receipt of FRMR response	7, 8	Error log
	L	Receipt of undefined frame	4, 5, 6, 7, 8	Error log
	M (Note 2)	Receipt of I field not permitted	4, 5, 6, 7, 8	Error log
	N	Receipt of frame with wrong size	4, 5, 6, 7, 8	Error log
	O	N201 error	4, 5, 6, 7, 8	Error log

Real examples:

Error: ASCII 47 corresponds to error code G Unsuccessful retransmission (N200 times - Default value = 3) Message SABME in Status 5 - Problem during TEI check procedure.

F5413 E8 N8149 STATIST BPA CIRCUIT L2 SPOR ERROR 10-06-01 15:47:37

ALARM CLASS:SWU-PER:001

P908:LTG1 :LTU33:010: 00 : 0 Q2217-X STMD3/1 BST:01 PLS:-06

FORMAT:22 DEVICE NAME: S0VERB

0200040C010547010547010547010547

FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF

FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF

FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF

FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF

FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF

FFFFFFFFFFFF

Additional Hint:

Error messages

Attached Line Trace shows only incomplete messages from the Network. No messages from User included.

Reason:

Wrong Wiring: - Send-Send and Receive-Receive instead of Send-Receive, Receive-Send.

Special case:

Byte 00-03	=	PNE: (P rivate N etwork E mulator) The following information indicates a PNE error message
Byte 04-90	=	PNE error message in ASCII format

See also [Section 8.14, “Device names”](#).

F5414

CIRCUIT

L2 ERROR

Type:

Service-specific (Format 22/36)

Short text:

Layer 2 error

Cause:

Layer 2 error (protocol), may also have been caused by remote partner.
Format 36: Layer 2 error in digital networking circuit only (protocol). Positive acknowledgment with [F5418](#).

System reaction:

statistics, locks layer 2-3

Action:

Check partner (remote system), check line with the protocol tester.

REASON:	00	RELEASE ACKNOWLEDGE (layer 2 cleared down)
	01	DEACTIVATED BY PEER (partner has cleared down layer 2)
	02	LAYER 1 DEACTIVATED (Layer 2 was cleared down due to layer 1 error)
	03	DEFECT ON U (UP0 error)
	04	DEFECT ON S (S0 error)
	05	PEER OUT OF ORDER (Layer 2 setup, partner not responding)
	06	PROTOCOL FAILURE
	07	TIMEOUT REMOTE BUSY (remote overload)
	08	FRMR, DM OR F-BIT (error status, partner deactivated)
	09	RESET BY PEER (layer 2 reset by partner)

0A	TEI NOT ASSIGNED (Terminal Endpoint Identifier does not exist)
0B	TEI REMOVE (Terminal Endpoint Identifier is taken back)
0C	POWER UP TE (terminal equipment is powered)
0D	TEI INVALID (Incorrect address or terminal does not understand address)
0E	CES NOT ASSIGNED (No CES exists; no terminal for logical link)
0F	LAYER 2 NOT READY

See also [Section 8.14, “Device names”](#).

F5415

CIRCUIT

L2 STOP NEW SEIZURES

Type:

Service-specific (Format 18)

Short text:

Overload prevention is active

Cause:

STOP for re-seizures. Overload prevention for digital networking circuits

System reaction:

locks layer 2-3

Action:

Look for any associated, additional error messages. If this error occurs frequently, save the error message data and contact your [Next level of support](#).

Overload prevention is also possible for CGW STMI trunking cards. The corresponding CPU Threshold settings for the board can be adjusted in WBM under **Maintenance > Platform Diagnostics > CPU Monitor**.

Important note: Default values should not be changed but if needed please contact GVS in advance for an advise/support.

See also [Section 8.14, “Device names”](#).

F5416

CIRCUIT

L2 START NEW SEIZURES

Type:

Service-specific (Format 18)

Short text:

Overload end

Cause:

Re-seizures possible again. Overload queue has been worked off or board has reset itself.

System reaction:

ends of lock on layer 2-3

Action:

Look for any associated, additional error messages. If this error occurs frequently, save the error message data and contact your [Next level of support](#).

Overload prevention is also possible for CGW STMI trunking cards. The corresponding CPU Threshold settings for the board can be adjusted in WBM under **Maintenance > Platform Diagnostics > CPU Monitor**.

Important note: Default values should not be changed but if needed please contact GVS in advance for an advise/support.

See also [Section 8.14, "Device names"](#).

F5417

CIRCUIT

L3 ERROR

Type:

Service-relevant (Format 22)

Short text:

Layer 3 error

Cause:

Layer 3 error in digital networking record (switching technology). An L3 ERROR can occur in connection with AMO TWABE. The S2 interface requires a response from the remote system within 1.5 seconds. The AMO TWABE requires a longer CPU time, however, which can result in an L3 ERROR.

System reaction:

Signalling only.

Action:

The remedy depends on an analysis of the supplementary data. Save error message data and contact [Next level of support](#). The COP parameter ASNM must be set in order to output errors.

Various Formats apply, see message structure; DH_M_NW_QF_FA_STR

The most important/common follow the following structure (red highlighted):

F5417 E8 N1454 NO ACT BPA CIRCUIT L3 ERROR 02-07-26 12:58:30

ALARM CLASS:SWU-PER:000

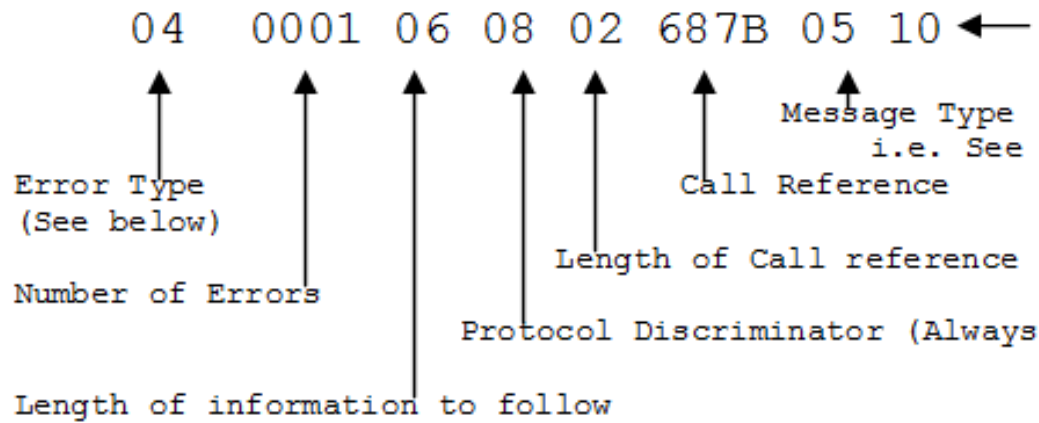
P102:LTG1 :LTU2 :103: 00 :15 Q2096-X200 DIU-S2 BST:01 FW:D762-C

FORMAT:22 DEVICE NAME: S2COD


```

040001060802687B0510FFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFF

```



* COP L3FR = Only outputted if set in COP

* COP ASNM = ASN.1 errors only outputted if set in COP

DB_M_QF_CIR_L3_ERR_SET = SET

00	DB_QF_CIR_L3_MT_NOT_EXIST,	/* DH: KEIN MESSAGE TYPE
01	DB_QF_CIR_L3_PD_NOT_EXIST,	/* DH: KEIN PROTOKOLL DIS
02	DB_QF_CIR_L3_WEL_NOT_EXIST,	/* DH: KEINE W-ELEMENTE
03	DB_QF_CIR_L3_DOUBLE_WEL,	/* DH: DOPPELTES W-ELEMEN
04	DB_QF_CIR_L3_NOT_ALLOW_WEL,	/* DH: NICHT ERLAUBTES W-
05	DB_QF_CIR_L3_MISSING_WEL,	/* DH: FEHLENDES W-ELEMEN
06	DB_QF_CIR_L3_WEL_OVERFLOW,	/* DH: UEBERLAUF W-ELEMEN
07	DB_QF_CIR_L3_LOC_PROC_ERR,	/* DH: RESSOURCENMANGEL
08	DB_QF_CIR_L3_NO_BEL_Q,	/* DH: KEINE BELEGUNGSQUI
09	DB_QF_CIR_L3_NO_AUSL_Q,	/* DH: KEINE AUSLOESEQUIT
0A	DB_QF_CIR_L3_NO_B_CHAN,	/* DH: B-KANALVERHANDLUNG
0B	DB_QF_CIR_L3_CHAN_REST_LOC,	/* DH: CHANNEL RESTART LO
0C	DB_QF_CIR_L3_SPAN_REST_LOC,	/* DH: SPAN RESTART LOCAL
0D	DB_QF_CIR_L3_CHAN_REST_REM,	/* DH: CHANNEL RESTART RE
0E	DB_QF_CIR_L3_SPAN_REST_REM,	/* DH: SPAN RESTART REMOT
0F	DB_QF_CIR_L3_REST_NO_ACK,	/* DH: RESTART_NO_ACK
10	DB_QF_CIR_L3_CHAN_MB_REM,	/* DH: MAINT_BUSY_REMOTE
11	DB_QF_CIR_L3_CHAN_OOS_REM,	/* DH: OOS_REMOTE
12	DB_QF_CIR_L3_SPAN_MB_REM,	/* DH: MAINT_BUSY_REMOTE
13	DB_QF_CIR_L3_SPAN_OOS_REM,	/* DH: OOS_REMOTE
14	DB_QF_CIR_L3_MT_UNEXPECTED,	/* DH: UNPLAUSIBLE MELDUN
15	DB_QF_CIR_L3_TIMER_EXPIRY,	
16	DB_QF_CIR_L3_SEG_DISCARD,	
17	DB_QF_CIR_L3_SEG_MSG_LONG,	
18	DB_QF_CIR_L3_COMP_DISCARD,	
19	DB_QF_CIR_L3_FAC_DISCAR,	
1A	DB_QF_CIR_L3_OVERFLOW,	
1B	DB_QF_CIR_L3_TAG,	
1C	DB_QF_CIR_L3_LENGTH,	
1D	DB_QF_CIR_L3_RANGE,	
1E	DB_QF_CIR_L3_ENUMERATED,	
1F	DB_QF_CIR_L3_SIZE,	
20	DB_QF_CIR_L3_SELECT,	
21	DB_QF_CIR_L3_ANYDEFINEDBY,	
22	DB_QF_CIR_L3_CDU_OVERFLOW,	
23	DB_QF_CIR_L3_OPERATIONCODE,	
24	DB_QF_CIR_L3_ERRORCODE,	
25	DB_QF_CIR_L3_OTHER,	
26	DB_QF_CIR_L3_INVALID_CR,	/* DH: invalid Call Refere
27	DB_QF_CIR_L3_MSG_OVERFLOW,	/* DH: outgoing msg overfl
28	DB_QF_CIR_L3_Y_OVERFLOW,	
29	DB_QF_CIR_L3_Y_TAG,	
2A	DB_QF_CIR_L3_Y_LENGTH,	
2B	DB_QF_CIR_L3_Y_RANGE,	
2C	DB_QF_CIR_L3_Y_ENUMERATED,	
2D	DB_QF_CIR_L3_Y_SIZE,	
2E	DB_QF_CIR_L3_Y_SELECT,	
2F	DB_QF_CIR_L3_Y_ANY_DEFINEDBY,	
30	DB_QF_CIR_L3_Y_CDU_OVERFLOW,	
31	DB_QF_CIR_L3_Y_OPERATIONCODE,	
32	DB_QF_CIR_L3_Y_ERRORCODE,	
33	DB_QF_CIR_L3_Y_OTHER,	

To find the message type convert the HEX to binary and look up below.

Excerpt ETS 300 102-1: December 1990

4.4 Message type

Table 4.2: Message types

Bits

8 7 6 5 4 3 2 1

0 0 0 0 0 0 0 0 Escape to nationally specific message type; see NOTE:ETSI requirement 1.

0 0 0 - - - - - Call establishment messages:

0 0 0 0 1 ALERTING

0 0 0 1 0 CALL PROCEEDING

0 0 1 1 1 CONNECT

0 1 1 1 1 CONNECT ACKNOWLEDGE

0 0 0 1 1 PROGRESS

0 0 1 0 1 SETUP

0 1 1 0 1 SETUP ACKNOWLEDGE

0 0 1 - - - - - Call information phase messages:

0 0 1 1 0 RESUME

0 1 1 1 0 RESUME ACKNOWLEDGE

0 0 0 1 0 RESUME REJECT

0 0 1 0 1 SUSPEND

0 1 1 0 1 SUSPEND ACKNOWLEDGE

0 0 0 0 1 SUSPEND REJECT

0 0 0 0 0 USER INFORMATION

0 1 0 - - - - - Call clearing messages:

0 0 1 0 1 DISCONNECT

0 1 1 0 1 RELEASE

1 1 0 1 0 RELEASE COMPLETE

0 0 1 1 0 RESTART

0 1 1 1 0 RESTART ACKNOWLEDGE

0 1 1 - - - - - Miscellaneous messages:

0 0 0 0 0 SEGMENT (ETSI requirement 2)

1 1 0 0 1 CONGESTION CONTROL

1 1 0 1 1 INFORMATION

0 0 0 1 0 FACILITY

0 1 1 1 0 NOTIFY

1 1 1 0 1 STATUS

1 0 1 0 1 STATUS ENQUIRY

Error messages

DB_M_NW_W_ELEM_SET is not included in this document because it is version dependant (pasting the error message to Message Doctor if the correct version is configured will display the correct value).

Other formats from reported scenarios:

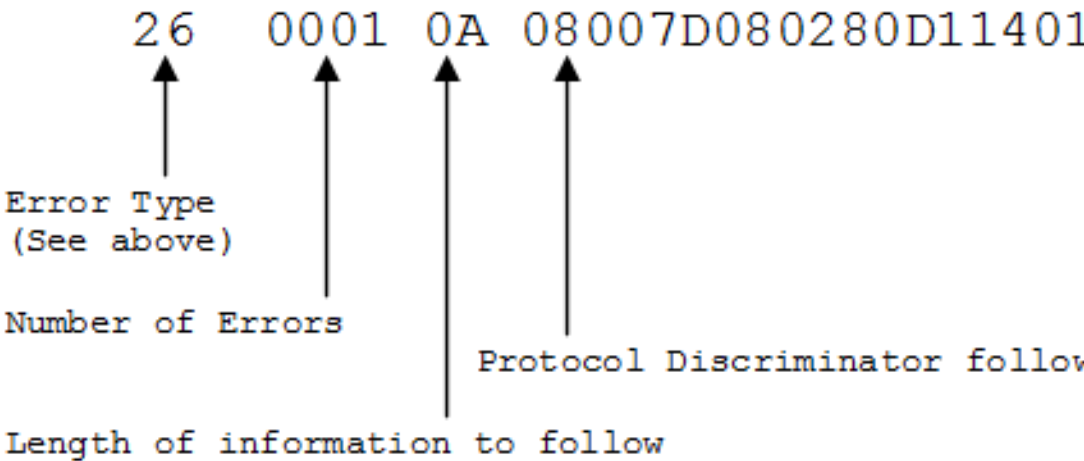
F5417 E8 N0532 NO ACT BPB CIRCUIT L3 ERROR 11-04-19 11:39:49

ALARM CLASS:SWU-LOG:201

P301:LTG1 :LTU4 :025: 01 : 0 Q2196-X DIU-N2/1 BST:01 PLS:-07

FORMAT:22 DEVICE NAME: S2VERB

2600010A08007D080280D1140100FFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF
FFFFFFFF



Byte 0	=	DB_M_QF_CIR_L3_ERR_SET	Error type (DH_M_NW_QF_FA
	00	DB_QF_CIR_L3_MT_NOT_EXIST	Unknown message type (DH_M_NW_L3_ERR_ARY)
	01	DB_QF_CIR_L3_PD_NOT_EXIST	Unknown protocol (DH_M_NW_L3_ERR_ARY)
	02	DB_QF_CIR_L3_WEL_NOT_EXIST	Unknown information element/ (DH_M_NW_L3_ERR_BYTE_)
	03	DB_QF_CIR_L3_DOUBLE_WEL	Dual information element (DH_M_NW_L3_ERR_BYTE_)
	04	DB_QF_CIR_L3_NOT_ALLOW_WEL	Impermissible information elem (DH_M_NW_L3_ERR_WEL_S
	05	DB_QF_CIR_L3_MISSING_WEL	Mandatory information elemen (DH_M_NW_L3_ERR_WEL_S

Error messages

06	DB_QF_CIR_L3_WEL_OVERFLOW	Too many information elements in messages (no supplementary data)
07	DB_QF_CIR_L3_LOC_PROC_ERR	Local problem in protocol processing (logfile not active (AMO P device memory available supplementary data)
08	DB_QF_CIR_L3_NO_BEL_Q	No seizure acknowledged (no supplementary data)
09	DB_QF_CIR_L3_NO_AUSL_Q	No trigger acknowledgement (no supplementary data)
0A	DB_QF_CIR_L3_NO_B_CHAN	B-channel negotiation not successful (no supplementary data)[BP]
0B	DB_QF_CIR_L3_CHAN_REST_LOC	for US Release 6.0 (no supplementary data)
0C	DB_QF_CIR_L3_SPAN_REST_LOC	for US Release 6.0 (no supplementary data)
0D	DB_QF_CIR_L3_CHAN_REST_REM	for US Release 6.0 (no supplementary data)
0E	DB_QF_CIR_L3_SPAN_REST_REM	for US Release 6.0 (no supplementary data)
0F	DB_QF_CIR_L3_REST_NO_ACK	for US Release 6.0 (no supplementary data)
10	DB_QF_CIR_L3_CHAN_MB_REM	for US Release 6.0 (no supplementary data)
11	DB_QF_CIR_L3_CHAN_OOS_REM	for US Release 6.0 (no supplementary data)
12	DB_QF_CIR_L3_SPAN_MB_REM	for US Release 6.0 (no supplementary data)
13	DB_QF_CIR_L3_SPAN_OOS_REM	for US Release 6.0 (no supplementary data)
14	DB_QF_CIR_L3_MT_UNEXPECTED	Implausible message (DH_M_NW_L3_ERR_A)
15-17		Reserved
18	DB_QF_CIR_L3_COMP_DISCARD	Error while decoding the message (lack of space in DH message) (DH_M_NW_L3_ERR_B)
19	DB_QF_CIR_L3_FAC_DISCAR	Error while decoding the message (lack of space in DH message) (DH_M_NW_L3_ERR_B)
1A	DB_QF_CIR_L3_OVERFLOW	ASN1 decoder error (DH_M_NW_L3_ERR_B)
1B	DB_QF_CIR_L3_TAG	ASN1 decoder error (DH_M_NW_L3_ERR_B)
1C	DB_QF_CIR_L3_LENGTH	ASN1 decoder error (DH_M_NW_L3_ERR_B)
1D	DB_QF_CIR_L3_RANGE	ASN1 decoder error (DH_M_NW_L3_ERR_B)

Error messages

	1E	DB_QF_CIR_L3_ENUMERATED	ASN1 Decoder Fehler (DH_M_NW_L3_ERR_BYTE_5)
	1F	DB_QF_CIR_L3_SIZE	ASN1 decoder error (DH_M_NW_L3_ERR_BYTE_5)
	20	DB_QF_CIR_L3_SELECT	ASN1 decoder error (DH_M_NW_L3_ERR_BYTE_5)
	21	DB_QF_CIR_L3_ANYDEFINEDBY	ASN1 decoder error (DH_M_NW_L3_ERR_BYTE_5)
	22	DB_QF_CIR_L3_CDU_OVERFLOW	ASN1 decoder error (DH_M_NW_L3_ERR_BYTE_5)
	23	DB_QF_CIR_L3_OPERATIONCODE	ASN1 decoder error (DH_M_NW_L3_ERR_BYTE_5)
	24	DB_QF_CIR_L3_ERRORCODE	ASN1 decoder error (DH_M_NW_L3_ERR_BYTE_5)
	25	DB_QF_CIR_L3_OTHER	ASN1 decoder error (DH_M_NW_L3_ERR_BYTE_5)
	26	DB_QF_CIR_L3_INVALID_CR	Wrong call reference (DH_M_NW_L3_ERR_ARY)
	27	DB_QF_CIR_L3_MSG_OVERFLOW	DATA3 overflow (DH_M_NW_L3_ERR_WEL_S)
	28	DB_QF_CIR_L3_Y_OVERFLOW	ASN1 encoder error (DH_M_NW_L3_ERR_COMP_5)
	29	DB_QF_CIR_L3_Y_TAG	ASN1 encoder error (DH_M_NW_L3_ERR_COMP_5)
	2A	DB_QF_CIR_L3_Y_LENGTH	ASN1 encoder error (DH_M_NW_L3_ERR_COMP_5)
	2B	DB_QF_CIR_L3_Y_RANGE	ASN1 encoder error (DH_M_NW_L3_ERR_COMP_5)
	2C	DB_QF_CIR_L3_Y_ENUMERATED	ASN1 encoder error (DH_M_NW_L3_ERR_COMP_5)
	2D	DB_QF_CIR_L3_Y_SIZE	ASN1 encoder error (DH_M_NW_L3_ERR_COMP_5)
	2E	DB_QF_CIR_L3_Y_SELECT	ASN1 encoder error (DH_M_NW_L3_ERR_COMP_5)
	2F	DB_QF_CIR_L3_Y_ANY_DEF_BY	ASN1 encoder error (DH_M_NW_L3_ERR_COMP_5)
	30	DB_QF_CIR_L3_Y_CDU_OVERFLW	ASN1 encoder error (DH_M_NW_L3_ERR_COMP_5)
	31	DB_QF_CIR_L3_Y_OPERAT_CODE	ASN1 encoder error (DH_M_NW_L3_ERR_COMP_5)

	32	DB_QF_CIR_L3_Y_ERRORCODE	ASN1 encoder error (DH_M_NW_L3_ERR_C
	33	DB_QF_CIR_L3_Y_OTHER	ASN1 encoder error (DH_M_NW_L3_ERR_C
	34		Reserved

See also [Section 8.14, "Device names"](#).

F5418

CIRCUIT

LX ACTIVE

Type:

Service-specific (Format 36)

Short text:

Layer 1, or layer 2/3 okay again

Cause:

The errored protocol layer (L1, L2 or L3) of the networking circuit is intact again. Positive response for [F5412](#) and [F5414](#). LX ACTIVE Layer 3 is also used as a positive response after [F5993](#) CIRCUIT L2 ERROR VC for voice compression. This message is also used for ATM circuits of all modes of operation. It can refer to one circuit or to all circuits in the board (see circuit information).

System reaction:

starts up layer 1 in the case of 'Layer 1 active' or layer 3 in the case of 'Layer 3 active'.

System reaction:

ends lock on layer 1 or 2-3.

Action:

Positive acknowledgment, no action required.

Interpretation of auxiliary data:

T1-Board in USA:

REASON: 01H ACQUISITION OF SIGNAL

REASON: 02H CHANNEL FAULT OK

REASON: 03H GREEN ALARM

REASON: 04H MIN ERR SECS

REASON: 05H CHANNEL IN SERVICE

REASON: 06H SPAN IN SERVICE

Networking Europe:

REASON: 07H LAYER 1 ACTIVE

Cause:

Layer 1 active for networking

REASON: 09H LAYER 3 ACTIVE

Cause:

Layer 2 and 3 active for networking

REASON: 0AH LAYER 1 DELAYED

Cause:

Layer 1 delayed; only for DIUC 64 in France. The delay time for LAYER 1 DELAY can be set between 30 and 180 seconds with the STABTIM parameter of the LWPAR AMO (reload).

See also [Section 8.14, "Device names"](#).

F5420

TERM

ASYNC

Type:

Service-specific (Format 18)

Short text:

Terminal asynchronous

Cause:

Terminal asynchronous (DIGITE, DIG M86). Board attempts to synchronize. If error repeats and DH is already asynchronous, the terminal will remain asynchronous. The FA error analysis system deactivates the terminal after each error, although the error message is only signaled once. End of synchronization with [F5688](#).

System reaction:

locks the terminal

Action:

Check line and terminal.

See also [Section 8.14, "Device names"](#).

F5421

TERM

NO BLOCKED ID

Type:

Service-specific (Format 18)

Short text:

Defective ID card reader (IDCR).

Cause:

Board checks for end-of-block character. If this is missing, PP sends a TERM_AWL_DEF message to the FA.

System reaction: - SLMB, SLMB16: terminal is reset automatically. - SLMD: terminal is blocked (deactivated).

Action:

Replace IDCR, reset terminal.

See also [Section 8.14, "Device names"](#).

F5422

TERM

DEACTIVATED

Type:

Service-specific (Format 22)

Short text:

Terminal deactivated

Cause:

Terminal connected to SLMD (direct or via adapter CTE) has deactivated itself due to an error. Terminal sends message to SLMD.

System reaction:

terminal is blocked by FA and restored to service after a delay.

Action:

Check terminal and connector.

Interpretation of auxiliary data:

Byte 0 = REASON_L1 Byte 1 = REASON_L2

See also [Section 8.14, "Device names"](#).

F5423

TERM

LL STAT

Type:

Service-specific (Format 22)

Short text:

Terminal last look error

Cause:

- Sporadic transmission error, detected more than three times during terminal last look verification (DIGITE / ATND). - DH receives 'data transfer error' or 'unknown command' message from DIGITE or attendant console. - DCI cannot be reloaded.

System reaction:

DH initiates a RESET for DIGITE, DIGITE M86 and T3510.

Action:

Error message only for statistics. However, if this error recurs frequently, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 = Maximum length of data to follow (64 Bytes) Byte 1 - 64 = Includes the entire message of DH to FA. Last message to the DH begins at Byte 11.

See also [Section 8.14, "Device names"](#).

F5424

TERM

NOT READY

Type:

Service-specific (Format 18)

Short text:

X.21 terminal not ready

Cause:

Terminal is not ready, i.e. cannot accept call, power failure at TTX terminal, or terminal adapter of CTE loose/not plugged. Terminals with S* interface: terminal is not configured. Positive acknowledgment with [F5425](#).

System reaction:

line alarm for the terminal

Action:

Check line, terminal and terminal parameters.

See also [Section 8.14, "Device names"](#).

F5425

TERM

READY

Type:

Service-specific (Format 18)

Short text:

X.21 terminal ready again / plugged in

Cause:

X.21/T3510/S3510/CTE a/b or DCI terminal startup (restart) completed. For terminals with an S* interface this message means terminal is installed.

System reaction:

end of line alarm for the terminal

Action:

Positive acknowledgment, without action.

See also [Section 8.14, "Device names"](#).

F5426

TERM

REFRESH

Type:

Service-specific (Format 18)

Short text:

Refresh requested by terminal in 'asynchronous' status

Cause:

Terminal has lost call processing data and sent a refresh request to the DH. End of synchronization indicated by [F5688](#) and terminal is automatically restored to service by FA.

System reaction: a) Digite, Digite M86, T3510: the FA locks the terminal, refresh by DH. b) ATND: Attendant console data is refreshed by DH without deactivation by FA

Action:

Check terminal or attendant console. If repeated refresh requests caused by user playing with chip card during call, instruct users in correct use of chip card.

See also [Section 8.14, "Device names"](#).

F5427

TERM

DEV HARDWARE ERROR

Type:

Service-specific (Format 22)

Short text:

Hardware error of a terminal (HWER)

Cause:

Terminal has detected a hardware error and has reported it to the SOMUP handler by means of a transfer message sent via PP.

System reaction:

terminal is blocked (deactivated)

Action:

Check terminal.

Interpretation of auxiliary data:

Byte 0 = Length of data to follow (transfer message + 3) Byte 1 = Routing type
Byte 2 = Length of transfer message Byte 3 = TC Byte 4-47 = Transfer message

See also [Section 8.14](#), "Device names".

F5428

TERM

DEV MSG ERROR

Type:

Service-specific (Format 22)

Short text:

Message error of a terminal (MSER)

Cause:

Terminal has received a bad message and has reported it to the SOMUP handler by means of a transfer message sent via PP.

System reaction:

signals only

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 = Length of data to follow (transfer message + 3) Byte 1 = Routing type
Byte 2 = Length of transfer message Byte 3 = TC Byte 4-47 = Transfer message

See also [Section 8.14](#), "Device names".

F5429

TERM

TERMINAL SWITCHED OFF

Type:

Service-specific (Format 18)

Short text:

Terminal switch-off indication (TSOI) detected

Cause:

Message from SOMUP handler to FA: a) An adapted server has switched itself off. b) The DCI has been unplugged or the line is asynchronous. c) T3510 / S3510 monitor has been switched off. Positive acknowledgment with [F5425](#).

System reaction:

remote lock with no signaling.

Action:

Check DCI, line and server.

See also [Section 8.14](#), “Device names”.

F5431

TERM

TERMINAL RESET

Type:

Service-specific (Format 18)

Short text:

Terminal adapter reset indication (TARI) detected

Cause:

a) Message TERM_SOM_TARI - Terminal adapter reset on CTE or T3510 / S3510
b) Message TERM_DCI_DH_TARI - Partner DCI does not respond to clear-down attempt - DCI power-on (USA) - DCI plugged in (USA).

System reaction:

resets the terminal

Action:

Positive acknowledgment without action.

See also [Section 8.14](#), “Device names”.

F5432

TERM

TIMEOUT

Type:

Service-specific (Format 18)

Short text:

Timeout error

Cause:

Terminal does not react to a request or signaling criterion from call processing (CP). Positive acknowledgment with [F5425](#).

System reaction:

terminal line alarm

Action:

Check terminal, connector and line circuit board. Test with TSU AMO if necessary.

See also [Section 8.14](#), “Device names”.

F5433

TERM

DCI WRONG VERS

Type:

Service-specific (Format 18)

Short text:

Wrong DCI version

Cause:

The DCI cannot be loaded but replies with a parameter error, e.g. due to wrong PROM version.

System reaction:

the DCI is deactivated.

Action:

Replace DCI. Check firmware PROM version (see hardware systems service).

See also [Section 8.14](#), "Device names".

F5434

TERM

DCI NO ANSW

Type:

Service-specific (Format 22)

Short text:

DCI not responding properly

Cause:

DCI is not responding properly and cannot be loaded. Positive acknowledgment with [F5425](#).

System reaction:

locks the DCI

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#). Replace DCI if necessary.

Interpretation of auxiliary data:

Byte 0 = Length of relevant bytes Byte 1 = Error signaled from DCI
(DB_M_QF_SEV_DCI_ERROR_SET) 00 No response 01 Transmission error
02 Data inconsistent 03 Watchdog 04 No reason

See also [Section 8.14](#), "Device names".

F5439

TERM

COR-T/SET4 AK D BIT

Type:

Service-specific (Format 18)

Short text:

Set 400 downloading aborted

Cause:

The DIGITE M86 downloading process has been aborted. Data inconsistency in downloaded data. System reaction: terminal disabled

Action:

Check terminal.

See also [Section 8.14](#), “Device names”.

F5440

TERM

COR-T/SET4 AK W BIT

Type:

Service-specific (Format 18)

Short text:

Set 400 watchdog timeout

Cause:

Watchdog timeout in DIGITE M86.

System reaction:

the terminal is disabled by the system and subsequently restored to service again after a delay.

Action:

If this error message occurs frequently, check terminal.

See also [Section 8.14](#), “Device names”.

F5444

TERM

TERMINAL NPR

Type:

Service-specific (Format 18)

Short text:

Terminal (adapter) not present

Cause:

Terminal adapters, adapted servers or non-voice terminals connected to CTE are absent (not present) or are not responding during startup. Positive acknowledgment with [F5425](#).

System reaction:

line alarm.

Action:

Check terminal adapter, servers, non-voice terminals, CTE and cable connections.

See also [Section 8.14](#), "Device names".

F5445

TERM

STAT OVERFLOW

Type:

Service-specific (Format 22)

Short text:

Statistics counter overflow (threshold value exceeded)

Cause:

Statistics counters monitor the alarms on this terminal. The terminal has been placed out of service due to too many alarms. Counter sequence: each alarm increments the error counter by 1. Alarm pairs (alarm set and alarm reset message) also increment a specific pair counter by 1, even if the alarm is reset correctly. One of the statistics counters has reached its threshold, and the terminal has been placed out of service by dependability (status: DEF). As a rule, the counter level is reset after overflow, so that the terminal is not immediately blocked again when re-activated via AMO or when the board is replaced. In addition, the counter level is decremented at set intervals (minutes).

Action:

Deactivate and re-activate terminal. Check terminal and line, and replace if necessary.

Interpretation of auxiliary data:

Byte 0 = Counter level of alarm pair counter (standard) Byte 1 = Counter level of single alarm counter (standard) Byte 2 = Counter level of single alarm counter (optional) Byte 3 = Counter level of single alarm counter (optional) Byte 4 = Statistics class 0 - 20. Different threshold values exist depending on the board type. Byte 5 = Number of counter which has overflowed 00 Alarm pair counter (standard) 01 Single alarm counter (standard) 02 Single alarm counter (optional) 03 Single alarm counter (optional) Byte 6-7 = Threshold value of overflowed counter (MAX_COUNT) Byte 8-9 = Reset value of overflowed counter (COUNT_ACTION) Byte 10 = Type of threshold value reached 00 Alarm pair (standard) 01 Single alarm (standard) 02 Single alarm (optional) 03

Single alarm (optional) Byte 11-12 = Decrementing time interval, in minutes (MAX_TIME_COUNT) Byte 13-14 = Decrementing value (DECREMENT) Byte 15-80 = Message to FA which led to statistics overflow

See also [Section 8.14, "Device names"](#).

F5446

TERM

BACK IN SERVICE

Type:

Service-relevant (Format 18)

Short text:

Terminal back in service

Cause:

Following a defect, the terminal was put back into service after multiple attempts and a preset block timeout. The terminal is monitored to see if another failure occurs. If a new defect occurs during this monitoring time, it is put back into service on a trial basis after a longer block time. In ACTION = INSTRIAL (in service trial) putting into service on a trial basis (Format 43) In ACTION = IN SERV (in service), putting into service is permanent, the monitoring period is over. (Format 18)

System reaction:

Terminal goes from DEF to READY.

Action:

Positive message, no action required.

Interpretation of auxiliary data:

Text only for format 43: TRIAL NO: 1 = current number of attempts to put the system into service (max. 8)

F5447

TERM

OVERLOAD BEG

Type:

Service-specific (Format 22)

Short text:

Overload of digital terminal

Cause:

Station user "playing" on the Digite (e.g. indiscriminately pressing keys or "drumming" on the hook switch). The message came from call processing. The terminal is deactivated and enabled again after about one minute.

System reaction:

the terminal is disabled

Action:

Check terminal

Interpretation of auxiliary data:

Byte 0 = Length of following, relevant bytes Byte 1-7 = HEX value, convert using ASCII table. E.g.: '53544F45524552' = 'STOERER'

See also [Section 8.14](#), "Device names".

F5448

TERM

OVERLOAD END

Type:

Service-specific (Format 22)

Short text:

Terminal back in service

Cause:

Station user stopped "playing" on the Digite

System reaction:

the Digite is placed in service again.

Action:

Positive acknowledgment of [F5447](#), no action.

Interpretation of auxiliary data:

Byte 0 = Length of following, relevant bytes Byte 1-7 = HEX value, convert using ASCII table. E.g.: '53544F45524552' = 'STOERER'

See also [Section 8.14](#), "Device names".

F5449

TERM

CORNET-T ERROR

Type:

Service-specific (Format 22)

Short text:

Error in CorNet-T terminal startup

Cause:

Error in CorNet-T terminal during downloading, or line alarm on CorNet-T line.

System reaction:

depends on the error types, see Interpretation of auxiliary data.

Action:

If error recurs frequently, replace terminal.

Interpretation of auxiliary data:

Byte 0 = Max. length of data to follow (64 bytes) Byte 1 = Error type (DB_M_QF_SEV_C_T_SET) 00 Downloading defective, multiple startup by DEP with Reset 01 Download data incomplete, multiple startup by DEP with Reset 02 Multiple startup by DEP with Reset 03 Invalid parameter received during downloading, terminal is blocked by DEP 04 "Wrong component description" received during downloading. The terminal is blocked by DEP 05 Reset request for terminal, blocking and startup by DEP with Reset 06 Terminal has performed restart or self reset (statistics) 07 No positive acknowledgment from terminal for partial download (statistics) 08 CorNet-T terminal is not operational, check terminal (line alarm)

See also [Section 8.14, "Device names"](#).

F5450

TERM

CORNET-T MSG ERROR

Type:

Service-specific (Format 22)

Short text:

CorNet-T terminal message corrupted

Cause:

Corruption of CorNet-T messages to line peripheral (device handler). Software error!

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 = Max. length of data to follow (64 bytes) Byte 1 = Error type (DB_M_QF_SEV_C_T_MSG_SET) 01 Requested service not available 02 Invalid call reference number 03 Incompatible destination 04 Invalid message (not further specified) 05 CorNet-T mandatory info element missing in message 06 CorNet-T message type not recognized 07 CorNet-T message not permissible in this device status 08 CorNet-T information element not recognized 09 CorNet-T information element with invalid contents 0A Message header incomplete 0B Unrecognized protocol discriminator 0C Information element not recognized 0D Information element not required 0E Information elements not in sequence 0F Duplicate information elements not allowed 10 No call reference available 11 Status indicator error 12 Release indicator error 13 Message not detected 14 Unexpected message

See also [Section 8.14, "Device names"](#).

F5451

TERM

CORNET-T TIME ERROR

Type:

Service-specific (Format 22)

Short text:

Timeout while waiting for CorNet T messages

Cause:

Timer exceeded (timeout) during CorNet T message exchange; detected by system software. Board possibly unplugged during operation, causing loss of message traffic.

System reaction:

statistics

Action:

Replug board if loose. Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 1 = Error type (DB_M_QF_SEV_C_T_TIM_SET) 00 TE does not respond to test loop start 02 Dialing time watchdog triggered 03 SETUP watchdog triggered 04 Disconnect watchdog triggered 05 Watchdog for disconnect with announcement triggered 06 Release watchdog triggered 08 Watchdog for global transactions triggered 09 RESTART watchdog triggered 0A Watchdog for restart processing triggered 0B Watchdog for status requests triggered 0C No response to request for key assignment 0D Watchdog for level 2 clear down triggered

See also [Section 8.14](#), "Device names".

F5452

TERM

FUNCT L3 ERROR

Type:

Diagnosis-specific (Format 22)

Short text:

Layer 3 error of functional terminal

Cause:

Layer 3 error of functional terminal. Software error! Error type indicated in byte 1 of hexadecimal output.

System reaction:

signals only

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 = Max. length of data to follow (5F) Byte 1 = Error type
(DB_M_QF_CIR_L3_ERR_SET) 00 Unrecognized message type 01
Unrecognized protocol 02 Unrecognized information element/call reference
03 Duplicate information element 04 Information element not allowed 05
Missing mandatory information element 06 Too many information elements in
message 07 Local problem in protocol handler (e.g. protocol not active (AMO
PRODE) or no more device memory available (AMO DIMSU)) 08 No seizure
acknowledgment 09 No release acknowledgment 0A B-channel handling
negative 0B-13 For US Release 6.0 14 Implausible message

See also [Section 8.14, "Device names"](#).

F5453

TERM

L2 ERROR

Type:

Service-specific (Format 22)

Short text:

Layer 2 terminal error

Cause:

Layer 2 error of terminals in S0 bus or similar configurations. This is only an error, if it is not due to unplugging or manually deactivating a terminal. Positive acknowledgment with [F5455](#).

System reaction: - CorNet terminal: line alarm - Functional terminal: statistics, in the event of an overload, all terminal functions are blocked on the bus

Action:

If this error recurs frequently, and is definitely not due to unplugging the terminal, the terminal must be exchanged.

Interpretation of auxiliary data:

Byte 0 = Max. length of data to follow (5F) Byte 1 = Error type
(DB_M_QF_CIR_L2_ERR_SET) 00 RELEASE ACKNOWLEDGE (layer 2
cleared down) 01 DEACTIVATED BY PEER (partner has cleared down layer 2)
02 LAYER 1 DEACTIVATED (Layer 2 was cleared down due to layer 1 error)
03 DEFECT ON U (UP0 error) 04 DEFECT ON S (S0 error) 05 PEER OUT OF
ORDER (Layer 2 setup, partner not responding) 06 PROTOCOL FAILURE 07
TIMEOUT REMOTE BUSY (remote overload) 08 FRMR, DM OR F-BIT (error
status, partner deactivated) 09 RESET BY PEER (layer 2 reset by partner)
0A TEI NOT ASSIGNED (Terminal Endpoint Identifier does not exist) 0B TEI
REMOVE (Terminal Endpoint Identifier is taken back) 0C POWER UP TE
(terminal equipment is powered) 0D TEI INVALID (Incorrect address or terminal
does not understand address) 0E CES NOT ASSIGNED (No CES exists; no
terminal for logical link) 0F LAYER 2 NOT READY Special case: Error types
05 PC card or data terminal is switched off 0F Device is not connected or not
responding must not be indicated for reasons of serviceability. These cases are
indicated by TRS instead of NPR in the status memory.

See also [Section 8.14, “Device names”](#).

F5454

TERM

L2 SPOR ERROR

Type:

Service-specific (Format 22)

Short text:

Sporadic layer 2 error

Cause:

Sporadic Layer 2 error of S0 bus terminals or similar configuration..

System reaction:

statistics. It is only locked when the statistics overflow

Action:

No action currently necessary. If the error occurs repeatedly, check terminal.

Interpretation of auxiliary data:

Byte 0 = Max. length of data to follow (5F) Byte 1 = Error type
(DB_M_QF_CIR_L2_SPO_ERR_SET) 00 Layer 2 is reset 01 Short-term
blocking of layer 2 02 Error LAPD protocol Byte 2,3 = Number of errors reported
Byte 4 = Length of data to follow Byte 5-91 = Reported errors, in sequence

See also [Section 8.14, “Device names”](#).

F5455

TERM

LX ACTIVE

Type:

Service-specific (Format 22)

Short text:

Terminal layer 2 active again

Cause:

Terminal or user circuit of S0 bus is okay again.

System reaction:

layer 2 protocol successfully established.

Action:

Positive acknowledgment of [F5453](#), without action.

Interpretation of auxiliary data:

Byte 0 = Max. length of data to follow (5F) Byte 1 = Error type
(DB_M_QF_CIR_LX_AKTIV_SET) 08 Layer 2 is active

See also [Section 8.14, "Device names"](#).

F5457

TERM

A NS T OUT

Type:

Service-specific (Format 18)

Short text:

RolmPhone timeout (USA)

Cause:

RolmPhone timeout in automatic answer mode (auto answer timeout).

System reaction:

locks and delayed restart

Action:

Check device and ensure that the auto answer function is working properly.

See also [Section 8.14, "Device names"](#).

F5458

TERM

WRONG R DEV

Type:

Service-specific (Format 22)

Short text:

Wrong Rolm device

Cause:

Wrong RolmPhone connected.

System reaction:

signals only

Action:

Connect the correct RolmPhone model or reconfigure the line.

Interpretation of auxiliary data:

Byte 0 = Length of data to follow (3) Byte 1 = CONFIGURED: (RolmPhone ID of configured device) Byte 2 = EXISTING: (RolmPhone ID of connected device) Byte 3 = REV_LEVEL: (FW revision level / status of connected device)

See also [Section 8.14, "Device names"](#).

F5459

TERM

BAD TRUNK K

Type:

Service-specific (Format 18)

Short text:

Central office trunk connection defective (USA)

Cause:

RolmPhone user reports defective or bad central office trunk connection by pressing "Bad Trunk" key.

System reaction:

signals only

Action:

Check central office trunk. If necessary block manually.

See also [Section 8.14](#), "Device names".

F5460

CIRCUIT

LW EXCEPTION

IMPORTANT: This message replaces the error messages F5970 to F5983.

Message texts:

REASON: H00 CALLED FUNCTION DOES NOT EXIST

Type:

Diagnosis-specific (Format 43)

Short text:

Procedure cannot be called (identical to F5970)

Cause:

A specific procedure cannot be called. Error (exception) in the loadware of a COSMOS-module (e.g. SLMA24, SLMA16, TMOM, TMEW2, SLMO).

Action:

A solution to the problem is determined by the interpretation of the auxiliary data. Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 = Length of data to follow

Byte 1 = Exception Type

Byte 2 = LW_PROCESS

Byte 3 = STATE

Byte 4 = EVENT

Byte 5-8 = ADDRESS

Byte 9 = SOURCE_ID

Byte 10 = DEST_ID

Byte 11 = INTERNAL_INFO

Byte 12-15 = Reserve for additional data

Byte 16 = Length of auxiliary data

Byte 17-48 = Max. 32 bytes of any auxiliary data

REASON: H01 MESSAGE SENT TO NOT EXISTING PROCESS

Type:

Diagnosis-specific (Format 43)

Short text:

Message sent to non-existent process (identical to F5971)

Cause:

A message or an event was sent to a non-existent process. Error in the loadware of a COSMOS module or in the system software.

Action:

A solution is determined by the interpretation of the auxiliary data. Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H02 EVENT CODE OR PARAMETER NOT EXPECTED

Type:

Diagnosis-specific (Format 43)

Short text:

Event code not valid (identical to F5972)

Cause:

The event code (EC) of a message was not expected in the current status and in the current process. Error in the loadware of a COSMOS module or in the external message.

Action:

A solution is determined by the interpretation of the auxiliary data. Save error messages and contact your [Next level of support](#).

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H03 TIMER VALUE OVERFLOW

Type:

Diagnosis-specific (Format 43)

Short text:

Timer outside the valid range (identical to F5973)

Cause:

The value of the timer in the message is outside the valid range. Error in system software.

Action:

A solution is determined by the interpretation of the auxiliary data. Save error messages and contact your [Next level of support](#).

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H04 MAILBOX OR BUFFER OVERFLOW

Type:

Diagnosis-specific (Format 43)

Short text:

Buffer overflow in the mailbox (identical to F5974)

Cause:

Error in the loadware of a COSMOS module, or too many messages are arriving at the circuit.

Action:

The circuit is reset by the system and restarted immediately.

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H05 EPIC DRIVER RECEIVED INVALID COMMAND

Type:

Diagnosis-specific (Format 43)

Short text:

Invalid command sent to EPIC driver (identical to F5975)

Cause:

The EPIC driver received an invalid command. Error in the loadware of a COSMOS module.

Action:

A solution is determined by the interpretation of the auxiliary data. Save error messages and contact your [Next level of support](#).

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H06 COMMAND QUEUE OVERFLOW

Type:

Diagnosis-specific (Format 43)

Short text:

Command queue overflow (identical to F5976)

Cause:

Error in the loadware of a COSMOS module.

Action:

A solution is determined by the interpretation of the auxiliary data. Save error messages and contact your [Next level of support](#).

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H07 COSMOS EXCEPTION

Type:

Diagnosis-specific (Format 43)

Short text:

COSMOS exception (identical to F5977)

Cause:

An exception (error) was output by the COSMOS operating system. There is an invalid COSMOS call or an incorrect parameter. Error in the loadware of a COSMOS module.

Action:

A solution is determined by the interpretation of the auxiliary data. Save error messages and contact your [Next level of support](#).

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H08 IOM2 ERROR

Type:

Service-specific (Format 43)

Short text:

Command incorrectly processed (identical to F5978)

Cause:

A command for the IOMI monitor (ISDN Oriented Modular Interface) was incorrectly processed. Error in the hardware or in the loadware of a COSMOS module.

Action:

A solution is determined by the interpretation of the auxiliary data. Save error messages and contact your [Next level of support](#).

Interpretation of auxiliary data:

see above.

REASON: H09 CASE NOT VALID

Type:

Diagnosis-specific (Format 43)

Short text:

Parameter invalid (identical to F5979)

Cause:

The parameters provided are invalid for the current CASE. Error in the loadware of a COSMOS module or in the system software.

Action:

The circuit does not need to be reset.

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H0A PARAMETER NOT VALID

Type:

Diagnosis-specific (Format 43)

Short text:

Parameter invalid (identical to F5980)

Cause:

The parameters provided are invalid in the current CASE. Error in the loadware of a COSMOS module or in the system software.

Action:

The circuit is reset by the system and restarted immediately.

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H0B SCAN OVERFLOW

Type:

Diagnosis-specific (Format 43)

Short text:

Too many hardware event signals (identical to F5981)

Cause:

Too many hardware event signals within a specific time period. Error in the loadware of a COSMOS module or too many external event signals.

Action:

The circuit is restarted by the system after a delay.

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H0C NECESSARY HARDWARE RESPONSE FAILED

Type:

Service-specific (Format 43)

Short text:

Hardware function error (identical to F5982)

Cause:

Hardware function error in the circuit or failed external power supply for the circuit.

Action:

A solution is determined by the interpretation of the auxiliary data. Save error messages and contact your [Next level of support](#). Check the loadware if necessary.

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H0D STMA DYNAMIC TRUNKING: SVC TRACEPOINT

Type:

Diagnosis-specific (Format 43)

Short text:

One of the "SVC connection" trace points was reached in STMA operating mode Networking2.0.

Cause:

One or more STMA, Networking 2.0 specific trace points were enabled by means of the PETRA AMO in order to display information on the setting up and clearing down of switched virtual connections in the ATM network. A message is displayed to indicate that a trace point has been reached.

Action:

The trace function can also be disabled by means of the PETRA AMO.

Interpretation of auxiliary data:

self-explanatory

REASON: H12 LW EXCEPTION DUMMY

Type:

Diagnosis-specific: (Format 43)

Short text:

Error with DUMMY event (identical to F5983)

Cause:

An error occurred with a DUMMY event

Action:

For diagnosis purposes, this message is temporarily incorporated into the loadware code of some boards by the loadware development department. A solution is determined by the interpretation of the auxiliary data. Save error messages and contact your [Next level of support](#).

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H13 LW EXCEPTION DUMMY

Type:

Diagnosis-specific (Format 43)

Short text:

Error with DUMMY event (identical to F5983)

Cause:

An error occurred with a DUMMY event

Action:

For diagnosis purposes, this message is temporarily incorporated into the loadware code of some boards by the loadware development department. A solution is determined by the interpretation of the auxiliary data. Save error messages and contact your [Next level of support](#).

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H14 LW EXCEPTION DUMMY

Type:

Diagnosis-specific (Format 43)

Short text:

Error with DUMMY event (identical to F5983)

Cause:

An error occurred with a DUMMY event

Action:

For diagnosis purposes, this message is temporarily incorporated into the loadware code of some boards by the loadware development department. A solution is determined by the interpretation of the auxiliary data. Save error messages and contact your [Next level of support](#).

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

REASON: H15 MESSAGE LOST

Type:

Diagnosis-specific (Format 43)

Short text:

Message lost

Cause:

The loadware on the STMA module identified a message loss (the DH in the HCM 300 system is no longer in sync with the DH partner on the loadware).

Action:

A solution is determined by the interpretation of the auxiliary data. Save error messages and contact your [Next level of support](#).

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST..

REASON: H17 HW ERROR, CHIP RETURNED ERROR CODE

Type:

Service-specific (Format 43)

Short text:

Hardware chip returned error code

Cause:

A hardware chip on the module returned an error code.

System reaction:

the circuit is disabled and subsequently restarted after a delay.

Action:

If the circuit is not to be restarted, there must be a fault in the hardware.

Interpretation of auxiliary data:

see REASON: H00 CALLED FUNCTION DOES NOT EXIST.

F5461

CIRCUIT

LW DETECT ERROR

Cause:

See REASON.

See also [Section 8.14](#), "Device names".

REASON: 04H CONFIG ERR: EXTENDED SUBSCR LOOP AND PULSE
METERING BY TONES

Type:

Service-specific

Short text:

Incorrect configuration, extended subscriber loop and pulse metering by tones cannot be performed simultaneously.

Cause:

Incorrect configuration, extended subscriber loop and pulse metering by tones cannot be performed simultaneously. The subscriber has an extended subscriber loop with increased supply voltage. In addition, the system has been configured for this subscriber in such a way that charge pulses are sent as tones to the terminal.

Action:

If, in spite of extended subscriber loops, charge pulses are to be sent to the terminal (payphone), this must be carried out via a different type, e.g. polarity reversal. Caution: The terminal must be configured for the charge pulses dialed. It may be necessary to reconfigure or replace the terminal. For further information, please refer to the relevant maintenance information [F4704](#).

REASON: 05H DC LOOP PROBLEMS (CHECK DEVICE/LINE)

Type:

Service-specific

Short text:

Problems on subscriber line / in terminal

Cause:

Due to an error in the hardware or the wiring, a piece of circuit hardware may overheat. The circuit hardware cuts out automatically. - or: hardware fault on subscriber line / in terminal.

System reaction:

the circuit is disabled and restarted after a delay.

Action:

If it was not possible to start the circuit, check the wiring and the terminal. Check that there are no wiring faults, short circuits or too many / incorrect or faulty terminals. If an error cannot be detected, replace the board.

F5462

CIRCUIT

NCT REJECTION (US-specific)

Type:

Service-specific (Format 22)

Short text:

MCI-NCT (MCI Communications Corporation - Network Call Transfer) rejected.

Cause:

The CP sends a message to indicate that it was not possible to call up a network-wide call transfer with MCI.

Action:

This message is for information purposes only. No action necessary.

F5463

CIRCUIT

NOT IN SERVICE

Type:

Service-relevant (Format 18)

Short text:

Circuit did not go into service.

Cause:

Despite several attempts to put the unit into service (max. 8, for more information, see AMO PSTAT), the element could not be put into service correctly due to a new error. This problem may also be caused by the line or the remote station.

System reaction:

Circuit goes from READY to DEF state.

Action:

Evaluate error messages that described the defect. Replace circuit or remove massive line faults. Positive acknowledgement, see [F5609](#).

F5470

CIR

L1 PORT ERROR

Type:

Service relevant (Format 43)

Short text:

A loss of layer 1 of the physical cable is detected.

Cause:

This message is directly related to the physical cable which is mounted on the board. The layer 1 has detected an error. The cable may be defective or disconnected.

System reaction:

Standard: All circuits belonging to the affected port are locked. The BRD SU status for the reference clock support is locked. NCUI: The affected entries for the IP payload path table are set to 'BAD'. No calls are possible over this cable any longer. Reference clock is not supported over the affected cable. STMI: The affected entries for the IP payload path table are set to 'BAD'. The BRD SU status is set to DEF. Reference clock is not supported over the affected cable.

Action:

Check the connected cable for defects and connect a new cable if necessary.

REASON:	00H	BIT SLIP (LOCAL ALARM)
	02H	BIT ERR RATE -3 (LOCAL ALARM)
	03H	LOST FRAME (RED) (LOCAL ALARM)
	05H	AIS (BLUE) (AIS ALARM)
	07H	NO DATA LOADED
	1AH	CIR L1 UPDATE
	1BH	ATM CELL LOST
	1DH	TRANSMIT FIFO OVERFLOW (LOCAL ALARM)
	1EH	RECEIVE FIFO OVERFLOW (LOCAL ALARM)
	20H	SIGNAL LABEL MISMATCHED (LOCAL ALARM)
SUBBOARD NUMBER:	0H-2H	0H: No subboard on this board, 1H-2H: number of
		subboard which contains the physical port.

Error messages

PHYS PORT NUMBER:	0H-4H	0H: reserved, 1H-4H: number of the physical
		port/cable which is affected.
AUX DATA:		Diagnosis data filled in by board LW for product specialist.

F5471

CIR

L1 PORT ACTIVE

Type:

Service relevant (Format 43)

Short text:

The layer 1 of the physical cable is back again.

Cause:

This message is directly related to the physical cable which is mounted on the board. The layer 1 has been detected again. The cable is connected and up again.

System reaction:

Standard: All affected circuits are activated on layer 1 level. The BRD SU status is activated to support reference clock. NCUI: The affected entries for the IP payload path table are set to 'GOOD'. Calls are again possible over this cable. Reference clock is not supported over the affected cable. STMI: The affected entries for the IP payload path table are set to 'GOOD'. The BRD SU status is activated again. Reference clock is not supported over the affected cable for STMI.

Action:

No special action necessary.

REASON:	07H	LAYER 1 ACTIVE (GREEN)
SUBBOARD NUMBER:	0H-2H	0H: No subboard on this board, 1H-2H: number of
		subboard which contains the physical port.
PHYS PORT NUMBER:	0H-4H	0H: reserved, 1H-4H: number of the physical
		port/cable which is affected.
AUX DATA:		Diagnosis data filled in by board LW for product specialist.

F5472

CIR

L1 SPOR PORT ERROR

Type:

Diagnosis relevant (Format 43)

Short text:

A sporadic error of layer 1 of the physical cable is detected.

Cause:

A sporadic error of layer 1 of the physical cable is detected.

System reaction:

Standard: The error counter for reference clock handling is incremented. NCUI/STMI: the message is only signaled.

Action:

Save error message data and call product specialist.

REASON:	00H	BIT SLIP (LOCAL ALARM)
	01H	BIT ERR RATE -6 (LOCAL ALARM)
	02H	BIT ERR RATE -3 (LOCAL ALARM)
	03H	LOST FRAME (RED) (LOCAL ALARM)
	04H	NO SIGNAL (RED) (LOCAL ALARM)
	05H	AIS (BLUE) (AIS ALARM)
	06H	REMOTE ALARM (YELLOW) (DISTANT ALARM)
	0BH	REMOTE ALARM CRC4 (DISTANT ALARM)
	1BH	ATM CELL LOST
	1CH	BIT STUFFING ERROR (LOCAL ALARM)
	1DH	TRANSMIT FIFO OVERFLOW (LOCAL ALARM)
	1EH	RECEIVE FIFO OVERFLOW (LOCAL ALARM)
	1FH	UTOPIA INTERFACE FAULT (LOCAL ALARM)
	20H	SIGNAL LABEL MISMATCHED (LOCAL ALARM)
SUBBOARD NUMBER:	0H-2H	0H: No subboard on this board, 1H-2H: number of
		subboard which contains the physical port.
PHYS PORT NUMBER:	0H-4H	0H: reserved, 1H-4H: number of the physical
		port/cable which is affected.
AUX DATA:		Diagnosis data filled in by board LW for product specialist.

F5473

CIR

LOSS OF SIGNAL

Type:

Error messages

Service relevant (Format 22)

Short text:

Loss of signal.

Cause:

T1 specific. Sporadic T1 layer 1 error. Loss of signal. Line interrupted for less than 1500 ms.

System reaction:

Set the lock bit for reference clock.

Action:

No action necessary.

Interpretation of auxiliary data:

The auxiliary data are diagnosis data filled in by board LW for product specialist.

F5474

CIR

MAX ERROR SECS

Type:

Service relevant (Format 22)

Short text:

Max error secs.

Cause:

T1 specific. Sporadic T1 layer 1 error. Max error per seconds (Bit slips). number of errors is above threshold.

System reaction:

Set the lock bit for reference clock.

Action:

No action necessary.

Interpretation of auxiliary data:

The auxiliary data are diagnosis data filled in by board LW for product specialist.

F5475

CIR

ACQUISITION OF SIGNAL

Type:

Service relevant (Format 22)

Short text:

Acquisition of signal.

Cause:

T1 specific. End of sporadic T1 layer 1 error. Acquisition of signal. Line connected again.

System reaction:

Reset of lock bit for reference clock.

Action:

No action necessary because 'good' message.

Interpretation of auxiliary data:

The auxiliary data are diagnosis data filled in by board LW for product specialist.

F5476

CIR

MIN ERROR SECS

Type:

Service relevant (Format 22)

Short text:

Min error secs.

Cause:

T1 specific. End of sporadic T1 layer 1 error. Min error per seconds (Bit slips). Number of errors is below threshold.

System reaction:

Reset of lock bit for reference clock.

Action:

No action necessary because 'good' message.

Interpretation of auxiliary data:

The auxiliary data are diagnosis data filled in by board LW for product specialist.

F5477

CIRCUIT

ENCRYPTION ERROR

Type:

Service-relevant (Format 43)

Short text:

Problem for TLS connection to the partner.

Cause:

Certificate or configuration missing.

System reaction:

Connection is set up unencrypted.

Action:

Find the cause of the encryption problem and correct the setting.

Start and end of encryption problems are indicated in plain text:

00h - NO TLS CONNECTION ESTABLISHED 01h - TLS CONNECTION ESTABLISHED If the TLS connection to the partner cannot be set up on account of encryption problems, the SPE (Signaling and Payload Encryption) alarm is set and the IP trunk is put into operation unencrypted. The alarm is reset for this IP trunk the next time a successful TLS connection is set up to the partner CGW.

F5479

BOARD

LW REQUEST

Diagnosis-relevant (Format 43)

The board LW request an action from FA.

With this message, the loadware on a board has the possibility to request an action from FA. This might be only signaling of a text string and auxiliary data with both filled in by loadware. This may also be a request to lock the board or LTU with or without entering it in the "in service task" for delayed reactivation. The loadware can request an immediate reset of the board or the LTU if it detected a severe error. The displayed text string should always give a short description of the situation. The loadware development of the affected board is responsible for this text.

Depending on the request reason: 00H: The message is only signaled. 01H: The message is signaled and the board or LTU is locked. 02H: The message is signaled, the board or LTU is locked and entered in the "in service task". 03H: The message is signaled and the board or LTU is reset immediately. 04H: The message is only signaled. 05H: The message is only signaled

Save error message data and contact your Next level of support.

The following diagnosis data (max. 192 chars) are converted in a plain text in order to be readable by Hista:

Reason 00H - ONLY SIGNALING 01H- SIGNALING AND LOCKING 02H SIGNALING, LOCKING AND DELAYED REACTIVATION 03H SIGNALING AND IMMEDIATE BOARD RESET 04H CMI CLOCK PHASE OFFSET 05H LW SIGNALING AND RESTART .

F5500

L2 BS LOAD ERROR

Type:

Service-specific (Format 22)

Short text:

Load error in the base station

Cause:

Base station was not installed by the cordless module or is no longer installed. The end of the error is signaled with [F5455](#) TERM LX AKTIV.

System reaction:

line alarm

- Service Center: request installation of EXEC-DSSU in base station.
- On-site: unplug/replug line to base station, in order to force loading if necessary.

Interpretation of auxiliary data:

Byte 0 = 5F Max. length 95 bytes Byte 1 = Error type
(DB_M_QF_CIR_L2_ERR_SET) 11 Load error in base station

See also [Section 8.14](#), "Device names".

F5501

TERM

L2 BS NO RESPONSE

Type:

Service-specific (Format 22)

Short text:

Base station not responding

Cause:

The cordless module can no longer contact the base station. The end of the error is signaled with [F5455](#) TERM LX AKTIV.

System reaction:

line alarm

Action:

- Service Center: request installation of EXEC-DSSU in base station. - On-site: unplug/replug line to base station, in order to force loading if necessary.

Interpretation of auxiliary data:

Byte 0 = 5F Max. length 95 bytes Byte 1 = Error type
(DB_M_QF_CIR_L2_ERR_SET) 12 Base station not responding

F5502

TERM

RESTORED

Type:

Service-specific (Format 18)

Short text:

Terminal was blocked and has been restored

Cause:

Following a restore process, an ISDN terminal remained in the NPR state. This was detected by the DC.

System reaction:

reset command for the terminal.

Action:

No action is required as the device was restarted by the dependability system.

Interpretation of auxiliary data:

not available

See also [Section 8.14, "Device names"](#).

F5503

TERM

LW DETECT ERROR

Cause:

See REASON.

See also [Section 8.14, "Device names"](#).

REASON: 00H PROLONGING CONNECTION: SIGNALLING
DISCONNECTED

Type:

Service-specific (Format 43)

Short text:

Prolonging connection interrupted. (Emergency mode).

Cause:

Prolonging connection (TSC) to the remote Optiset port was interrupted. Calls that have been set up by the remote subscriber are then executed via the remote node (emergency mode). The TSC connection is interrupted if a restart is carried out in one of the participating nodes (routing, transit or remote nodes). The connection is also interrupted if the logical Routing or Remote Set600 was blocked.

System reaction:

signals only

Action:

Check port configuration in the routing and remote nodes.

REASON: 01H PROLONGING CONNECTION: SIGNALLING CONNECTED

Type:

Service-specific (Format 43)

Short text:

Prolonging connection restored.

Cause:

Prolonging connection (TSC) to remote Optiset port has been restored. The remote Optiset port switches from emergency mode to normal mode. After a TSC connection has been aborted, it can be restored.

System reaction:

signals only

Action:

None

REASON: 02H PROLONGING CONNECTION: VOICE CHANNEL NOT AVAILABLE

Type:

Service-specific (Format 43)

Short text:

Prolonging connection could not be set up.

Cause:

Prolonging connection with voice channel (CSC) to the remote Optiset port could not be set up. This may be for one of the following reasons: a) all B channels between the participating PABXs have already been seized, or b) the partner call number from the logical Routing Set600 to the Remote Set600 is incorrect.

System reaction:

signals only

Action:

Check port configuration in the routing node; check that free B channels are still available between the participating PABXs.

REASON: 03H PROLONGING CONNECTION: L3-USER MESSAGE LOST

Type:

Service-specific (Format 43)

Short text:

User3-to-user3 message(s) have been lost.

Cause:

User3-to-user3 message(s) which are transported via the TSC prolonging connection have been lost. User-To-User messages are numbered by the sender (log. Set600) and checked by the recipient (log. Set600) to ensure that there are no gaps in the numbering (the checks are performed in both directions). If messages were lost in the event of a lack of resources on TSC connections (i.e. contingent per time unit exceeded), this message loss is sent to the FA.

System reaction:

signals only

Action:

Save error messages and contact your [Next level of support](#).

F5504

TERM

ATTENDANT CONSOLE ERR

Cause:

See Reason.

See also [Section 8.14, "Device names"](#).

Reason: H00 ATTENDANT CONSOLE STARTUP ERROR

Type:

Service-specific (Format 43)

Short text:

Attendant console startup error

Cause:

While the attendant console was booting, it detected an error, or the cable to the attendant console has been unplugged (layer 1 error). 1 byte hexadecimal data is displayed which is not service-specific.

System reaction:

the attendant console is reset and is restarted after a delay

Action:

If the system cannot be restarted: Check cable (layer 1), Check AC and replace if necessary

Reason: H01 ATTENDANT CONSOLE IDLELOOP ERROR

Type:

Service-specific (Format 43)

Short text:

Attendant console idle loop error

Cause:

While the attendant console was carrying out a self-test, it detected an error. 1 byte hexadecimal data is displayed which is not service-specific.

System reaction:

the attendant console is reset and restarted after a delay

Action:

If the system cannot be restarted: check AC and replace if necessary

Reason: H02 ATTENDANT CONSOLE IMPLAUSIBLE MESSAGE

Type:

Diagnosis-specific (Format 43)

Short text:

Attendant console outputs implausible message

Cause:

The attendant console has received an unknown command. The hexadecimal data is not service-specific.

Action:

If this error message persists, save error message data and contact your [Next level of support](#).

Reason: H03 ATTENDANT CONSOLE REFRESH

Type:

Diagnosis-specific (Format 43)

Short text:

Attendant console refresh

Cause:

The attendant console requested a refresh and was subsequently refreshed by the system.

Action:

If this error message persists, save error message data and contact your [Next level of support](#).

F5505

Term

Client

Cause:

See Reason.

See also [Section 8.14](#), “Device names”

Reason: 00H TCP CONNECTION TO CLIENT DOWN

Type:

Service-specific (Format 43)

Short text:

The TCP connection from the server to the client has failed.

Cause:

There are several reasons for the loss of the connection:

- Error in the TCP/IP protocol
- Physical network error in the public network, the router or on the LAN cable for example

System reaction:

signals only.

Action:

Error messages

Check the various network components and configuration data: ISDN interface, NIC card, router, cable ...

Interpretation of auxiliary data:

none

Reason: 01H TCP CONNECTION TO CLIENT ESTABLISHED

Type:

Service-specific (Format 43)

Short text:

TCP connection has been restored.

Cause:

The TCP connection between the server and the client has been restored. The server or the client has restored the previously faulty TCP connection.

System reaction:

signals only.

Action:

none

Interpretation of auxiliary data:

none

Reason: 02H SERVER INITIATED LOGOUT OF CLIENT

Type:

Service-specific (Format 43)

Short text:

The server initiates a mandatory LOGOUT from a client

Cause:

There are several reasons for this procedure:

- the server cannot regenerate a faulty TCP connection
- the maximum LOGON time of a client has been exceeded (default value: 18 hrs.)

System reaction:

signals only.

Action:

Save error message.

Interpretation of auxiliary data:

The auxiliary data can only be interpreted by a system specialist.

F5506

TERM

NOT IN SERVICE

Type:

Service-relevant (Format 18)

Short text:

Terminal did not go into service

Cause:

Despite several attempts to put the unit into service (max. 8, for more information, see AMO PSTAT), the element could not be put into service correctly due to a new error.

System reaction:

Terminal goes from READY to DEF state.

Action:

Evaluate error messages that described the defect. Replace terminal or rectify massive line faults. Positive acknowledgement, see F5446.

F5510

TERM

B-CHANNEL OUT SERV FE

Type:

Service relevant (Format 43)

Short text:

B-channel out of service far end.

Cause:

The central office (CO) side has requested to lock a B-channel. After locking no test calls from the CO can be executed.

System reaction:

The B-channel is locked (remote blocking state TRS).

Action:

No special action necessary.

B_CHANNEL STATE:	MAN_AMO/TRS	AMO remote blocking
	MAN_AMO/RES	AMO reserve state
	MAN_AMO	AMO
	READY	ready
	TRS	remote blocking
	RES	reserve state

F5511

TERM

B-CHANNEL IN SERV FE

Type:

Service relevant (Format 43)

Short text:

B-channel in service far end.

Cause:

The central office (CO) ends the remote blocking of the B-channel.

System reaction:

The B-channel is unlocked.

Action:

No special action necessary.

B_CHANNEL STATE:	MAN_AMO/TRS	AMO remote blocking
	MAN_AMO/RES	AMO reserve state
	MAN_AMO	AMO
	READY	ready
	TRS	remote blocking
	RES	reserve state

F5512

TERM

B-CHANNEL MAINTENANCE

Type:

Service relevant (Format 43)

Short text:

B-channel in maintenance state.

Cause:

The central office (CO) side has requested to bring a B-channel into the maintenance state. In this state test calls from the CO can be executed.

System reaction:

The B-channel is brought into the 'reserve state' (RES).

Action:

No special action necessary.

B_CHANNEL STATE:	MAN_AMO/TRS	AMO remote blocking

	MAN_AMO/RES	AMO reserve state
	MAN_AMO	AMO
	READY	ready
	TRS	remote blocking
	RES	reserve state

F5520

NCUCG

CLOCK NOT SWITCHED

Type:

Service-specific (Format 22)

Short text:

Connect order not executed in AP shelf.

Cause:

The trunk module in the AP shelf was unable to execute the connect order.

System reaction:

The error counter in the reference clock table is incremented for the concerned trunk module and a new search for a reference clock circuit in the AP shelf is started.

Action:

If this error occurs frequently on a particular trunk module, check the trunk module.

Interpretation of auxiliary data:

see F5553.

F5521

NCUCG

CLOCK SWITCHED OFF

Type:

Service-specific (Format 22)

Short text:

Disconnect order executed in AP shelf.

Cause:

A disconnect order was executed by the trunk module. The supplementary data contains information indicating whether the disconnect order was correct or whether FA LTG has reset the trunk module.

System reaction:

A new search for a reference clock circuit in the AP shelf is started.

Action:

Action depends on the evaluation of the HEX data. Save error message data and notify product specialist.

Interpretation of auxiliary data:

see F5553.

F5523

NCUCG

AUTONOMOUS CLOCK

Type:

Service-specific (Format 22)

Short text:

Autonomous clock in AP shelf.

Cause:

Unable to synchronize to external reference clock in AP shelf.

System reaction:

The clock generator of the NCUI board is not synchronous to an external reference clock. Therefore the error rate of payload connections can be increased.

Action:

Use AMO REFTA to display possible reference clock sources of the AP shelf.

F5524

NCUCG

CLOCK REF LOSS

Type:

Service-specific (Format 22)

Short text:

Loss of external reference clock in AP shelf.

Cause:

Clock generator of the NCUI board is no longer synchronous with external reference clock source because a. the clock generator has stopped regulating
b. one of the following situations occurred for at least 2 seconds: - the clock generator was unable to identify a reference clock, - jitter, wander or drift is too great, - the reference clock is outside the VCO latch range.

System reaction:

The current reference clock circuit of the AP shelf is switched off, its error counter in the reference clock table is incremented and a new search for a reference clock circuit in the AP shelf is started.

Action:

Check reference clock supplier, since error is usually to be found in line connection from source. Use AMO "DIS-REFTA;" to query the clock status of all possible clock generators of the AP shelf. You can see from this whether certain circuits have been blocked, or whether the priority is too low or the error counter (modifiable from V2.0) is too high. In order to make it possible to automatically select a clock of a specific circuit, these values can be adjusted with CHA-REFTA. Save error message data and notify product specialist. Positive acknowledgment with F5528.

Interpretation of auxiliary data:

Byte 0-1 = Error counter (Note: byte 0 = low byte, byte 1 = high byte; interpret first high then low byte)

F5525

NCUCG

CLOCK NOT SYNC

Type:

Service-specific (Format 22)

Short text:

Clock not synchronized in AP shelf.

Cause:

The clock generator of the NCUI board has latched on to the external reference clock and has also begun regulating, but has failed to synchronize within 10 minutes of the synchronization order.

System reaction:

The current reference clock circuit of the AP shelf is switched off, its error counter in the reference clock table is incremented and a new search for a reference clock circuit in the AP shelf is started.

Action:

If the clock generator of the NCUI board cannot synchronize on any of the available circuits, replace the NCUI board. If only one possible reference clock source exists, check this one source exhaustively before replacing the clock generator, to rule out any possibility of a line error. If this does not work, save the error message data and notify product specialist.

Interpretation of auxiliary data:

see F5524.

F5526

NCUCG

CLOCK RECOGNIZED

Type:

Service-specific (Format 22)

Short text:

False clock detected in AP shelf.

Cause:

The clock generator of the NCUI board has identified an unexpected reference frequency at the beginning of a synchronization process. Possible reasons are a HW error on one of the possible clock sources of the AP shelf or a defective clock generator.

System reaction:

The system begins deactivating all the possible clock sources (boards) of the AP shelf one by one, until the false clock frequency disappears. If the false frequency cannot be switched off in this way, the AP shelf will switch over to autonomous clock (see also F5523).

Action:

Unplug all the possible clock sources (boards) of the AP shelf one by one, to check whether one of these boards is causing the false clock frequency. If this is the case, the clock generator will begin synchronizing again approximately 1 minute after the defective board is unplugged, indicating that the false frequency has disappeared. If this does not work, replace the NCUI board.

F5527

NCUCG

CLOCK NOT RECOGNIZED

Type:

Service-specific (Format 22)

Short text:

Reference clock not recognized in AP shelf.

Cause:

The clock generator of the NCUI board was unable to identify a reference clock although one is applied in the AP shelf.

System reaction:

The current reference clock circuit of the AP shelf is switched off, its error counter in the reference clock table is incremented and a new search for a reference clock circuit in the AP shelf is started.

Action:

If the error occurs frequently on a particular circuit, check the clock source.

Interpretation of auxiliary data:

see F5524.

F5528

NCUCG

CLOCK SYNC

Type:

Service-specific (Format 22)

Short text:

AP shelf synchronized with reference clock.

Cause:

The AP shelf is synchronous with the external reference clock frequency.

Action:

Positive acknowledgment of F5524 and F5525, no action.

Interpretation of auxiliary data:

see F5524.

F5530

NCUCG

TIME STBY CC ACK

Type:

Service-specific (Format 22)

Short text:

Tracking point of AP shelf not acknowledged by standby CC.

Cause:

The standby CC did not acknowledge the information, which reference clock circuit has been switched on in the AP shelf.

Action:

No action necessary.

F5533

NCUCG

TIME BROAD PLL

Type:

Service-specific (Format 18)

Short text:

Broad PLL order not acknowledge by NCUI

Cause:

The NCUI has not acknowledged the Broad PLL order for the internal clock generator.

System reaction:

The NCUI board is reset and the AP shelf is reloaded.

Action:

If the automatic reset of the NCUI does not work, replace the NCUI board.

F5534

NCUCG

TIME NARROW PLL

Type:

Service-specific (Format 18)

Short text:

Narrow PLL order not acknowledge by NCUI

Cause:

The NCUI has not acknowledged the Narrow PLL order for the internal clock generator.

System reaction:

The NCUI board is reset and the AP shelf is reloaded.

Action:

If the automatic reset of the NCUI does not work, replace the NCUI board.

F5535

NCUCG

TIME SYNC REF

Type:

Service-specific (Format 18)

Short text:

Sync order not acknowledge by NCUI

Cause:

The NCUI has not acknowledged the Sync order for the internal clock generator.

System reaction:

The NCUI board is reset and the AP shelf is reloaded.

Action:

If the automatic reset of the NCUI does not work, replace the NCUI board.

F5536

NCUCG

TIME STATE

Type:

Service-specific (Format 18)

Short text:

State request order not acknowledge by NCUI

Cause:

The NCUI has not acknowledged the State request order for the internal clock generator.

System reaction:

The NCUI board is reset and the AP shelf is reloaded.

Action:

If the automatic reset of the NCUI does not work, replace the NCUI board.

F5537

NCUCG

TIME REGULATION REF

Type:

Service-specific (Format 18)

Short text:

No synchronization acknowledgment from NCUI.

Cause:

The internal clock generator on the NCUI was not synchronized within 15 minutes following a synchronization request.

System reaction:

Reset of NCUI board. AP frame is reloaded.

Action:

Replace the NCUI board if the automatic reset of the NCUI fails.

F5538

NCUCG

TIME SYNC STATE

Type:

Service-specific (Format 18)

Short text:

Sync state request order not acknowledge by NCUI

Cause:

The NCUI has not acknowledged the Sync state request order for the internal clock generator.

System reaction:

The NCUI board is reset and the AP shelf is reloaded.

Action:

If the automatic reset of the NCUI does not work, replace the NCUI board.

F5539

NCUCG

TIME STRATUM

Type:

Service-specific (Format 18)

Short text:

Stratum request order not acknowledge by NCUI

Cause:

The NCUI has not acknowledged the Stratum request order for the internal clock generator.

System reaction:

The NCUI board is reset and the AP shelf is reloaded.

Action:

If the automatic reset of the NCUI does not work, replace the NCUI board.

F5540

NCUCG

CG STATE

Type:

Service-specific (Format 18/43)

Short text:

CG state request timeout (format 18) or CG state of the NCUI (format 43)

Cause:

Format 18: The NCUI has not acknowledged the CG state request. Format 43: The NCUI has sent the requested CG state.

System reaction:

Format 18: The NCUI board is reset and the AP shelf is reloaded. Format 43: The received CG state is signalled.

Action:

Format 18: If the automatic reset of the NCUI does not work, replace the NCUI board. Format 43: No action required.

Message indicating CG state of the NCUI board (Format 43):

FRONT_REF:	NO_REF	No front reference detected
	BAD_FREQ	Front reference detected, but frequency not valid
	BAD_JITTER	Front reference detected, but too much jitter
	REF_OK	Front reference ok
IP_REF:	NO_REF	No IP reference detected
	BAD_FREQ	IP reference detected, but frequency not valid
	BAD_JITTER	IP reference detected, but too much jitter
	REF_OK	IP reference ok
PTP_MASTER:	FALSE	CG is not PTP master
	TRUE	CG is PTP master
PTP_MASTER_STRATUM:	0 - 255	Stratum (quality) of the PTP master (0: best quality ... 255: lowest quality)

F5553

CLOCK

CLOCK NOT SWITCHED

Type:

Service-specific (Format 22)

Short text:

Connection request not executed

Cause:

A connection request could not be executed from the trunk module.

Action:

If the error occurs frequently for the same trunk module, the trunk module must be checked.

Interpretation of auxiliary data:

Byte 0-1	=	Line that was selected (same as LTG-LTU-SLOT circuit in the additional line of the error message)
Byte 2-3	=	Line that was switched (same as LTG-LTU-SLOT circuit in the additional line of the error message; must be identical to byte 0-1)
Byte 4	=	Cause (DB_M_QF_NO_RF_SWITCH_SET)

Error messages

	00	Peripheral board has acknowledged
	01	Timer is running
	02	Peripheral board was reset
Byte 5	=	Cause (DB_M_QF_NO_RF_SWITCH_SET)
	00	Peripheral board has acknowledged
	01	Timer is running
	02	Peripheral board was reset

F5554

CLOCK

CLOCK SWITCHED OFF

Type:

Service-specific (Format 22)

Short text:

Disconnect order executed.

Cause:

A disconnect order was executed by the trunk module. The supplementary data contains information indicating whether the disconnect order was correct or whether FA LTG has reset the trunk module.

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see F5553.

F5556

CLOCK

AUTONOMOUS CLOCK

Type:

Service-specific (Format 22)

Short text:

Autonomous clock

Cause:

Unable to synchronize to external reference clock:

- No reference clock circuit found.
- The inhibit flags (LTG, IOCC) prevent a circuit from being selected.

- A CCG error has been detected.

Action:

Use AMO REFTA to display possible reference clock sources, or AMO SDSU to show whether LTGs or the IOCC are blocked.

F5557

CLOCK

CCG SWITCHED

Type:

Service-specific (Format 22)

Short text:

Switchover to slave CCG

Cause:

An attempt is made to switch to the slave CCG because it has detected a reference clock after synchronization which was not detected by the master CCG.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5558

CLOCK

ERROR COUNTER

Type:

Service-specific (Format 22)

Short text:

Error during clock synchronization

Cause:

The circuit error counter is incremented because an error has occurred (e.g. connection has miscarried) or clock has been lost during synchronization.

Action:

If this error occurs repeatedly, check clock source.

F5559

CLOCK

CLOCK REF LOSS

Type:

Service-specific (Format 22)

Short text:

Loss of external reference clock

Cause:

Clock generator is no longer synchronous with external reference clock source because a. the clock generator has stopped regulating b. one of the following situations occurred for at least 2 seconds: - the clock generator was unable to identify a reference clock, - jitter, wander or drift is too great, - the reference clock is outside the VCO latch range. c. the AECB (external reference clock box) has been switched on or switched off (CHA-REFTA:AECB,68, ,or CHA-REFTA:AECB,38,)

Action:

Check reference clock supplier, since error is usually to be found in line connection from source. Use AMO "DIS-REFTA;" to query the clock status of all possible clock generators. You can see from this whether certain circuits have been blocked, or whether the priority is too low or the error counter (modifiable from V2.0) is too high. In order to make it possible to automatically select a clock of a specific circuit, these values can be adjusted with CHA-REFTA. Save error message data and contact your [Next level of support](#). Positive acknowledgment with [F5572](#).

Byte 0-1	=	Error counter (Note: byte 0 = low byte, byte 1 = high byte; interpret first high then low byte)
Byte 39	=	Clock status (convert to binary)
	Bit 0 = 0	CCG is not synchronized to partner
	Bit 0 = 1	CCG is synchronized to partner
	Bit 1 = 0	Partner does not exist
	Bit 1 = 1	Partner does exist
	Bit 2 = 0 C	lock outside latch range
	Bit 2 = 1	Clock within latch range
	Bit 3 = 0	PCG output and reference clocks have incorrect phase position
	Bit 3 = 1	PCG output and reference clocks have correct phase position
	Bit 4 = 0	Jitter, wander, drift out of order
	Bit 4 = 1	Jitter, wander, drift okay
	Bit 5 = 0	Frequency mismatch
	Bit 5 = 1	Frequency okay
	Bit 6 = 0	Control out of order
	Bit 6 = 1	Control okay
	Bit 7 =	No meaning

Byte 44	=	tolerance range of the clock generator
	Value: 1 =	narrow tolerance range (required for STMA)
	Value: 2 =	broad tolerance range

Example: byte 33 or byte 34 or byte 35 = C7

Convert to binary:	C				7				HEX
	1	1	0	0	0	1	1	1	Binary
								+	-> Bit 0 = 1

NOTICE: CCG takes care of the clock synchronisation to the LTU shelves. PCG takes care of the clock synchronisation to an external reference

F5560

CLOCK

IOCC SWITCH

Type:

Service-specific (Format 00)

Short text:

IOCC clock connect

Cause:

An IOCC hardware redundancy check is made during clock connection.

Action:

If this error occurs frequently, replace the IOCC board. If this does not work, save the error message data and contact your [Next level of support](#).

F5563

CLOCK

NO CLOCK REGULATION

Type:

Service-specific (Format 22)

Short text:

No CCG regulation

Cause:

The clock generator has latched on to the external reference clock and has received the synchronization order. 8 seconds after the synchronization order, the clock generator status was checked and the clock generator found to be not regulating.

System reaction:

the source error counter is incremented and a different circuit is selected.

Action:

If the clock generator cannot synchronize on any of the available circuits, replace the CG board. If only one possible reference clock source exists, check this one source exhaustively before replacing the clock generator, to rule out any possibility of a line error. If this does not work, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0-1 = Error counter (Note: byte 0 = low byte, byte 1 = high byte; interpret first high then low byte)

F5564

CLOCK

CLOCK NOT SYNC

Type:

Service-specific (Format 22)

Short text:

Clock not synchronized

Cause:

The clock generator has latched on to the external reference clock and has also begun regulating, but has failed to synchronize within 10 minutes of the synchronization order.

System reaction:

the source error counter is incremented and a different circuit is selected.

Action:

If the clock generator cannot synchronize on any of the available circuits, replace the CG board. If only one possible reference clock source exists, check this one source exhaustively before replacing the clock generator, to rule out any possibility of a line error. If this does not work, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see [F5563](#).

F5566

CLOCK

CLOCK RECOGNIZED

Type:

Service-specific (Format 22)

Short text:

False clock detected

Cause:

The clock generator has identified a reference frequency without having received a synchronization order for an external clock source. Possible reasons are a HW error on one of the possible clock sources or a defective clock generator.

System reaction:

the system begins deactivating all the possible clock sources (boards) one by one, until the false clock frequency disappears. If the false frequency cannot be switched off in this way, the system will switch over to autonomous clock (see also F5556).

Action:

Check whether a CG switchover has occurred, and check whether the second clock generator also detects the false clock. If so, unplug all the possible clock sources (boards) one by one, to check whether one of these boards is causing the false clock frequency. If this is the case, the clock generator will begin synchronizing again approximately 1 minute after the defective board is unplugged, indicating that the false frequency has disappeared. If this does not work, replace both clock generators.

F5567

CLOCK

CLOCK CONTROL

Type:

Service-specific (several formats apply)

Short text:

CCG clock detection

Cause:

After a CC switchover, the master CCG is checked for a reference clock.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5568

CLOCK

CLOCK NOT RECOGNIZED

Type:

Service-specific (Format 22)

Short text:

Reference clock not recognized

Cause:

The clock generator was unable to identify a reference clock although one is applied.

System reaction:

an attempt is made to switch to the CCG slave (3000 system). If this is unsuccessful, the source error counter is incremented and a different circuit is selected.

Action:

If the error occurs frequently on a particular circuit, check the clock source.

Interpretation of auxiliary data:

see F5559.

F5569

CLOCK

BLOCKING FLAG RESET

Type:

Diagnosis-specific (Format 22)

Short text:

New clock connection

Cause:

The system is set to autonomous clock and restarts the clock connection. The inhibit flags which have been withdrawn are then displayed.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5570

CLOCK

SBR CLOCK

Type:

Diagnosis-specific (Format 22)

Short text:

Tracking point received

Cause:

The active CC reports that the partner CC has received the tracking point identifying the reference clock source.

Action:

Positive acknowledgment, no action.

F5572

CLOCK

CLOCK SYNC

Type:

Service-specific (Format 22)

Short text:

System synchronized with reference clock

Cause:

The system is synchronous with the external reference clock frequency.

Action:

Positive acknowledgment of [F5559](#) and [F5564](#), no action.

F5573

CLOCK

BAD REFERENCE

Type:

Service-specific (Format 22)

Short text:

Clock out of latch range

Cause:

The frequency of the reference clock supplied has drifted outside the latch range of the PCG/CCG.

Action:

A physical line check of the reference clock circuit is necessary in order to remove the cause of the error.

F5574

CLOCK

IOCC BLOCK. FLAG RESET

Type:

Diagnosis-specific (Format 22)

Short text:

IOCC inhibit flag reset

Cause:

The IOCC inhibit flag is cleared because the IOCC has been activated via a hard restart.

Action:

Positive acknowledgment of F5576, no action.

F5575

CLOCK

LTG BLOCK. FLAG RESET

Type:

Diagnosis-specific (Format 22)

Short text:

LTG inhibit flag reset

Cause:

The LTG inhibit flag is cleared because the LTG has made a hard restart.

Action:

Positive acknowledgment of F5577, no action.

F5576

CLOCK

IOCC BLOCKING FLAG SET

Type:

Diagnosis-specific (Format 22)

Short text:

IOCC inhibit flag set

Cause:

During clock connection, the IOCC is marked by an inhibit flag indicating that an attempt has already been made with this HW.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5577

CLOCK

LTG BLOCKING FLAG SET

Type:

Diagnosis-specific (Format 22)

Short text:

LTG inhibit flag set

Cause:

An LTG is disabled for clock selection.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5582

CLOCK

TIME STBY CC ACK

Type:

Service-specific (Format 22)

Short text:

Tracking point not acknowledged by standby CC

Cause:

The standby CC has not acknowledged the tracking point.

Action:

No action necessary.

F5584

CLOCK

TIME TM OFF

Type:

Service-specific (Format 22)

Short text:

Disconnect order not acknowledged by LTG

Cause:

The LTG has not acknowledged a disconnect order because it was perhaps executing a soft restart.

Action:

Action depends on the evaluation of the HEX data. Determine reason for LTG soft restart. If this does not work, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see F5553.

F5585

CLOCK

TIME TM ON

Type:

Service-specific (Format 22)

Short text:

Connect order not acknowledged by LTG

Cause:

The LTG has not acknowledged a connect order because it was perhaps executing a soft restart.

Action:

Action depends on the evaluation of the HEX data. Determine reason for LTG soft restart. If this does not work, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see F5553.

F5586

CLOCK

SYNC TOGGLE

Type:

Service-specific (Format 22)

Short text:

Reference clock out of range

Cause:

The central clock generator has detected a short deviation of the reference clock. This message is intended for the statistics counter. When the counter overflows, it is reset to zero and a new reference clock supplier is selected.

Action:

No action necessary.

Interpretation of auxiliary data:

see F5559.

F5587

CLOCK
 PLUG NCG IN EC-HW
Type:
 Service-specific (Format 1A)
Short text:
 PCG plugged instead of NCG
Cause:
 PCG plugged instead of NCG.
Action:
 Replace PCG with NCG.

F5588

CLOCK
Type:
 Service-specific (Format 1A)
Short text:
 AECB is functioning
Cause:
 The clock generator has detected that a working AECB has been connected.
 Positive acknowledgment for F5589
Action:
 Use the AMO DISP-REFTA:AECB; to check the class of the clock generator.
 In the case of Class 68, the AECB has been activated. In the case of Class 38,
 you must wait until the end of the warm-up time of the AECB before the AECB
 is activated with the AMO CHA-REFTA:AECB,68;. Check the class again using
 the AMO DISP-REFTA:AECB;
Interpretation of auxiliary data:
 Byte 3 = Status of the front reference (convert to binary) Bit 4 = 0 Jitter, Wander,
 Drift not functioning 1 Jitter, Wander, Drift functioning Bit 5 = 0 Frequency not
 functioning 1 Frequency functioning Byte 4 = Status of the AECB (convert
 to binary) Bit 4 = 0 Jitter, Wander, Drift not functioning 1 Jitter, Wander, Drift
 functioning Bit 5 = 0 Frequency not functioning 1 Frequency functioning

F5589

CLOCK
 AECB DISCON OR DEFECT
Type:

Service-specific (Format 1A)

Short text:

AECB is not connected or is faulty

Cause:

The clock generator has detected that an AECB has not been connected or that the connected AECB is faulty. Negative acknowledgment for F5588.

Action:

You can read from byte 4 of the auxiliary data whether or not the AECB is no longer connected to the clock generator (value: 00) or whether the AECB is faulty (value: 20). Check the connection between the clock generator and the AECB. If this does not solve the problem, check whether the second clock generator also signals a problem with the AECB in the case of a duplex system. If so, the AECB has a fault and must be replaced. If the other clock generator does not detect a fault in the AECB, you can test whether the cable is faulty or not by exchanging the two cable sets.

Interpretation of auxiliary data:

see F5588.

F5590

CLOCK

FRONT READY

Type:

Service-specific (Format 1A)

Short text:

Front reference functioning

Cause:

The clock generator has detected that a front reference has been connected and can be selected as an external clock generator. Positive acknowledgment for F5591.

Action:

If the front reference is not selected as a clock generator, use the AMO DISP-REFTA; to check the priority, the blocking flag and the error counter for the front reference. If the priority is too low or the error counter too high, these values can be changed using the AMO CHA-REFTA:TYP=FRONT,PRIO=...,BLOCK=N,ERROR=...;.

Interpretation of auxiliary data:

see F5588.

F5591

CLOCK

FRONT DISCON OR DEFECT

Type:

Service-specific (Format 1A)

Short text:

Front reference is not connected or is faulty

Cause:

The clock generator has detected that a front reference has not been connected or that the connected front reference is faulty. This may be due to the fact that the device that generates the front reference has detected an error and has therefore switched off the front reference. Negative acknowledgment for F5590.

Action:

You can read from byte 4 of the auxiliary data whether the front reference is no longer detected by the clock generator (value: 00) or whether the front reference is generating a clock with an invalid frequency (valid: 20) Check the connection between the clock generator and the front reference. If this does not solve the problem, check whether the second clock generator also signals a problem with the AECB in the case of a duplex system. If so, the front reference has a fault and must be replaced. If the other clock generator does not detect a fault in the front reference, you can test whether the cable is faulty or not by exchanging the two cable sets.

Interpretation of auxiliary data:

see F5588.

F5592

PCG

CGM DEFECT, USING CG81

Type:

Service-specific (Format H'1A)

Short text:

DSC80: optional CGM board faulty

Cause:

The optional CGM board installed on the DSC80 is faulty. The board has already been disabled and the the CG81 is being used instead.

Action:

Replace faulty CGM board. For interpretation of auxiliary data see F5588.

F5607

CIRCUIT

MFC MONITORING

Type:

Service-specific (Format 22)

Error messages

Short text:

MFC signal exchange monitor

Cause:

The MFC signal exchange monitor has responded.

System reaction:

Signals only.

Action:

Error (if any) and error location are shown in the HEX data.

Interpretation of auxiliary data:

Byte 0	=	Length of following data
Byte 1	=	Subevent code MFC Monitoring (2CH)
Byte 2	=	Situation (DB_M_MFC_SITUATION_SET)
	00	No SIU available
	01	No first signal
	02	No next signal
	03	Signal does not switch off
	04	No control frequency (SOCOTEL/IBERCOM)
	05	Control frequency does not switch off (SOCOTEL/IBERCOM)
	06	No answer from SIU (request of frequencies) / SIU does not respond to the message (query pending frequencies)
	07	Not allowed signal (NOPO in MFCTA) / Illegal character (NIMO in MFC table)
	08	Outgoing: Forward signal not answered / Outbound: forward signal not acknowledged
	09	Outgoing: Missing dialing form (internal) STN / Outbound: no dialing from (internal) station
	0A	Invalid COE present (line has assigned invalid or no Class of Externals. F5607 with situation 0A also exists for trunks without an MFC table!)
	0B	illegal begin of MFC signal / MFC start character not plausible
	0C	illegal end of MFC signal / MFC end character not plausible
	0D	illegal time out / Timer not possible (not plausible)
	0E	protocol of test call1 / statistics of test call 1 (only for Test)
	0F	protocol of test call2 / statistics of test call 2 (only for Test)
	10	other situation (not assigned)
	11	protocol of test call3 / statistics of test call 3 (only for Test)
	12	time out for request message / No request message of the SIU (MFRP)

	13	Invalid frequencies of the SIU (MFRP)
	14	illegal 1st frequency / unexpected 1. Frequency (MFRP)
	15	illegal program flow (MFRP)
	16	congestion (MFRP)
	17	incoming: timeout of long timer
	18	outgoing: timeout of long timer (MFRP)
	19	Error by MF shuttle
	1A	Codogram error (for ANIF: not sent; for ANIB: no receiver)
	1B	Error on MFRP outgoing
	1C	Error on MFRP
	1D	Error on MFRP
	1E	Error on MFRP
	1F	Log of incoming call (end-to-end signaling)
	20	Log of incoming call (link-by-Link signaling)
	21	Implausible pointer in dyn. memory f (as of HP4k V2.0)
	22	Log of outgoing call (HP4k V2.0)
Byte 3	=	from SIU detected frequencies (see special table) / Pending frequencies at the SIU (see table)
Byte 4 - 9	=	MFC attributes (only for development)
Byte 10 - 12	=	Counters for forward signals: in counter, out counter, demand pointer
Byte 13 - 34	=	Forward signals (VWZ)
Byte 35 - 37	=	Counters for backward signals: in counter, out counter, demand pointer /
Byte 38 - 60	=	Backward signals (RWZ)
Byte 61 - 64	=	SIU device address
Byte 65	=	DH state
as of byte 66	=	irrelevant data

Byte 0-3 see above.

Byte 4 - 18	=	MFC attributes (only for development)
Byte 19 - 21	=	Counters for forward signals: in counter, out counter, demand pointer
Byte 22 - 48	=	Forward signals (VWZ)
Byte 49 - 51	=	Counters for backward signals: in counter, out counter demand pointer
Byte 52 - 78	=	Backward signals (RWZ)

Error messages

Byte 79 - 82	=	SIU device address
Byte 83	=	DH state
as of byte 84	=	irrelevant data

F5608

CIRCUIT

STAT OVERFLOW

Type:

Service-specific (Format 22)

Short text:

Statistics counter overflow (threshold value overstepped)

Cause:

Statistics counters monitor this circuit. The circuit has been placed out of service due to too many alarms. Counter sequence: each alarm increments the error counter by 1. Alarm pairs (alarm set and alarm reset message) also increment a specific pair counter by 1, even if the alarm is reset correctly. One of the statistics counters has reached its threshold, and the circuit has been placed out of service by dependability (status: DEF). As a rule, the counter level is reset after overflow, so that the circuit is not immediately blocked again when re-activated via AMO or when the board is replaced. In addition, the counter level is decremented at set intervals (minutes).

System reaction:

the circuit has been placed out of service due to too many alarms.

Action:

Take previous error messages and line quality of circuit into account. Activate/deactivate circuit, unplug/re-plug board concerned (power-on reset). If one of the statistics counters overflows again, replace the board.

Byte 0	=	Counter level of alarm pair counter (standard)
Byte 1	=	Counter level of single alarm counter (standard)
Byte 2	=	Counter level of single alarm counter (optional)
Byte 3	=	Counter level of single alarm counter (optional)
Byte 4	=	Statistics class 0 - 20. Different threshold values exist depending on the board type.
Byte 5	=	Number of counter which has overflowed
	00	Alarm pair counter (standard)01 Single alarm counter (standard)
	02	Single alarm counter (optional)
	03	Single alarm counter (optional)

Byte 6-7	=	Threshold value of overflowed counter (MAX_COUNT)
Byte 8-9	=	Reset value of overflowed counter (COUNT_ACTION)
Byte 10	=	Type of threshold value reached
	00	Alarm pair (standard)
	01	Single alarm (standard)
	02	Single alarm (optional)
	03	Single alarm (optional)
Byte 11-12	=	Decrementing time interval, in minutes (MAX_TIME_COUNT)
Byte 13-14	=	Decrementing value (DECREMENT)
Byte 15-80	=	Message to FA which led to statistics overflow

See also [Section 8.14, "Device names"](#).

F5609

CIRCUIT

BACK IN SERVICE

Type:

Service-relevant (Format 18)

Short text:

Trunk back in service

Cause:

Following a defect, the circuit was put back into service after multiple attempts and a preset block timeout. The circuit is then monitored to see if another failure occurs. If a new defect occurs during this monitoring time, it is put back into service on a trial basis after a longer block time. In ACTION = INSTRIAL (in service trial) putting into service on a trial basis (Format 43) In ACTION = IN SERV (in service), putting into service is permanent, the monitoring period is over. (Format 18)

System reaction:

Record goes from DEF to READY.

Action:

Positive acknowledgement, therefore no action required.

Interpretation of auxiliary data:

Text only for format 43: TRIAL NO: 1 = current number of attempts to put the system into service (max. 8)

F5623

CIRCUIT

MSG OVERFLOW

Type:

Service-specific (Format 22)

Short text:

SLMB16 message overflow

Cause:

Message data overflow of terminal connected to SLMB16 board. Available buffers for terminal in question in buffer pool are full.

System reaction:

circuit is reset automatically.

Action:

The overload may have occurred for a variety of reasons, e.g. LW error, wrong configuration, etc. Check terminals connected to circuit.

See also [Section 8.14](#), “Device names”.

F5624

CIRCUIT

LINE ALARM END

Type:

Service-specific (Format 22)

Short text:

End of line alarm (only for Netherlands)

Cause:

End of line alarm of DIUC.

System reaction:

signals only.

Action:

Positive acknowledgment, no action.

Interpretation of auxiliary data:

see [F5348](#).

See also [Section 8.14](#), “Device names”.

F5625

CIRCUIT

LINE ALARM 1

Type:

Service-specific (Format 22)

Short text:

Line alarm in idle state (only for Netherlands)

Cause:

Line-alarm of DIUC in idle state.

System reaction:

signals only.

Action:

If error repeats, replace board or check appropriate line and replace if necessary.

Interpretation of auxiliary data:

see [F5348](#).

See also [Section 8.14](#), “Device names”.

F5626

CIRCUIT

LINE ALARM 2

Type:

Service-specific (Format 22)

Short text:

Line alarm during outgoing connection (only for Netherlands)

Cause:

Line-alarm of DIUC during outgoing connection.

System reaction:

signals only.

Action:

If error repeats, replace board or check appropriate line and replace if necessary.

Interpretation of auxiliary data:

see [F5348](#).

See also [Section 8.14](#), “Device names”.

F5627

CIRCUIT

LINE ALARM 3

Type:

Service-specific (Format 22)

Short text:

Line alarm during incoming connection (only for Netherlands)

Cause:

Line-alarm of DIUC during incoming connection.

System reaction:

signals only

Action:

If error repeats, replace board or check appropriate line and replace if necessary.

Interpretation of auxiliary data:

see [F5348](#).

See also [Section 8.14](#), "Device names".

F5628

CIRCUIT

LINE ALARM 4

Type:

Service-specific (Format 22)

Short text:

Missing release acknowledgment (only for Netherlands)

Cause:

Missing cleardown acknowledgment for DIUC.

System reaction:

signals only

Action:

If error repeats, replace board or check appropriate line and replace if necessary.

Interpretation of auxiliary data:

see [F5348](#).

See also [Section 8.14](#), "Device names".

F5629

CIRCUIT

PRI MB REM

Type:

Service-specific (Format 22)

Short text:

T1-PRI on hold (USA, T1 Board)

Cause:

Remote partner system has put one channel of a T1-PRI (primary rate interface) on hold (Remote).

System reaction:

remote maintenance status

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

See also [Section 8.14](#), “Device names”.

F5630

CIRCUIT

PRI OOS REM

Type:

Service-specific (Format 22)

Short text:

T1-PRI out-of-service (USA, T1 Board)

Cause:

Remote partner system has put T1-PRI (primary rate interface) out-of-service (Remote).

System reaction:

remote blocking

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

See also [Section 8.14](#), “Device names”.

F5631

CIRCUIT

INVALID MP EC

Type:

Diagnosis-specific (Format 22)

Short text:

Invalid event code for analog station line module

Cause:

Invalid event code detected by firmware of analog line board. Bytes 2-14 of the hexadecimal output contain information on the microprocessor (see also [F5409](#), [F5348](#)). Error in board LW or board received invalid external message.

System reaction:

statistics

Action:

Check LW version and circuit parameters via AMO. If error persists, save error message data and contact your [Next level of support](#) for evaluation.

See also [Section 8.14](#), "Device names".

F5632

CIRCUIT

ROLM NET SIG ERROR

Type:

Service-specific (Format 22)

Short text:

Network signaling error (USA, ROLM board)

Cause:

A network signaling error occurred in the circuit.

System reaction:

statistics generated only

Action:

Replace module when convenient.

See also [Section 8.14](#), "Device names".

F5633

CIRCUIT

ROLM DIGIT ERROR

Type:

Service-specific (Format 22)

Short text:

Digit error (USA, ROLM board)

Cause:

A digit error occurred in the circuit.

System reaction:

statistics generated only

Action:

Replace module when convenient.

See also [Section 8.14](#), “Device names”.

F5634

CIRCUIT

ROLM FLT FAILURE

Type:

Service-specific (Format 22)

Short text:

Filter error (USA, ROLM board)

Cause:

A filter error occurred in the circuit.

System reaction:

the circuit is automatically switched off.

Action:

Replace board when convenient.

See also [Section 8.14](#), “Device names”.

F5635

CIRCUIT

ROLM CIR FAILURE

Type:

Service-specific (Format 22)

Short text:

HW error (USA, ROLM board)

Cause:

A HW error occurred in the circuit.

System reaction:

the circuit is automatically switched off.

Action:

Replace board when convenient.

See also [Section 8.14, “Device names”](#).

F5636

CIRCUIT

ROLM UNCFG CIR

Type:

Service-specific (Format 22)

Short text:

Reconfiguration error (USA, ROLM board)

Cause:

An error occurred while reconfiguring a circuit.

System reaction:

the circuit is reloaded and if the error occurs again, the circuit is blocked.

Action:

Re-configure board correctly.

See also [Section 8.14, “Device names”](#).

F5637

CIRCUIT

ROLM UNCFG FILTR

Type:

Service-specific (Format 22)

Short text:

Reconfiguration error (USA, ROLM board)

Cause:

An error occurred while reconfiguring a circuit filter.

System reaction:

the circuit is reloaded and if the error occurs again, the circuit is blocked.

Action:

Re-configure filter correctly.

See also [Section 8.14, “Device names”](#).

F5640

CIRCUIT

ROLM INV CHN EVT

Type:

Service-specific (Format 22)

Short text:

Invalid channel event (USA, ROLM board)

Cause:

An event exception (invalid channel message) occurred on the board for this circuit.

System reaction:

statistics

Action:

Possible SW error. contact your [Next level of support](#).

See also [Section 8.14](#), "Device names".

F5644

CIRCUIT

ROLM T1 DP0

Type:

Service-specific (Format 22)

Short text:

Dial pulse out of service (USA, T1 Board)

Cause:

Problems with pulse dialing on the circuit.

System reaction:

statistics.

Action:

Check line and network. Replace board if necessary.

See also [Section 8.14](#), "Device names".

F5645

CIRCUIT

L1 ERROR S0

Type:

Service-specific (Format 36)

Short text:

Layer 1 failure

Cause:

Layer 1 failure on S0 bus; bus line interrupted or last device in sequence either unplugged or defective. Message can be initiated by an S0 board, an SLMO board, a DIUS2 board with cordless or SLMN with video PC. The SLMN-T1 board in the USA is only used for video PC, but with the interface of the T1 boards for networking!

System reaction:

statistics

Action:

If this error occurs frequently, check bus line and last terminal.

Interpretation of auxiliary data:

(supported by text) Byte 0 = Error type (DB_M_QF_CIR_L1_ERR_SET)

REASON: 00H BIT SLIP

Cause:

Bit slip (LOCAL ALARM)

REASON: 02H BIT ERR RATE -3

Cause:

Bit error rate >10 E-3 (LOCAL ALARM)

REASON: 03H LOST FRAME

Cause:

Loss of frame (LOCAL ALARM)

REASON: 04H NO SIGNAL

Cause:

No signal on the line (LOCAL ALARM)

REASON: 05H AIS

Cause:

Alarm indication signal from partner (AIS ALARM)

REASON: 06H REMOTE ALARM

Cause:

Remote alarm from partner (DISTANT ALARM)

REASON: 07H NO DATA LOADED

Cause:

Circuit data not loaded (line alarm)

REASON: 08H LAYER 1 NOT ACTIVE

Cause:

Layer 1 is not active, cannot be activated

REASON: 09H EVENT OVERFLOW

Cause:

Message overflow

REASON: 0AH BAD EVENT

Cause:

Invalid event

REASON: 0BH REMOTE ALARM CRC4

Cause:

Remote alarm CRC4 from partner (DISTANT ALARM)

Special scenario for video PC:

Error type 04 for line interrupt must not be indicated for reasons of serviceability (i.e., if video PC is switched off). In this case, this error type can only be diagnosed if status TRS is output instead of NPR.

Special scenario for SLMN-T1 in USA.

REASON: 10H LOSS OF SIGNAL

Cause:

Loss of signal detected for greater than the specified interval. Suppressed for switching off the video PC.

REASON: 11H MAX ERROR SECS

Cause:

The maximum number of errored seconds has been detected for the specified interval.

REASON: 12H RED ALARM LFA

Cause:

The board is in a red alarm condition due to loss of single frame synchronization. Suppressed for switching off the video PC.

REASON: 13H RED ALARM LMA

Cause:

The board is in a red alarm condition due to loss of multi-frame synchronization.)

REASON: 14H YELLOW ALARM RFA

Cause:

The board is in a yellow alarm condition due to loss of single frame synchronization.

REASON: 15H YELLOW ALARM RMA

Cause:

The board is in a yellow alarm condition due to loss of multi-frame synchronization.

REASON: 16H AIS ALARM (BLUE)

Cause:

The board is in blue alarm condition because it is receiving an AIS signal from the partner.

REASON: 17H CHANNEL FAULT

See also [Section 8.14, "Device names"](#).

F5646

CIRCUIT

NOT READY

Type:

Service-specific (Format 18)

Short text:

X.21 line defective

Cause:

Networked systems: X.21 line defective/unplugged, or remote partner not responding.

System reaction:

line alarm

Action:

Check line. Positive acknowledgment with [F5647](#).

See also [Section 8.14](#), "Device names".

F5647

CIRCUIT

READY

Type:

Service-specific (Format 18)

Short text:

X.21 line ready

Cause:

Networked systems: X.21 line back in service.

System reaction:

end of line alarm

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

See also [Section 8.14](#), "Device names".

F5648

CIRCUIT

TIMEOUT

Type:

Service-specific (Format 18)

Short text:

Timeout error.

Cause:

X.21 circuit of remote partner system is not responding to CP seizure request. Remote partner system may be undergoing soft restart.

System reaction:

line alarm

Action:

Check remote system and connecting line. Positive acknowledgment with [F5647](#).

See also [Section 8.14](#), “Device names”.

F5649

CIRCUIT

L1 ERROR TOTAL

Type:

Service-specific (Format 37)

Short text:

Layer 1 misc. errors summation messages (France only)

Cause:

Summation message for miscellaneous layer 1 errors if a threshold is exceeded within a given time. This message is implemented for the DIUCAS in France, and reduces the number of messages output for low-impact errors. The timer can be set with the SUPPTIM parameter of the LWPAR AMO. Changes to SUPPTIM only become effective when the board is reloaded, e.g. after power-on reset (unplugging and replugging).

System reaction:

signals only

Action:

Check remote system and connecting line.

TYPE	=	L1 ERROR (error) or LX ACTIVE (positive acknowledgment)
QUANTITY	=	Number of errors counted
REASON	=	Hexadecimal code for the layer 1 error
TEXT	=	Plain text description of layer 1 error
LOCAL ALARM	=	Home system detected error
DISTANT ALARM	=	Remote system detected error

Error messages

AIS	=	Alarm Indication Signal from remote system

See also [Section 8.14, "Device names"](#).

F5650

MBU

NO HDLC CLOCK

Type:

Service-specific (Format 22)

Short text:

Error in central clock source (NCG)

Cause:

MBU has detected clock failure or excessive drift in clock frequency.

Action:

Check central clock source, replace clock generator if necessary.

F5651

MBU

INFO

Type:

Diagnosis-specific (Format 22)

Short text:

MBU Info on MBU restart

Cause:

MBU has carried out a restart.

Action:

No action necessary.

Interpretation of auxiliary data:

Can only be evaluated by FW developer.

F5680

TERM

EXT ANN NO INIT

Type:

Service-specific (Format 18)

Short text:

Error in Musiphone initialization (USA)

Cause:

The Musiphone (recorded announcement device) has either not been assigned a key or has not been initialized correctly. Event came from call processing.

System reaction:

signals only

Action:

Check Musiphone configuration on SLMA.

See also [Section 8.14, "Device names"](#).

F5681

TERM

EXT ANN NO RESP

Type:

Service-specific (Format 18)

Short text:

Musiphone not responding (USA).

Cause:

Musiphone not responding. Event came from Anate device handler.

System reaction:

signals only

Action:

Check Musiphone connection to SLMA.

See also [Section 8.14, "Device names"](#).

F5682

TERM

TEST ERROR

Type:

Service-specific (Format 43)

Short text:

RTO: Defective terminal or cable.

Cause:

The RTO message to the error analysis system (FA) is output in the HEX data. Device names, completed test and test result are output in plain text

Action:

Check line and terminal.

Interpretation of auxiliary data:

Format 22/43: see [F5309](#).

See also [Section 8.14](#), "Device names".

F5683

TERM

SPOR ERROR

Type:

Service-specific (Format 43)

Short text:

RTO: Sporadic terminal error

Cause:

Sporadic terminal error (advisory). The RTO message to the error analysis system (FA) is output in the HEX data. Device names, completed test and test result are output in plain text.

Action:

If this error occurs frequently, replace firmware or terminal.

Interpretation of auxiliary data:

Format 22: see [F5309](#).

See also [Section 8.14](#), "Device names".

F5684

TERM

NOT CONNECTED

Type:

Service-specific (Format 18)

Short text:

No Musiphone connection (USA)

Cause:

A Musiphone recorded announcement unit connected to an SLMA cannot be put into service. Message from an Anate device handler.

System reaction:

a second attempt at startup is made via the startup procedure task list IBP.

Action:

Check Musiphone and activate manually.

See also [Section 8.14](#), "Device names".

F5685

TERM

CONNECTED

Type:

Service-specific (Format 18)

Short text:

Musiphone connection OK (USA)

Cause:

A recorded announcement unit has been connected to an SLMA. Message came from Anate device handler.

System reaction:

the terminal is started up.

Action:

No error message: the device has been successfully put into service, no action.

See also [Section 8.14](#), “Device names”.

F5687

TERM

DATA OVERFLOW

Type:

Service-specific (Format 18)

Short text:

Message data overflow of connected terminal

Cause:

Message data overflow of terminal connected to SLMB8 board. Available buffers for terminal in question in buffer pool are full. Event signal came from SLMB8 loadware.

System reaction:

reset the terminal

Action:

The overflow may have occurred for a variety of reasons, e.g. too many messages, firmware error or terminal HW error.

See also [Section 8.14](#), “Device names”.

F5688

TERM

TERMINAL SYNC

Type:

Service-specific (Format 18)

Short text:

Terminal synchronization okay again.

Cause:

Possibly terminal has been plugged back in. Message originates from DIGITE or ATND device handler.

System reaction:

the device is started up.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

See also [Section 8.14, "Device names"](#).

F5689

TERM

EARTH BEGIN

Type:

Service-specific (Format 18)

Short text:

Ground leakage on analog telephone circuit.

Cause:

Ground leakage on a or b-wire (tip/ring) of analog telephone circuit. Message originates from ANATE device handler.

Action:

Check line for ground leakage and repair. Check that the positive acknowledgment was output with [F5690](#).

See also [Section 8.14, "Device names"](#).

F5690

TERM

EARTH END

Type:

Service-specific (Format 18)

Short text:

End of ground leakage on ANATE circuit.

Cause:

End of ground leakage on a or b-wire (tip/ring) of analog telephone circuit.
Message originates from ANATE device handler.

Action:

Positive acknowledgment, no action.

See also [Section 8.14, "Device names"](#).

F5691

TERM

TCOM WRONG PULSE PAUSE

Type:

Service-specific (Format 22)

Short text:

Wrong pulse spacing on TCOM

Cause:

The TCOM a/b wires may be wrongly connected. The event signal originated in the device handler of the TCOM.

System reaction:

blocks the terminal and restarts after a delay.

Action:

Check TCOM and verify the TCOM parameters via administration and maintenance order (AMO).

Interpretation of auxiliary data:

Byte 1 of the HEX data outputs type of device according to structure DB_M_DH_GERAETE_TYP_SET.

See also [Section 8.14, "Device names"](#).

F5692

TERM

TCOM NO SEIZURE ACK

Type:

Service-specific (Format 22)

Short text:

No seizure acknowledgment

Cause:

The TCOM a/b wires may be wrongly connected. Event signal came from the device handler (DH) of the TCOM.

System reaction:

blocks the terminal and restarts after a delay.

Action:

Check TCOM and verify the TCOM parameters via administration and maintenance order (AMO).

Interpretation of auxiliary data:

Byte 1 of the HEX data outputs type of device according to structure DB_M_DH_GERAETE_TYP_SET.

See also [Section 8.14](#), "Device names".

F5693

TERM

TCOM NO START DIAL

Type:

Service-specific (Format 22)

Short text:

No start-of-dialing

Cause:

No proceed-to-send signal from TCOM terminal. The TCOM a/b wires may be wrongly connected. Event signal came from the device handler (DH) of the TCOM.

System reaction:

blocks the terminal and restarts after a delay.

Action:

Check TCOM and verify the TCOM parameters via administration and maintenance order (AMO).

Interpretation of auxiliary data:

Byte 1 of the HEX data outputs type of device according to structure DB_M_DH_GERAETE_TYP_SET.

See also [Section 8.14](#), "Device names".

F5694

TERM

TCOM NO END OF DIAL

Type:

Service-specific (Format 22)

Short text:

No end-of-dialing

Cause:

No end-of-dialing signal for the code calling system. The TCOM a/b wires may be wrongly connected. Event signal came from the device handler (DH) of the TCOM.

System reaction:

blocks the terminal and restarts after a delay.

Action:

Check TCOM and verify the TCOM parameters via administration and maintenance order (AMO).

Interpretation of auxiliary data:

Byte 1 of the HEX data outputs type of device according to structure DB_M_DH_GERAETE_TYP_SET.

See also [Section 8.14](#), "Device names".

F5695

TERM

TCOM REMOTE BLOCK BEGIN

Type:

Service-specific (Format 22)

Short text:

Start of remote block for TCOM

Cause:

A remote block of the remote partner has been started for a line/terminal of the TCOM circuit

System reaction:

remote block for incoming seizures

Action:

Check remote system.

Interpretation of auxiliary data:

Byte 1 of the HEX data outputs type of device according to structure DB_M_DH_GERAETE_TYP_SET.

See also [Section 8.14](#), "Device names".

F5696

TERM

TCOM REMOTE BLOCK END

Type:

Service-specific (Format 22)

Short text:

End of remote block for TCOM

Cause:

The remote block has been removed by the remote system for a line/terminal of TCOM circuit.

System reaction:

end of the remote block for incoming seizures.

Action:

Positive acknowledgment, no action necessary.

Interpretation of auxiliary data:

Byte 1 of the HEX data outputs type of device according to structure DB_M_DH_GERAETE_TYP_SET.

See also [Section 8.14](#), "Device names".

F5697

TERM

TCOM LINE ALARM BEG

Type:

Service-specific (Format 22)

Short text:

Start of line alarm for TCOM

Cause:

Line alarm set for TCOM circuit. Exchange or tie line may have a breakage or is otherwise interrupted, or TCOM is wrongly connected.

System reaction:

sets line alarm status

Action:

Check line for breakage and TCOM connection. Check TMOM configuration parameters via AMO.

Interpretation of auxiliary data:

Byte 1 of the HEX data outputs type of device according to structure DB_M_DH_GERAETE_TYP_SET.

See also [Section 8.14](#), "Device names".

F5698

TERM

TCOM LINE ALARM END

Type:

Service-specific (Format 22)

Short text:

End of line alarm for TCOM.

Cause:

TCOM has detected end of line alarm.

System reaction:

sets end of line alarm status.

Action:

Positive acknowledgment, no action.

Interpretation of auxiliary data:

Byte 1 of the HEX data outputs type of device according to structure DB_M_DH_GERAETE_TYP_SET.

See also [Section 8.14](#), "Device names".

F5700

PM/XP

ALARM ON

Type:

Service relevant (Format 22)

Short text:

PhoneMail/Xpressions alarm on

Cause:

A PhoneMail/Xpressions alarm on has been signaled.

System reaction:

Signaling and alarm counter for PM/XP for specified group and node is increased.

Action:

Depending on auxiliary data. Save error data received and inform product specialist.

Byte 0:	Length of valid data in HEX (100'T = 64'H)
Byte 1,2:	PhoneMail group number
Byte 3:	PhoneMail node number
Byte 4,5:	PhoneMail/Xpressions alarm type (EventCode)
Byte 6-100:	Auxiliary data containing e.g. Network-ID

F5701

PM/XP

Error messages

ALARM OFF

Type:

Service relevant (Format 22)

Short text:

PhoneMail/Xpressions alarm off

Cause:

A PhoneMail/Xpressions alarm off has been signaled.

System reaction:

Signaling and alarm counter for PM/XP for specified group and node is cleared.

Action:

Depending on auxiliary data. Save error data received and inform product specialist.

Byte 0:	Length of valid data in HEX (100'T = 64'H)
Byte 1,2:	PhoneMail group number
Byte 3:	PhoneMail node number
Byte 4,5:	PhoneMail/Xpressions alarm type (EventCode)
Byte 6-100:	Auxiliary data containing e.g. Network-ID

F5713

TERM

L1 ERROR CORNET-TS

Type:

Service-specific (Format 22)

Short text:

CorNet TS layer 1 error

Cause:

Layer 1 error in repeater/terminator link (master/slave).

System reaction:

- Slave asynchronous: line alarm - Slave message lost: signals only

Action:

Check line between repeater and terminator, check both terminals.

Interpretation of auxiliary data:

Byte 0 = Length of relevant bytes Byte 1 = Error type
(DB_M_QF_SYM_L1_ERR_SET) 00 Slave asynchronous 01 Message to slave
lost Byte 2-100 = Miscellaneous auxiliary data (diagnosis-specific)

See also [Section 8.14](#), "Device names".

F5714

TERM

L2 ERROR CORNET-TS

Type:

Service-specific (Format 22)

Short text:

CorNet TS layer 2 error

Cause:

Error in uplink or downlink connection of CorNet TS terminals.

System reaction:

signals only.

Action:Save error message data and contact your [Next level of support](#).**Interpretation of auxiliary data:**

Byte 0 = Length of relevant bytes Byte 1 = Error type
(DB_M_QF_SYM_L2_ERR_SET) 00 Downlink error 01 Uplink error Byte 2-100
= Miscellaneous auxiliary data (diagnosis-specific)

See also [Section 8.14](#), "Device names".**F5715**

TERM

L3 ERROR CORNET-TS

Type:

Service-specific (Format 22)

Short text:

CorNet TS layer 3 error

Cause:

Downlink error of station (Phone) or add-on device (Option), or uplink error during message transmission.

System reaction:

statistics, signaling.

Action:Save error message data and contact your [Next level of support](#).**F5716**

TERM

Error messages

PHONE ERROR CORNET-TS

Type:

Service relevant (Format 22)

Short text:

Phone error in CORNET-TS

Cause:

Phone detects and report one of following errors.

System reaction:

- Signaling in the event of power reset, layer 1 asynchronous, timeout, deactivated,
- Otherwise: statistics and signaling.

Action:

Check the terminal and the line. Save error message data and notify [Next level of support](#).

Byte 0	=	Length of the possible bytes
Byte 1	=	Error type (DB_M_QF_SYM_PHONE_ERR_SET)
	00	Resetting due to power failure
	01	Layer 1 asynchronous
	02	Layer 1 timer expired
	03	Layer 1 deactivated
	04	Watchdog run
	05	Reset received from system
	06	Internal OS queue overflowed
	07	Stack pointer test negative
	08	Undefined reset
	09	Overflow of internal send queue
	0A	Received frame too big
	0B	Message too short
	0C	Message repetition
	0D	Option bus configuration error
	0E	Message pool overflow
	0F	Monitor data received
	10	End of monitor message
	11	D-CHANNEL TRANSMIT QUEUE OVERFLOW

	13	AUDIO DRIVER REPORTS AN ERROR CONDITION
	12	AUDIO DRIVER REPORTS AN UNEXPECTED BUSY CONDITION
	14	MEMORY MANAGEMENT REPORTS USAGE OF UNDEFINED POINTER VALUES
Byte 2-100	=	Arbitrary supplementary data (diagnosis-relevant)

See also [Section 8.14](#), "Device names".

F5717

TERM

OPT ERROR CORNET-TS

Type:

Service-specific (Format 22)

Short text:

Option error in the case of CORNET-TS

Cause:

Option recognizes and reports one of the following errors. Option refers, for example, to an add-on device, a chip card reader or else a plug-in adapter.

System reaction:

Signaling

Action:

Save error message data and contact your [Next level of support](#) For "option not configured": please determine the station with these error messages, display the configuration (AMO SBCSU) and compare with the physical terminal. An option that is not configured in the AMO should be connected to the terminal. Configured options that are not connected do not generate error messages. These options are automatically recognized during installation.

Interpretation of auxiliary data:

Byte 0	Length of the possible bytes	
Byte 1	Error type (DB_M_QF_SYM_OPT_ERR_SET	
	00	Option not defined
	01	ROM error
	02	RAM error
	03	Option not active
	04	Option not configured
	05	Obsolete software (headset)
Byte 2	Option address	

Error messages

	01-04	Key module 1-4
	05-08	Key module with self-labeled keys 1-4
	09	Chip card reader
	0C-0F	Plug-in adapter
	19	Signature Module, Smart Card Reader

See also [Device names](#).

F5718

TERM

CFG ERROR CORNET-TS

Type:

Service-specific (Format 22)

Short text:

CorNet TS configuration error

Cause:

CorNet TS terminals not performing as configured during startup.

- Remote block for terminator, repeater or both not active
- Signals only for terminator, repeater erroneously active, device ID incorrect
- Blocks if two terminators, repeaters are erroneously active

Action:

Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 = Number of relevant bytes Byte 1 = Error type
(DB_M_QF_SYM_CFG_ERR_SET) 00 Configured terminator not active 01
Configured repeater not active 02 Repeater active, only terminator configured
03 Repeater and terminator active, only terminator configured 04 2 terminators
active 05 2 repeaters active 06 Repeater and terminator not active 07 Wrong
device ID Byte 2-100 = Miscellaneous auxiliary data (diagnosis-specific)

See also [Section 8.14, "Device names"](#).

F5719

TERM

CMI ERROR

Type:

Service-specific (Format 22)

Short text:

Cordless cell phone error (CMI)

Cause:

Cordless cell phone error detected by peripheral board. Message may be received from the IWU or CP component of the board ("Interworking" or "Common Part").

System reaction:

Signals only.

Action:

Depends on type of error, contact your [Next level of support](#) if necessary.

CMI ERROR DATA:

Byte 0 = 5F Max. 95 bytes length

Byte 1 = Error type (DB_M_QF_CIR_L1_ERR_SET)

Byte 2,3 = 0001 Error number

Byte 4 = Length of data to follow

Byte 5-95 = Specific CMI error data;

Error types: (with text)

Note: See also [Device names](#).

Message texts:

REASON: 00H MAJOR ERROR IN IWU (PABX) DATABASE

Incorrect values in IWU PABX database

REASON: 01H ERROR IN CP MOBILITY DATABASE

Incorrect values in mobility database

REASON: 02H ERROR REASON NOT USED

Not used

REASON: 03H INCORRECT OR DOUBLE CMI PIN

Registration error in a mobile unit

REASON: 04H PP DECT ID NOT VALID

DECT_ID in mobile unit invalid

REASON: 05H UNKNOWN EMC CODE

Unknown manufacturer code

REASON: 06H OTHER TRACER STILL ACTIVE

Another trace is still active

REASON: 07H ERROR IN IWU BOF COMPONENT

Error in IWU BOF component

REASON: 08H ERROR IN IWU SWU SEP COMPONENT

Error in IWU SWU SEP component

REASON: 09H ERROR IN IWU CP SEP COMPONENT

Error in IWU CP SEP component

REASON: 0AH ERROR IN IWU EXTENSION COMPONENT

Error messages

Error in IWU extension component

REASON: 0BH ERROR IN IWU IC SERVICE COMPONENT

Error in IWU IC service component

REASON: 0CH ERROR IN IWU CALL HANDLING COMPONENT

Error in IWU call handling component

REASON: 0DH ERROR IN IWU ALARM/TRACE/TEST COMPONENT

Error in IWU alarm/test/trace component

REASON: 0EH ERROR IN IWU MESSAGE EN/DECODER COMPONENT

Error in IWU message codec component

REASON: 0FH ERROR IN IWU ADMINISTRATION COMPONENT

Error in IWU administration component

REASON: 10H ERROR IN IWU STARTUP PHASE 1

Error in IWU startup phase 1

REASON: 11H ERROR IN IWU STARTUP PHASE 2

Error in IWU startup phase 2

REASON: 12H ERROR IN PABX EXTENSION LOCKED

XXX - No info on reason available

REASON: 13H ERROR IN IWU ADMINISTRATION EXTENSION NOT INS

XXX - No info on reason available

REASON: 14H ERROR IN IWU TRACE DATABASE

XXX - No info on reason available

REASON: 15H INTERSLMC CONNECTION NOT POSSIBLE

XXX - No info on reason available

REASON: 16H ERROR IN IWU DURING UPLOAD OF A DSS KEY

XXX - No info on reason available

REASON: 17H ERROR IN IWU DURING DOWNLOAD DATABASE

XXX - No info on reason available

REASON: 18H ERROR IN PABX ADD-ON MODULE NOT EQUIPPED

XXX - No info on reason available

REASON: 19H ERROR IN IWU DEPENDABILITY COMPONENT

XXX - No info on reason available

REASON: 1AH ERROR IN IWU TIMING COMPONENT

XXX - No info on reason available

REASON: 1BH ERROR IN IWU EXTENDED ERROR COMPONENT

XXX - No info on reason available

REASON: 1CH ERROR IN IWU SYSTEM COMPONENT

XXX - No info on reason available

REASON: 1DH ERROR IN IWU SWUSIGNLINK COMPONENT

XXX - No info on reason available

REASON: 1EH ERROR IN IWU IWUMODEL COMPONENT

XXX - No info on reason available

REASON: 1FH ERROR IN IWU COMPONENT

First IWU reserve element

REASON: 29H ERROR IN IWU COMPONENT

Last IWU reserve element

REASON: 2AH ERROR IN QDCL COMPONENT

XXX - No info on reason available

REASON: 2BH ERROR IN SLMCCO COMPONENT

Error in CP SLMC coordination

REASON: 2CH ERROR IN STB COMPONENT

XXX - No info on reason available

REASON: 2DH ERROR IN CP LLME COMPONENT

XXX - No info on reason available

REASON: 2EH ERROR IN CP DECT LAYER 3

XXX - No info on reason available

REASON: 2FH ERROR IN DLCH COMPONENT

XXX - No info on reason available

REASON: 30H ERROR IN CP MOBILITY CONTROL COMPONENT

XXX - No info on reason available

REASON: 31H ERROR IN IC MUX COMPONENT

XXX - No info on reason available

REASON: 32H ERROR IN CP L3 MUX COMPONENT

XXX - No info on reason available

REASON: 33H ERROR REASON NOT USED

XXX - No info on reason available

REASON: 34H ERROR REASON NOT USED

XXX - No info on reason available

REASON: 35H ERROR REASON NOT USED

XXX - No info on reason available

REASON: 36H ERROR CP L1 COMPONENT

XXX - No info on reason available

REASON: 37H ERROR CP L2 COMPONENT

XXX - No info on reason available

REASON: 38H EVENTCODE NOT VALID

Error messages

XXX - No info on reason available

REASON: 39H GENERAL ERROR IN CP COMPONENT

XXX - No info on reason available

REASON: 3AH ERROR IN HWREL COMPONENT

XXX - No info on reason available

REASON: 3BH ERROR IN CP COMPONENT

XXX - No info on reason available

REASON: 3CH ERROR IN HDLC COMPONENT

XXX - No info on reason available

REASON: 3DH ERROR IN CP COMPONENT

First CP reserve element

REASON: 4DH ERROR IN CP COMPONENT

Last CP reserve element

REASON: 4EH ERROR IN CP OR IWU COMPONENT

XXX - No info on reason available

REASON: 4FH CMI HUNTGRP LOCKED

Cause: overload on CMI board; hunt groups are locked; no new connections to the board are possible. Auxiliary data. Info per locked hunt group (see number of errors, byte 2-3) as of byte 5 Byte 1 Service 00 VOICE DEE Byte 1 RNR Length 01-06 Byte 1-6: RNR

REASON: 50H CMI HUNTGRP UNLOCKED

Cause: end of overload on CMI board; hunt groups are released; new connections to the board are possible. Auxiliary data. Info per locked hunt group (see number of errors, byte 2-3) as of byte 5 Byte 1 Service 00 VOICE DEE Byte 1 RNR Length 01-06 Byte 1-6: RNR

F5730

BOARD

QUALITY SIGNALING

Type:

Service-specific (Format 22)

Short text:

Quality statistics signaling

Cause:

Peripheral board is transmitting quality statistics (line or transmission error statistics), since counter has reached threshold value (e.g. SLMC16). The following statistics are counted: - Line errors < 100 ms asynchronous, - Last look errors in received bytes

System reaction:

statistics

Action:

contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 = Length of auxiliary data, max. 32 bytes Byte 1 = Board error statistics

F5731

BOARD

MP LIST OVERFLOW

Type:

Service-specific (Format 22)

Short text:

List overflow of a peripheral board

Cause:

Overflow of microprocessor input/output list of a peripheral board. Messages can no longer be transferred to the system. a) With loss of messages: The lists are cleared when the board is reset, the processor will continue operation. All existing connections are lost. b) No message loss (only signaling of list overflow)

System reaction:

resets the board in the event of message loss.

Action:

- The list overflow may have occurred for a variety of reasons, e.g. unexpected traffic overload due to wrong board configuration, wrong LW resource dimensions or inadequate overload protection strategy. - Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Bytes 2-14 contain further information for your system specialist (see [F5348](#))

F5732

BOARD

MP WATCHDOG

Type:

Service-specific (Format 22)

Short text:

MP watchdog timeout

Cause:

Timeout of microprocessor watchdog timer of a peripheral board. Board is unable to run the necessary routines within programmed time base.

System reaction:

the board will be reloaded after a one-minute interval.

Action:

If watchdog timeouts persist, replace the board.

Interpretation of auxiliary data:

Bytes 2-14 contain further information for your system specialist (see [F5348](#))

F5733

BOARD

MP CHECKSUM

Type:

Service-specific (Format 22)

Short text:

Bit corruption in microprocessor

Cause:

Corrupted bits in microprocessor code of a peripheral board. These are detected after loading, e.g. following a hard restart of the system.

System reaction:

board is reloaded by the system.

Action:

If error recurs, check loadware and replace board if necessary.

Interpretation of auxiliary data:

Bytes 2-14 contain further information for your system specialist (see [F5348](#))

F5734

BOARD

MP NO RESOURCE

Type:

Service-specific (Format 22)

Short text:

No more resources for peripheral board MP

Cause:

The microprocessor of the peripheral board concerned has run out of resources. This is either due to overload or a resource allocation error.

System reaction:

the board is reloaded by the system.

Action:

The overload situation, whether real or symptomatic, may have occurred for a variety of reasons, e.g. wrong board configuration or wrong LW design. Try unplugging/replugging the board (power-on reset) or replace board if this does not work. If the error persists, contact your [Next level of support](#).

Interpretation of auxiliary data:

Bytes 2-14 contain further information for your system specialist (see [F5348](#))

F5735

BOARD

MP ASIC ERROR

Type:

Service-specific (Format 22)

Short text:

ASIC error of peripheral board MP

Cause:

The microprocessor of the peripheral board concerned has detected an ASIC error in a board logic circuit.

System reaction:

the board is reloaded after a one-minute interval.

Action:

If error recurs, unplug/replug the board (power-on reset) or replace board if this does not work.

Interpretation of auxiliary data:

Bytes 2-14 contain further information for your systemspecialist (see [F5348](#))

F5736

BOARD

RMS-ERROR

Type:

Service-specific (Format 22)

Short text:

RMS1 error

Cause:

Remote Switch error (RMS1) reported by DIUR.

System reaction:

this error message is also output in the case of RMS failures.

Action:

Remedial measures depend on the evaluation of the HEX data.

Error messages

Interpretation of auxiliary data:

Byte 0 = Message length (14 Bytes) Byte 1 = Code for DIUR Byte 2 = PBC address of DIUR in main system Byte 3 = Board HW status Byte 4 = FW status of DIUR as ASCII-value Byte 5 = Error location (see table) Byte 6-7 = Detailed error information (see table)

Byte 5	Byte 6	Byte 7
[01] PCM Highway	[01] Layer 1 error	[01] Frame loss
		[02] No signal
		[03] Alarm signal
		[04] Remote alarm
		[05] Error on PCM highway
		[06] PCM highway restored
	[02] Layer 2 error	[01] No partner
		[02] Partner restored
		[03] Message cannot be sent
[02] RMS	[01] Message from RG	[01] Syn1 clock absent
		[02] Syn1 clock restored
	[02] Message from PCG	[01] Bad reference clock
		[02] No reference clock
		[03] Other message from PCG
		[04] PCG synchronized
		[05] Hardware error
	[03] Message from power supply	[01] Battery operation
		[02] Mains power operation
	[04] Message from DIUR	[01] FW error
		[02] Message cannot be sent
		[03] HW error
		[04] DIUR reset
[03] Main system	[01] Message from DIUR	[01] FW error
		[03] HW error
		[04] DIUR reset

Table 4 Interpretation of F5736 for RMS1

F5737

BOARD

EXC NO PROCEDURE

Type:

Diagnosis-specific (Format 22)

Short text:

Procedure call failed (LW exception error)

Cause:

A procedure (routine) cannot be called. Exception error in the loadware of a COSMOS board (e.g., SLMA24, SLMA16, TMOM, TMEW2, SLMO, etc.).

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#). Check loadware if indicated in the HEX data.

Interpretation of auxiliary data:

Byte 0 = Length of the data to follow Byte 1 = Exception Type Byte 2 = LW_PROCESS Byte 3 = STATE Byte 4 = EVENT Byte 5-8 = ADDRESS Byte 9 = SOURCE_ID Byte 10 = DEST_ID Byte 11 = INTERNAL_INFO Byte 12-15 = Reserve for additional data Byte 16 = Length of the auxiliary data Byte 17-100 = max 84 bytes miscellaneous auxiliary data

F5738

BOARD

EXC NO PROCESS

Type:

Diagnosis-specific (Format 22)

Short text:

Message sent to non-existent process (LW exception error)

Cause:

A message or an event was sent to a non-existent process. Error in the loadware of a COSMOS board or in the system software.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#). Check loadware if indicated in the HEX data.

Interpretation of auxiliary data:

see F5737.

F5739

BOARD

EXC EC NOT VALID

Type:

Diagnosis-specific (Format 22)

Short text:

Unexpected event code (LW exception error)

Cause:

Event code EC of a message was not expected in the current state and current routine. Error in the loadware of a COSMOS board or in the external message.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#). Check loadware if indicated in the HEX data.

Interpretation of auxiliary data:

see F5737.

F5740

BOARD

EXC TIMER OVERFLOW

Type:

Diagnosis-specific (Format 22)

Short text:

Timer out of range (LW exception error)

Cause:

The value of the timer indicated in the message was outside the valid range. Error in the system software.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#). Check loadware if indicated in the HEX data.

Interpretation of auxiliary data:

see F5737.

F5741

BOARD

EXC LIST OVERFLOW

Type:

Diagnosis-specific (Format 22)

Short text:

Buffer overflow in board mailbox (LW exception error)

Cause:

Error in the loadware of a COSMOS board, or board is receiving too many messages.

System reaction: - WAML: board is automatically reloaded. - Other board: restart after block without loading.

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#). Check loadware if indicated in the HEX data.

Interpretation of auxiliary data:

see F5737.

F5742

BOARD

EXC CMD NOT VALID

Type:

Diagnosis-specific (Format 22)

Short text:

Invalid command (LW exception error)

Cause:

The EPIC driver received an invalid command. Error in the loadware of a COSMOS board.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#). Check loadware if indicated in the HEX data.

Interpretation of auxiliary data:

see F5737.

F5743

BOARD

EXC CMD Q OVERFLOW

Type:

Diagnosis-specific (Format 22)

Type:

Command queue overflow (LW exception error)

Cause:

Error in the loadware of a COSMOS board.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#). Check loadware if indicated in the HEX data.

Interpretation of auxiliary data:

see F5737.

F5744

BOARD

EXC COSMOS EXCEPTION

Type:

Diagnosis-specific (Format 22)

Short text:

COSMOS OS error (LW exception error)

Cause:

An exception error was reported by the COSMOS operating system. Invalid COSMOS command or invalid parameter. Error in the loadware of a COSMOS board.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#). Check loadware if indicated in the HEX data.

Interpretation of auxiliary data:

see F5737.

F5745

BOARD

EXC BUFFER INTEGRITY

Type:

Service-specific (Format 22)

Short text:

Buffer test negative (LW exception error)

Cause:

The routine buffer test completed with errors. Hardware error or address error in the loadware of a COSMOS board.

System reaction:

the board is blocked and reloaded.

Action:

Replace board. If error persists, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see F5737.

F5746

BOARD

EXC WATCHDOG (up to SP 300 E V1.0)

Type:

Service-specific (Format 22)

Short text:

Watchdog timeout (LW exception error)

Cause:

The watchdog timer of the board has expired. Error in the hardware or loadware of a COSMOS board.

System reaction:

the board is blocked and reloaded after a period of 1 minute.

Action:

Replace board. If error persists, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see F5737.

BOARD

NO CLOCK ACK (from SP 300 E V2.0)

Type:

Diagnosis-specific (Format 00)

Short text:

No acknowledgment of the board for a reference clock command

Cause:

A board has received a command for switching on/off the reference clock and did not respond to it. This may be due to a hardware error or to a loadware error.

System reaction:

the board is reset and restarted after a delay.

Action:

If the board does not restart after a blocking period, an attempt can be made to restart it using AMO BSSU. Should the errors recur, replace board.

F5747

BOARD

CONFIG ERROR

Type:

Service relevant (Format 43)

Short text:

Board configuration error.

Cause:

The situation is depending on the reason described below.

System reaction:

See below.

Action:

See below.

00H SUBBOARD CONFIGURATION MISMATCH

Type:

Service relevant (Format 43)

Short text:

Configuration mismatch of subboard.

Cause:

There is a mismatch between the data which has been configured for the subboard (submodule on a board) and the really mounted subboard.

System reaction:

An alarm is generated.

Action:

The mounted subboard and/or the configuration data have to be checked. Perhaps the subboard has to be replaced by another type.

SUBBOARD NUMBER:	01H-02H	Number of affected subboard.
ACTUAL SUBBOARD HW ID:		HW ID of actually mounted subboard.
CONFIGURED SUBBOARD HW ID:		HW ID of configured subboard.
Auxiliary data:		Diagnosis data filled in by board LW for product specialist.

F5748

BOARD

EXC WRITE PROTECTION

Type:

Diagnosis-specific (Format 22)

Short text:

Write protection error (LW exception error)

Cause:

Error in the loadware of a COSMOS board.

System reaction:

the board is blocked and reloaded automatically.

Action:

Unplug/replug board (power on reset). Check LW version. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see F5737.

F5749

BOARD

LW REQUEST

Type:

Diagnosis-relevant (Format 43)

Short text:

The board LW request an action from FA.

Cause:

With this message, the loadware on a board has the possibility to request an action from FA. This might be only signaling of a text string and auxiliary data which are both filled in by loadware. This may also be a request to lock the board or LTU with or without entering it in the 'in service task' for delayed reactivation. The loadware can also request an immediate reset of the board or the LTU if it detected a severe error. The displayed text string should always give a short description of the situation. The loadware development of the affected board is responsible for this text.

System reaction:

Depending on the request reason: 00H: The message is only signaled. 01H: The message is signaled and the board or LTU is locked. 02H: The message is signaled, the board or LTU is locked and entered in the 'in service task'. 03H: The message is signaled and the board or LTU is reset immediately. 04H: The message is only signaled. 05H: The message is only signaled.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

The following diagnosis data can be output by the board LW as an ASCII text string:

REASON:	00H	ONLY SIGNALING
	01H	SIGNALING AND LOCKING
	02H	SIGNALING, LOCKING AND DELAYED REACTIVATION
	03H	SIGNALING AND IMMEDIATE BOARD RESET
	04H	CMI CLOCK PHASE OFFSET
	05H	LW SIGNALING AND RESTART

F5750

BOARD

PAYLOAD CONNECTION

Type:

Service-specific (Format 43)

Short text:

Information on the quality of the payload connection over IP for NBCS.

Cause:

This message on the BOARD level is sent from STMI NBCS. Whenever a call is set up via an NBCS system, the NCUI or STMI loadware monitors the voice quality of the route over the IP network by checking various quality parameters

(e.g., the round-trip delay). When the quality drops below a configurable threshold value, the NCUI/STMI loadware reports "IP BAD QUALITY". When the quality exceeds a configurable threshold value, the loadware reports "IP GOOD QUALITY". The loadware also monitors the voice quality of the route over IP after the call has been enabled using UDP pings; however, this monitoring occurs only for a defined time period. If the voice quality was bad and did not improve during this time period, the message "IP QUALITY TEST TIMER EXPIRED" is displayed. This limits the time during which the loadware can test the quality with UDP pings. The message includes information on both the stations involved in the call as well as both IP addresses. "IP GOOD QUALITY" and "IP QUALITY TEST TIMER EXPIRED" are only outputted if the NMC DIAGS switch 01 is activated (CHA-DIAGS:,NMC,,ON;).

00H IP BAD QUALITY

- 1) The relevant entry in the IP payload path table is set to "BAD". The currently set up call is not changed, but retains the current quality. However, if a further attempt to set up a call is made for the same route and if an "alternative payload path" via ISDN has been configured in the system, the call is routed via this alternative payload path" (with the better voice quality).

01H IP GOOD QUALITY

The relevant entry in the IP payload path table is set to "GOOD". The currently set up call is not changed, but retains the current quality. New calls are again routed via the IP network.

02H IP QUALITY TEST TIMER EXPIRED

The relevant entry in the IP payload path table is set to "GOOD". New calls are again routed via the IP network even if the quality is still bad.

Action:

No special actions required. If "IP BAD QUALITY" is reported too often, this indicates that the IP network connection of the NBCS system was not designed or configured for VoIP requirements. In this case, you will need to check the IP network.

Cause:	00H	IP BAD QUALITY
	01H	IP GOOD QUALITY
	02H	IP QUALITY TEST TIMER EXPIRED
STATION A (PEN):		PEN of station A. The PEN consists of 'LTG-LTU-PBC-CIR-SUBUNIT'. The SUBUNIT may be redundant in some cases if the station is a trunk group or STMI.
STATION B (PEN):		PEN of station B. The PEN consists of 'LTG-LTU-PBC-CIR-SUBUNIT'. The SUBUNIT may be redundant in some cases if the station is a trunk group or STMI.
SOURCE-IP-ADDRESS:		IP address of the source of the checked route.
DESTINATION-IP-ADDRESS:		IP address of the destination of the checked route.
Text string		ASCII text string inserted by the loadware.
Auxiliary data:		Diagnostic data of board LW added for product specialist .

Error messages

		Description of auxiliary data Byte 01-04: Round trip networking delay (in ms) Byte 05-08: Filler with FFFFFFFF Byte 09-12: Fraction outgoing packets (in %) Byte 12-16: Filler with FFFFFFFF Byte 17-20: Jitter last RTCP (in ms) Byte 21-24: Filler with FFFFFFFF Byte 25-28: Fraction incoming packets (in %)
		Example: 000000C4FFFFFFFF00000001FFFFFFFF 00000001FFFFFFFF00000000FFFFFFFF Round trip networking delay: 196ms Fraction outgoing packets: 01% Jitter last RTCP: 01ms Fraction incoming packets: 00% If the messages is output after the connection is cleared, no auxiliary data is available. 00 or FF is displayed in this case. 00000000FFFFFFFF00000000FFFFFFFF 00000000FFFFFFFF00000000FFFFFFFF

F5751

LTUR HSB

P5V OK

Type:

Service-specific (Format 22)

Short text:

5V power supply okay

Cause:

The redundant 5V power supply is functioning correctly again.

Action:

Positive acknowledgment, no action needed.

F5752

LTUR HSB

PM15V OK

Type:

Service-specific (Format 22)

Short text:

+/- 15V power supply okay

Cause:

The +/- 15V power supply unit is functioning correctly again. All analog connections and CO trunks are functioning again.

Action:

Positive acknowledgment, no action needed.

F5753

LTUR HSB

M48V OK

Type:

Service-specific (Format 22)

Short text:

-48V power supply okay

Cause:

The redundant -48V power supply unit is functioning again.

Action:

Positive acknowledgment, no action needed.

F5754

LTUR HSB

M48V F OK

Type:

Service-specific (Format 22)

Short text:

-48V power supply fuse replaced

Cause:

The fuse for the -48V power supply unit has been replaced. All boards should function again.

Action:

Positive acknowledgment, no action needed.

F5755

LTUR HSB

RING OK

Type:

Service-specific (Format 22)

Short text:

Ringing voltage generator okay

Cause:

The ringing voltage generator is functioning correctly again.

Action:

Positive acknowledgment, no action needed.

F5756

LTUR HSB

RING F OK

Type:

Service-specific (Format 22)

Short text:

Ringling voltage generator fuse replaced

Cause:

The fuse in the ringling voltage generator has been replaced; the ATI and OPS boards should be functioning again.

Action:

Positive acknowledgment, no action needed.

F5757

LTUR HSB

FAN OK

Type:

Service-specific (Format 22)

Short text:

All fans okay

Cause:

All four fans are functioning again.

Action:

Positive acknowledgment, no action needed.

F5758

LTUR HSB

M10 P OK

Type:

Service-specific (Format 22)

Short text:

Power supply for Model 10 okay

Cause:

The power supply for the Model 10 is functioning again.

Action:

Positive acknowledgment, no action needed.

F5759

LTUR HSB

M10 FAN OK

Type:

Service-specific (Format 22)

Short text:

Model 10 fan okay

Cause:

The fan for the Model 10 is functioning again.

Action:

Positive acknowledgment, no action needed.

F5760

LTUR HSB

M10 OH OFF

Type:

Service-specific (Format 22)

Short text:

Model 10 overtemperature okay

Cause:

The temperature on the Model 10 has returned to the permissible range.

Action:

Positive acknowledgment, no action needed.

F5761

LTUR HSB

M10 EX1 OFF

Type:

Service-specific (Format 22)

Short text:

Alarm 1 reset

Cause:

External alarm 1 has been reset.

Action:

Positive acknowledgment, no action needed.

F5762

LTUR HSB

M10 EX2 OFF

Type:

Service-specific (Format 22)

Short text:

Alarm 2 reset

Cause:

External alarm 2 has been reset.

Action:

Positive acknowledgment, no action needed.

F5763

LTUR HSB

M10 EX3 OFF

Type:

Service-specific (Format 22)

Short text:

Alarm 3 reset

Cause:

External alarm 3 has been reset.

Action:

Positive acknowledgment, no action needed.

F5764

LTUR HSB

M10 EX4 OFF

Type:

Service-specific (Format 22)

Short text:

Alarm 4 reset

Cause:

External alarm 4 has been reset.

Action:

Positive acknowledgment, no action needed.

F5765

LTUR HSB

P5V NOK

Type:

Service-specific (Format 22)

Short text:

5V power supply failure

Cause:

The redundant 5V power supply unit has failed.

Action:

Repair or replace the defective 5V power supply unit.

F5766

LTUR HSB

PM15V NOK

Type:

Service-specific (Format 22)

Short text:

+/- 15V power supply failure

Cause:

The +/- 15V power supply unit has failed. All analog lines and CO trunks are no longer functioning.

Action:

Replace or repair power supply unit immediately.

F5767

LTUR HSB

M48V NOK

Type:

Service-specific (Format 22)

Short text:

-48V power supply unit failure

Cause:

One of the two -48V power supply units has failed. Operation will not be affected as long as the 2nd power supply unit is functioning.

Action:

Replace or repair the defective power supply unit.

F5768

LTUR HSB

M48V F NOK

Type:

Service-specific (Format 22)

Short text:

-48V power supply fuse blown

Cause:

The fuse for the -48V power supply unit has burned out. Only the T1 board on this shelf is still functioning.

Action:

Determine cause of fuse burnout and replace fuse.

F5769

LTUR HSB

RING NOK

Type:

Service-specific (Format 22)

Short text:

Ring voltage generator power failure

Cause:

One of the redundant ring voltage generator power supply units has failed. The ROLM shelf will remain operational as long as only one of the power supply units has failed.

Action:

Repair or replace the ring voltage generator power supply unit.

F5770

LTUR HSB

RING F NOK

Type:

Service-specific (Format 22)

Short text:

Ring voltage generator fuse blown

Cause:

The fuse for the ringing voltage generator has burned out. All ATI and OPS boards on this shelf are no longer functioning.

Action:

Determine cause of fuse burnout and replace fuse.

F5771

LTUR HSB

FAN NOK

Type:

Service-specific (Format 22)

Short text:

Fan defective

Cause:

One of the four fans is defective. Shelf operation not immediately affected.

Action:

Replace or repair fan.

F5772

LTUR HSB

M10 P NOK

Type:

Service-specific (Format 22)

Short text:

Model 10 voltage failure

Cause:

One of the output power supply units for the Model 10 is defective.

Action:

Replace or repair power supply unit immediately.

F5773

LTUR HSB

M10 FAN NOK

Type:

Service-specific (Format 22)

Short text:

Error messages

Model 10 fan defective

Cause:

Model 10 system fan is no longer functioning.

Action:

Repair or replace fan immediately.

F5774

LTUR HSB

M10 OH ON

Type:

Service-specific (Format 22)

Short text:

Model 10 overtemperature

Cause:

The Model 10 temperature exceeded an upper threshold.

Action:

Immediately determine the reason for the overheating and initiate cooling measures.

F5775

LTUR HSB

M10 EX1 ON

Type:

Service-specific (Format 22)

Short text:

Model 10 external alarm 1

Cause:

External alarm 1 was triggered on the Model 10.

Action:

Determine reason.

F5776

LTUR HSB

M10 EX2 ON

Type:

Service-specific (Format 22)

Short text:

Model 10 external alarm 2

Cause:

External alarm 2 was triggered on the Model 10.

Action:

Determine reason.

F5777

LTUR HSB

M10 EX3 ON

Type:

Service-specific (Format 22)

Short text:

Model 10 external alarm 3

Cause:

External alarm 3 was triggered on the Model 10.

Action:

Determine reason.

F5778

LTUR HSB

M10 EX4 ON

Type:

Service-specific (Format 22)

Short text:

Model 10 external alarm 4

Cause:

External alarm 4 was triggered on the Model 10.

Action:

Determine reason.

F5780

DCL

AP CONNECTION LOSS

Type:

Diagnosis-relevant (Format 43)

Short text:

Connection to Access Point lost.

Cause:

Access point was reset by the partner CC or the control of the access point is to change.

System reaction:

The connection to the Access Point is set up again.

Action:

No action required.

Interpretation of auxiliary data:

The reason for the loss of connection is shown in plain text. NCUI RESET BY PARTNER CC : Partner CC has reset Access Point SWITCH CONTROL TO OWN CC : Own CC assumes control SWITCH CONTROL TO PTN CC : Partner CC assumes control SWITCH CONTROL TO NONE : No CC has control

F5781

DCL

ENCRYPTION ERROR

Type:

Service-relevant (Format 43)

Short text:

HSR identifies the encryption problem

Cause:

An encrypted connection to the access point cannot be set up.

System reaction:

Attempts to set up the connection to the access point are repeated.

Action:

Find the cause of the encryption problem and correct the setting.

The cause of the encryption problem is indicated in plain text:

00h - MASTER ENCRYPTION KEY NOT AVAILABLE 01h - ENCRYPTION ALGORITHM IS NOT SUPPORTED 02h - CHANGED MASTER ENCRYPTION KEY DOES NOT MATCH 03h - TIMEOUT FOR ENCRYPTION OF SIGNALING CONNECTION 04h - TCP CONNECTION CANNOT BE ESTABLISHED AFTER ENCRYPTION ERROR 05h - MESSAGE CANNOT BE DECRYPTED

This message sets the SPE (Signaling and Payload Encryption) alarm for the corresponding access point (if not yet set). The alarm is reset when a successful connection is set up, provided this was the only problem involving signaling and payload encryption.

F5800

LTUR

HW ERROR

Type:

Service-specific (Format 22)

Short text:

Hardware error

Cause:

An LTUR reported a HW defect. A hard restart of the LTUR is carried out.

Action:

If the same LTUR has repeated HW problems: replace LTUR board.

F5801

LTUR

UNPL EVT

Type:

Service-specific (Format 22)

Short text:

Implausible event code

Cause:

Implausible event code in the LTUR.

Action:

A soft restart is triggered automatically.

F5802

LTUR

SR REQ

Type:

Service-specific (Format 22)

Short text:

LTUR soft restart request

Cause:

LTUR has requested a soft restart.

Action:

The soft restart is carried out automatically.

F5803

LTUR

HR REQ

Type:

Service-specific (Format 22)

Short text:

LTUR hard restart request

Cause:

LTUR has requested a hard restart.

Action:

The hard restart is carried out automatically.

F5804

LTUR

RELOAD REQ

Type:

Service-specific (Format 22)

Short text:

LTUR reload request

Cause:

LTUR requested a reload.

Action:

Check that the reload is completed successfully. If this does not work, save the error message data and contact your [Next level of support](#).

F5805

LTUR

SAVED INFO

Type:

Service-specific (Format 22)

Short text:

Restart reason

Cause:

This message contains the reason for the previous restart.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5806

LTUR

INFO

Type:

Service-specific (Format 22)

Short text:

LTUR information message

Cause:

LTUR information message.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5810

LTUR

ST LOAD LTUR

Type:

Service-specific (Format 22)

Short text:

Clock error on LTUR

Cause:

Clock error on the LTUR after a soft restart.

Action:

The LTUR is reloaded automatically.

F5813

LTUR

DEVICE RESET

Type:

Service-specific (Format 22)

Short text:

Reinitialize Rolm device

Cause:

The LTUR tries to reinitialize a Rolm device. This can occur during overload situations.

Action:

Check whether the overload situation has passed or not. If not, check Rolm device.

F5814

LTUR

BD COMM FAIL

Type:

Service-specific (Format 22)

Short text:

Communication problem

Cause:

Communication problems between LTUR and Rolm board. There are a number of possible causes. See the supplemental data for more detailed information.

Action:

The board is reset. Remedy after repeated occurrence: Replace the board, possibly the LTUR.

F5815

LTUR

STBY CLOCK DEF

Type:

Service-specific (Format 18)

Short text:

Standby clock defective

Cause:

An analysis of the clock supervision showed that the standby clock supply is defective.

Action:

Check standby half.

F5816

LTUR

STBY DEF

Type:

Service-specific (Format 18)

Short text:

LTUR hardware error

Cause:

An analysis of the clock supervision showed that this is a HW error in the LTUR that did not take effect until the switchover to standby.

Action:

Switch off and replace LTUR.

F5817

LTUR

DEF

Type:

Service-specific (Format 22)

Short text:

LTUR clock defective

Cause:

The LTUR clock supply is defective. A hard restart will be attempted.

Action:

Replace the LTUR if the error recurs.

F5818

LTUR

IN AL

Type:

Service-specific (Format 18)

Short text:

LTUR plugged

Cause:

The LTUR has been plugged in and is present in the available list.

Action:

This is a positive acknowledgment without action.

F5819

LTUR

LEFT AL

Type:

Service-specific (Format 18)

Short text:

LTUR unplugged

Cause:

The LTUR has been pulled and is no longer present in the available list.

Action:

Plug in the LTUR, or replace if it is already plugged in.

F5821

LTUR

DFE ERROR

Type:

Service-specific (Format 22)

Short text:

LTUR DFE error

Cause:

The LTUR has a DFE defect. A hard restart of the LTUR is started.

Action:

Replace the LTUR if the error recurs.

F5826

LTUR

SPOR ERROR

Type:

Service-specific (Format 22)

Short text:

Error during microprocessor test of the RTO

Cause:

Sporadic error in the RTO microprocessor test on the LTUR.

Action:

No response from error analysis (FA). If this message occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5827

LTUR

LOOP DATA ERROR

Type:

Service-specific (Format 22)

Short text:

Error in start of RTO test loop

Cause:

Error when starting RTO test loop in the microprocessor test.

Action:

A hard restart of the LTUR is triggered. Replace LTUR if error recurs.

F5828

LTUR

STATUSWORD ERROR

Type:

Service-specific (Format 22)

Short text:

Self-test error

Cause:

Self-test error on the LTUR board.

Action:

A hard restart of this LTUR is triggered. Replace LTUR.

F5829

LTUR

TIME ERROR

Type:

Service-specific (Format 22)

Short text:

Timeout

Cause:

Timeout during the RTO microprocessor test on the LTUR. A hard restart of the LTUR is triggered.

Action:

Check the HLDC if the LTUR does not restart. Replace LTUR if needed.

F5831

LTUR

DB INIT TIMER

Type:

Service-specific (Format 24)

Short text:

No response from DH

Cause:

No response from device handler.

Action:

A hard restart of this LTUR is triggered.

F5847

LTUR

MIC DMA1 INTERRUPT

Type:

Service-specific (Format 2F)

Short text:

MIC DMA1 generates an interrupt

Cause:

MIC DMA1 generates an interrupt.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5848

LTUR

ACT SIGNAL LOST

Type:

Service-specific (Format 22)

Short text:

LTUR failed to receive active signal

Cause:

The LTUR did not receive an active signal from the switching system. Either the switching system or the cable has failed.

Action:

Check hardware, cabling, and switching system.

F5849

LTUR

TWO ACT SIGNAL

Type:

Service-specific (Format 22)

Short text:

Active signal set

Cause:

The active signal was set by the SWU-A half and by the SWU-B half.

Action:

Reset SWU-A or SWU-B half.

F5850

LTUR

DTA PATH PARITY

Type:

Service-specific (Format 22)

Short text:

DTA path parity error

Cause:

DTA path parity error on the LTUR shelf. A peripheral board is most likely defective, but it is not possible to determine which board.

Action:

Check peripheral boards.

F5851

LTUR

INV DRAM CHECKSUM

Type:

Service-specific (Format 22)

Short text:

Checksum error

Cause:

Checksum error on the LTUR. The LTUR is defective.

Action:

Replace LTUR

F5852

LTUR

OVERLOAD BEG

Type:

Service-specific (Format 22)

Short text:

No internal buffers

Cause:

The internal buffers on the LTUR have failed. An attempt is being made to find the bad channels.

Action:

If this error occurs repeatedly, the load must be redistributed to other shelves. Save the error message data and contact your [Next level of support](#).

F5853

LTUR

OVERLOAD END

Type:

Service-specific (Format 22)

Short text:

End of LTUR overload

Cause:

Overload end for the LTUR.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5854

LTUR

INT BUF UNFL

Type:

Service-specific (Format 22)

Short text:

No more free buffers

Cause:

HDLC does not have any more buffers. Software problem.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F5855

LTUR

MIC NOISE INT

Type:

Service-specific (Format 22)

Short text:

Noise interrupts

Cause:

Unidentifiable interrupts on the LTUR were caused by noise.

Action:

Check cable, NCG, and LTUR.

F5870

BOARD

LW EXCEPTION

Message texts:

Reason: 00H CALLED FUNCTION DOESN'T EXIST

Type:

Diagnosis-specific (Format 43)

Short text:

A procedure cannot be called up (identical to F5737)

Cause:

A specific procedure cannot be called up. Error (exception) in the loadware of a COSMOS module. (e.g. SLMA24, SLMA16, TMOM, TMEW2, SLMO etc.).

System reaction:

statistics.

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#). If necessary check the loadware.

Byte 0 = Length of the data to follow

Error messages

Byte 1 = Exception Type

Byte 2 = LW_PROCESS

Byte 3 = STATE

Byte 4 = EVENT

Byte 5-8 = ADDRESS

Byte 9 = SOURCE_ID

Byte 10 = DEST_ID

Byte 11 = INTERNAL_INFO

Byte 12-15 = Reserve for additional data

Byte 16 = Length of the auxiliary data

Byte 17-100 = max 84 bytes miscellaneous auxiliary data

Reason: 01H MESSAGE SENT TO NOT EXISTING PROCESS

Type:

Diagnosis-specific (Format 43)

Short text:

Message sent to non-existent process (identical to F5738)

Cause:

A message or an event was sent to a non-existent process. Error in the loadware of a COSMOS board or in the system software.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 02H EVENT CODE OR PARAMETER NOT EXPECTED

Type:

Diagnosis-specific (Format 43)

Short text:

Event code or event parameter not valid (identical to F5739)

Cause:

Event code EC of a message was not expected in the current state and current routine, or the event parameters are incorrect. Error in the loadware of a COSMOS board or in the external message.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save the error message data and contact your [Next level of support](#). Check the loadware if necessary.

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 03H TIMER VALUE OVERFLOW

Type:

Diagnosis-specific (Format 43)

Short text:

Timer out of range (identical to F5740)

Cause:

The value of the timer in the message was outside the valid range. Error in the system software.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 04H MAILBOX OR BUFFER OVERFLOW

Type:

Diagnosis-specific (Format 43)

Short text:

Buffer overflow in the mailbox or board buffer (identical to F5741)

Cause:

Error in the loadware of a COSMOS board, or board is receiving too many messages.

1) WAML, WAML2: the board is automatically reloaded.

- Other board: restarted after blocking without loading.

Action:

Action depends on the evaluation of the HEX data. Save the error message data and contact your [Next level of support](#). If necessary, check loadware.

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 05H EPIC DRIVER RECEIVED INVALID COMMAND

Type:

Diagnosis-specific (Format 43)

Short text:

Invalid command (identical to F5742)

Cause:

The EPIC driver received an invalid command. Error in the loadware of a COSMOS board.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save the error message data and contact your [Next level of support](#). If necessary check loadware.

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 06H COMMAND QUEUE OVERFLOW

Type:

Diagnosis-specific (Format 43)

Short text:

Command queue overflow (identical to F5743)

Cause:

Error in the loadware of a COSMOS board.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save the error message data and contact your [Next level of support](#). If necessary check loadware.

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 07H COSMOS EXCEPTION

Type:

Diagnosis-specific (Format 43)

Short text:

COSMOS OS error (identical to F5744)

Cause:

An exception error was reported by the COSMOS operating system. Invalid COSMOS command or invalid parameter. Error in the loadware of a COSMOS board.

System reaction:

statistics

Action:

Action depends on the evaluation of the HEX data. Save the error message data and contact your [Next level of support](#). If necessary check loadware.

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 08H BUFFER TEST FAILED

Type:

Service-specific (Format 43)

Short text:

Buffer test negative(identical to F5745)

Cause:

The routine buffer test failed. Error in the hardware or addressing error in the loadware of a COSMOS board.

System reaction:

the board is blocked and then reloaded.

Action:

If the error persists after the board has been replaced, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 09H WATCHDOG TIMER EXPIRED

Type:

Service-specific (Format 43)

Short text:

Watchdog timer expired (identical to F5746)

Cause:

The watchdog timer in the board has expired. Error in the hardware or addressing error in the loadware of a COSMOS board.

System reaction:

the board is blocked and then reloaded after a 1 minute interval.

Action:

If the error persists after the board has been replaced, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 0AH CHECKSUM TEST FAILED

Type:

Service-specific (Format 43)

Short text:

Invalid checksum (identical to F5747)

Cause:

The IDLE task of the loadware detected an invalid checksum. Error in the hardware or addressing error in the loadware of a COSMOS board.

System reaction:

the board is blocked and then reloaded.

Action:

If the error persists after the board has been replaced, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 0BH MICROPROCESSOR WRITE ACCESS TO ROM AREA

Type:

Diagnosis-specific (Format 43)

Short text:

Write protection error (identical to F5748)

Cause:

Error in the loadware of a COSMOS board.

System reaction:

the board is blocked and then reloaded.

Action:

Unplug/replug the board, check loadware version

Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 0CH PCM FRAME SYNCHRONIZATION LOST

Type:

Service-specific (Format 43)

Short text:

Faulty ELIC chips detected (identical to F5749)

Cause:

Error in the hardware of a COSMOS board.

System reaction:

statistics.

Action:

Unplug/replug the board, replace board if necessary

Interpretation of auxiliary data:

see Reason: 00H.

Special board highway test:

If byte 11 INTERNAL INFO = 0DDH, this indicates that an invalid connection has been activated:

Byte 16 = 4 (length of auxiliary data)

Byte 17 = Port number, if available, otherwise FFH

Byte 18 = TSL timeslot

Byte 19 = HWY (logical highway from the message, not ELIC HW no.)

Byte 20 = B-channel

Reason: 0DH NECESSARY HARDWARE RESPONSE FAILED

Type:

Service-specific (Format 43)

Short text:

Hardware function fault (identical to F5950)

Cause:

Hardware function fault in the board or lack of external power supply for the board (power supply, ringing current etc.).

- WAML, WAML2: statistics, resets the board
- Other board: statistics

Action:

Check the hardware of the board or the external signals to the board. Otherwise, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 0EH RESOURCES SHORTAGE

Type:

Service-specific (Format 43)

Short text:

Lack of resources (identical to F5952)

Cause:

Overload, lack of buffer. The logged on board can no longer process the incoming messages as central elements are missing. New seizures are prevented by the system for the entire board.

- Line circuits: blocks all circuits of a board
- Subscriber circuits: only blocks the free terminals of the board

Action:

Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 0FH RESOURCES AVAILABLE

Type:

Service-specific (Format 43)

Short text:

End of lack of resources (identical to F5953)

Cause:

End of overload. The board can now continue processing the other messages as it has processed the jam in the message queue.

- Line circuits: unblocks all circuits of a board
- Subscriber circuits: unblocks the terminals of the board not seized

Action:

No action necessary as this is a positive acknowledgment for Reason: 0EH RESOURCES SHORTAGE

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 10H LOADWARE TRACE DATA

Type:

Diagnosis-specific (Format 43)

Short text:

Loadware trace data (identical to F5954)

Cause:

The board (e.g. SLC16) can collect its own trace data and print it out.

System reaction:

signals only, no statistics

Action:

Interpretation of the trace data.

Reason: 13H DUMMY 1

Type:

Diagnosis-specific (Format 43)

Short text:

Error with DUMMY event (identical to F5951)

Cause:

An error was detected with DUMMY event.

System reaction:

signals only, no statistics

Action:

For diagnosis purposes, this message is temporarily incorporated into the loadware code of some boards by the loadware development department. A solution is determined by the interpretation of the auxiliary data. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 14H DUMMY 2

Type:

Diagnosis-specific (Format 43)

Short text:

Error with DUMMY event (identical to F5951)

Cause:

An error was detected with DUMMY event.

System reaction:

signals only, no statistics

Action:

For diagnosis purposes, this message is temporarily incorporated into the loadware code of some boards by the loadware development department.

A solution is determined by the interpretation of the auxiliary data. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 15H DUMMY 3

Type:

Diagnosis-specific (Format 43)

Short text:

Error with DUMMY event (identical to F5951)

Cause:

An error was detected with DUMMY event.

System reaction:

signals only, no statistics

Action:

For diagnosis purposes, this message is temporarily incorporated into the loadware code of some boards by the loadware development department.

A solution is determined by the interpretation of the auxiliary data. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see Reason: 00H.

Reason: 16H ERROR BUFFER FULL

Type:

Service-specific (Format 43)

Short text:

Error buffer full (identical to F5955)

Cause:

Histo-file of the WAML/WAML2 contains errors. Implausible software functions.

System reaction:

statistics

Action:

Initiate dump output of error buffer with PETRA AMO, address and length of the dump, see auxiliary data. When the dump has been output, the error buffer must be deleted using PETRA AMO and released

Interpretation of auxiliary data:

Byte 0 - 15: not relevant

Byte 16: Number of bytes in auxiliary data

Byte 17: Offset address of the error buffer LOW byte (for PETRA AMO)

Byte 18: Offset address of error buffer HIGH byte (for PETRA AMO)

Byte 19: Segment address of error buffer LOW byte (for PETRA AMO)

Byte 20: Segment address of error buffer HIGH byte (for PETRA AMO)

Byte 21: Length of error buffer LOW byte (for PETRA AMO)

Byte 22: Length of error buffer HIGH byte (for PETRA AMO)

The dump output initiated with PETRA AMO can be interpreted by your system specialist.

Error buffer is dumped with PETRA AMO (2 KB are output respectively):

ABFR-PETRA: DUMP, Itg, Itu, slot, 86, F000, 0, 101;

ABFR-PETRA: DUMP, Itg, Itu, slot, 86, F000, 0, 102;

ABFR-PETRA: DUMP, Itg, Itu, slot, 86, F000, 0, 103;

Delete and release the error buffer (no dump output):

ABFR-PETRA: DUMP, Itg, Itu, slot, 86, F000, 0, 100;

Reason: 17H LOG BUFFER READ REQUEST

Type:

Service-specific (Format 43)

Short text:

LOG buffer read request (identical to F5956)

Cause:

This message can only be initiated via the PETRA AMO.

ABFR-PETRA: DUMP, lrg, ltu, slot, 86, F000, 0, 23;

It is used to determine the address and length of the LOG buffer (trace buffer).

The types of trace entries are defined by the LANC AMO (table of global data, parameter TRCLVL).

System reaction:

statistics

System reaction:

signals only, no statistics

Action:

Initiate dump output of LOG buffer (contains trace entries of WAML) with PETRA AMO, see auxiliary data for addresses and length of dump.

Interpretation of auxiliary data:

Byte 0 - 15: not relevant

Byte 16: Number of bytes in auxiliary data

Byte 17: Offset address of the LOG buffer LOW byte (for PETRA AMO)

Byte 18: Offset address of LOG buffer HIGH byte (for PETRA AMO)

Byte 19: Segment address of LOG buffer LOW byte (for PETRA AMO)

Byte 20: Segment address of error buffer HIGH byte (for PETRA AMO)

Byte 21: Length of LOG buffer LOW byte (for PETRA AMO)

Byte 22: Length of LOG buffer HIGH byte (for PETRA AMO)

The dump output initiated with PETRA AMO can be interpreted by your system specialist.

Reason: 18H PROCESSOR INTERRUPT HARD

Type:

Service-specific (Format 43)

Short text:

Processor interrupt, continuation not practical (identical to F5957)

Cause:

Error in loadware, an interrupt with an unexpected vector number has occurred.

System reaction:

statistics and resets the board

Action:

Notify product specialist.

Interpretation of auxiliary data:

Byte 0 - 15: not relevant

Byte 16: Number of bytes in auxiliary data

Byte 17: Interrupt vector number LOW byte

Byte 18: Interrupt vector number HIGH byte

Reason: 19H PROCESSOR INTERRUPT SOFT

Type:

Service-specific (Format 43)

Short text:

Processor interrupt, processing resumed (identical to F5958)

Cause:

Error in loadware, an interrupt with an unexpected vector number has occurred.

System reaction:

statistics

Action:

Notify product specialist.

Interpretation of auxiliary data:

Byte 0 - 15: not relevant

Byte 16: Number of bytes in auxiliary data

Byte 17: Interrupt vector number LOW byte

Byte 18: Interrupt vector number HIGH byte

Reason: 1AH INTERNAL LAN CONTROLLER DEFECT

Type:

Service-specific (Format 43)

Short text:

LAN controller to 'internal' LAN of the WAML faulty (identical to F5959)

Cause:

Hardware error. Smooth operation of the LAN controller in the direction of the 'internal' LAN is not guaranteed. Destinations located on this interface cannot be contacted.

System reaction:

the LAN interface has been disabled by the loadware.

Action:

Switch the board on/off manually. Replace the board (Action also described in the simultaneously output error message F4704).

Interpretation of auxiliary data:

The auxiliary data can be interpreted by your system specialist.

Reason: 1BH EXTERNAL LAN CONTROLLER DEFECT

Type:

Board type: WAML / Service-specific (Format 43)

Short text:

LAN controller to 'external' LAN of the WAML faulty (identical to F5960)

Cause:

Hardware error. Smooth operation of the LAN controller in the direction of the 'external' LAN is not guaranteed. It may not be possible to contact destinations located on this interface.

System reaction:

the LAN interface has been disabled by the loadware.

Action:

Switch the board on/off manually. Replace the board (Action also described in the simultaneously output error message F4704).

Interpretation of auxiliary data:

The auxiliary data can be interpreted by your system specialist.

Type:

Board type: WAML 2 / Service-specific (Format 43)

Short text:

LAN controller to 'external' LAN of the WAML2 faulty

Cause:

Hardware error. Smooth operation of the LAN controller in the direction of the 'external' LAN is not guaranteed. It may not be possible to contact destinations (servers) located on this interface.

System reaction:

the board is blocked first. After 5 minutes, an attempt is then made to restart the board.

Action:

If the board does not restart, it must be replaced.

Interpretation of auxiliary data:

The auxiliary data can only be interpreted by your product specialist.

Reason: 1CH FIREWALL ALARM

Type:

Service-specific (Format 43)

Short text:

Firewall alarm (identical to F5961)

Cause:

WAML: a LAN user who is not authorized to be 'routed' by the WAML is attempting to send data packages to the WAML.

WAML2: a LAN user who does not have access to the WAML2 is sending data packages to the WAML2.

System reaction:

statistics.

Action:

Review configuration (AMO LANC) to determine whether all necessary user authorizations are properly configured. If user authorizations are OK, trace unauthorized user (hacker?).

Interpretation of auxiliary data:

The auxiliary data are output in plain text in the Maintenance Alarm message. See F4704 with short text: ERROR: FIREWALL ALARM.

Reason: 1DH BOARD SYNCHRONIZATION ERROR

Type:

Service-specific (Format 43)

Short text:

A clock for all cordless boards has failed (identical to F5964)

Cause:

None of the (possibly four) cordless master boards could take over the clock.

System reaction:

Major alarm to the Service Center.

Action:

Interpret previous error messages.

Service Center: find master boards with AMO. Switch individual boards on and off in sequence using BSSU AMO and check responses.

On-site: unplug/replug, replace master boards. Check clock line.

Interpretation of auxiliary data:

Reason: 00H.

Reason: 1EH BOARD SYNCHRON AGAIN

Type:

Service-specific (Format 43)

Short text:

Clock for Cordless boards back in sync (identical to F5963)

Cause:

One of the (possibly four) Cordless master boards was able to recover the reference clock after replacing the board.

System reaction:

End of major alarm to the Service Center.

Action:

No action necessary since this is a positive acknowledgment. End of clock failure for all Cordless boards.

Interpretation of auxiliary data:

Reason: 00H.

Reason: 1FH CLOCK CHANGE OF MASTER

Type:

Service-specific (Format 43)

Short text:

Clock taken over by other Cordless board (identical to F5965)

Cause:

The synchronizing Cordless board (master) has failed.

System reaction:

signaling.

Action:

Evaluate preceding error messages. Trace the failure of one of the (four possible) Cordless master boards.

The clock for the Cordless boards, base stations and mobile subscribers remains in sync. Mobile users are only affected by EXC FATAL SYNCHRON ERR.

Interpretation of auxiliary data:

Reason: 00H.

Reason: 20H ERROR IN CONFIGURATION DATA

Type:

Service-specific (Format 43)

Short text:

The configuration data of the WAML or WAML2 are inconsistent

Cause:

Configuration data have not been correctly configured.

System reaction:

signaling.

Action:

Correct configuration data

(for WAML: AMO-LANC, for WAML2: AMO-BDAT).

Byte 0 - 15: not relevant

Byte 16: Number of bytes in auxiliary data

Byte 17: Not relevant

Byte 18: Type of error

bit 0 = 1 : gateway (router) not available, check IP routing table

bit 5 = 1 : Destination not available, check IP routing table

bit 3 = 1 : Problem on network interface,

Check global parameter and network interface table

Reason: 21H LOADWARE TRACE DATA WITH ASCII TEXT

Type:

Diagnosis-specific (Format 43)

Short text:

Trace data of the loadware

Cause:

The board can collect its own trace data and print it. In addition, text can be output by the loadware.

System reaction:

signaling.

Action:

Evaluate the trace data and save error messages and contact your [Next level of support](#).

Reason: 22H POWER SUPPLY FAILURE

Type:

Service-specific (Format 43)

Short text:

SLMAR power supply failed

Cause:

One of the two DC-DC converters of the SLMAR board is faulty.

System reaction:

the board is disabled and restarted after a delay.

System reaction:

first the board is blocked. After 5 minutes, an attempt is made to restart the board.

Action:

If the system was able to restart the supply:

check whether a circuit LW detect error "HW Problem" Circuit too hot" (F5461) Service was signaled. If yes, test the cabling and terminals.

If the cabling and terminals are free from defects, or if only one "Power Supply Failure" was signaled, replace board.

F5871

BOARD

SERVER

Cause:

See Reason.

Reason: 00H TCP CONNECTION BETWEEN WAML2 AND SERVER ESTABLISHED

Type:

Service-specific (Format 43)

Short text:

The connection between the WAML2 and the server has been re-established.

Cause:

There are several reasons for the re-establishment of the connection:

1) Following a hard or soft restart of the system

- Following activation of the WAML2 (plug in using the AMO)
- Server logs on again after a breakdown on the LAN interface
- Server logs on again after failure
- Re-establishment due to a change in the WAML2 configuration data which affect the interface to the server (AMO-BDAT, e.g. change in the IP address or the port number of the server or the WAML2 etc.)

System reaction:

activation of all circuits.

Action:

None.

Interpretation of auxiliary data:

none

Reason: 01H TCP CONNECTION BETWEEN WAML2 AND SERVER DOWN

Type:

Service-specific (Format 43)

Short text:

The connection between the WAML2 and the server is down.

Cause:

There are several reasons for the connection being cleared down:

- Following a hard or soft restart of the system
- Fault on the LAN interface (LAN cable, HUB)
- Server logs on again after a breakdown on the LAN interface
- Server failure
- A change in the WAML2 configuration data which affect the interface to the server (AMO-BDAT, e.g. change in the IP address or the port number

of the server or the WAML2 etc.) Note: When the connection fails, the WAML2 attempts to re-establish the connection (cyclically in seconds)

System reaction:

all circuits on the WAML2 are blocked.

Action:

If the connection cannot be re-established again, check the following (depending on the auxiliary data:

- LAN cable or HUB
- Configuration data of the WAML2 (AMO-BDAT) and servers
- Server status.

1st byte in the auxiliary data indicates the cause: 1 = hard or soft restart of the system 2 = change in the WAML2 configuration data 3 = fault on the LAN interface or server failure Should other values occur, please contact your [Next level of support](#).

Reason: 02H STATISTIC OVERFLOW ON SERVER

Type:

Service-specific (Format 43)

Short text:

A statistics threshold has been reached in the server.

Cause:

Too many messages of a specific error type have arrived on the server within a predefined period.

System reaction:

signals only.

Action:

Check the TCP/IP configuration parameter, network configuration and components (NIC card, cable).

1st byte in the auxiliary data indicates the cause: 1 = error in the TCP/IP signaling interface to the WAML2, signaled by the operating system 2 = error in the TCP/IP signaling interface to the client, signaled by the operating

Error messages

system 3 = error in the TCP/IP signaling interface to the OMC, signaled by the operating system.

Reason: 03H TOO MANY INVALID LOGONS OF A CLIENT

Type:

Service-specific (Format 43)

Short text:

The server has received too many invalid LOGON attempts from a client.

Cause:

There are several causes for this error:

- the LOGON identification parameter is invalid
- the telephone number specified at each LOGON attempt is not registered in the configuration database of the server.

System reaction:

signals only.

Action:

Check the configuration database of the server.

Interpretation of auxiliary data:

none.

F5872

BOARD

ROUTER

Cause:

See Reason.

Reason: 00H TCP CONNECTION TO ROUTER DOWN

Type:

Service-specific (Format 43)

Short text:

The TCP/IP connection from the server to the router is down.

Cause:

This error can occur if a router is being implemented that can be polled by the server. If the router supports this functionality, the server checks the connection to the router at regular intervals.

System reaction:

all circuits on the WAML2 are blocked.

Action:

Check router and/or network components.

Interpretation of auxiliary data:

none

Reason: 01H TCP CONNECTION TO ROUTER ESTABLISHED

Type:

Service-specific (Format 43)

Short text:

The TCP/IP connection between the server and router has been re-established

Cause:

The server signals re-establishment of the connection after a previous loss of connection to the router.

System reaction:

all circuits are restarted.

Action:

None.

Interpretation of auxiliary data:

none

F5873

BOARD

DEST ADDR NOT PLAUS

Type:

Diagnosis-specific (Format 43)

Short text:

Destination address of a Cordless board is not plausible

Cause:

The DCL has detected that either the shelf number or the PBC number of the destination address for a Cordless board is not within the valid range of the system configuration.

System reaction:

signaling with output of the LTU, the PBC and the relevant message of the LW to the DCL.

Action:

Save error messages and contact your [Next level of support](#).

Interpretation of auxiliary data:

(supported by text) DESTINATION LTU: decimal shelf number DESTINATION PBC: decimal PBC number MESSAGE FROM DCL: Byte 5 = FF Indication for DCL that the message goes directly to another Cordless board Byte 6 = Shelf number of the destination board (hexadecimal) Byte 7 = PBC number of the destination board (hexadecimal)

F5874

BOARD

FLOW CTRL OVERLOAD BEG

Type:

Service-specific (Format 43)

Short text:

Message overflow of a peripheral board

Cause:

The periphery system measures the number of messages from the system to the peripheral board. When the short-term or long-term threshold is reached or exceeded, this overload message is sent to the error analysis system.

System reaction:

soft block for the board and its terminals.

Action:

Check that the board has been configured correctly as otherwise an overload may occur.

Interpretation of auxiliary data:

(supported by text)

1) OVERFLOW SHORT TERM RATE: overflow for short-term measurement (1 min) FLOW CONTROL DATA: other current measurement values in last period LONG TERM RATE: current value of long-term measurement (10 min) LONG TERM THRESH: threshold of long-term measurement

OVERFLOW LONG TERM RATE: overflow for long-term measurement (1 min) FLOW CONTROL DATA: other current measurement values in last period SHORT TERM RATE: current value of long-term measurement (10 min) SHORT TERM THRESH: threshold of long-term measurement

F5875

BOARD

FLOW CTRL OVERLOAD END

Type:

Service-specific (Format)

Short text:

End of message overflow of a peripheral board

Cause:

The periphery system measures the number of messages from the system to the peripheral board. When the threshold for permanent message flow is exceeded, this message is sent to the error analysis system.

System reaction:

end of soft block for the board and its terminals.

Action:

Positive acknowledgment for [F5874](#). Check the configuration of the board.

Interpretation of auxiliary data:

(supported by text) UNDERFLOW RATE: permanent measure is not reached (10 min) FLOW CONTROL DATA: other current measurement values in last period.

F5876

BOARD

NOT IN SERVICE

Type:

Service-relevant (Format 18)

Short text:

Board did not go into service

Cause:

Despite several attempts to put the unit into service (max. 8, for more information, see AMO PSTAT), the element could not be put into service correctly due to a new error.

System reaction:

Board goes from READY to DEF state.

Action:

Evaluate error messages that described the defect. Rectify the error, if necessary, replace the board. Positive acknowledgement, see [F5372](#).

F5877

BOARD

TSL SWITCH ERR

Type:

Diagnosis-relevant (Format 43)

Short text:

Error detected when switching RTO timeslots.

Cause:

Timeslots were not enabled in the case of call processing activities.

System reaction:

The error was detected by RTO and rectified. The timeslot specified in the plaintext was enabled.

Action:

If this error occurs frequently, run a search for the PEN-related error message, inform Product Support and forward to Development for further data analysis.

F5878

BOARD

ATTENUATION ER

Type:

Diagnosis-relevant (Format 43)

Short text:

Error detected when resetting the RTO attenuation.

Cause:

The attenuation was not reset.

System reaction:

The error was detected by RTO and rectified. The attenuation was reset.

Action:

If this error occurs frequently, run a search for the PEN-related (see header) error message (Highway/Timeslot, see plaintext), inform Product Support and forward to Development for further data analysis.

F5879

BOARD

TSL DISTORT ER

Type:

Diagnosis-relevant (Format 43)

Short text:

Error detected when switching RTO timeslots.

Cause:

Timeslots were not enabled in the case of call processing activities or a hardware error occurred on the LTUCE board. (Exception: Tolerance issue with boards, see the following note).

System reaction:

No reaction was possible as the frozen timeslot is being used by an "old" board which does not support the board HWY check. Consequently, the error could not be removed by RTO and could result in halfpaths. In other words, the timeslot with tone locking at a board in the relevant shelf quarter could not be localised.

IMPORTANT: The board data (PEN) in the error message header is not relevant as the specified board only detected the error. It is not the cause of the frozen timeslot. The timeslot/

highway is specified in plain text, however, in the body of the error message.

NOTICE: This error is probably caused by the software (switching technology/loadware). However, the error may be reported for all timeslots in one or more highways in a shelf. In this case, the error is probably caused by the hardware on the relevant LTUCE board. This RTO test is very sensitive and depends on the tolerance range of all boards involved. Therefore in extreme cases it is possible that there are no software or hardware errors! If the large number of error messages is disruptive, the BDHWYTST (RTO job) should be deactivated after consulting the GVS.

Action:

If this error occurs frequently, run a search for the PEN-related error message, inform your [Next level of support](#) and forward to Development for further data analysis. In the case of a LTUCE error, this board must be replaced by another LTUCE.

F5880

BOARD

RECONFIGURATION

Type:

Service-specific (Format 43)

Short text:

Reconfigure stations to HFA standby BG or virtual HFA boards to standby softgate

Cause:

A board/port error or statistics overflow has resulted in the failure of an HFA board. The affected IP stations are reconfigured to an HFA standby board. The defective HFA board is placed in the defective state with INIT ERROR, DEF ON REQUEST (see also F5345). Another cause is the connection loss with a softgate. All affected virtual HFA boards are reconfigured to a standby softgate.

System reaction:

Signaling, decommissioning of defective board. After reconfiguration to a standby softgate the disconnected softgate is put into operation.

Action:

Check the status of the affected station with the AMO SDSU after start-up of the HFA standby board. Replace the defective HFA board. Replace the disconnected softgate, if it does not startup again.

REASON:00H BOARD RECONFIGURATION OK

- 1) Reconfiguration of the stations to the HFA standby board was successful. !!
Attention: This message only means that the configuration was successful.
The proper startup of the new board must be verified!!

REASON:01H BOARD RECONFIGURATION ERROR

Software error on reconfiguring the stations. Save error message data and contact your [Next level of support](#).

REASON:02H SOFTGATE RECONFIGURATION START

Reconfiguration of the virtual HFA boards and their stations starts after loss of the softgate.

REASON:03H SOFTGATE RECONFIGURATION END

Reconfiguration of the virtual HFA boards and their stations was successful. !! Attention: This message only means that the configuration was successful. The proper startup of the new virtual boards of the standby softgate must be verified!!

REASON:04H SOFTGATE RECONFIGURATION ERROR

Software error on reconfiguring the virtual HFA boards and their stations. Save error message data and contact your [Next level of support](#).

REASON:05H SOFTGATE RECONFIGURATION TIME

Timeout during reconfiguration of the virtual HFA boards and their stations. Save error message data and contact your [Next level of support](#).

F5881

BOARD

ENCRYPTION ERROR

Type:

Service-relevant (Format 43)

Short text:

CGW identifies the encryption problem

Cause:

No or invalid or expired certificates available.

System reaction:

Connections are set up unencrypted or not at all.

Action:

Find the cause of the encryption problem and correct the setting.

The cause of the encryption problem is indicated in plain text:

00h - NO PKI CERTIFICATE AVAILABLE 01h - PKI CERTIFICATE AVAILABLE
02h - CERTIFICATE EXPIRED 03h - CERTIFICATE OK 04h - CERTIFICATE
REVOCATION LIST EXPIRED 05h - CERTIFICATE REVOCATION LIST OK
06h - LARGE ENTERPRISE GATEKEEPER REGISTRATION FAILED 07h -
SIP REGISTRATION FAILED 08h - SIP MIKEY CERTIFICATE VERIFICATION
FAILED 09h - H.323 MIKEY CERTIFICATE VERIFICATION FAILED 0Ah - SIP

MIKEY CERTIFICATE VERIFICATION OK 0Bh - H.323 MIKEY CERTIFICATE VERIFICATION OK

Error messages set the SPE (Signaling and Payload Encryption) alarm (if not already set) and the corresponding integrity messages reset the alarm. Exception: A TLS connection is set up with a temporary key to register a CGW board at an LEGK/SIP registrar. An appropriate fault message is signaled (06h or 07h) if this connection cannot be set up for any reason, and this IP trunk is put into operation unencrypted. The SPE alarms remains. The CGW only has to be manually reset by the service after the problem has been corrected (for example, LEGK configuration was modified). The SPE alarm for this trunk is reset at the same time.

F5882

BOARD

SECURE TRACE

Type:

Diagnosis-relevant (Format 43)

Short text:

Secure Trace switchover

Cause:

Secure Trace was enabled or disabled for this CGW.

System reaction:

None.

Action:

None.

Activation and deactivation are indicated in plain text:

00h - SECURE TRACE SWITCHED ON 01h - SECURE TRACE SWITCHED OFF

F5900

LTUC

BOTH PLL DEFECT

Type:

Service-specific (Format)

Short text:

PLL chips on the LTUCE are faulty

Cause:

Both PLL chips are faulty. Attempt to restore LTUCE 1 minute after failure was unsuccessful. The event signal came from the LTUCE firmware.

System reaction:

Blocks the LTUC and attempts to restart.

Action:

Switch off LTU and replace board.

Interpretation of auxiliary data:

Byte 0 = 01 Length of the subsequent related data Byte 1 = 0B both PLL chips are faulty.

F5901

LTUC

BOTH PLL DEFECT

Type:

Service-specific (Format)

Short text:

No ACTIVE signal from DP

Cause:

No ACTIVE signal present. Attempt to restore LTUC and LTUCE 1 minute after failure was unsuccessful. The event signal came from the LTUC or LTUCE firmware.

System reaction:

Blocks the LTUC and attempts to restart.

1) Trace ACTIVE signal to find cause of signal loss.

- If signal can be measured at LTUC input, switch LTUC board off and back on (power-on reset). If this does not work, replace board.

Interpretation of auxiliary data:

Byte 0 = 01 Length of the subsequent related data Byte 1 = 06 No ACTIVE signal.

F5902

LTUC

BUFFER OVERFLOW

Type:

Service-specific (Format 22)

Short text:

Buffer overflow on LTUC(E)

Cause:

Buffer overflow on the LTUC or LTUCE board. The LTU is reset and immediately reloaded.

System reaction:

resets the LTUC board.

Action:

If the error recurs contact your [Next level of support](#).

Byte 0	=	01 Length of the subsequent related data
Byte 1	=	Status byte
	80	Buffer overflow on the LTUC
	0C	Buffer overflow on the LTUCE

F5903

LTUC

TIME SWITCH ERROR

Type:

Service-specific (Format 22)

Short text:

RTO: Blocked highways

Cause:

Blocked highways (status: UNACA) were detected that indicate an LTUC error. Same highways blocked in both CC halves.

Action:

Replace the board LTUC. Evaluate previous LTUC error messages.

Byte 0	=	10 Length of the subsequent related data (16dec)
Byte 1	=	HWY 0 - 7
Byte 2	=	HWY 8 - 15
Byte 3	=	HWY 16 - 23
.....		
Byte 16	=	HWY 120 - 127

F5904

LTUC

WRONG RGEN/ACGEN INSRT

Type:

Service-specific (Format 18)

Short text:

Wrong board type plugged

Cause:

Wrong board type plugged in slot reserved for ringing generator or AC generator.

System reaction:

restarts the board to generate the INIT error.

Action:

Unplug wrong board type and plug in correct board type.

Interpretation of auxiliary data:

no data available

F5905

LTUC

WRONG RGEN/ACGEN RMVD

Type:

Service-specific (Format 18)

Short text:

Wrong board type removed

Cause:

Wrong board type plugged in slot reserved for ringing generator or AC generator has been removed.

System reaction:

blocks the board in accordance with NPR.

Action:

Plug in correct board type.

Interpretation of auxiliary data:

no data available

F5906

LTUC

STBY CABLE DEF

Type:

Service-relevant (Format 43)

Short text:

Cable to the standby computer defective.

Cause:

Standby line not connected or defective.

System reaction:

None

Action:

Connect or replace cable (highway/timeslot, see plaintext).

F5907

LTUC

BACK IN SERVICE

Type:

Service-relevant (Format 18/43)

Short text:

LTUC back in service

Cause:

Following a defect, the LTUC was put back into service after multiple attempts and a preset block timeout. The LTUC is then monitored for further failure. If a new defect occurs during this monitoring time, it is put back into service on a trial basis after a longer block time. In ACTION = INSTRIAL (in service trial) putting into service on a trial basis (Format 43) In ACTION = IN SERV (in service), putting into service is permanent, the monitoring period is over. (Format 18)

System reaction:

LTUC goes from DEF to READY.

Action:

Positive message, no action required.

Interpretation of auxiliary data:

Text only for format 43: TRIAL NO: 1 = current number of attempts to put the system into service (max. 8, for more information, see AMO PSTAT) ONLY LTU READY -> RESET: Automatic LTU (AP) one-time reset after loading of AP shelf without any configured peripheral board in READY state.

F5908

LTUC

NOT IN SERVICE

Type:

Service-relevant (Format 18)

Short text:

LTUC did not go into service

Cause:

Despite several attempts to put the unit into service (max. 8, for more information, see AMO PSTAT), the element could not be put into service correctly due to a new error.

System reaction:

LTUC goes from READY to DEF state.

Action:

Evaluate the error messages that referred to the defect. Rectify the error, if necessary, replace the board. Positive acknowledgement, see [F5907](#).

F5909

LTUC

BOARDS LEFT LTU SHELF

Type:

Service-relevant (Format 22)

Short text:

Several boards leave the shelf

Cause:

Since at least two boards leave the shelf simultaneously, a central error must also be incorporated in the shelf.

System reaction:

The relevant boards switch to NPR state, individual boards signaling is performed with the message [F5354](#).

Action:

Activate/deactivate relevant boards. In necessary, disconnect and then reconnect to see if it goes back into service. This error can also be caused if two adjacent boards, for example, are causing mutual interference. Test LTUC and, if necessary, replace it. The cause error could also be the power supply to the shelf, clocks or backplane.

The same data as for the message F5354 BOARD SECONDARY OUT ATTEND L is output. This message can only be interpreted fully by a system specialist. Notify the [Next level of support](#).

F5915

LTUC

PAYLOAD CONNECTION

Type:

Service-specific (Format 43)

Short text:

Information on the quality of the payload connection over IP for NBCS.

Cause:

This message on the LTUC level is sent from NCUI NBCS. Whenever a call is set up via an NBCS system, the NCUI or STMI loadware monitors the voice quality of the route over the IP network by checking various quality parameters

(e.g., the round-trip delay). When the quality drops below a configurable threshold value, the NCUI/STMI loadware reports "IP BAD QUALITY". When the quality exceeds a configurable threshold value, the loadware reports "IP GOOD QUALITY". The loadware also monitors the voice quality of the route over IP after the call has been enabled using UDP pings; however, this monitoring occurs only for a defined time period. If the voice quality was bad and did not improve during this time period, the message "IP QUALITY TEST TIMER EXPIRED" is displayed. This limits the time during which the loadware can test the quality with UDP pings. The message includes information on both the stations involved in the call as well as both IP addresses. "IP GOOD QUALITY" and "IP QUALITY TEST TIMER EXPIRED" are only outputted if the NMC DIAGS switch 01 is activated (CHA-DIAGS:,NMC,,ON;).

00H IP BAD QUALITY

The relevant entry in the IP payload path table is set to "BAD". The currently set up call is not changed, but retains the current quality. However, if a further attempt to set up a call is made for the same route and if an "alternative payload path" via ISDN has been configured in the system, the call is routed via this alternative payload path" (with the better voice quality).

01H IP GOOD QUALITY

The relevant entry in the IP payload path table is set to "GOOD". The currently set up call is not changed, but retains the current quality. New calls are again routed via the IP network.

02H IP QUALITY TEST TIMER EXPIRED

The relevant entry in the IP payload path table is set to "GOOD". New calls are again routed via the IP network even if the quality is still bad.

Action:

No special actions required. If "IP BAD QUALITY" is reported too often, this indicates that the IP network connection of the NBCS system was not designed or configured for VoIP requirements. In this case, you will need to check the IP network.

Cause:	00H	IP BAD QUALITY
	01H	IP GOOD QUALITY
	02H	IP QUALITY TEST TIMER EXPIRED
STATION A (PEN)		PEN of station A. The PEN consists of "LTG-LTU-PBC-CIR-SUBUNIT". The SUBU redundant in some cases if the station is a trunk group or STMI.
STATION B (PEN)		PEN of station B. The PEN consists of "LTG-LTU-PBC-CIR-SUBUNIT". The SUBU redundant in some cases if the station is a trunk group or STMI.
Source IP address		IP address of the source of the checked route.
Destination IP address		IP address of the destination of the checked route.
Text string		ASCII text string inserted by the loadware.
Auxiliary data:		Diagnostic data of board LW added for product specialist.

Error messages

		Examples: Auxiliary data up to V8 (hexadecimal) Auxiliary data from V10
Source port		UDP Source port of the checked route.
Destination port		UDP Destination port of the checked route.

Auxiliary data up to V8 (hexadecimal)

Byte 01-04: Round trip networking delay (in ms)

Byte 05-08: Filler with FFFFFFFF OR UDP source port (depending on LW used)

Byte 09-12: Fraction outgoing packets (in %)

Byte 12-16: Filler with FFFFFFFF OR UDP destination port (depending on LW used)

Byte 17-20: Jitter last RTCP (in ms)

Byte 21-24: Filler with FFFFFFFF

Byte 25-28: Fraction incoming packets (in %)

Byte 29-32: Filler with FFFFFFFF

Example:

```
000000C400004014 000000010000405E
00000001FFFFFFFF 00000000FFFFFFFF
```

Round trip networking delay: 196ms

UDP Source Port: 16404

Fraction outgoing packets: 01%

UDP Destination Port: 16478

Jitter last RTCP: 01ms

Fraction incoming packets: 00%

Auxiliary data from V10

```
NPCI: 2D0A      SourcePort: 16404      DestinationPort:
16478
AverageNetworkDelay: 196 ( C4H) FractionOutgoing% :
1 ( 01H)
Jitter(ms)last RTCP: 1 ( 01H) FractionIncoming% :
0 ( 00H)
```

F5916

LTUC

SURV PATH ERROR

Type:

Service relevant (Format 43)

Short text:

Survivability path test failed to AP shelf

Cause:

The survivability path is defect. The path was tested by RTO with test result DB_QR_RE_SURV_PATH_ERR or DB_QR_RE_TIME_ERR. A reference test of the survivability modem by FA-RTO shows that the modem works. Possible reasons: Configuration of AP or router wrong Router defective or no resources available ISDN cable to modem defective or unplugged

System reaction:

Only signaling

Action:

The configuration of the AP has to be checked. All parts of the connection such as WAML, S0/S2 board, cables, ISDN cable to the modem and their configuration has to be checked.

F5917

LTUC

SURV MODEM ERROR

Type:

Service relevant (Format 43)

Short text:

Survivability modem test failed

Cause:

The test of the survivability modem by RTO failed. Possible reasons: Modem cable defective or unplugged. Modem defective. Modem not switched on.

System reaction:

Only signaling.

Action:

Modem and modem cable has to be checked.

F5918

LTUC

SUPERVISION

Short text:

See below.

Reason: 00H 19 INCH EXPANSION BOX SUPERVISION NEEDED, BOX DOES NOT EXIST

Type:

Service relevant (Format 43)

Short text:

The expansion box for 19inch NBCS AP does not exist.

Cause:

This message is generated by AMO after configuring the first peripheral board in a 19inch NBCS AP. The message is only signaled, if then the expansion box of a 19inch NBCS AP does not exist or is not connected to the 19inch base box or is not powered on although it is necessary for the peripheral board. It is not signaled if the expansion box of a 19inch NBCS AP is available.

System reaction:

An alarm is generated.

Action:

It has to be checked if the expansion box is not connected to the base box or if it is not powered on or if it is missing at all. The expansion box has to be installed.

Interpretation of auxiliary data:

No auxiliary data available.

Reason: 01H 19 INCH EXPANSION BOX SUPERVISION NOT NEEDED

Type:

Service relevant (Format 43)

Short text:

The expansion box for 19inch NBCS AP does not exist.

Cause:

This message is generated by AMO after deleting the last peripheral board in a 19inch NBCS AP. This message is never signaled.

System reaction:

An alarm is generated.

Action:

No action necessary.

Interpretation of auxiliary data:

No auxiliary data available.

Reason: 02H RG/WG SUPERVISION NEEDED, DEVICE IS INACTIVE

Type:

Service relevant (Format 43)

Short text:

RG/WG is inactive /active

Cause:

This message is generated by AMO after configuring the first SLMA board (for RG) or TMLBL/TMBCT board (for WG) in a NBCS AP. If the signal of a RG/WG board or module (In a 19inch shelf only a RG module is possible) has not been detected by the LTU control board loadware, this error message is signaled. If the signal of a RG/WG board or module is available, no error message is signaled because this is the normal operation mode.

System reaction:

An alarm is generated.

Action:

Check if the necessary RG/WG board or RG module is mounted. Replace the defective RG/WG board or RG module.

RG/WG DEVICE:	00H	RG STANDARD BOARD
	01H	WG STANDARD BOARD
	02H	RG IN 19 INCH BASE BOX
	03H	RG IN 19 INCH EXPANSION BOX

Reason: 03H RG/WG SUPERVISION NOT NEEDED

Type:

Service relevant (Format 43)

Short text:

RG/WG is inactive /active.

Cause:

This message is generated by AMO after deleting the last SLMA or TMLBL/TMBCT board in a NBCS AP. This message is never signaled.

System reaction:

An alarm is generated.

Action:

No action necessary.

RG/WG DEVICE:	00H	RG STANDARD BOARD
	01H	WG STANDARD BOARD
	02H	RG IN 19 INCH BASE BOX
	03H	RG IN 19 INCH EXPANSION BOX

F5919

F5919

LTUC

EMERGENCY BEGIN

Type:

Diagnosis-relevant (Format 42)

Short text:

Start of Access Point Emergency Mode

Cause:

One or more access points that can be controlled by the reporting CC-AP were switched to emergency mode manually (using AMO APESU) or the conditions for an automatic switchover to emergency mode were fulfilled.

System reaction:

CC-AP controls the relevant access points until a manual reset or until the conditions for an automatic reset are fulfilled.

Action:

In case of an automatic switch to emergency mode, check the connections from the host system to the appropriate access points.

Interpretation of auxiliary data:

No supplementary data present.

F5920

LTUC

EMERGENCY END

Type:

Diagnosis-relevant (format 42)

Short text:

End of Access Point Emergency Mode

Cause:

The reporting CC-AP has given up control for the last access point controlled by it. The switchover occurred manually (using the AMO APESU) or the conditions for an automatic reset were fulfilled.

System reaction:

CC-AP no longer controls any Access Points.

Action:

No action required.

Interpretation of auxiliary data:

No supplementary data present.

F5921

LTUC

EMERGENCY SHELVES

Type:

Diagnosis-relevant (format 49)

Short text:

List of access points controlled by the CC-AP

Cause:

After the CC-AP is restarted/reloaded, all access points controlled by the reporting CC-AP are listed. The message only appears if at least one access point is controlled by the CC-AP.

System reaction:

CC-AP controls the displayed Access Points.

Action:

No action required.

Interpretation of auxiliary data:

ACCESS POINTS: numbers of the access points controlled by the CC-AP.

F5922

LTUC

CC AP UNAVAILABLE

Type:

Diagnosis-relevant (format 42)

Short text:

CC-AP cannot be reached from the host system

Cause:

The host system cannot reach the CC-AP due to a connection problem.

System reaction:

One or more access points that could be controlled by the displayed CC-AP can no longer be switched to emergency mode manually (using the AMO APESU).

Action:

Check the connections from CC-AP to the access points which could be controlled by the displayed CC-AP.

Interpretation of auxiliary data:

CC-AP: number of the unreachable CC-AP.

F5923

LTUC

CC AP AVAILABLE

Type:

Diagnosis-relevant (format 42)

Short text:

CC-AP can be reached again from the host system

Cause:

The host system can reach the CC-AP again.

System reaction:

None.

Action:

No action required.

Interpretation of auxiliary data:

CC-AP: number of the CC-AP which can be reached again.

F5924

LTUC

ENCRYPTION ERROR

Type:

Diagnosis-relevant/service-relevant (Format 43)

Short text:

NCUI identifies the encryption problem

Cause:

An unexpected (encrypted or unencrypted) message was received or an encrypted message cannot be decrypted.

System reaction:

Connection to the sending host is cleared down (by NCUI) and an attempt is made to set a connection to the access point.

Action:

Find the cause of the encryption problem and correct the setting.

The cause of the encryption problem is indicated in plain text:

00h - PASSIVE CONNECTION IS NOT ENCRYPTED 01h - UNEXPECTED
ENCRYPTED MESSAGE RECEIVED FROM HOST-CC 02h - UNEXPECTED
ENCRYPTED MESSAGE RECEIVED FROM CC-AP 03h - UNEXPECTED
UNENCRYPTED MESSAGE RECEIVED FROM HOST-CC 04h -
UNEXPECTED UNENCRYPTED MESSAGE RECEIVED FROM CC-AP 05h -
CANNOT DECRYPT MESSAGE FROM HOST-CC 06h - CANNOT DECRYPT
MESSAGE FROM CC-AP

F5950

LTUC

EXC NO HW FUNCTION

Type:

Service-specific (Format 22)

Short text:

Hardware function error (LW exception error)

Cause:

Functional error of the board hardware or missing external feed (power supply, ringing current, etc.).

1) WAML: statistics, resets board

- Other board: statistics

Action:

Check board hardware and external signal sources. If no error is found, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see [F5737](#)

F5951

LTUC

EXC LW DUMMY

Type:

Diagnosis-specific (Format 22)

Short text:

Error with DUMMY event (LW exception error)

Cause:

An error occurred with a DUMMY event.

System reaction:

signals only, no statistics

Action:

For diagnosis purposes, this message is temporarily incorporated into the loadware code of some boards by the loadware development department. Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see [F5737](#).

F5952

LTUC

EXC RESOURCE SHORTAGE

Type:

Service-specific (Format 22)

Short text:

Resource shortage (LW exception error)

Cause:

Overload, shortage of buffer memory. The board concerned can no longer process incoming messages since these are missing vital information elements. Reseizures/re-assignments are prevented by the system for all board circuits.

1) Line circuits: blocks all board circuits

- Subscriber circuits: only blocks the free terminals of the board.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see [F5737](#).

F5953

LTUC

EXC RESOURCE AVAILABLE

Type:

Service-specific (Format 22)

Short text:

End of resource shortage (LW exception error)

Cause:

End of overload. The board concerned can process incoming messages again since the message queue has been processed.

1) Line circuits: unblocks all circuits of a board

- Subscriber circuits: unblocks any terminals of the board not seized.

Action:

Positive acknowledgment of [F5952](#), no action.

Interpretation of auxiliary data:

see [F5737](#).

F5954

LTUC

EXC LW TRACE DATA

Type:

Service-specific (Format 22)

Short text:

Loadware trace data (LW exception error)

Cause:

The SLC16 board (Cordless) can store its own trace results and output to printer.

System reaction:

signals only, no statistics.

Action:

Evaluate trace results.

F5955

BOARD

EXC ERROR DUMP REQUEST

Type:

Service-specific (Format 22)

Short text:

Error buffer full (LW exception error)

Cause:

Histo file of WAML has errors. Implausible SW functions.

System reaction:

statistics

Action:

Initiate dump output of error buffer with PETRA AMO, see auxiliary data (HEX data) for addresses and length of dump.

Interpretation of auxiliary data:

Byte 0 - 15: not relevant Byte 16: Number of bytes in auxiliary data Byte 17: Offset address of error buffer LOW byte (for PETRA AMO) Byte 18: Offset address of error buffer HIGH byte (for PETRA AMO) Byte 19: Segment address of error buffer LOW byte (for PETRA AMO) Byte 20: Segment address of error buffer HIGH byte (for PETRA AMO) Byte 21: Length of error buffer LOW byte (for PETRA AMO) Byte 22: Length of error buffer HIGH byte (for PETRA AMO)

The dump output initiated with PETRA can be interpreted by your system specialist. Error buffer is dumped with PETRA AMO (2 KB output respectively):

ABFR-PETRA: DUMP, Itg, Itu, slot, 86, F000, 0, 101;

ABFR-PETRA: DUMP, Itg, Itu, slot, 86, F000, 0, 102;

ABFR-PETRA: DUMP, Itg, Itu, slot, 86, F000, 0, 103;

Deletes and releases error buffer (no dump output):

ABFR-PETRA: DUMP, Itg, Itu, slot, 86, F000, 0, 100;

F5956

BOARD

EXC LOG DUMP REQUEST

Type:

Service-specific (Format 22)

Short text:

LOG dump request (LW exception error)

Cause:

This message can only be initiated via the PETRA AMO: ABFR-PETRA: DUMP, Itg, Itu, slot, 86, F000, 0, 23; It is used to ascertain the address and length of the LOG buffer (trace buffer). The types of the trace inputs are defined by the LANC AMO (table of global data, parameter TRCLVL).

System reaction:

statistics

Action:

Initiate dump output of LOG buffer (contains trace entries of WAML) with PETRA AMO, see auxiliary data (HEX data) for addresses and length of dump.

Interpretation of auxiliary data:

Byte 0 - 15: not relevant Byte 16: Number of bytes in auxiliary data Byte 17: Offset address of LOG buffer LOW byte (for PETRA AMO) Byte 18: Offset address of LOG buffer HIGH byte (for PETRA AMO) Byte 19: Segment address of LOG buffer LOW byte (for PETRA AMO) Byte 20: Segment address of LOG buffer HIGH byte (for PETRA AMO) Byte 21: Length of LOG buffer LOW byte (for PETRA AMO) Byte 22: Length of LOG buffer HIGH byte (for PETRA AMO)
The dump output initiated with PETRA can be interpreted by your system specialist.

F5957

BOARD

EXC PROC INTRPT HARD

Type:

Service-specific (Format 22)

Short text:

Processor hard interrupt, processing not resumed (LW exception error)

Cause:

Error in LW. An interrupt with an unexpected vector number has occurred.

System reaction:

statistics and resets the board.

Action:

contact your [Next level of support](#).

Interpretation of auxiliary data:

Byte 0 - 15: not relevant Byte 16: Number of bytes in auxiliary data Byte 17: Interrupt vector number LOW byte Byte 18: Interrupt vector number HIGH byte

F5958

BOARD

EXC PROC INTRPT SOFT

Type:

Service-specific (Format 22)

Short text:

Processor soft interrupt, processing resumed (LW exception error)

Cause:

Error in LW. An interrupt with an unexpected vector number has occurred.

System reaction:

statistics

Action:contact your [Next level of support](#).**Interpretation of auxiliary data:**

Byte 0 - 15: not relevant Byte 16: Number of bytes in auxiliary data Byte 17:
Interrupt vector number LOW byte Byte 18: Interrupt vector number HIGH byte

F5959

BOARD

EXC HW LAN CONTR INTRN

Type:

Service-specific (Format 22)

Short text:

LAN controller to 'internal' LAN of the WAML faulty (LW exception error)

Cause:

HW error. Smooth operation of the LAN controller in the direction of the 'internal' LAN is no longer guaranteed. Destinations on this interface are no longer available.

System reaction:

the LAN interface is disabled by the LW.

Action:

"Manual" deactivation and re-activation of board (i.e. via AMO). If this does not work, replace board (action also described in simultaneously signaled error message [F4704](#)).

Interpretation of auxiliary data:

can only be interpreted by a system specialist.

F5960

BOARD

EXC HW LAN CONTR EXTRN

Type:

Service-specific (Format 22)

Short text:

LAN controller to 'external LAN of the WAML faulty (LW exception error)

Cause:

HW error. Smooth operation of the LAN controller in the direction of the 'external' LAN is no longer guaranteed. Destinations at this interface may no longer be available.

System reaction:

the LAN interface has been deactivated.

Action:

"Manual" deactivation and re-activation of board (i.e. via AMO). If this does not work, replace board (action also described in the simultaneously signaled error message [F4704](#)).

Interpretation of auxiliary data:

can only be interpreted by a system specialist.

F5961

BOARD

EXC FIREWALL ALARM

Type:

Service-specific (Format 22)

Short text:

Firewall alarm (LW exception error)

Cause:

An unauthorized LAN user is attempting to send data packets via the WAML.

System reaction:

statistics

Action:

Review configuration (AMO LANC) to determine whether all necessary user authorizations are properly configured. If user authorizations are OK, trace unauthorized user (hacker?).

Interpretation of auxiliary data:

The auxiliary data is output in plain text in the maintenance alarm message; see description under [F4704](#) with short text: ERROR: FIREWALL ALARM.

F5962

BOARD

PER HW MESSAGE

Type:

Service-specific (Format 22)

Short text:

Message for hardware periphery of peripheral board (LW exception error)

Cause:

Dependability has received request from peripheral board for HW periphery reload (e.g. for cordless base stations).

System reaction:

statistics and load commands to DC.

Action:

If error recurs repeatedly, check base station concerned and replace if necessary.

Byte 0	=	01 Number of bytes to follow
Byte 1	=	Error type (DB_M_QF_BOARD_PER_HW_SET)
	00	Load code and data
	01	Load data only
	02	Match LW-ID and Data-ID

F5963

BOARD

EXC SYNCHRON AGAIN

Type:

Service-specific (Format 22)

Short text:

Reference clock for Cordless boards back in synch. (LW exception error)

Cause:

One of the (four possible) Cordless master boards was able to recover the reference clock, e.g. after replacing a board.

System reaction:

end of major alarm to the Service Center.

Action:

No action necessary, since this is a positive acknowledgment. End of clock failure for all cordless line boards.

Interpretation of auxiliary data:

see [F5737](#)

F5964

BOARD

EXC FATAL SYNCHRON ERR

Type:

Service-specific (Format 22)

Short text:

Clock failure for all cordless line boards (LW exception error)

Cause:

None of the (four possible) Cordless master boards was able to recover the reference clock.

System reaction:

major alarm to the Service Center

Action:

Evaluate preceding error messages. Remote access: display master boards via AMO. Use BSSU to deactivate and re-activate all these boards in sequence. Check response. Local access: unplug and replug all master boards, replace boards on a trial-and-error basis if necessary, check clock supplier

Interpretation of auxiliary data:

see [F5737](#)

F5965

BOARD

EXC SYNCHRON TAKE OVER

Type:

Service-specific (Format 22)

Short text:

Clock recovery taken over by other cordless board (LW exception error)

Cause:

Cordless master board failure. At startup, the message only signals that the system is defining the clock for the first time. From CMI V2.2: the message is also generated by the first clock master when the system starts up. If two boards are in clock master mode, two messages from different boards in the node must be observed.

System reaction:

signaling

Action:

Evaluate preceding error messages. Determine cause of board failure. Since master board is only one of four possible masters, the reference clock is maintained for all (other) cordless line boards, base stations and cellular phones. User services are only affected by clock errors of the type EXC FATAL SYNCHRON ERR.

Interpretation of auxiliary data:

see [F5737](#)

F5984

CIRCUIT

CONTACT ALARM ON

Type:

Service-specific (Format 2F)

Short text:

Contact alarm set (US - specific)

Cause:

An external contact alarm was detected by the board. The alarm will remain set until the alarm reset message (contact alarm off) is signaled.

System reaction:

signals only.

Action:

This message is signaled as soon as the board detects the external contact alarm.

See also [Section 8.14](#), "Device names".

F5985

CIRCUIT

CONTACT ALARM OFF

Type:

Service-specific (Format 2F)

Short text:

Contact alarm reset (US - specific)

Cause:

External contact alarm reset message (alarm has been cleared).

System reaction:

signals only

Action:

This message is signaled as soon as the board detects the absence of the external contact alarm.

See also [Section 8.14, "Device names"](#).

F5986

CIRCUIT

TSC REJECTION

Type:

Service-specific (Format 2F)

Short text:

TSC information rejected (US - specific)

Cause:

User-user signaling: temporary signaling connection information (TSC) is rejected by AT&T's SDN, as reported by the CorNet VN Gateway loadware. This message is always output with the first rejection. Subsequent rejections are reported at intervals of 1 to 15 minutes at most.

System reaction:

signals only

Action:

Action depends on the evaluation of the HEX data. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

The first byte contains the number of rejections over the previous 15 minutes.

See also [Section 8.14, "Device names"](#).

F5987

CIRCUIT

FEA REJECTION

Type:

Service-specific (Format 2F)

Short text:

FEA information rejected (US - specific)

Cause:

User-user signaling: congestion feature information (FEA) is rejected by AT&T's SDN, as reported by the CorNet VN Gateway loadware. This message is always output with the first rejection. Subsequent rejections are reported at intervals of 1 to 15 minutes at most.

System reaction:

signals only

Action:

Action depends on the evaluation of the HEX data. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

The first byte contains the number of rejections over the previous 15 minutes.

See also [Section 8.14, "Device names"](#).

F5988

CIRCUIT

L1 SPOR ERR S0

Type:

Service-specific (Format 22)

Short text:

Sporadic layer 1 failure

Cause:

Sporadic layer 1 failure on S0 bus due to line error or brief failure of an S0 bus terminal. Message can be initiated by S0 board, SLMO board, DIUS2 board with cordless or SLMN with video PC.

System reaction:

statistics, signaling.

Action:

If this error occurs frequently, check S0 bus .

Byte 0	=	Error type (DB_M_QF_CIR_L1_ERR_SET)
	00	Corruption on the line (bit slip)
	01	Corruption on the line (bit error rate > 10 E-6)
	02	Corruption on the line (bit error rate > 10 E-3)
	03	Line interruption (frame loss)
	04	Line interruption (no signal)
	05	Error signaling from the remote computer (alarm display signal)
	06	Error signaling from the remote computer (remote alarm)
	07	No circuit data loaded
	08	L1 cannot be activated, or is not active
	09	Message overflow (USA)
	0A	Invalid message (USA)
	0B	Error signaling from the remote computer (remote alarm CRC4)

Error messages

Special case for SLMN-T1 in USA:

	10	Loss of Signal
	11	Max Error Secs
	12	Red Alarm LFA
	13	Red Alarm LMA
	14	Yellow Alarm RFA
	15	Yellow Alarm RMA
	16	AIS Alarm (Blue)
	17	Channel Fault

See also [Section 8.14, “Device names”](#).

F5989

CIRCUIT

L2 SPOR ERR S0

Type:

Service-specific (Format 22)

Short text:

Sporadic layer 2 error

Cause:

Sporadic Layer 2 error on S0 bus. This error can only be reported by a functional terminal connected to a DIUS2 board or a video PC connected to an SLMN in an S2 point-to-point configuration. Terminals on the S0 bus will output the error message [F5454](#) instead.

System reaction:

statistics

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see [F5454](#). Byte 0 = Error type (DB_M_QF_CIR_L2_SPO_ERR_SET)

See also [Section 8.14, “Device names”](#).

F5990

CIRCUIT

L2 STOP NEW SEIZURE S0

Type:

Service-specific (Format 18)

Short text:

STOP for re-assignments/reseizures

Cause:

Overload, shortage of buffer memory on S0 bus. Reseizures/re-assignments are prevented by the system for the circuit concerned. Message can also be initiated by S0 board, DIUS2 board with cordless or SLMN with video PC.

System reaction:

blocks the terminal that has not been seized. In the case of DIUS2 Cordless or Video PC, the circuit is blocked.

Action:

Save error message data and contact your [Next level of support](#).

See also [Section 8.14](#), "Device names".

F5991

CIRCUIT

L2 START NEW SEIZUR S0

Type:

Service-specific (Format 18)

Short text:

Re-assignments/reseizures possible again

Cause:

Overload end. The board concerned can process incoming messages again since the message queue has been processed. Message can also be initiated by S0 board, DIUS2 board with cordless or SLMN with video PC.

System reaction:

releases the board that has not been seized. In the case of DIUS2 Cordless or Video PC, releases the circuit.

Action:

Positive acknowledgment of [F5990](#), no action.

See also [Section 8.14](#), "Device names".

F5992

CIRCUIT

LX ACTIVE S0

Type:

Service-specific (Format 36)

Short text:

Layer 1 or 3 on S0 bus active

Cause:

The errored layer 1 of the S0 bus is intact again. Layer 2 will be re-established as soon as required by the terminal at TERM level. Message can also be initiated by S0 board, DIUS2 board with cordless or SLMN with video PC. In this regard the message 'Layer 3 active' may also be displayed for the SLMN board. The SLMN-T1 board in the USA is used for video PC, but with the interface of the T1-boards for networking!

System reaction:

layer 1 or layer 3 is activated.

Action:

No action necessary as this is a positive acknowledgment.

Interpretation of auxiliary data:

(supported by text) Special case for SLMN-T1 in USA:

REASON: 01H ACQUISITION OF SIGNAL

REASON: 02H CHANNEL FAULT OK

REASON: 03H GREEN ALARM

REASON: 04H MIN ERR SECS

REASON: 05H CHANNEL IN SERVICE

REASON: 06H SPAN IN SERVICE

S0 bus and subsequent board:

REASON: 07H LAYER 1 ACTIVE

1) Layer 1 active for S0 bus, SLMO, DIUS2, SLMN-E1

REASON: 09H LAYER 3 ACTIVE

Layer 2/3 active for SLMN-E1

See also [Chapter](#) , "Device names".

F5993

CIRCUIT

L2 ERROR VC

Type:

Service-specific (Format 43)

Short text:

D-channel of Voice Compression connection not active (Layer 2 error)

Cause:

The D-channel may be interrupted anywhere along the connection path of the established VC tie-line connection and the error is only reported by a VCM board. The cause of the error may lie with the VCM board, in the MTS (nailed connection), the DIUS2 or STMD, the external connection path or the (symmetrical) partner configuration in the destination PABX.

System reaction:

the D channel and all B channels are blocked. Positive message with [F5418](#) CIRCUIT LX ACTIVE (layer 1 and layer 3).

Action:

Evaluate any previous error messages initiated by the partner VCM boards. One of the boards may simply have been unplugged, or the external connection path may be physically interrupted. The TSU AMO allows you to start an explicit RTO routine test for the VCM boards, which tests the D-channel and all the configured B-channels of a board. The results will eliminate or confirm a defective VCM board as the cause (note that the error is reported in both partner systems!). If both the VCM boards are in order, the DIUS2 or STMD boards must be eliminated next as the possible cause on a trial-and-error basis. If all four boards of the partner configurations are in order, the error must lie in an interruption of the external connection path (tie-lines, transit node), or in the MTS (nailed connections).

Restrictions: A routine test order or explicit test of the B-channels of a DIUS2 is not possible if VC channels are configured on the board, (this affects user services). Routine test orders cannot be explicitly started for STMD boards. The nailed connection timeslots cannot be tested with an explicit RTO job either, since this also affects user services.

Interpretation of auxiliary data:

(supported by text) STATUSBYTE 1: 00000001 Bit 0 = D channel (faulty) Bit 1-7 = B channel 1-7 STATUSBYTE 2: 00000000 Bit 8-15 = B channels 8-15

The appropriate status bit is set high (1) for faulty channels; for active or unconfigured channels, the status bit is set low (0). POSSIBLE OTHER DEFECTIVE UNITS: possible other defective units PARTNER-CIRCUIT: Circuit address of the partner (DIUS2, STMD etc.) VCM-PATH: Nailed connection of the VCM circuits PARTNER-PATH: Nailed connection of the VCM partner (DIUS2, STMD etc.) PARTNER-SYSTEM

See also [Section 8.14](#), "Device names".

F5994

CIRCUIT

B CHANNEL VC DEF

Type:

Service-specific (Format 43)

Short text:

B-channel (channels) of a Voice Compression connection not active.

Cause:

a) Individual B-channel of VCM board is defective. If only one B-channel of the VCM is reported, you can assume that the cause of the error lies with the VCM board concerned (e.g. defective signaling processor). The error is reported by one or both of the partner VCM boards, i.e., a defective B-channel may be detected and reported by a receiving board but the error can still lie with the transmitting board. In some cases, a transmitting board may not detect any errors to report! b) All four B-channels of a VCSU defective This indicates an

error on the DIUS2/STMD or in the MTS (nailed connection). One B-channel on a DIUS2 or STMD corresponds to one VCSU of a VCM board (i.e. four compressed channels).

System reaction:

the defective channels are blocked. Positive message with [F5995](#) B CHANNEL VC OK

Action:

The TSU AMO allows you to start an explicit RTO routine test for the VCM boards, which tests the D-channel and all the configured B-channels of a board. The results will eliminate or confirm a defective VCM board as the cause (note that the error is not necessarily reported by the partner system in which it occurs!). The overnight routine test of the RTO will localize the defective B-channel and block it by setting it to DEF status. Next step: Eliminate one of the partner DIUS2/STMD boards as the cause of the error (on a trial-and-error basis!). Restrictions: A routine test order or explicit test of the B-channels of a DIUS2 is not possible if VC channels are configured on the board, (this affects user services). Routine test orders cannot be explicitly started for STMD boards. The nailed connection timeslots cannot be tested with an explicit RTO job either, since this also affects user services.

Example:

Bit 4-7 in 1st status byte defective STATUSBYTE 1: 11110000 Bit 0 = D channel (in order) Bit 1-7 = B channel 1-7 STATUSBYTE 2: 00000000 Bit 8-15 = B channel 8-15 In the case of defective channels, the respective bit is set to 1. In the case of active or unconfigured channels the relevant bit is set to 0. In the case of 'underequipped' VCM boards (VCM-B7) the second status byte always has the binary value 00000000. POSSIBLE OTHER DEFECTIVE UNITS: possible other defective units PARTNER-CIRCUIT: circuit address of the partner (DIUS2, STMD etc.) VCM-PATH: nailed connection of the VCM circuit PARTNER-PATH: nailed connection of the VCM partner (DIUS2, STMD etc.) PARTNER-SYSTEM: partner system

See also [Section 8.14](#), "Device names".

F5995

CIRCUIT

B CHANNEL VC OK

Type:

Service-specific (Format 43)

Short text:

All B channels of a Voice Compression connection are active again.

Cause:

B-channel (channels) was defective and is working again. Positive acknowledgment for [F5994](#) B CHANNEL VC DEF.

System reaction:

the blocked B channel (channels) are re-activated.

Action:

Evaluate previous and subsequent error messages: search for other B-channel failure messages of the VCM board. If the VCM board has repeated problems with B-channel failures, replace the board and check for new error messages.

Interpretation of auxiliary data:

text mask not required.

See also [Section 8.14](#), “Device names”.

F5996

CIRCUIT

L2 ERROR S0

Type:

Service-specific (Format 22)

Short text:

Layer 2 failure in S0 bus circuit

Cause:

Various causes are possible, depending on the type of error reported, as shown in Byte 0 of the auxiliary data. Message is only initiated by video PC connected to SLMN board.

System reaction:

blocks layer 2 of the circuit.

Action:

Check line (e.g. with protocol tester); check terminal.

Interpretation of auxiliary data:

see [F5414](#) (Layer 2 error in digital networking circuit)

See also [Section 8.14](#), “Device names”.

F5997

CIRCUIT

L3 ERROR S0

Type:

Service-specific (Format 22)

Short text:

Layer 3 failure in S0 bus circuit

Cause:

Call processing detects a layer 3 error, e.g. while verifying message elements. Message is only initiated by video PC connected to SLMN board.

System reaction:

Signals only.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

see [F5417](#) (Layer 3 error in digital networking circuit)

See also [Section 8.14](#), "Device names".

F5998

CIRCUIT

NETWORK LOOP ON

Type:

Service-specific (Format 22)

Short text:

Exchange test loop on (US-specific message)

Cause:

Test loop activation is received from the exchange side. The D-channel and B-channels of the PCM highway concerned are not available for call processing for the duration of the test.

System reaction:

signaling, sets DC status to remote block.

Action:

No action necessary.

See also [Section 8.14](#), "Device names".

F5999

CIRCUIT

NETWORK LOOP OFF

Type:

Service-specific (Format 22)

Short text:

Exchange test loop off (US-specific message)

Cause:

Test loop deactivation is received from the exchange side, following test loop activation (see [F5998](#)). The D-channel and B-channels of the PCM highway concerned are available for call processing once more.

System reaction:

signaling, resets DC status to ready.

Action:

No action necessary.

See also [Section 8.14, “Device names”](#).

8.7 F6000

[A9000](#) -- [F1000](#) -- [F2000](#) -- [F3000](#) -- [F4000](#) -- [F5000](#) -- **F6000** -- [F7000](#) -- [F8000](#)

F6000	F6001	F6002	F6003	F6004	F6005	F6006	F6007	F6008	F6009	F6010
F6012	F6013	F6014	F6016	F6033	F6050	F6051	F6052	F6053	F6054	F6055
F6056	F6057	F6058	F6059	F6060	F6062	F6063	F6064	F6066	F6083	F6103
F6104	F6105	F6106	F6107	F6108	F6109	F6110	F6113	F6114	F6116	F6133
F6150	F6152	F6153	F6155	F6156	F6159	F6160	F6164	F6166	F6200	F6202
F6203	F6204	F6205	F6206	F6207	F6208	F6209	F6210	F6212	F6214	F6216
F6233	F6250	F6251	F6252	F6253	F6254	F6255	F6256	F6257	F6258	F6259
F6260	F6262	F6264	F6266	F6283	F6298	F6300	F6301	F6302	F6303	F6304
F6305	F6306	F6307	F6308	F6309	F6310	F6312	F6313	F6314	F6316	F6333
F6334	F6404	F6424	F6444	F6464	F6484	F6504	F6506	F6507	F6524	F6616
F6654	F6700	F6701								

F6000

DMS

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

Implausible event code.

Action:

Save error message data and contact your [Next level of support](#).

F6001

DMS

DISALL EVT CODE

Type:

Error messages

Diagnosis-specific (several formats apply)

Short text:

Wrong event code

Cause:

Event code valid but not allowed.

Action:

Save error message data and contact your [Next level of support](#).

F6002

DMS

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state

Cause:

Implausible state.

Action:

Save error message data and contact your [Next level of support](#).

F6003

DMS

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in current state.

Action:

Save error message data and contact your [Next level of support](#).

F6004

DMS

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and contact your [Next level of support](#).

F6005

DMS

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:

Save error message data and contact your [Next level of support](#).

F6006

DMS

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:

Save error message data and contact your [Next level of support](#).

F6007

DMS

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for database access.

Action:

Reaction is a soft restart. Save error message data and contact your [Next level of support](#).

F6008

DMS

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6009

DMS

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6010

DMS

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

Negative exception code in operating system call.

Action:

Save error message data and contact your [Next level of support](#).

F6012

DMS

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:

Save error message data and contact your [Next level of support](#).

F6013

DMS

MSG HEADER FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible message header

Cause:

Implausible message header.

Action:

Save error message data and contact your [Next level of support](#).

F6014

DMS

DMS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative acknowledgments

Cause:

Negative acknowledgments by the data management system (e.g. I/O error).

Action:

Save error message data and contact your [Next level of support](#).

F6016

DMS

ADVISORY

Type:

Diagnosis-specific (several formats apply)

Short text:

Advisory message

Cause:

Advisory message.

Action:

Save error message data and contact your [Next level of support](#).

F6033

DMS

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Plausibility error

Cause:

Too many plausibility errors within a specific time. Error statistics overflow.

Action:

Save error message data and contact your [Next level of support](#).

F6050

CMS

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

Implausible event code.

Action:

Save error message data and contact your [Next level of support](#).

F6051

CMS

DISALL EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Wrong event code

Cause:

Event code valid but not allowed.

Action:

Save error message data and contact your [Next level of support](#).

F6052

CMS

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state

Cause:

Implausible state.

Action:

Save error message data and contact your [Next level of support](#).

F6053

CMS

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in current state.

Action:

Save error message data and contact your [Next level of support](#).

F6054

CMS

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and contact your [Next level of support](#).

F6055

CMS

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:

Save error message data and contact your [Next level of support](#).

F6056

CMS

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:

Save error message data and contact your [Next level of support](#).

F6057

CMS

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for database access.

Action:

Reaction is a soft restart. Save error message data and contact your [Next level of support](#).

F6058

CMS

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6059

CMS

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6060

CMS

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

Negative exception code in operating system call.

Action:

Save error message data and contact your [Next level of support](#).

F6062

CMS

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:

Save error message data and contact your [Next level of support](#).

F6063

CMS

MSG HEADER FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible message header

Cause:

Implausible message header.

Action:

Save error message data and contact your [Next level of support](#).

F6064

CMS

DMS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative acknowledgments

Cause:

Negative acknowledgments by the data management system (e.g. I/O error).

Action:

Save error message data and contact your [Next level of support](#).

F6066

CMS

ADVISORY

Type:

Diagnosis-specific (several formats apply)

Short text:

Advisory message

Cause:

Advisory message.

Action:

Save error message data and contact your [Next level of support](#).

F6083

CMS

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Plausibility error

Cause:

Too many plausibility errors within a specific time. Error statistics overflow.

Action:

Reaction is a hard restart. Save error message data and contact your [Next level of support](#).

F6103

SM-DB

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in current state.

Action:

Save error message data and contact your [Next level of support](#).

F6104

SM-DB

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and contact your [Next level of support](#).

F6105

SM-DB

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:Save error message data and contact your [Next level of support](#).**F6106**

SM-DB

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:Save error message data and contact your [Next level of support](#).**F6107**

SM-DB

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for database access.

Action:Save error message data and contact your [Next level of support](#).

F6108

SM-DB

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6109

SM-DB

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6110

SM-DB

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

Negative exception code in operating system call.

Action:

Save error message data and contact your [Next level of support](#).

F6113

SM-DB

MSG HEADER FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible message header

Cause:

Implausible message header.

Action:Save error message data and contact your [Next level of support](#).**F6114**

SM-DB

DMS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative acknowledgments

Cause:

Negative acknowledgments by the data management system (e.g. I/O error).

Action:Save error message data and contact your [Next level of support](#).**F6116**

SM-DB

ADVISORY

Type:

Diagnosis-specific (several formats apply)

Short text:

Advisory message

Cause:

Advisory message.

Action:Save error message data and contact your [Next level of support](#).

F6133

SM-DB

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Plausibility error

Cause:

Too many plausibility errors within a specific time. Error statistics overflow.

Action:

Reaction is a hard restart. Save error message data and contact your [Next level of support](#).

F6150

SM-CR

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

Implausible event code.

Action:

Save error message data and contact your [Next level of support](#).

F6152

SM-CR

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state

Cause:

Implausible state.

Action:

Save error message data and contact your [Next level of support](#).

F6153

SM-CR

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in current state.

Action:Save error message data and contact your [Next level of support](#).**F6155**

SM-CR

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:Save error message data and contact your [Next level of support](#).**F6156**

SM-CR

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:Save error message data and contact your [Next level of support](#).

F6159

SM-CR

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6160

SM-CR

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

Negative exception code in operating system call.

Action:

Save error message data and contact your [Next level of support](#).

F6164

SM-CR

DMS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative acknowledgments

Cause:

Negative acknowledgments by the data management system (e.g. I/O error).

Action:

Save error message data and contact your [Next level of support](#).

F6166

CDR

ADVISORY

Type:

Service-specific (several formats apply)

Short text:

Advisory message for call data recording

Cause:

This advisory message always refers to call data recording (see also [F4216](#)).

Action:

Evaluate the auxiliary data line. Advisory messages (F6166) can be output in the auxiliary data line with the following texts. If you have any (further) questions not answered here, save the error message data and contact your [Next level of support](#).

CDR DATA LOSS GEZ FILE OFLOW (GEZ = CDRC)

Cause:

Call charge file overflow

1) Check file size (DAGR AMO)

- Check output application (KDGZ AMO)
- Check area size (INFO AMO)

GE: NO DF FOR FORCED TASK

Cause:

No dialog field defined for forced task

- CDRC file is full, and no dialog field defined for forced output (GEZAB AMO)
- Check CDRC parameters (GEZAB AMO)

GE: NO DF DEFINED FOR COMPUTER

Cause:

No dialog field defined for computer

- Device configuration okay? (GEZU AMO)
- Output device is computer (DP), and no dialog field defined? (GEZAB AMO)

CDR: FORMAT EMPTY

Cause:

Empty format

- Format in selection group? (SELG AMO)
- Format in format table? (FTBL AMO)

CDR: CO CIRCUIT NO. NOT IN TRUNK NO. TABLE

LTG:01 LTU:6 EBT: 115 SATZ:000 B-KANAL:02" (EBT = Slot; SATZ = circuit; B-KANAL = B-channel)

Cause:

Destination number/tariff zone table incomplete

- Check line number table entry for specified slot address and add if necessary (FBTN AMO)
- Tariff tables configured correctly? (TTBL/SELG AMOs)
- Destination number table configured? (FBTN AMO)

GE: WRONG ENTRY IN TARIFF TABLE

Cause:

Tariff table entry wrong. Tariff list empty

- Tariff table configured correctly? (TTBL AMO)
- Correct tariff group configured in SELG? (SELG AMO)
- Tariff types configured correctly? (TTBL AMO)

GE: EDP OUTPUT BLOCK TOO LARGE

Cause:

EDP output block too large

Action:

Reduce block size for SELG group (SELG AMO)

GE: CHANGE TAPE - WRITE NOT POSSIBLE / INVALID VOL_ID

Cause:

Magnetic tape unit message

- Check tape settings (SELG AMO)
- Check format (SELG AMO)
- Change tape, create new VOL_ID/header (TIMIT AMO)

Auxiliary Data (if the data set contains errors):

Byte 00-11 = PIN Number Byte 12-15 = TRUNK_NO Number of exchange trunk seized Byte 12-13: LTG Line Number Byte 14: Subunit Byte 15: ISDN B-channel Byte 16-19 = TRUNK_POS Physical address of exchange trunk seized (LTG-LTU-SLOT-CCT) Byte 20 - 25 = CONN_ROUT_CODE Customer-specific route code Byte 26 = SWITCH_PROCESS Identifies the call progress stage in the switching process 0 Empty 1 End after: seizure 2 End after: call section identifier 3 End after: Virtual call section 4 Call section after: seizure 5 Call section after: call section identifier 6 Section after: virtual call section 7 Virtual call section after: seizure 8 Virtual call section after: call section identifier 9 Virtual call section after: virtual call section 10 END_AFTER_START 11 SECT_AFTER_START
 Byte 27 = CONN_SERVICE_IND Communication service of connection 0 Voice 1 Teletext 2 Videotex 3 Fax 4 Data 5 Telex via TTC (interworking)
 Byte 28 = CONN_NETWORK Specifies the network in which the call was set up 0 Analog network 1 IDN 2 ISDN 3 Analog 4 Digital
 Byte 29 = CONN_SPEED Transmission speed, values 0-133 Byte 30 = ATTND_GROUP Attendant group of calling party and chargee, values from 0-16
 Byte 31-52 = PAYING_PARTY Number of chargee, values 0-15 per byte
 Byte 53 = NODE_ID.TYPE Type of node 0 TYPE_UNKNOWN 1 NODE_ID_NOT_PRESENT 2 LEVEL0_NODE_NO 3 LEVEL1_NODE_NO 4 LEVEL2_NODE_NO 5 RESERVE_5 6 RESERVE_6 7 RESERVE_7
 Byte 54 = NODE_ID.Level2 Node identification, sub-domain, values from 0-15
 Byte 55 = NODE_ID.Level1 Node identification, domain, values from 0-127
 Byte 56-57 = NODE_ID.Level0 Node identification, node number, values from 0-999
 Byte 58-59 = CURR_MESSAGE_NR User system current message number, values from 0-65535
 Byte 60-61 = CONN_CHARGE_UNITS Connection charge units, values from 0-65535
 Byte 62-64 = MARK1 Bit string for selection features, bits 0-21 used. The bits are divided among the three bytes as follows: - Byte 1: bits 8-15 - Byte 2: bits 0-7 - Byte 3: bits 0-5: bits 16-21
 Significance of set bits as follows: BIT 0 Local connection BIT 1 Toll connection BIT 2 Chargee = ATND BIT 3 Chargee = MTLC BIT 4 Chargee = Night Station BIT 5 User with CDRS authorization BIT 6 User with CDRS authorization BIT 7 Poss. ambiguous connection data BIT 8 CDRATND for connections set up by attendant BIT 9 CDRATND for connections set up by user BIT 10 TTX notification authorization BIT 11 Night status(per ATND group) BIT 12 Limit section exceeded BIT 13 Connection setup via S&F unit BIT 14 TRUNK_ID BIT 15 TIE_LINE, BIT 16 GEI_AUTH BIT 17 EXPENSIVE BIT 18 INTERN, BIT 19 DINCOMING, BIT 20 OUTGOING, BIT 21 AMOUNT_FROM_NET
 Byte 65 = CALL_ID.NODE_NO.TYPE; see byte 53
 Byte 66 = CALL_ID.NODE_NO.LEVEL_2; see byte 54
 Byte 67 = CALL_ID.NODE_NO.LEVEL_1; see byte 55
 Byte 68-69 = CALL_ID.NODE_NO.LEVEL_0; see bytes 56-57
 Byte 70-73 = CALL_ID.SEQU_NO ID number of current connection
 Byte 74-77 = CONN_CHARGE_AMOUNT Call charges in currency amounts
 Byte 78 = CARRIER_ZONE.CARRIER Carrier, values 0-9
 Byte 79 = CARRIER_ZONE.ZONE Distance zone, values 0-220, see TTBL

Error messages

AMO Description, under: DA_M_CG_ZONE_TYPE_SET,1 Byte
80 = SUPPL_SERVICE Supplementary service, under which the chargeable call was set up 0 NOT_DEFINED 1 NORMAL_CALL
2 CONSULTATION_CALL 3 CALL_TRANSFER 4 CALL_BACK 5
CALL_FWD_BUSY 6 CALL_FWD_UNCONDIT 7 CALL_FWD_NOREPLY
8 CALL_PICKUP 9 CONFERENCE 10 OVERRIDE 11 HUNTING_GROUP
12 MAIL_BOX 13 PAGING 14 DICTATION 15 CREDIT_CARD_CHRG 16
REVERSE_CHARGING 17 CALL_DEFLECTION 18 DOOR_OPENING_SYS
Byte 81-92 = IDENT_CARD Personal identification number Byte 93
= IDENT_CARD_COPIN Class of PIN, values 0-8 Byte 94 = CAUSE
Reason for connection clear-down, values 0-149 Byte 95 = B_CHNL_CNT
Number of 64-Kbit-channels of a connection, values 0-30 Byte 96 =
RECORD_POINT Recording point of the call data recording system 0
TRANSIT 1 BREAKOUT 2 ORIGIN 3 ORIGIN_BREAKOUT 4 BREAKIN
Byte 97 = TRANSIT_COUNT Number of transit nodes, values 0-31 Byte
98-105 = see bytes 12 - 19 Byte 98-99 : INCOMING_TRUNK_NO.LTG_Line
Byte 100-101 : Byte 102 : INCOMING_TRUNK_POS.LTG Byte 103 :
INCOMING_TRUNK_POS.LTU Byte 104 : INCOMING_TRUNK_POS.EBT
(SLOT) Byte 105 : INCOMING_TRUNK_POS.Satz (Circuit) Byte 106 =
TARTYP Time-of-day-segment of connection setup 0 DAY 1 NIGHT1 2
NIGHT2 3 NIGHT3 Byte 106-112 = CONN_TIME_END_ABS_EXC End of
connection Byte 106 : Year (0-99) Byte 107 : Month (1-12) Byte 108 : Day
(1-31) Byte 109 : Hour Byte 110 : Minute Byte 111 : Second Byte 112 : 1/10
second Byte 113-116 = CONN_TIME_EXC Connection duration Byte 113 :
Hours Byte 114 : Minutes Byte 115 : Seconds Byte 116 : 1/10 second Byte
116-116 = EXC_SEL_GR_PAR Selection group Byte 116: Selection group

F6166 M4 N0091 NO ACT A1 SM-CR ADVISORY 97-03-19 13:28:23
ALARM CLASS:CENTRAL:023 CC:44000 EC:43801 UA:0000:5A90:11F1
SP:0000:CB44:0716 FORMAT:14 0105 0100

- Check FT file settings (DAGR, SELG AMOs)
- File area full? (INFO AMO)

F6200

SM-USER

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

Implausible event code.

Action:

Save error message data and contact your [Next level of support](#).

F6202

SM-USER

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state

Cause:

Implausible state.

Action:

Save error message data and contact your [Next level of support](#).

F6203

SM-USER

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in current state.

Action:

Save error message data and contact your [Next level of support](#).

F6204

SM-USER

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and contact your [Next level of support](#).

F6205

SM-USER

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:

Save error message data and contact your [Next level of support](#).

F6206

SM-USER

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:

Save error message data and contact your [Next level of support](#).

F6207

SM-USER

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for database access.

Action:

Save error message data and contact your [Next level of support](#).

F6208

SM-USER

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6209

SM-USER

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6210

SM-USER

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

Negative exception code in operating system call.

Action:

Save error message data and contact your [Next level of support](#).

F6212

SM-USER

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:

Save error message data and contact your [Next level of support](#).

F6214

SM-USER

DMS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative acknowledgments

Cause:

Negative acknowledgments by the data management system (e.g. I/O error).

Action:

Save error message data and contact your [Next level of support](#).

F6216

SM-USER

ADVISORY

Type:

Diagnosis-specific (several formats apply)

Short text:

Advisory message.

Cause:

Advisory message.

Action:

Save error message data and contact your [Next level of support](#).

F6233

SM-USER

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Plausibility error

Cause:

Too many plausibility errors within a specific time. Error statistics overflow.

Action:

Save error message data and contact your [Next level of support](#).

F6250

SM-DEP

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code.

Cause:

Implausible event code.

Action:

Save error message data and contact your [Next level of support](#).

F6251

SM-DEP

DISALL EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Wrong event code

Cause:

Event code valid but not allowed.

Action:

Save error message data and contact your [Next level of support](#).

F6252

SM-DEP

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state.

Cause:

Implausible state.

Action:

Save error message data and contact your [Next level of support](#).

F6253

SM-DEP

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in current state.

Action:

Save error message data and contact your [Next level of support](#).

F6254

SM-DEP

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and contact your [Next level of support](#).

F6255

SM-DEP

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:Save error message data and contact your [Next level of support](#).**F6256**

SM-DEP

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:Save error message data and contact your [Next level of support](#).**F6257**

SM-DEP

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for database access.

Action:Save error message data and contact your [Next level of support](#).

F6258

SM-DEP

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6259

SM-DEP

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6260

SM-DEP

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

Negative exception code in operating system call.

Action:

Save error message data and contact your [Next level of support](#).

F6262

SM-DEP

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:Save error message data and contact your [Next level of support](#).**F6264**

SM-DEP

DMS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative acknowledgments

Cause:

Negative acknowledgments by the data management system (e.g. I/O error).

Action:Save error message data and contact your [Next level of support](#).**F6266**

SM-DEP

ADVISORY

Type:

Diagnosis-relevant (several formats relevant)

Short text:

Advisory message from the SW complex server dependability system

Cause:

The dependability outputs this advisory message when a specific set of circumstances are reached. The messages are partially text-driven: E.g.: FBC-QUEUE OVERFLOW: the signaling task SIT is not available, the messages are queued. In the case of too many messages, an overflow to (Queue Overflow) occurs. As a result, messages cannot be lost. Some notes of the Linux platform

Error messages

are displayed through this message with information about the problem in clear text. Please check "Platform Administration (Portal)" for more information on the problem!

Action:

Save error message data and contact your [Next level of support](#).

This advisory message is also reported when RDS or other service application disconnects or reconnects to ADP Communication Object, e.g. when clicking ShutDown in the RDS menu in Assistant.

HISTA Message texts:

Monitoring the Customer-LAN bond0

- CCA CUSTOMER-LAN Interface bond0 is down
- CCA CUSTOMER-LAN bond0 Interface eth1 is up
- CCA CUSTOMER-LAN Interface bond0 is active

Monitoring the IPDA-LAN bond1:

- CCA IPDA-LAN Interface bond1 is down
- CCA IPDA-LAN Interface bond1 is active
- CCA IPDA-LAN bond1 Interface eth2 is up

Cause:

An Ethernet Link Down was detected.

System reaction:

Depending of used connectivity mode a malfunction of the IP connection could appear (but must not). In case of Ethernet bonding with redundant cabling no system reaction will occur.

Action:

Check the Advisory message for detail information and check cabling of the processor cards in any case.

F6283

SM-DEP

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Plausibility error

Cause:

Too many plausibility errors within a specific time. Error statistics overflow.

Action:

Save error message data and contact your [Next level of support](#).

F6298

SM-DEP

PROCESSOR INTERRUPT

Type:

(Format 01)

Short text:

Interrupt processed by Sysload

Cause:

Sysload has processed or output an interrupt.

Action:Save error message data and contact your [Next level of support](#).**F6300**

SM-AM

IMPLAUSIBLE EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible event code

Cause:

Implausible event code.

Action:Save error message data and contact your [Next level of support](#).**F6301**

SM-AM

DISALL EVT CODE

Type:

Diagnosis-specific (several formats apply)

Short text:

Wrong event code

Cause:

Event code valid but not allowed.

Action:Save error message data and contact your [Next level of support](#).

F6302

SM-AM

IMPLAUSIBLE STATE

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible state.

Cause:

Implausible state.

Action:

Save error message data and contact your [Next level of support](#).

F6303

SM-AM

UNEXP MESSAGE

Type:

Diagnosis-specific (several formats apply)

Short text:

Unexpected message

Cause:

Message not expected in current state.

Action:

Save error message data and contact your [Next level of support](#).

F6304

SM-AM

IMPLAUSIBLE MESSAGE DATA

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data in the message.

Action:

Save error message data and contact your [Next level of support](#).

F6305

SM-AM

IMPLAUSIBLE PROC RET

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible return value

Cause:

Implausible return value received from a procedure.

Action:Save error message data and contact your [Next level of support](#).**F6306**

SM-AM

IMPLAUSIBLE PROC PARAM

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible parameter values

Cause:

Implausible parameter values in procedure call.

Action:Save error message data and contact your [Next level of support](#).**F6307**

SM-AM

DBAR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data for database access.

Action:Reaction is a soft restart. Save error message data and contact your [Next level of support](#).

F6308

SM-AM

STATIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (static data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6309

SM-AM

DYNAMIC DATA FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible data

Cause:

Implausible data (dynamic data) in memory.

Action:

Save error message data and contact your [Next level of support](#).

F6310

SM-AM

OS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative exception code

Cause:

Negative exception code in operating system call.

Action:

Save error message data and contact your [Next level of support](#).

F6312

SM-AM

TIMEOUT FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Timer run down

Cause:

Timeout for expected response.

Action:Save error message data and contact your [Next level of support](#).**F6313**

SM-AM

MSG HEADER FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible message header.

Cause:

Implausible message header.

Action:Save error message data and contact your [Next level of support](#).**F6314**

SM-AM

DMS CALL FAULT

Type:

Diagnosis-specific (several formats apply)

Short text:

Negative acknowledgments

Cause:

Negative acknowledgments by the data management system (e.g. I/O error).

Action:Save error message data and contact your [Next level of support](#).

F6316

SM-AM

ADVISORY

Type:

Service-specific (Format 42)

Short text:

Advisory message, status message of SWS

Cause:

The additional text in the auxiliary data indicates the processing status of the software supply function SWS.

Action:

No action necessary.

The following messages are output:

UPDATE OF CUSTOMER DATABASE TO HD IS STARTED
UPDATE OF CUSTOMER DATABASE TO MO IS STARTED
GRACE PERIOD IS ACTIVE
BACKUPTIME IS ACTIVE
COPY OF AREA(S) FROM MO TO HD IS STARTED
DOUBLE RECORDING WITH HD AS MASTER IS STARTED

Type:

Service-specific (Format 12)

Short text:

Advisory message of FAMOS

Cause:

FAMOS reports the rejection of a connection.

Action:

No immediate action necessary. In case of several such messages contact next level of support.

FAMOS: ERROR IN PROTOCOL - CONNECTION REJECTED

FXADP-UX UFAMOS LOGON 27

or

FAMOS: ERROR IN PROTOCOL - CONNECTION REJECTED

FXADP-UX UFAMOS LOGON RST

Some of the connection parameters are recorded, these could be relevant for later diagnosis.

The last value in the last line is a counter indicating the total of rejected connections.

After the 256th rejected connection, the counter is reset and this is marked by RST.

F6333

SM-AM

PLAUS MAX LIMIT

Type:

Diagnosis-specific (Format 01)

Short text:

Plausibility error

Cause:

Too many plausibility errors within a specific time. Error statistics overflow.

Action:Save error message data and contact your [Next level of support](#).**F6334**

SM-AM

SYSTEM EXCEPTN HANDLER

Type:

Diagnosis-relevant (Format 01)

Short text:

Error processing root job

Cause:

System exception handler was called due to an error.

Action:Determine cause with additional error log. Save error message data and contact your [Next level of support](#).**F6404**

DMS

MAINTENANCE

Type:

Service-specific (several formats apply)

Short text:Service advisory message, initiated by the alarm [CENTRAL:029](#)
MAINTENANCE NOTE.**Cause:**

This message usually consists of plain text, which is either self-explanatory or refers to a specific section of the Service Manual.

Action:

The MAINTENANCE NOTE alarm must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; If this does not work, save the error messages associated with this alarm. contact your [Next level of support](#).

F6424

CMS

MAINTENANCE

Type:

Service-specific (several formats apply)

Short text:

Service advisory message, initiated by the alarm [CENTRAL:029](#) MAINTENANCE NOTE.

Cause:

This message usually consists of plain text, which is either self-explanatory or refers to a specific section of the Service Manual.

Action:

The MAINTENANCE NOTE alarm must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; If this does not work, save the error messages associated with this alarm. contact your [Next level of support](#).

F6444

SM-DB

MAINTENANCE

Type:

Service-specific (several formats apply)

Short text:

Trace job via TRACA AMO

Cause:

The trace job was started with the trace conditions defined in the TRACA AMO. The trace situation created with the AMO has occurred. This message usually consists of plain text, which is either self-explanatory or explained in the auxiliary data or refers to a specific section of the Service Manual.

Action:

The alarm [CENTRAL:029](#) MAINTENANCE NOTE must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; In order to be able to evaluate the trace job, your system specialist needs the error message data. Save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

START	The trace job was started via AMO. The functional system unit concerned and the trace point are shown in the auxiliary data.
STOP	The trace point defined by AMO has been reached. The trace job for a specific functional system unit has been stopped. The unit concerned is output in the auxiliary data, together with the trace point.
STOP ALL	The trace point defined by AMO has been reached. The trace job has been stopped for all functional system units. The unit concerned is output in the auxiliary data, together with the trace point.

F6464

SM-CR

MAINTENANCE

Type:

Service-specific (several formats apply)

Short text:

Service advisory message, initiated by the alarm [CENTRAL:029](#)
MAINTENANCE NOTE.

Cause:

This message usually consists of plain text, which is either self-explanatory or refers to a specific section of the Service Manual.

Action:

The MAINTENANCE NOTE alarm must always be reset (deleted) via AMO.
SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; If this does not work, save the error messages associated with this alarm. contact your [Next level of support](#).

F6484

SM-AS

MAINTENANCE

Type:

Service-specific (Format 33)

Short text:

Advisory message of the MAINTENANCE NOTE alarm.

Cause:

This message usually consists of plain text, which is either self-explanatory or explained in the auxiliary data or refers to a specific section of the Service Manual.

Action:

The alarm [CENTRAL:029](#) MAINTENANCE NOTE must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; If this does not work, save the error messages associated with this alarm. contact your [Next level of support](#). Further steps to be undertaken depend on the error message text.

The CDBR component outputs the following text:

CDBR: SPORADIC ERROR STATISTIC OVERFLOW. CDBR: CONSTANT ERROR STATISTIC OVERFLOW. CDBR: INTERNAL PROGRAM INCONSITENCY.

Save the error message and the entries in the History File for diagnosis. Check the History File for additional information on the error cause. Eliminate the cause of the error and reactivate the CDBR component.

The SWS component outputs the following text after "SOFTWARE SUPPLY:":
STARTTIME NOT VALID SYSTEMTIME NOT VALID

- 1) An invalid start time was specified. Check the system time and the SWS times. Start SWS again.

SWU NOT READY

The system is not in call processing operation. Start SWS again when the system is back in operation.

SYSTEM HAS NOT BEEN LOADED FROM MO

In partial mode, SWS requires a system to be loaded from MO first. Either initiate a complete start of the SWS, or load the system from MO and subsequently initiate a partial start of the SWS again.

DOWNTIME EXCEEDING WHILE

System was down for more than 4 hours during SWS run. Start SWS again.

SWITCH RUNS WITH OLD SW FROM HD; MO IS

New SW has caused a reload of the old SW. Request MO with new SW and start SWS again.

WRONG SWS VERSION

The SWS versions on HD and MO are not compatible. Software cannot be updated with SWS. Carry out a manual software update.

USER ABORT

DEA-SWS AMO command entered.

DOWNTIME CONTROL ERROR ERROR WHILE UPDATING ... ERROR WHILE COPYING AREA :PDS: FROM MO TO HD ERROR WHILE FINAL UPDATE OF THE ADM DATABASE ERROR WHILE STARTING DOUBLE RECORDING... INTERNAL ERROR WHILE STARTING REMINDER WITH ... INTERNAL ERROR WHILE ... DEACT PAIR ERROR THIS MESSAGE SHOULD NEVER OCCUR

An internal runtime error has occurred. Save error messages for later diagnosis and contact your [Next level of support](#).

F6504

SM-DEP

MAINTENANCE

Type:

Service-specific (several formats apply)

Short text:

Service advisory message, initiated by the alarm [CENTRAL:029](#) MAINTENANCE NOTE.

Cause:

This message usually consists of plain text, which is either self-explanatory or refers to a specific section of the Service Manual. Some notes of the Linux platform are displayed through this message with information about the problem in clear text. Please check "Platform Administration (Portal)" for more information on the problem!

Action:

The MAINTENANCE NOTE alarm must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; If this does not work, save the error messages associated with this alarm. Contact your [Next level of support](#).

Messages:

HD SPACE-WARNING

F6504 M4 N0206 NO ACT A1 SM-DEP MAINTENANCE 13-07-25 07:36:23
ALARM CLASS:CENTRAL:029 FORMAT:33 HD EVENT: hdspace NodeA
Partition:/opt/dscxl/share percent: 82.1 Warning: value is over threshold (80)

Cause:

Mounted partitions are filled up above the threshold of 80 %. This message is reported again, if a rearm value of 75% is reached and the threshold value is reached again.

Action:

If tmp area is affected, delete files that you don't need anymore. If this message appears for one of the other areas contact the product specialist or your next level of support.

SWAP-Monitoring

F6504 M4 N0173 NO ACT A1 SM-DEP MAINTENANCE 13-07-24 01:53:36
ALARM CLASS:CENTRAL:029 FORMAT:33 HD EVENT: memory NodeA
swap_used: 88719360B Warning: value is over threshold (52428800)

Cause:

The threshold of 50 MB is reached. As long as the value is above this 50 MB, a HISTA will be created every 6 hours (4 times a day). If the value goes below 50 MB there is no output anymore.

System reaction:

The system starts swapping.

Action:

Save error message data and contact the product specialist or your next level of support.

CHECK BIOS BATTERY VALUE

F6504 - Check Bios battery value: 2548

Cause:

The battery of the BIOS of the main board is depleted.

Action:

Replace the battery of the BIOS according to the service documentation. The battery must be replaced only by an identical battery or one recommended by the manufacturer.

F6506

SM-DEP

RESTART LEVEL

Type:

Service-specific (Format 41)

Short text:

Type of restart carried out. This ADP error message replaces F7000 - F7005 (advisory messages with HEX data).

Cause:

This message is always output by dependability following a restart, and describes the type of restart in plain text as well as a possible restart escalation. Example: RESTART TYPES: HARD RESTART / SOFT RESTART A soft restart was requested, which escalated to a hard restart.

Action:

This message is intended as an advisory and helps determine the reason for the restart. Evaluate preceding error messages.

F6507

SM-DEP

LOAD DEVICE

Type:

Service relevant (Format 33)

Short text:

Output of the current load device.

Cause:

Signaling of message each time the ADP is reloaded.

System reaction:

Depends on the current load device:

1) HD (:A1H1E:) - System is in normal state, this is only an advisory message.

- All other load devices trigger a MAJOR ALARM 13 (ALTERNATE LOAD AREA) if the reload was not manually triggered (AMO REST).

Action:

Only required if the load device and the HD are not the same. Save error message data and restart logs and contact your [Next level of support](#). A possible cause may be that the incorrect software version is installed on the HD. The measure implemented depends on the cause of the reload, for example:

- replace HD,
- regenerate PDS,
- load backup.

A PDS (AMO REST) must be triggered after the measure has been implemented.

The load device is output in the appendix of the CURRENT LOAD DEVICE IS: text. Possible variants include:

If the following text RECOMMENDED ACTION: CHANGE OR PREPARE A NEW HD!! is output in the appendix of the output device, this means that Major Alarm 13 - ALTERNATE LOAD AREA was set.

F6524

SM-AM

MAINTENANCE

Type:

Service-specific (several formats apply)

Short text:

Service advisory message, initiated by the alarm [CENTRAL:029](#) MAINTENANCE NOTE.

Cause:

This message usually consists of plain text, which is either self-explanatory or refers to a specific section of the Service Manual.

Action:

The MAINTENANCE NOTE alarm must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; If this does not work, save the error messages associated with this alarm. contact your [Next level of support](#).

Message Text 1:

WARNING BY HISTA TASK: THE HISTA FILE CAPACITY OF 95% IS REACHED IF YOU WANT, SAVE THE HISTO FILE

Cause:

The above MINOR alarm is initiated by the HISTA task in the ADP in repines to an alarm request specified in the AMO (ALARM parameter of ADD-HISTA command). 19 of the 20 Histo file pairs are filled with error messages and information, corresponding to 95% of the HISTA database capacity.

Action:

File pairs 1-19 should be saved to an external backup medium. No messages are lost, since the current messages can still be stored in the 20th file pair. See also [HISTA backup measures](#).

Message Text 2:

WARNING BY HISTA TASK: HISTA FILE OVERFLOW (LOSS OF FAULT MESSAGES) THE FIRST 5% OF THE HISTA FILE IS DELETED

Cause:

The above MAJOR alarm is initiated by the HISTA task in the ADP in repines to an alarm request specified in the AMO (ALARM parameter of ADD-HISTA command). All of the 20 file pairs have been filled with error messages and information, and the first file pair (corresponds to 5% of the HISTA database capacity) is now being overwritten, i.e. all the "old" error messages/information contained in the file pair are now irretrievably lost.

Action:

Action: If an external backup of the file pairs 1-19 was carried out when the MINOR alarm was signaled, you only need to save the 20th file pair. If no external backup was carried out, you can still save file pairs 2 - 20 to an external backup medium. See also [HISTA backup measures](#).

F6616

ACM

ADVISORY

Type:

Service-specific (Format 14)

Short text:

ACM error detected.

Cause:

This Error is reported whenever ACM detects an error. The most important information is the error code which is available in the EC field. The ACL-C event which causes the error is usually at the end of the message. When the system restarts, ACM usually logs a few advisory messages before it can synchronize with the other tasks. So, ignore the ACM advisories right after a switch restart.

System reaction:

Signals only.

Action:

Depends on the error code.

Interpretation of auxiliary data:

56000	The application sent a message to ACM without being connected.
56001	The application sent a request to ACM without being signed-on.
56002	ACM is out of sync with the ACL Complex. Send error to development.
56003	Not Used
56004	The event code sent by CP or the application is not supported by ACM.
56005	Internal error. Send error to development.
56006	The contents of the received message is invalid. This is usually caused by CP or the application sending a bad message.
56007	The syntax of the received message is bad. This is usually caused by CP or the application sending a bad message.
56008	Internal error. Send error to development.
56009	The application is not configured in the system. Check AMOs ACMSM, CPDL, XAPPL, etc
56010	Internal error. Send error to development.
56011	ACM could not complete processing the message. Send error to development.
56012	Not Used
56013	The high water mark in the send queue was hit. This can happen during high load situations. Some events to the application may be lost.
56014	ACM could not process the request. This may be caused when the application puts wrong information in the sign-on request.
56015	Non fatal ACM error when making an OS function call. This is caused by system resources problem or internal control problem. The system should still function ok. Send error to development
56016	Fatal ACM error when making an OS function call. This causes the server to restart. This problem usually is caused by system resources problem such as not having enough memory or serious problems in communication. Send error to development
56017	ACM received a message with bad header information. This is usually caused by CP, DEP, DB, AMO, or CMS sending a bad message.
56018	The maximum size of the send queue was hit. This can happen if the traffic is heavier than what we can support.
56019	The queue high water mark is less than or equal to the low water mark. Something is wrong with the queue size. Send error to development.
56020	ACM had problems parsing a message. Either someone (CP or application) sent a bad message to ACM or it is an internal error. Send error to development.
56021	The configuration is bad. Check configuration using AMOs ACMSM, CPDL, XAPPL, etc.
56022	CP has restarted. The link (layer 4 and layer 7) to the application is dropped. ACM waits for the application to reconnect the link.
56023	Internal counter of the message in the application send queue was wrong. ACM recovers itself.

F6654

AMC

MAINTENANCE

Type:

Service-specific (several formats apply)

Short text:

Service advisory message, initiated by the alarm [CENTRAL:029](#) MAINTENANCE NOTE.

Cause:

This message usually consists of plain text, which is either self-explanatory or refers to a specific section of the Service Manual.

Action:

The MAINTENANCE NOTE alarm must always be reset (deleted) via AMO. SWU: DEL-GRA:BP,29; ADP: DEL-GRA:AI,29; VI server: DEL-GRA:VI,29; If this does not work, save the error messages associated with this alarm. contact your [Next level of support](#).

F6700

DBSYNC

MESSAGE

Type:

Service-specific (Format 17)

Short text:

Data synchronization necessary

The SWU has been newly generated. The data of the affected service (EMML, ACD or DIR) are no longer consistent with the SWU data. The backup data of the service must be adapted to the SWU (version can be displayed with SYNC AMO).

The DBSYNC task has terminated, since it was unable to access the files in the DSY area on the hard disk. The data in the SWU and the Services (EMML, ACD, DIR) are no longer synchronized.

Action:

Check the DSY area on the hard disk.

F6701

DBSYNC

ERROR

Type:

Service-specific (Format 17)

Short text:

File handling problems

Messages describing problems in DBSYNC handling of hard disk files (e.g. not enough space on hard disk in DSY area of DBSYNC).

Synchronization problems between DBSYNC and Service (EMML, ACD, DIR) following modification of SWU data, reload or update of HD data via AMOs.

Action:

Diagnosis possible by displaying the SEAT with the SYNC AMO.

8.8 F7000

A9000 -- F1000 -- F2000 -- F3000 -- F4000 -- F5000 -- F6000 -- **F7000** -- F8000

F7050	F7051	F7052	F7053	F7054	F7056	F7059	F7062	F7072	F7074	F7075
F7079	F7082	F7083	F7084	F7085	F7100	F7101	F7102	F7132	F7153	F7154
F7155	F7156	F7168	F7169	F7177	F7178	F7186	F7187	F7188	F7189	F7190
F7191	F7192	F7193	F7194	F7195	F7196	F7197	F7198	F7199	F7200	F7201
F7202	F7356	F7359	F7360	F7361	F7362	F7363	F7364	F7365	F7400	F7402
F7403	F7404	F7405	F7406	F7407	F7408	F7420	F7421	F7422	F7530	F7531
F7532	F7533	F7534	F7536	F7537	F7538	F7541	F7542	F7544	F7545	F7546
F7547	F7548	F7549	F7550	F7551	F7552	F7553	F7554	F7556	F7557	F7558
F7559	F7560	F7561	F7562	F7563	F7564	F7565	F7566	F7568	F7569	F7570
F7571	F7573	F7574	F7575	F7576	F7577	F7578	F7579	F7580	F7581	F7582
F7583	F7584	F7585	F7586	F7592	F7597	F7600	F7601	F7603	F7604	F7605
F7606	F7607	F7608	F7609	F7610	F7612	F7613	F7615	F7620	F7622	F7623
F7624	F7625	F7627	F7628	F7629	F7631	F7632	F7633	F7637	F7638	F7639
F7640	F7641	F7642	F7643	F7644	F7645	F7646	F7650	F7660	F7661	F7662
F7663	F7664	F7665	F7666	F7700	F7701					

F7050

SM-DP

POWER FAIL

Type:

Diagnosis-specific (several formats apply)

Short text:

Hardware interrupt without dependability actions

Cause:

A battery voltage failure has been detected. This message is output if an interrupt occurs due to a short voltage failure. This error has no effect on user services.

Action:

No action necessary.

F7051

SM-DP

TIMEOUT ERROR

Type:

Diagnosis-specific (Format 03)

Short text:

Multibus seized

Cause:

The data processor DP has failed to release the multibus after a seizure.

Action:

Save the error message data and contact your [Next level of support](#).

F7052

SM-DP

CLOCK OFF

Type:

Diagnosis-specific (Format 03)

Short text:

Clock failure

Cause:

System clock has failed.

Action:

The system responds with a soft restart. Save the error message data and contact your [Next level of support](#).

F7053

SM-DP

WATCHDOG 1

Type:

Service-specific (Format 28)

Short text:

Watchdog 1 timeout

Cause:

The current task is output with stack and addresses (LOG ADDR = 0) and all (LOG STACK = 0) the tasks in the OS Ready Queue in order of priority (lowest priority first). The number of stack messages per task depends on the BCA memory available, up to a maximum of 10. If only the current task is output, then the WD1 timeout was caused by this task. If more than one task is output, the interrelationships of the tasks in the stack must be determined. Please note that although tasks awaiting resource allocation are not listed, they may still be the cause of the watchdog timeout.

Action:

The system responds with a soft restart. Save error message data and contact your [Next level of support](#).

F7054

SM-DP

WATCHDOG 2

Type:

Diagnosis-specific (Format 03)

Short text:

Watchdog 2 timeout

Cause:

Watchdog 2 for LOW priority has timed out.

Action:

Save error message data and contact your [Next level of support](#).

F7056

SM-DP

UNDEFINED ERROR

Type:

Diagnosis-specific (several formats apply)

Short text:

Implausible error

Cause:

An implausible NMI has occurred (non-masked interrupt), which was generated by the DP.

Action:

If this error recurs frequently, replace the processor board (DP). Save error message data and contact your [Next level of support](#) if this does not work.

F7059

SM-DP

MULTIBUS TIMEOUT

Type:

Service-specific (Format 27)

Short text:

Inconsistency

Cause:

The DP has detected an inconsistency on the multibus. The DP is not receiving the required responses from its partner processor (IOP, IP or LBC). The partner processor can be determined by means of the slot number output in the error message.

Action:

Check the hardware (boards and bus cable). If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7062

SM-DP

WATCHDOG 0

Type:

Diagnosis-specific (Format 32)

Short text:

Watchdog 0 timeout

Cause:

Repetitive error loop in high-priority task, OS deadlock, interrupts blocked too long or WD0 task no longer being polled. For watchdog timeouts, up to 5 stack messages can be output before the actual watchdog task information message. The number of task information messages is limited to 7. The number of corresponding stack data messages is limited to 5. Task information messages are output in the following sequence: running task, clock task, WD0 task, nucleus task, tasks in the nucleus queue or tasks in the OS ready queue. The tasks in the OS ready queue are output in order of priority (lowest priority first). If only the running task is output, then the WD0 timeout was caused by this task. If more than one task is output, the interrelationships of the tasks in the stack must be determined. Please note that although tasks awaiting resource allocation are not listed, they may still be the cause of the watchdog timeout. The system responds with a soft restart. The last task information message contains the action initiated.

Action:

Save diagnosis data (stack messages and task information messages) and contact your [Next level of support](#).

F7072

SM-DP

DISALLOWED ADDRESS

Type:

Service-specific (Format 27)

Short text:

Software error

Cause:

Processor has attempted to access an address outside the upper range value of the local memory address.

Action:

Save error message data and contact your [Next level of support](#).

F7074

SM-DP

TEST WATCHDOG 0 FAULT

Type:

Service-specific (Format 03)

Short text:

Watchdog 0 error

Cause:

A hardware check by the routine test organization (RTO) was completed with errors.

Action:

Replace processor board (DP). If this does not work, save error message data and contact your [Next level of support](#).

F7075

SM-DP

TEST WATCHDOG 1 FAULT

Type:

Service-specific (Format 03)

Short text:

Watchdog 1 error

Cause:

A hardware check by the routine test organization (RTO) was completed with errors.

Action:

Replace processor board (DP). If this does not work, save error message data and contact your [Next level of support](#).

F7076

SM-DP

TIMEOUT FAULT

Type:

Service-specific (Format 03)

Short text:

Timeout

Cause:

A hardware check by the routine test organization (RTO) was completed with errors.

Action:

Replace processor board (DP). If this does not work, save error message data and contact your [Next level of support](#).

F7079

SM-DP

PARITY ERROR

Type:

Service-relevant (Format 47)

Short text:

Parity error, memory error

Cause:

Sporadic defective memory component

System reaction:

If this error occurs repeatedly, replace the processor board.

Interpretation of auxiliary data:

See [F3176](#).

Basically, the fourth digit combination was increased from 2 digits to 3 digits for record specification in the case of PEN/EBT and LD. Actions:

- DB_RS_TEMP_LOCKED signaled with **TEMPLOCK** --> temporarily locked. Commissioning follows.
- DB_RS_IN_SERV_TRIAL is signaled with **INSTRIAL** --> in service trial

F7082

SM-DP

Short text:

PARTNER RESET

Type:

Service-specific (Format 39)

Short text:

ADP restart

Cause:

Base processor has requested an ADP restart.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F7083

SM-DP

NMI PCI ERROR

Type:

Service-relevant (Format 47)

Short text:

Non Maskable Interrupt at the peripheral computer interface bus (PCI BUS).

Cause:

The CPU and the connected units, such as memory or hard disk, LAN controller, etc. are connected via the peripheral computer interface bus (PCI BUS). The PCI NMI error (non maskable interrupt) occurs in the event of component or bus communication faults. The error with format 47 only occurs in the case of Pentium boards.

System reaction:

Soft restart

Action:

If this error occurs repeatedly, replace the processor board.

Interpretation of auxiliary data:

See new error message [F3176](#).

F7084

SM-DP

FAN ERROR

Type:

Service-specific (Format 49)

Short text:

RPM problems with the fans

Cause:

The fans have failed or cannot reach the set speed (revolutions per minute)

System reaction:

If the cooling of the processor boards is insufficient due to RPM problems with the fans, higher RPMs are set.

Action:

Check the RPM values for the individual fans and replace any defective items.

Interpretation of auxiliary data:

The current and set rotation speeds are displayed. In addition, the current board and processor temperatures and the status of the controller are shown.

F7085

SM-DP

TEMPERATURE ERROR

Type:

Diagnosis-relevant (Format 49)

Short text:

Temperature thresholds of processor boards reached

Cause:

A processor or processor board has reached its current lower or upper temperature threshold.

System reaction:

New lower and upper temperature thresholds are set for the processor or the processor board. The rotation speeds of the fans are also recalculated accordingly.

Action:

If this error message occurs frequently, check the cause of the temperature problems (e.g., fan problems [F7084](#)) or save the error data and notify a product specialist.

Interpretation of auxiliary data:

The current temperatures and all temperature thresholds of the processor board that produces the alarm are displayed. In addition, diagnosis-relevant data such as OVER TEMP, HYST and the status of the temperature sensor are shown.

F7100

SM-MEM

1 BIT ERROR

Type:

Service-specific (Format 12)

Short text:

1-bit error

Cause:

Error has no effect on operation; this message is generated by an overflow (> 20 times).

Action:

If error occurs repeatedly, replace the board.

F7101

SM-MEM

2 BIT ERROR

Type:

Service-specific (Format 12)

Short text:

2-bit error

Cause:

Two-bit error. Reaction is always a restart.

Action:

Replace board affected.

F7102

SM-MEM

WRPROT ERROR

Type:

Service-specific (Format 12)

Short text:

Write-protect error

Cause:

Write-protect error. Reaction is always a restart.

Action:

Replace board affected.

F7132

SM-MEM

MEM PARITY ERROR

Type:

Service-specific (Format 12)

Short text:

Corrupted byte

Cause:

Corrupted byte in the local memory of the M8M. The error analysis system FA determines which byte is errored (physical address).

Action:

This error message always initializes a reload. Replace the M8M.

F7153

SM-IP

FW ERROR

Type:

Diagnosis-specific (Format 13)

Short text:

Inconsistency

Cause:

Interface processor (IP) reset because of an inconsistency.

Action:

Check firmware and replace board if necessary.

F7154

SM-IP

SPOR ERROR

Type:

Diagnosis-specific (Format 13)

Short text:

Sporadic error

Cause:

Sporadic error.

Action:

Message only for statistics.

F7155

SM-IP

UNDEFINED ERROR

Type:

Diagnosis-specific (Format 13)

Short text:

Implausible error

Cause:

Implausible error.

Action:

If this error occurs frequently, replace the board. If this does not work, save the error message data and contact your [Next level of support](#).

F7156

SM-IP

MULTIBUS TIMEOUT

Type:

Diagnosis-specific (Format 13)

Short text:

Inconsistency

Cause:

Multibus gets no acknowledgment from interface processor (IP) because of inconsistency.

Action:

Check the hardware, boards and bus cables. If this does not work, save the error message data and contact your [Next level of support](#).

F7168

SM-IP

ACT PARTNER ON-LINE

Type:

Service-specific (Format 13)

Short text:

Server IP responding to polling

Cause:

Server IP is online to IEC bus again.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F7169

SM-IP

STANDBY PARTNER ONLINE

Type:

Service-specific (Format 13)

Short text:

Standby system half responding to polling

Cause:

Standby CC system half is online again.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F7177

SM-IP

ACT NO PARTNER

Type:

Service-specific (Format 2F)

Short text:

No connection to CC

Cause:

No connection to active CC half.

Action:

System responds with a soft restart. Replace IP or MIP board if necessary, and check cables.

F7178

SM-IP

STANDBY NO PARTNER

Type:

Service-specific (Format 13)

Short text:

Failure of standby CC half

Cause:

Standby CC system half cannot be accessed.

Action:

Replace IP or MIP board if necessary, and check cables.

F7186

SM-IP

ACT TIMEOUT

Type:

Diagnosis-specific (Format 13)

Short text:

Error during message transmission

Cause:

An error has occurred during message transmission to the IP of the active system.

Action:This leads to a soft restart. Save error message data and contact your [Next level of support](#).**F7187**

SM-IP

STANDBY TIMEOUT

Type:

Diagnosis-specific (Format 13)

Short text:

Error during message transmission

Cause:

An error has occurred during message transmission to the IP of the standby CC half.

Action:

This leads to a soft restart. Save error message data and contact your [Next level of support](#).

F7188

SM-IP

ADS TIMEOUT

Type:

Diagnosis-specific (Format 13)

Short text:

Error during message transmission

Cause:

An error has occurred during message transmission to the IP of the ADS.

Action:

This leads to a soft restart. Save error message data and contact your [Next level of support](#).

F7189

SM-IP

VMS1 TIMEOUT

Type:

Diagnosis-specific (Format 13)

Short text:

Error during message transmission

Cause:

An error has occurred during message transmission to the IP of VMS-1.

Action:

This leads to a soft restart. Save error message data and contact your [Next level of support](#).

F7190

SM-IP

VMS2 TIMEOUT

Type:

Diagnosis-specific (Format 13)

Short text:

Error during message transmission

Cause:

An error has occurred during message transmission to the IP of VMS-2.

Action:

This leads to a soft restart. Save error message data and contact your [Next level of support](#).

F7191

SM-IP

VMS3 TIMEOUT

Type:

Diagnosis-specific (Format 13)

Short text:

Error during message transmission

Cause:

An error has occurred during message transmission to the IP of VMS-3.

Action:

This leads to a soft restart. Save error message data and contact your [Next level of support](#).

F7192

SM-IP

Cause:

TCS1 TIMEOUT

Type:

Diagnosis-specific (Format 13)

Short text:

Error during message transmission

Cause:

An error has occurred during message transmission to the IP of TCS-1.

Action:

This leads to a soft restart. Save error message data and contact your [Next level of support](#).

F7193

SM-IP

TCS2 TIMEOUT

Type:

Diagnosis-specific (Format 13)

Short text:

Error during message transmission

Cause:

An error has occurred during message transmission to the IP of TCS-2.

Action:

This leads to a soft restart. Save error message data and contact your [Next level of support](#).

F7194

SM-IP

TCS3 TIMEOUT

Type:

Diagnosis-specific (Format 13)

Short text:

Error during message transmission

Cause:

An error has occurred during message transmission to the IP of TCS-3.

Action:

This leads to a soft restart. Save error message data and contact your [Next level of support](#).

F7195

SM-IP

NO PARTNER

Type:

Diagnosis-specific (Format 2F)

Short text:

Remote processor off-line

Cause:

A routine poll has shown that the remote (partner) processor is not responding.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F7196

SM-IP

PARTNER TIME

Type:

Diagnosis-specific (Format 2F)

Short text:

Connection loss

Cause:

Loss of connection on receive side during a message transfer, due to a connection cleardown.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F7197

SM-IP

PARTNER BACK ON-LINE

Type:

Diagnosis-specific (Format 2F)

Short text:

Remote processor on-line again

Cause:

The partner processor is on-line again.

Action:

Positive acknowledgment, no action.

F7198

SM-IP

TIME OUT

Type:

Diagnosis-specific (Format 13)

Short text:

IP not responding

Cause:

IP does not respond within required time.

Action:

Exchange IP.

F7199

SM-IP

PARTNER RESET

Type:

Diagnosis-specific (Format 2F)

Short text:

Remote processor reset

Cause:

The partner processor is being reset due to a previous loss of connection.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F7200

SM-MB

IOP CTO

Type:

Diagnosis-specific (Format 03)

Short text:

No multibus seizure acknowledgment for IOP

Cause:

Input/output processor (IOP) seizes multibus without receiving seizure acknowledgment.

Action:

Check the hardware, firmware, and boards. If this does not work, save the error message data and contact your [Next level of support](#).

F7201

SM-MB

LBC CTO

Type:

Diagnosis-specific (Format 03)

Short text:

No multibus seizure acknowledgment for LBC

Cause:

Line bus controller (LBC) seizes multibus without receiving seizure acknowledgment.

Action:

Check the hardware, firmware, and boards. If this does not work, save the error message data and contact your [Next level of support](#).

F7202

SM-MB

IP CTO

Type:

Diagnosis-specific (Format 03)

Short text:

No multibus seizure acknowledgment for IP

Cause:

Interface processor (IP) seizes multibus without receiving seizure acknowledgment.

Action:

Check the hardware, firmware, and boards. If this does not work, save the error message data and contact your [Next level of support](#).

F7356

IOPS-DC

DC TIMEOUT

Type:

Diagnosis-specific (Format 06)

Short text:

IOPS not responding

Cause:

IOPS does not respond within the necessary time. The IOPS and the SCSI bus are reset and reinitialized. For further details see HEX data. Systems with magnetic tape units: see [F7405](#).

Action:

Reaction by dependability: Soft restart for the server module. Check the hardware, replace IOPS board if necessary

Interpretation of auxiliary data:

see [F7403](#).

F7359

IOPS-DC

IOPS DC UNDEFINED

Type:

Diagnosis-specific (Format 06)

Short text:

Undefined error

Cause:

Error source ambiguous: either IOPS or disk drive. For further details see HEX data.

Action:

Check terminating resistances and bus cable, exchange if necessary.

Interpretation of auxiliary data:

see [F7403](#).

F7360

IOPS-DC

SCSI BLOCK

Type:

Service-specific (Format 06)

Short text:

SCSI bus is blocked

Cause:

No access to HD, IOPA or CT possible.

Action:

Check terminating resistances and SCSI cable, exchange if necessary.
Exchange IOPA/S or HD/Tape/CT.

Interpretation of auxiliary data:

see [F7403](#).

F7361

IOPS-DC

CONTROLLER ERROR

Type:

Service-specific (Format 06)

Short text:

Controller test error

Cause:

IOPA reports controller test error.

Action:

Exchange IOPA.

Interpretation of auxiliary data:

see [F7403](#).

F7362

IOPS-DC

INT TEST ERROR

Type:

Service-specific (Format 06)

Short text:

Interrupt test error

Cause:

IOPA reports interrupt test error.

Action:

Exchange IOPA.

Interpretation of auxiliary data:

see [F7403](#).

F7363

IOPS-DC

MEM MAP ERROR

Type:

Service-specific (Format 06)

Short text:

Memory mapping test error

Cause:

IOPA reports memory mapping test error.

Action:

Exchange IOPA.

Interpretation of auxiliary data:

see [F7403](#).

F7364

IOPS-DC

RAM ERROR

Type:

Service-specific (Format 06)

Short text:

RAM test error

Cause:

IOPA reports RAM test error.

Action:

Exchange IOPA.

Interpretation of auxiliary data:

see [F7403](#).

F7365

IOPS-DC

SELF TEST TIMEOUT

Type:

Service-specific (Format 06)

Short text:

IOPA not responding

Cause:

IOPA does not report within time limit after self-test.

Action:

Exchange IOPA.

Interpretation of auxiliary data:

see [F7403](#).

F7400

DRIVE

N INX

Type:

Service-specific (Format 11)

Short text:

Device error

Cause:

Slot information (LTG:) is contained in the auxiliary data.

Action:

Reaction by dependability: statistics count or deactivation of device affected.
Check the hardware, terminating resistances, SCSI cable, IOPS and devices (drives).

Interpretation of auxiliary data:

see [F7403](#).

F7402

DRIVE

ERROR DET BY IOP

Type:

Service-specific (Format 11)

Short text:

SCSI controller (IOPS, IOPA(X), SIOP) not present

Cause:

Error on HD, CT, TAPE or DAT recorder/drive. The device affected is displayed with DRIVE:...; H=HD, C=CT, T=TAPE, D=DAT.

Action:

Check the hardware, terminating resistances, SCSI cable, and devices (drives).
Exchange defective HW or devices.

Interpretation of auxiliary data:

see [F7403](#).

F7403

DRIVE

IO HARDWARE

Type:

Service-specific (Format 11)

Short text:

Error on HD, CT, TAPE or DAT recorder/drive

Cause:

Error detected by controller. The device affected is displayed with DRIVE:...; H=HD, C=CT, T=TAPE, D=DAT.

Action:

Check the hardware, terminating resistances, SCSI cable, and devices (drives).
Exchange defective HW or devices.

Error messages

Interpretation of auxiliary data:

Byte 5	=	IOPS status (valid only when byte 9 = H'0A)
		The auxiliary data varies according to the board type (IOPS/IOPA(X)/DP-boards with SIOP). Only the most common bytes are listed here.
	10	No IOP error, order processed
	11	SCSI parity error
	13	FATAL SCSI ERROR, command canceled
	14	FATAL SCSI ERROR, SCSI bus reset, command canceled
	15	SCSI bus timeout, command canceled
	16	Command timeout, command canceled
	17	SCSI bus reset detected, command canceled
	18	Order aborted
	1A	Drive not initialized
	1B	No job started (Ready / not Ready / Ready)
	1C	No job started (Ready / not Ready)
	1D	Insufficient RAM
	20	IOPS task does not exist
	21	Command not recognized
	22	Illegal command
	23	Command sent before end of job in process
	24	IOPS-internal error
	25	IOPS-internal error
	2A	Command not allowed, task not started
	30	Invalid device ID
	32	Invalid transfer descriptor
	38	Maximum number of devices exceeded
	39	Drive type invalid
	3F	Parameter error
	40	SCSI device not responding, selection aborted
	41	Checksum error, command timeout
	41	Checksum error, command canceled

	44	SCSI bus is busy, selection canceled x IOPA copy/verify command error, command canceled
Byte 9	=	Operating status
	00	IO_UNCLASS
	01	IO_DATA
	02	IO_FORMAT
	03	IO_PRINT
	04	IO_WRPROT
	05	IO_HARDW
	06	IO_DELREC
	07	IO_MEDCHG
	08	IO_NOTRDY
	09	IO_CORR
	0A	IO_IOPS
	0C	IO_TIMEOUT
	0D	IO_SOFTW
	0E	IO_COMM
	10	IO_BUS_BUSY
Byte 0A	=	SCSI Status
	00	OK
	02	device reports error
	08	bus busy
	18	reservation conflict
Byte 0B	=	Sense Key
	00	no sense
	01	recovered error
	02	device not ready/access not possible
	03	medium error
	04	hardware error
	05	illegal command
	06	device reset
	07	data protect (medium write-protected)

Error messages

	08	blank check (usually EOD)
	0A	copy aborted
	0B	command canceled
	0D	volume overflow
Byte 0C	=	Additional Sense Code (device-type-specific, vendor-specific).
Byte 0D	=	Additional Sense Code Qualifier
Byte 0E	=	SCSI Command
	00	test unit ready
	01	rewind
	03	request sense
	04	format unit
	05	read block limits
	07	reassign blocks
	08	read (Group 0)
	0A	write (Group 0)
	0B	seek (Group 0)
	0D	get defect list
	0F	read reverse
	10	write filemarks
	11	space
	12	query
	13	verify
	14	recover buffered data
	15	mode select (Group 0)
	16	reserve
	17	release
	18	copy
	19	erase
	1A	mode sense (Group 0)
	1B	load/unload, start/stop unit
	1C	receive diagnostic results

	1D	send diagnostic
	1E	prevent/allow medium removal
	25	read capacity
	28	read (Group 1)
	2B	locate (Group 1)
	2E	write and verify
	2F	verify
	34	read position
	37	read defect data
	3F	write buffer
	3C	read buffer
	40	change definition (Group 2)
	4C	log select (Group 2)
	4D	log sense (Group 2)
Byte 18-1C	=	Device name. Displayed bytes are in HEX; interpretation according to ASCII table (convert HEX to ASCII)
Byte 18-19	=	Unit
	A1	ADS
	V1	Voice Mail
	T1	Text-Fax-Server
Byte 1A	=	Device type
	H	hard disk
	T	magnetic tape
	D	DAT recorder
	C	cartridge
Byte 1B-1C	=	Controller number

F7404

DRIVE

IO NOT READY

Type:

Service-specific (Format 11)

Short text:

Error on HD, CT, TAPE or DAT recorder/drive.

Cause:

Controller not present. The device affected is displayed with DRIVE:....; H=HD, C=CT, T=TAPE, D=DAT.

Action:

Check the hardware, terminating resistances, SCSI cable, and devices (drives). Exchange defective HW or devices.

Interpretation of auxiliary data:

see [F7403](#).

F7405

DRIVE

IO DATA

Type:

Service-specific (Format 11)

Short text:

Error on HD, CT, TAPE, MO, or DAT recorder/drive

Cause:

Loss of data or bit corruption. The device affected is displayed with DRIVE:....; H=HD, C=CT, T=TAPE, D=DAT. In systems with magnetic tape units, parallel access to the SCSI bus can cause collisions, which make the evaluation of the call charge data impossible (see also [F7356](#)).

Action:

Exchange or clean device and/or medium. Magnetic tape units: check the ground connection to the tape unit/ replace the SCSI bus as per HW Systems Service. MO disk drives: check DIP-FIX settings (see Devices/MO).

Interpretation of auxiliary data:

see [F7403](#).

F7406

DRIVE

IO ERROR

Type:

Service-specific (Format 11)

Short text:

Error on HD, CT, TAPE or DAT recorder/drive

Cause:

The device affected is displayed with DRIVE:....; H=HD, C=CT, T=TAPE, D=DAT.

Action:

Check the hardware, terminating resistances, SCSI cable, and devices (drives).
Exchange defective HW or devices.

Interpretation of auxiliary data:

The auxiliary data is generated by the Linux host and is built up the following way:

HD EVENT: smart NodeA SNr:22GXC076T Dev:/dev/sdb Mod:TOSHIBA
MK2576GSXZ

ID:191 Val:44912

Error: over threshold

Most of the time these are HD SMART events and can be interpreted like the following:

- The 1st line indicates the location of the error (node, serial number, device node, model of the HD)
- The 2nd line contains SMART info: the attribute ID and raw value. The most frequent error causes are:

ID5:	When the hard drive finds a read/write/verification error, it marks that sector as "reallocated" and transfers data to a special reserved area (spare area).
ID190:	This attribute is the Airflow Temperature and indicates when the drive's temperature exceeded the threshold in the past
ID 191:	The count of errors resulting from externally induced shock & vibration
ID197:	Count of "unstable" sectors. If an unstable sector is subsequently read successfully, this value is decreased and the sector is not remapped.
ID198:	The total count of uncorrectable errors when reading/writing a sector. A rise in the value of this attribute indicates defects of the disk surface and/or problems in the mechanical subsystem.

- The 3rd line indicates the classification of the error.

F7407

DRIVE

QUALITY DEGRADATION

Type:

Service-specific (Format 11)

Short text:

Bad DAT quality

Cause:

Quality of tape or DAT recorder has deteriorated.

Action:

Error messages

Insert cleaning tape, Exchange old tape, or Exchange defective DAT recorder.
Delete the alarm [CENTRAL:029](#) MAINTENANCE NOTE if set.

F7408

DRIVE

RESET/DATA LOSS

Type:

Service-specific (Format 11)

Short text:

Power supply failure

Cause:

Loss of power for (external) DAT recorder.

Action:

Check power supply Check that mains power switch is switched on Always connect external DAT recorder to an uninterruptible power supply (UPS). Delete the alarm [CENTRAL:029](#) MAINTENANCE NOTE if set.

F7420

FLASHMEM

WRITE ERROR

Type:

Service-specific (Format 11)

Short text:

Flash memory write error

Cause:

Error while writing to flash memory.

Action:

Exchange DP board.

F7421

FLASHMEM

ERASE ERROR

Type:

Service-specific (Format 11)

Short text:

Flash memory erase error

Cause:

Error while erasing from flash memory.

Action:

Exchange DP board.

F7422

FLASHMEM

LOW VOLTAGE DETECTED

Type:

Service-specific (Format 11)

Short text:

Flash memory voltage drop

Cause:

Voltage drop while writing to / erasing from flash memory.

Action:

Exchange DP board.

F7530

LCX

NO ERROR

Type:

Service-specific (several formats apply)

Short text:

Tests completed without errors

Cause:

All associated tests completed without errors.

Action:

Tested unit back in service.

F7531

LCX

LCU CENTRAL ERROR

Type:

Service-specific (Format 03)

Short text:

LBU / LCU error

Cause:

Both channels found defective in LBU / LCU loop test.

Action:

Check hardware and replace defective units. If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7532

LCX

LCX CORE TEST ERROR

Type:

Service-specific (Format 03)

Short text:

Core test error

Cause:

Core test error detected in service module during LCX recovery (central hardware LCX error). Core test = e.g. CHECKSUM ERROR PROM identified in self-test.

Action:

Check hardware and replace defective units.

F7533

LCX

LCX INTERFACE ERROR

Type:

Service-specific (several formats apply)

Short text:

LCX not reporting

Cause:

LCX fails to report in or is defective during LCX recovery.

Action:

Check hardware and replace defective units. Check LBU/LCU, check backplane jumper settings (must be plugged according to LBU/LCU function). Check connecting cables between basic shelf and expansion shelf. If you are still unable to find the cause of the error, replace the shelf.

F7534

LCX

LCX INTERRUPT ERROR

Type:

Service-specific (Format 04)

Short text:

LCX not responding

Cause:

LCX in the service module is unable to respond to an interrupt of the data processor (DP).

Action:

Check hardware (LBC/LCX) and replace defective units.

F7536

LCX

LCX OMS ERROR

Type:

Service-specific (Format 09)

Short text:

Plausibility error

Cause:

Plausibility error detected by LCX OMS.

Action:

Save the error message data and contact your [Next level of support](#).

F7537

LCX

LCX PLAUS ERROR

Type:

Diagnosis-specific (Format 05)

Short text:

Plausibility error

Cause:

Plausibility error detected by one of the programs in the LCX.

Action:

Save the error message data and contact your [Next level of support](#).

F7538

LCX

LCX TEST TIMEOUT ERROR

Type:

Service-specific (several formats apply)

Short text:

Timeout

Cause:

Timeout detected in an LBU/LCU test.

Action:

Check hardware and replace defective units. Check LBU/LCU. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7541

LCX

LCX LOAD ERROR

Type:

Service-specific (Format 03)

Short text:

Load error

Cause:

Error detected during LCX load, possibly file error on hard disk. Not an LCX error.

Action:

Start device test for the hard disk. LCS0: check that both S0 interfaces were configured with "ADD-LCS0"

F7542

LCX

LCX NOT READY

Type:

Service-specific (Format 0B)

Short text:

Sporadic error

Cause:

Sporadic overload or HW error.

Action:

Message only for statistics. Look for any associated, additional error messages, if this error occurs frequently.

F7544

LCX

LCR LOOP TEST TIMEOUT

Type:

Service-specific (Format 03)

Short text:

LCR loop test

Cause:

LCR loop test.

Action:

Timeout during test execution usually leads to LCX restart. Check hardware and replace defective units. Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7545

LCX

LCR LOOP TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

LCR loop test

Cause:

The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7546

LCX

VCD LOOP TEST TIMEOUT

Type:

Service-specific (several formats apply)

Short text:

VCD loop test

Cause:

Loop test for digital voice compression.

Action:

Timeout during test execution usually leads to LCX restart. Check hardware and replace defective units. Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7547

LCX

FCD LOOP TEST ERROR

Type:

Service-specific (several formats apply)

Short text:

FCD loop test.

Cause:

Test aborted. Error on FCD detected during test.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7548

LCX

VCD INIT TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

VCD INIT test

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7549

LCX

VCD INIT TEST TIMEOUT

Type:

Service-specific (several formats apply)

Short text:

Timeout

Cause:

Timeout in the data processor (DP) in the overall VECO test.

Action:

Check hardware and replace defective units. Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7550

LCX

VCD INIT TEST ERROR

Type:

Service-specific (Format 03)

Short text:

Central board error

Cause:

Central board error detected during the VCD INIT test.

Action:

Replace defective board.

F7551

LCX

LCC INIT TEST ABORT

Type:

Service-specific (Format 03)

Short text:

LCC INIT test

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7552

LCX

LCC INIT TEST TIMEOUT

Type:

Service-specific (Format 03)

Short text:

LCC INIT test

Cause:

Timeout identified in loop test. Timer in data processor (DP) timed out.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7553

LCX

LCC INIT TEST ERROR

Type:

Service-specific (Format 03)

Short text:

LCC INIT test

Cause:

Central error detected by associated tests.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7554

LCX

LCC LOOP TEST TIMEOUT

Type:

Service-specific (Format 03)

Short text:

LCC loop test.

Cause:

LCC loop test.

Action:

Timeout during test execution usually leads to LCX restart. Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7556

LCX

CONF ABORT

Type:

Diagnosis-specific (several formats apply)

Short text:

Configuration abort

Cause:

Analysis cannot be executed because configuration order for LCX or channel was aborted on account of a plausibility error. A plausibility error message from dependability is expected in addition to this report.

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#).

F7557

LCX

IF-BUS TEST VCD ERROR

Type:

Service-specific (Format 03)

Short text:

Bus error

Cause:

Bus error while polling the VCD. An error was detected by the relevant tests.

Action:

Check hardware and VCD board. Replace defective units.

F7558

LCX

IF-BUS TEST LCC ERROR

Type:

Service-specific (Format 03)

Short text:

Bus error

Cause:

Bus error in LCC. An error was detected by the relevant tests.

Action:

Check hardware and LCC board. Replace defective units.

F7559

LCX

IF-BUS TEST BUS ERROR

Type:

Service-specific (Format 03)

Short text:

General line hardware error.

Cause:

Several boards found defective by associated tests.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7560

LCX

IF-BUS TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

Bus error during test.

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7561

LCX

IF-BUS TEST TIMEOUT

Type:

Service-specific (several formats apply)

Short text:

Bus error

Cause:

BUS error detected on IF bus.

Action:

Timeout during test execution usually leads to LCX restart. Check hardware and replace defective units. Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7562

LCX

LCX REQ TEST ERROR

Type:

Service-specific (Format 03)

Short text:

LCX request test error.

Cause:

An error was detected by associated tests.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7563

LCX

LCX REQ TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

LCX request test.

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7564

LCX

LCX REQ TEST TIMEOUT

Type:

Service-specific (several formats apply)

Short text:

LCX request test.

Cause:

LCX request test timeout.

Action:

Timeout during test execution usually leads to LCX restart. Check hardware and replace defective units. Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7565

LCX

TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

Test aborted

Cause:

Test aborted.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7566

LCX

RAX LOOP TEST TIMEOUT

Type:

Service-specific (several formats apply)

Short text:

RAX loop test

Cause:

RAX loop test timeout.

Action:

Timeout during test execution usually leads to LCX restart. Check hardware (RAX board) and replace defective units. Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7568

LCX

RAX INIT TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

Overall RAX test.

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and RAX board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7569

LCX

RAX INIT TEST TIMEOUT

Type:

Service-specific (several formats apply)

Short text:

Overall RAX test.

Cause:

Timeout during test execution.

Action:

Check hardware (RAX board) and replace defective units. Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7570

LCX

RAX INIT TEST ERROR

Type:

Service-specific (several formats apply)

Short text:

Central hardware error

Cause:

A central hardware error was detected by the overall RAX test.

Action:

Check hardware and RAX board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7571

LCX

FCD LOOP TEST TIMEOUT

Type:

Service-specific (several formats apply)

Short text:

FCD loop test.

Cause:

FCD loop test.

Action:

Timeout during test execution usually leads to LCX restart. Check hardware (FCD board) and replace defective units. Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7573

LCX

IF-BUS/RAX ERROR

Type:

Service-specific (several formats apply)

Short text:

Board defective

Cause:

Board found defective by IF bus test.

Action:

Check hardware and RAX board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7574

LCX

LCU INIT TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

LCU loop test.

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and LCU board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7575

LCX

LCU LOOP TEST TIMEOUT

Type:

Service-specific (several formats apply)

Short text:

LCU loop test

Cause:

LCU loop test.

Action:

Timeout during test execution usually leads to LCX restart. Check hardware (LBU/LCU board) and replace defective units. Check LCR. Check connecting cables between basic shelf and expansion shelf. Check power supply of expansion shelf. If you are unable to find the cause of the error, save the error message data and contact your [Next level of support](#).

F7576

LCX

LCU MODEM TEST TIMEOUT

Type:

Service-specific (several formats apply)

Short text:

LCU modem loop test.

Cause:

LCU modem loop test.

Action:

Timeout during test execution usually leads to LCX restart. Check hardware and LCU board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7577

LCX

IF-BUS/RAX/LCC ERROR

Type:

Service-specific (several formats apply)

Short text:

RAX/LCC board defective

Cause:

RAX/LCC board found defective by IF bus test .

Action:

Check hardware (RAX/LCC board). Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7578

LCX

IF-BUS/VCD/LCC ERROR

Type:

Service-specific (several formats apply)

Short text:

VCD/LCC board defective

Cause:

VCD/LCC board found defective by IF bus test.

Action:

Check hardware (VCD/LCC board). Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7579

LCX

IF-BUS/FCD1/LCC ERROR

Type:

Service-specific (several formats apply)

Short text:

FCD1/LCC board defective.

Cause:

FCD1/LCC board found defective by IF bus test.

Action:

Check hardware (FCD1/LCC board). Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7580

LCX

IF-BUS/FCD2/LCC ERROR

Type:

Service-specific (several formats apply)

Short text:

FCD2/LCC board defective.

Cause:

FCD2/LCC board found defective by IF bus test.

Action:

Check hardware (FCD2/LCC board). Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7581

LCX

IF-BUS/FCD1/VCD ERROR

Type:

Service-specific (several formats apply)

Short text:

FCD1/VCD board defective.

Cause:

FCD1/VCD board found defective by IF bus test.

Action:

Check hardware (FCD1/VCD board) and replace defective board. If this does not work, save the error message data and contact your [Next level of support](#).

F7582

LCX

IF-BUS/FCD2/VCD ERROR

Type:

Service-specific (several formats apply)

Short text:

FCD2/VCD board.

Cause:

FCD2/VCD board found defective by IF bus test.

Action:

Check hardware (FCD2/VCD board) and replace defective board. If this does not work, save the error message data and contact your [Next level of support](#).

F7583

LCX

IF-BUS/FCD1/FCD2 ERROR

Type:

Service-specific (Format 03)

Short text:

FCD1/FCD2 board defective

Cause:

FCD1/FCD2 board found defective by IF bus test.

Action:

Check hardware (FCD1/FCD2 board) and replace defective board. If this does not work, save the error message data and contact your [Next level of support](#).

F7584

LCX

LCR LOOP TEST ERROR

Type:

Service-specific (several formats apply)

Short text:

Hardware error

Cause:

A hardware error was detected by the LCR loop test.

Action:

Check hardware and LCR board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7585

LCX

LCX SYSTEM ERROR

Type:

Diagnosis-relevant (several formats relevant)

Short text:

Plausibility error

Cause:

Software or hardware plausibility error detected by processor (LCS0) or operating system.

Action:

Save error message data and contact your [Next level of support](#). Swap out the board SCS0-D if this error message occurs frequently.

F7586

LCX

LCX NOTICE

Type:

Diagnosis-specific (Format 06)

Short text:

Plausibility error.

Cause:

Plausibility error detected by program on the LCX.

Action:

In the case of problems on the LCS0, save the error message logs for further evaluation.

F7592

LCX

CONF LIMIT

Type:

Service-specific (Format 10)

Short text:

LCX/channel association blocked

Cause:

The LCX/channel association has been blocked by dependability due to excessive restarts.

Action:

Save error message data, including preceding, relevant error messages, and contact your [Next level of support](#).

F7597

LCX

SWITCH ON LIMIT

Type:

Service-specific (several formats apply)

Short text:

LCX/channel association blocked

Cause:

Unable to activate affected LCX/channel association via automatic restart.
LCX/channel association has been blocked by dependability due to excessive restarts.

Action:

Save error message data, including preceding, relevant error messages, and contact your [Next level of support](#).

F7600

LCX-CHAN

NO ERROR

Type:

Service-specific (several formats apply)

Short text:

Tests completed without errors

Cause:

All associated tests completed without errors.

Action:

Tested unit back in service, no action.

F7601

LCX-CHAN

LCU LOOP TEST ERROR

Type:

Service-specific (Format 0E)

Short text:

LCU loopback error

Cause:

Error detected by LCU loopback test.

Action:

Check hardware (LCU board). Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7603

LCX-CHAN

LCU MODEM ERROR

Type:

Service-specific (several formats apply)

Short text:

LCU modem error.

Cause:

LCU modem error.

Action:

Test modem, replace if necessary. If this does not work, replace LCU because error might also be in the LCU.

F7604

LCX-CHAN

START/STOP TIMEOUT

Type:

Diagnosis-specific

Short text:

Timeout

Cause:

Timeout during attempt by call processing to activate or deactivate a channel.

Action:

If this error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F7605

LCX-CHAN

D-CHAN DISCON

Type:

Service-specific (several formats apply)

Short text:

Unexpected HDLC disconnect

Cause:

D channel layer 2 (HDLC link) cleared down unexpectedly.

Action:

Check that the B-channel connection on the SWU side is okay. This error message can also occur as a result of [F7537](#).

F7606

LCX-CHAN

NET TIMEOUT DISCON

Type:

Service-specific (several formats apply)

Short text:

Forced release for B channel

Cause:

B channel connection was forcibly released.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#). Only output in conjunction with other error messages.

F7607

LCX-CHAN

LCU LOOP TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

LCU loop test

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and LCU board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7608

LCX-CHAN

LCU MODEM TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

LCU modem and loop test

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and LCU board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7609

LCX-CHAN

LCR LOOP TEST ERROR

Type:

Service-specific (several formats apply)

Short text:

LCR loop test error.

Cause:

LCR loop test error.

Action:

Check hardware and LCR board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7610

LCX-CHAN

LCR INIT ABORT

Type:

Service-specific (several formats apply)

Short text:

Plausibility error

Cause:

The LCX restart was aborted on account of a plausibility error.

Action:

Check hardware and LCR board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7612

LCX-CHAN

LCR LOOP TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

LCR loop test

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and LCR board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7613

LCX-CHAN

VCD LOOP TEST ERROR

Type:

Service-specific (several formats apply)

Short text:

VCD loop test error

Cause:

Error found during digital voice compression loop test.

Action:

Check hardware (VCD board). Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7615

LCX-CHAN

VCD LOOP TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

VCD loop test.

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and VCD board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7620

LCX-CHAN

LCC LOOP TEST ERROR

Type:

Service-specific (Format 0F)

Short text:

LCC loop test error.

Cause:

An error was detected by associated tests.

Action:

Check hardware and LCC board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7622

LCX-CHAN

LCC LOOP TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

LCC loop test.

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware and LCC board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7623

LCX-CHAN

VCD INIT CHAN ERROR

Type:

Service-specific (several formats apply)

Short text:

Channel error

Cause:

A channel error was detected by overall VCD test.

Action:

Check hardware and VCD board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7624

LCX-CHAN

LCC INIT CHAN ERROR

Type:

Service-specific (several formats apply)

Short text:

Channel error

Cause:

A channel error was detected by overall LCC test.

Action:

Check hardware and LCC board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7625

LCX-CHAN

CONF ABORT

Type:

Service-specific (several formats apply)

Short text:

Configuration abort

Cause:

Configuration abort. Error during channel activation or deactivation.

Action:

Check hardware and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7627

LCX-CHAN

CHAN NOT READY

Type:

Service-specific (several formats apply)

Short text:

Channel not ready

Cause:

Sporadic HW error.

Action:

If error repeats, check LCX board. Replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7628

LCX-CHAN

LCU CONTROL LINE ERROR

Type:

Service-specific (Format 10)

Short text:

Channel control line error

Cause:

V24 interface line error. Defective channel number is output.

Action:

Channel is monitored by dependability and released again when the error is repaired. Check connecting cable. Check if connected PC, ITC, or other devices were switched off.

F7629

LCX-CHAN

CMS PROTOCOL ERROR

Type:

Service-specific (several formats apply)

Short text:

CMS protocol error.

Cause:

CMS protocol error.

Action:

Deactivate and reactivate affected line. If you are unable to determine the cause of the error, and error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F7631

LCX-CHAN

RAX LOOP TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

RAX loop test.

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware (RAX) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7632

LCX-CHAN

RAX LOOP TEST ERROR

Type:

Service-specific (several formats apply)

Short text:

Hardware error

Cause:

A channel-specific hardware error was detected by RAX loop test.

Action:

Check hardware (RAX) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7633

LCX-CHAN

RAX LOOP CLOCK ERROR

Type:

Service-specific (several formats apply)

Short text:

Clock error

Cause:

A channel-specific clock error was detected by RAX loop test.

Action:

Check hardware (RAX) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7637

LCX-CHAN

FCD LOOP TEST ABORT

Type:

Service-specific (several formats apply)

Short text:

FCD loop test.

Cause:

Test aborted. The test was rejected, i.e. not performed, or ended because of a plausibility error.

Action:

Check hardware (FCD) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7638

LCX-CHAN

FCD LOOP TEST ERROR

Type:

Service-specific (several formats apply)

Short text:

Hardware error

Cause:

A hardware error was detected by FCD loop test.

Action:

Check hardware (FCD) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7639

LCX-CHAN

RAX INIT CHAN ERROR

Type:

Service-specific (several formats apply)

Short text:

Channel error

Cause:

A channel error was detected by overall RAX test.

Action:

Check hardware (RAX) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7640

LCX-CHAN

RAX INIT CLOCK ERROR

Type:

Service-specific (several formats apply)

Short text:

Clock error

Cause:

A central clock error was detected by overall RAX test.

Action:

Check hardware (RAX) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7641

LCX-CHAN

IF-BUS/FCD1 ERROR

Type:

Service-specific (several formats apply)

Short text:

Board defective

Cause:

Board found defective by IF bus test.

Action:

Check hardware (FCD1) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7642

LCX-CHAN

IF-BUS/FCD2 ERROR

Type:

Service-specific (several formats apply)

Short text:

Board defective

Cause:

Board found defective by IF bus test.

Action:

Check hardware (FCD2) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7643

LCX-CHAN

LCS0 INIT CHAN ERROR

Type:

Service-specific (Format 0E)

Short text:

Loop error

Cause:

LCS0 initialization test reports loop errors on one interface.

Action:

Check hardware (LCS0) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7644

LCX-CHAN

LCS0 LOOP TEST ERROR

Type:

Service-specific (Format 0E)

Short text:

Error in loop test

Cause:

LCS0 loop test reports errors.

Action:

Check hardware (LCS0) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7645

LCX-CHAN

LCS0 LOOP TEST ABORT

Type:

Service-specific (Format 0A)

Short text:

Implausible test result

Cause:

LCS0 loop test was rejected, i.e. not performed.

Action:

Check hardware (LCS0) and replace defective units. If this does not work, save the error message data and contact your [Next level of support](#).

F7646

LCX-CHAN

CONF LIMIT

Type:

Service-specific (Format 10)

Short text:

LCX/channel association blocked

Cause:

The LCX/channel unit concerned has been blocked due to too many restarts.

Action:

Save error message data, including preceding, relevant error messages, and contact your [Next level of support](#).

F7650

CHAR-COM

ERROR

Type:

Service-specific (Format 08)

Short text:

Error in call charge computer

Cause:

General error detected in the call charge computer. The interface which caused the error is indicated in the slot information (LTG:). Interpretation of auxiliary data depends on the type of call detail recording used (GCU/MX or 3001A).

Action:

Action depends on the evaluation of the HEX data. Save error message data and contact your [Next level of support](#).

Byte 3	=	30 No error
	31	Format error (check against AMO FTBL and with GCU, menu 0.7.6.2)
	33	Format too long or too short
Byte 4	= 3	0 No error
	31	HD access error
	33	80% database capacity used
	35	Software error in GCU
	36	SDS intermediate buffer full (SDS=standard data set)
	38	100% database capacity used

Error messages

	39	Page printer inoperable (check page printer)

F7650 ERROR (for 3001A)

Byte 3	=	30 No error
	31	Format error
	33	Format too long or too short
	34	Timeout error (timer run out, data record not completed)
Byte 4	=	30 No error
	31	Floppy disk access error, check DKT file (DKT = Department, account, user)
	33	80% database capacity used on floppy disk (FD)
	34	Stack pointer overflow
	35	Error in controller 1
	36	Queue overflow
	37	Power failure
	38	100% database capacity used on floppy disk
	39	Page printer not operating (check page printer)

F7660

LCX-CHAN

PSIO CONT LINE ERROR

Type:

Service-specific (Format 10)

Short text:

Channel control error on PSIO

Cause:

V24 interface line error. Defective channel number is output.

Action:

Channel is monitored by dependability and released again when the error is repaired. Check connecting cable. Check if connected PC, ITC, or other devices were switched off.

F7661

LCX-CHAN

SWITCH ON LIMIT

Type:

Service-specific (Format 10)

Short text:

Channel blocked

Cause:

Unable to activate affected channel via automatic restart. Channel has been blocked by dependability due to excessive restarts.

Action:

Only output in conjunction with other error messages. Save error message data, including preceding, relevant error messages, and contact your [Next level of support](#).

F7662

LCX-CHAN

DONGLE ATTACHED

Type:

Service-specific (Format 10)

Short text:

Dongle detected on channel 8 and tested.

Cause:

Restart of the ADP, or dongle has been plugged. This message simply indicates that a dongle has been plugged.

1) A dependability test of the dongle was completed without errors.

- This message does not indicate that the correct dongle has been plugged.

Action:

No action necessary.

F7663

LCX-CHAN

DONGLE MISSING

Type:

Service-specific (Format 10)

Short text:

Dongle not plugged.

Cause:

Restart of the ADP. No dongle detected on channel 8 of the ADP data processor.

Action:

Correct dongle must be plugged on channel 8 of the ADP data processor.

F7664

LCX-CHAN
DONGLE HW READ ERROR

Type:

Service-specific (Format 10)

Short text:

Dongle detected on channel 8.

Cause:

Restart of the ADP, or dongle has been plugged. This message indicates that a dongle was detected on channel 8 of the ADP data processor.

1) A dependability test of the dongle was completed with errors.

- Dongle is defective.

Action:

Exchange defective dongle. New dongle must be plugged on channel 8 of the ADP data processor.

Interpretation of auxiliary data:

Message from CMS to FAB LINE

Byte 1	Event code
Byte 2	Service ID
Byte 3-6	AS connection
Byte 7	Channel number
Byte 15	Indication register
Byte 16	Dongle byte
	23 = Dongle test initiated, resulted in test errors

F7665

LCX-CHAN
DONGLE CMS TEST TO

Type:

Service-specific (Format 10)

Short text:

Dongle detected on channel 8.

Cause:

Restart of the ADP, or dongle has been plugged. This message indicates that a dongle was detected on channel 8 of the ADP data processor.

1) A dependability test of the dongle was not completed.

- CMS failed to respond within 20 seconds.

Action:

Unplug and replug the dongle. Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Message from CMS to FAB LINE

Byte 1	Event code
Byte 2	Service ID
Byte 3-6	AS connection
Byte 7	Channel number
Byte 15	Indication register
Byte 16	Dongle byte
	22 = Dongle test initiated, resulted in timeout

F7666

LCX-CHAN

DONGLE TEST REJECTED

Type:

Service-specific (Format 10)

Short text:

Dongle detected on channel 8.

Cause:

Restart of the ADP, or dongle has been plugged. This message indicates that a dongle was detected on channel 8 of the ADP data processor.

1) A dependability test of the dongle was not completed.

- Unable to set channel to 'CHECK' status.

Action:

Unplug and replug the dongle. Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

Message from CMS to FAB LINE

Byte 1	Event code

Error messages

Byte 2	Service ID	
Byte 3-6	AS connection	
Byte 7	Channel number	
Byte 15	Indication register	
Byte 16	Dongle byte	
	1	Channel not in status OOS_DEF or IN_SERVICE
	11	Attempt to set to 'CHECK' status resulted in plausibility error
	12	Attempt to set to 'CHECK' status rejected
	13	Attempt to set to 'CHECK' status with negative result
	21	Dongle test initiated, rejected

F7700

LBC-LB

NO ERROR

Type:

Service-specific (several formats apply)

Short text:

Unconfirmed error

Cause:

An error could not be confirmed during LBC test.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F7701

LBC-LB

CENTRAL ERROR

Type:

Service-specific (Format 03)

Short text:

LINEBUS error

Cause:

General error on the line bus (LBC).

Action:

Check/exchange LCU boards. If exchanging boards connected to the line bus, these must be blocked via the BSSM AMO or the LBC key. If the LBC is exchanged, an ADS restart is unavoidable in order to put the board into service.

8.9 F8000

A9000 -- F1000 -- F2000 -- F3000 -- F4000 -- F5000 -- F6000 -- F7000 -- F8000

F8000	F8001	F8010	F8011	F8012	F8013	F8014	F8015	F8016	F8017	F8018
F8019	F8020	F8021	F8022	F8023	F8024	F8025	F8026	F8027	F8028	F8029
F8030	F8100	F8101	F8102	F8103	F8104	F8105	F8106	F8107	F8120	F8121
F8203	F8204	F8205	F8250	F8251	F8252	F8253	F8254	F8255	F8256	F8257
F8258	F8259	F8260	F8261	F8262	F8263	F8264	F8265	F8266	F8267	F8268
F8269	F8270	F8271	F8272	F8273	F8274	F8275	F8276	F8277	F8278	F8279
F8280	F8281	F8282	F8283	F8284	F8285	F8286	F8287	F8288	F8289	F8290
F8291	F8292	F8293	F8294	F8300	F8301	F8302	F8303	F8304	F8305	F8306
F8307	F8320	F8321	F8384	F8385	F8386	F8387	F8388	F8500	F8501	F8502

F8000

CO-LINE

SWITCHED

Type:

Service-specific (Format 00)

Short text:

Trunk failure transfer ON

Cause:

Trunk failure transfer (TFT/ALUM relay) switched.

Action:

Determine reason for trunk failure transfer (e.g. power failure).

F8001

CO-LINE

SWITCHED BACK

Type:

Service-specific (Format 00)

Short text:

Error messages

Trunk failure transfer OFF

Cause:

Trunk failure transfer (TFT/ALUM relay) switched back. See also [F8000](#).

Action:

Positive acknowledgment, no action.

F8010

POW FAIL

START

Type:

Service-specific (Format 00)

Short text:

Start of power failure

Cause:

Start of power failure.

Action:

Transfer from AC power supply to battery.

F8011

POW FAIL

END

Type:

Service-specific (Format 00)

Short text:

End of power failure

Cause:

End of power failure.

Action:

Transfer from battery to AC power supply.

F8012

POW FAIL

CONVERTER ON

Type:

Service-specific (Format 00)

Short text:

Converter back in operation

Cause:

Converter back in operation (e.g. DCIRA inverter).

Action:

Positive acknowledgment of [F8013](#).

F8013

POW FAIL

CONVERTER OFF

Type:

Service-specific (Format 00)

Short text:

Converter out of service

Cause:

Converter is not operating (e.g. device switched off or 48V output not supplied).

Action:

A 24-pin interface for monitoring and control equipment can be found on the front panel of the DCIRA. Check that the positive acknowledgment with [F8012](#) is output. Check whether the converter is switched on or whether the 48V output has failed.

F8014

POW FAIL

POWER FAIL CC ON

Type:

Service-specific (Format 00)

Short text:

Failure of PSU in CC shelf

Cause:

At least one power supply unit in the CC shelf has failed.

Action:

Replace defective power supply unit.

F8015

POW FAIL

POWER FAIL CC OFF

Type:

Service-specific (Format 00)

Short text:

PSUs in CC shelf in operation

Cause:

All power supply units in the CC shelf are operational again.

Action:

Positive acknowledgment, no action.

F8016

POW FAIL

POWER FAIL LTUE ON

Type:

Service-specific (Format 00)

Short text:

LTUE power converter failure

Cause:

At least one LTUE power supply unit has failed.

Action:

Replace defective power supply unit.

F8017

POW FAIL

POWER FAIL LTUE OFF

Type:

Service-specific (Format 00)

Short text:

End of LTUE power converter failure

Cause:

All LTUE power supply units are operational again.

Action:

Positive acknowledgment, no action.

F8018

POW FAIL

POWER FAIL LTU ON

Type:

Service-specific (Format 00)

Short text:

LTU power converter failure

Cause:

At least one LTU power supply unit has failed.

Action:

Replace defective power supply unit.

F8019

POW FAIL

POWER FAIL LTU OFF

Type:

Service-specific (Format 00)

Short text:

End of LTU power converter failure

Cause:

All LTU power supply units are operational again.

Action:

Positive acknowledgment, no action.

F8020

POW FAIL

BATT MGR CARD FAILED

Type:

Service-specific (Format 00)

Short text:

Hardware error

Cause:

Error in the HW for monitoring the AC/DC power supply.

Action:

Check battery undervoltage monitor. Replace defective units.

F8021

POW FAIL

BATT MGR CARD OK

Type:

Service-specific (Format 00)

Short text:

Hardware okay

Cause:

The HW for monitoring the AC/DC power supply is operational again.

Action:

Positive acknowledgment, no action.

F8022

POW FAIL

BATTERY DOWN AC/DC SYS

Type:

Service-specific (Format 00)

Short text:

No battery power left

Cause:

The mains power has failed and the battery capacity will end in 1 minute.

Action:

Remove cause of power failure (e.g. switch on power supply unit, check/reset fuse).

F8023

POW FAIL

START AC/DC SYS

Type:

Service-relevant (Format 00)

Short text:

Power supply failure

Cause:

Power failure in an AC/DC system.

Action:

The system switches from the power-supply unit to a battery (if available). Determine the cause of the power failure and report the fault to the responsible power-supply company if required. Please follow the battery operating and maintenance instructions supplied by the battery vendor.

NOTICE:

In case of an EcoServer or Branch running with two power supplies, the message is also displayed if one of the power supplies is faulty or removed.

Example:

```
F8023 M5 N0179 NO ACT   A1     POW FAIL START
AC/DC SYS                22-03-17 16:34:36
ALARM CLASS:CENTRAL:029
FORMAT:33
PSU2 Host: OS4k_hostname out of service
```

F8024

POW FAIL

END AC/DC SYS

Type:

Service-specific (Format 00)

Short text:

Power supply functional again

Cause:

The failed power supply in an AC/DC system is fully operational again.

Action:

Switch back from battery operation to power supply unit.

NOTICE:

In case of an EcoServer or Branch running with one power supply, the message is also displayed when the second power supply is inserted.

Example:

```
F8024 M5 N0180 NO ACT   A1     POW FAIL END AC/
DC SYS                22-03-17 16:34:54
ALARM CLASS:CENTRAL:029
FORMAT:33
PSU2 Host: OS4k_hostname back in service
```

F8025

POW FAIL

REDUND LOSS AC/DC SYS

Type:

Service-specific (Format 00)

Short text:

Mains converter failure

Cause:

A power supply unit failed in a redundant AC/DC system.

Action:

Check converter and replace if necessary.

F8026

POW FAIL

REDUND BACK AC/DC SYS

Type:

Service-specific (Format 00)

Short text:

Power supply functional again

Cause:

The failed power supply in a redundant AC/DC system is operational again.

Action:

Positive acknowledgment, no action.

F8027

POW FAIL

START DC/DC SYS

Type:

Service-specific (Format 00)

Short text:

DC/DC converter failure

Cause:

The power supply units in a DC/DC system have failed.

Action:

Switch to battery operation, if available.

F8028

POW FAIL

END DC/DC SYS

Type:

Service-specific (Format 00)

Short text:

Power supply functional again

Cause:

The power supply in a DC/DC system is fully operational again.

Action:

Switch back from battery operation to power supply unit.

F8029

POW FAIL

REDUND LOSS DC/DC SYS

Type:

Service-specific (Format 00)

Short text:

DC/DC converter failure

Cause:

A power supply unit has failed in a redundant DC/DC system.

Action:

Check converter and replace if necessary.

F8030

POW FAIL

REDUND BACK DC/DC SYS

Type:

Service-specific (Format 00)

Short text:

Power supply functional again

Cause:

The failed power supply in a redundant DC/DC system is operational again.

Action:

Positive acknowledgment, no action.

F8100

TIMEDAT

VALID

Type:

Service-specific (Format 00)

Short text:

Time is set

Cause:

Valid time is now set

Action:

Positive acknowledgment, no action.

F8101

TIMEDAT

NOT VALID

Type:

Service-specific (Format 00)

Short text:

Time invalid

Cause:

Set time is not valid.

Action:

Set with DATE AMO.

F8102

TIMEDAT

NOT READY

Type:

Service-specific (Format 00)

Short text:

System clock not ready

Cause:

System clock is not operating.

Action:

Check the operating mode selection switches on the board which contains the system clock (IOPAX / DM80).

F8103

TIMEDAT

READY

Type:

Service-specific (Format 00)

Short text:

System clock ready

Cause:

System clock is ready for operation once more.

Action:

Positive acknowledgment, no action.

F8104

TIMEDAT

BATTERIE POWER FAILURE

Type:

Service-specific (Format 00)

Short text:

Clock power failure

Cause:

Failure of power supply of system clock component.

Action:

Check power supply / support battery of clock component on the board IOPAX / DM80. Replace the board if necessary.

F8105

TIMEDAT

BATTERIE POWER ON

Type:

Service-specific (Format 00)

Short text:

Clock power okay

Cause:

Power supply of clock component okay again.

Action:

Positive acknowledgment, no action.

F8106

TIMEDAT

BATTERIE SWITCHED OFF

Type:

Service-specific (Format 00)

Short text:

Clock battery switch off

Cause:

System clock component switched off.

Action:

Switch component back on with DIL switch on the board IOPAX / DM80.

F8107

TIMEDAT

BATTERIE SWITCHED ON

Type:

Service-specific (Format 00)

Short text:

Clock battery switch okay

Cause:

System clock component is switched on.

Action:

Positive acknowledgment, no action.

F8120

TIMEOUT

IDLE LEVEL TASK

Type:

Service-specific

Short text:

Timeout of idle level task monitoring

Cause:

Endless loop in low-priority tasks Tasks which are not monitored by the watchdog due to their low priority, are monitored by an error analysis task. The error analysis utility is set to the value 5 hours every 10 minutes. If one of the low-priority tasks is not addressed during a period of 5 hours, an idle level task

timeout is triggered. This error may also be due to an endless loop in the call processing task which triggers watchdog 1.

Action:

Save diagnosis data. contact your [Next level of support](#) and analyze the error. A soft restart should then be triggered manually. If this is not done within 10 hours, a soft restart is triggered automatically and diagnosis data may be lost.

Interpretation of auxiliary data:

Up to 5 stack messages are output first followed by the actual task information message. The number of task information messages output is restricted to 10. This applies to tasks waiting for the nucleus region and tasks in the ready queue. The tasks in the ready queue are output according to increasing priority values. However, the cause of the error must be determined from the interaction of the different tasks.

Meaning of the individual fields: PROC Physical processor number, not used
CELL PHYS Not used NMI LOG ADDR Not used NMI LOG STACK Not used
NMI PHYS ADDR Not used NMI PHYS STACK Not used TASK START ADDR
Start address of the task or FFFFH:FFFFH STATIC PRIO Statistical task priority allocated by the user DYNAMIC PRIO Dynamic task priority allocated by the OS
'READY' Task name BP, IP, CS, FLAG No meaning here Other auxiliary data 28
byte internal OS data MESSAGE-ID All error messages that belong to a single event, have the same message ID. See also, the section entitled "Interpretation of Stack data".

F8121

TIMEOUT

JOB TABLE END

Type:

Diagnosis-relevant (Format 28)

Short text:

End JOTA Timer process

Cause:

Job Table processing aborted. At system startup, the Init tasks of all existing subsystems are started according to the Job Table sequence. This startup is monitored by the JOTA timer. If one of these tasks blocks JOTA processing, the timer expires. Error analysis then identifies the last active job, signals stack and task information and then triggers a hard restart.

System reaction:

Hard restart

Action:

Save diagnostic data, Notify the product specialist and analyze fault.

Interpretation of auxiliary data:

First up to 10 stack messages are output, followed by the task information message itself. The task information message contains information concerning the Init task of the job which was last created during Job Table processing.

Error messages

(Information concerning the Init task is also located in the configuration module of the corresponding subsystem). Meaning of individual fields:

PROC	Physical processor number, is not used
CELL PHYS	Is not used
NMI LOG ADDR	Is not used
NMI LOG STACK	Is not used
NMI PHYS ADDR	Is not used
NMI PHYS STACK	Is not used
TASK START ADDR	Start address of Init task
STATIC PRIO	Static task priority, assigned by the user
DYNAMIC PRIO	Dynamic task priority, assigned by the OS
STATIC and DYNAMIC PRIO	At an earlier stage during startup can also contain the value "Creation Priority". Name of subsystem where the Init task is blocked by JOTA
BP, IP, CS, FLAG, additional 28 bytes of additional data	Not relevant here
MESSAGE-ID	All error messages belonging to an event have the same message ID value.

Refer also to the section [SW/Interrupt/Stack message interpretation](#).

F8203

SYSLOAD

FWLP ERROR

Type:

Service-specific (Format 17H)

Short text:

Error during QDCL loading

Cause:

This message is generated by Sysload if errors occur when loading the central I/O processor card QDCL. Errors can be the result of a defective QDCL card, or of missing or damaged LW files in the APSC/ directory. This directory contains the file CBGDAT00, which specifies the associated general data for the firmware load process (FWLP).

Action:

Subdirectory APSC/CLW contains the files to be loaded onto the QDCL card. If errors occur, replace the QDCL card or the files in APSC/ and APSC/CLW!

Interpretation of auxiliary data:

Please supply the following auxiliary data to the developer if above measures do not clear the error: STATE: X ERROR: Y where X-, Y-specific FWLP error codes are in the range 0H - FH. X indicates the position in the FWLP code where the error occurred. Y indicates the type of error.

F8204

SYSLOAD

ADVISORY

Type:

Diagnosis-specific (Format 17)

Short text:

Sysload advisory message

Cause:

Plain text advisory message output by sysload. Example: SAVE POOL INITIALIZED. Consistency check of SAVE POOL following a restart. If errors are detected, the SAVE POOL is re-initialized and its original contents are lost, which makes the advisory message relevant for diagnosis in some cases.

Action:

No action necessary.

F8205

SYSLOAD

INFO TEMPORARY SUSY

Type:

Diagnosis-specific (Format 17)

Short text:

Error in temporary subsystem

Cause:

User exception error caused by temporary subsystem. The auxiliary data indicates the selector and limit of the data and code segments of the subsystem concerned.

Action:

Save error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

The first line under the format output contains the name of the temporary subsystem. This is followed by max. two additional lines consisting of 4-byte blocks. The first word contains the selector of the code or data segment concerned, and the second word contains the appropriate limit. The subsystem mapping function allows you to search for the module which wrote the segment at the time of the error, since the selectors are uniquely assigned to the module names.

F8250

TRANSSYS

ETH PCNET32 DEFECT

Type:

Service-specific (Format 3C)

Short text:

(Re-)initialization of ETHERNET controller failed

Cause:

Initialization or reinitialization of the ETHERNET controller by the ETHERNET driver was unsuccessful

Action:

Replace board

F8251

TRANSSYS

ETH MEM ALLOC ERROR

Type:

Service-specific (Format 3B)

Short text:

Memory shortage

Cause:

Insufficient memory to initialize the ETHERNET driver

Action:

Reconfigure memory layout, exit applications.

F8252

TRANSSYS

ETH DRV INTERNAL ERROR

Type:

Diagnosis-specific (Format 3B)

Short text:

Inconsistent data

Cause:

The ETHERNET driver has detected internal data inconsistencies (software error).

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8253

TRANSSYS

ETH DRV IP IFACE ERROR

Type:

Diagnosis-specific (Format 3B)

Short text:

TCP/IP socket error

Cause:

Error at the interface between the ETHERNET driver and the IP part of the TCP/IP (software error).

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8254

TRANSSYS

ETH DRV CHIP IFACE ERR

Type:

Service-specific (Format 3C)

Short text:

Interface error

Cause:

Error at the interface between the ETHERNET driver and the ETHERNET controller (chip)

Action:

Reset or replace board.

F8255

TRANSSYS

ETH PCNET32 ALARMS

Type:

Diagnosis relevant (Format 3C)

Short text:

Atlantic LAN ETHERNET controller message

Cause:

The Atlantic LAN ETHERNET controller (chip) detected an overload.

System reaction:

None.

Action:

If this error message occurs frequently, save the error message data and contact your [Next level of support](#).

F8256

F8257

TRANSSYS

ETH LINK DOWN

Type:

Service-specific (Format 3C)

Short text:

Controller disconnected

Cause:

The ETHERNET controller detected that it is no longer connected to the ETHERNET.

Action:

Check whether: HUBC is defective, ETHERNET is cable defective or missing, ETHERNET partner is disconnected, ETHERNET controller is defective

F8258

TRANSSYS

ETH LINK AGAIN

Type:

Service-specific (Format 3C)

Short text:

Controller connected again

Cause:

The "TRANSSYS ETH LINK DOWN" ([F8257](#)) error has been cleared.

Action:

Positive acknowledgment, no action.

F8259

TRANSSYS

TCP SUSY ERROR FATAL

Type:

Diagnosis-specific (Format 3B)

Short text:

TCP subsystem error

Cause:

Error in the TCP subsystem (ZOLTCP00) that prevents further functioning of the TCP/IP software (software error).

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8260

TRANSSYS

TCP SUSY ERROR WARNING

Type:

Diagnosis-specific (Format 3B)

Short text:

TCP subsystem error

Cause:

Error in the TCP subsystem (ZOLTCP00) that does not prevent further functioning of the TCP/IP software. This error must be analyzed (software error).

Action:

Error must be analyzed (software error)! Save error message data and contact your [Next level of support](#).

F8261

TRANSSYS

TCP SUSY ERROR INFO

Type:

Diagnosis-specific (Format 3B)

Short text:

TCP subsystem analysis

Cause:

Error messages

Information for analyzing an error in the TCP subsystem (ZOLTCP00). The TCP/IP software is functioning again.

Action:

Error must be analyzed (software error)! Save error message data and contact your [Next level of support](#).

F8262

TRANSSYS

TCP SUSY ERROR DEBUG

Type:

Diagnosis-specific (Format 3B)

Short text:

TCP subsystem analysis

Cause:

Information for analyzing an error in the TCP subsystem (ZOLTCP00). The TCP/IP software is functioning again.

Action:

Error must be analyzed (software error)! Save error message data and contact your [Next level of support](#).

F8263

TRANSSYS

TCP START UP COMPLETE

Type:

Service-specific

Short text:

Not signaled

Cause:

Not signaled

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8264

TRANSSYS

ON CONN WITH BOOT

Type:

Service-specific

Short text:

Not signaled

Cause:

Not signaled

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8265

TRANSSYS

ON CONN LOSS BOOT

Type:

Service-specific

Short text:

Not signaled

Cause:

Not signaled

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8266

TRANSSYS

ON CONN LOSS OS

Type:

Service-specific (Format 3C)

Short text:

Connection interrupted

Cause:

Connection broken between ADP and CC or between two CCs. Restart or power failure of an RMX processor.

Action:

Determine reason for restart or remove cause of power failure.

F8267

TRANSSYS

ON CONN OS NEW

Type:

Service-specific (Format 3C)

Short text:

Partner processor connection okay again

Cause:

The error [F8266](#) has been cleared, i.e., the partner processor can be reached via the RMX-OS again.

Action:

Positive acknowledgment, no action.

F8268

TRANSSYS

ON CONN OS AGAIN

Type:

Service-specific (Format 3C)

Short text:

Connection to partner processor restored

Cause:

The OS detected that the connection to a partner processor (CC or ADP) has been restored without the partner having been started up again.

Action:

To prevent data inconsistencies, a partner restart is necessary (possible loss of connection in ETHERNET; see [F8257](#)).

F8269

TRANSSYS

ON CONN REJECTED

Type:

Service-specific (Format 3C)

Short text:

Wrong IP address

Cause:

Processor on the ETHERNET with an invalid IP address (e.g., UNIX PC attempted to set up connection to RMX-OS, i.e., it used the reserved

combination of IP address and TCP port number of the RMX-OS for connection setup)

Action:

Partner processor on the ETHERNET must be reconfigured or switched off.

F8270

TRANSSYS

ON UNEXP TPI RET CODE

Type:

Diagnosis-specific (Format 3B)

Short text:

Unexpected return code

Cause:

OS received an unexpected return code when calling TCP (-> software error).

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8271

TRANSSYS

ON UNEXP TPI MSG

Type:

Diagnosis-specific (Format 3B)

Short text:

Unexpected message

Cause:

OS received an unexpected message from TCP (software error).

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8272

TRANSSYS

PARTNER NOT AVAILABLE

Type:

Service-specific (Format 3C)

Short text:

Partner processor not available

Cause:

While a processor is booting, it becomes apparent that the connection to a partner processor cannot be set up. This may be due to a power failure or the restarting of a partner processor.

Action:

Find out why the connection could not be set up or restore the power supply.

F8273

TRANSSYS

ETH DRV STATISTICS

Type:

Diagnosis relevant (Format 3B)

Short text:

LAN-specific statistics data.

Cause:

The LAN ETHERNET driver outputs statistics data.

System reaction:

None.

Action:

No measure required.

F8274

TRANSSYS

ETH LS DEFECT

Type:

Service relevant (Format 3C)

Short text:

Re-/Initialization of second LAN ETHERNET controller unsuccessful.

Cause:

Initialization or re-initialization of the second LAN ETHERNET controller by the second LAN ETHERNET driver was unsuccessful.

System reaction:

The hardware is restarted when the error message initially appears. The second LAN is blocked if this message is repeated.

Action:

Replace the board.

F8275

TRANSSYS

ETH LS MEM ALLOC ERROR

Type:

Diagnosis relevant (Format 3B)

Short text:

Insufficient memory.

Cause:

There is insufficient memory available in the TCP subsystem to initialize the second LAN ETHERNET driver (internal TCP error).

System reaction:

A software restart is initiated.

Action:

Save error message data and contact your [Next level of support](#).

F8276

TRANSSYS

ETH LS DRV INTERN ERR

Type:

Diagnosis relevant (Format 3B)

Short text:

Data inconsistencies.

Cause:

The second LAN ETHERNET driver detected internal data inconsistencies (software error).

System reaction:

A software restart is initiated.

Action:

If this error message appears frequently, save the error message data and contact your [Next level of support](#).

F8277

TRANSSYS

ETH LS DRV IP IF ERR

Type:

Diagnosis relevant (Format 3B)

Short text:

Interface error.

Cause:

Error on the interface between the second LAN ETHERNET driver and the IP component of TCP/IP.

System reaction:

A software restart is initiated.

Action:

If this error message appears frequently, save the error message data and contact your [Next level of support](#).

F8278

TRANSSYS

ETH LS DRV CHIP IF ERR

Type:

Service relevant (Format 3C)

Short text:

Interface error.

Cause:

Error on the interface between the second LAN ETHERNET driver and the second LAN ETHERNET controller (chip).

System reaction:

This error is statistically evaluated. A hardware restart is initiated if this error appears too frequently.

Action:

If this error message appears frequently, save the error message data and contact your [Next level of support](#).

F8279

TRANSSYS

ETH LS CHIP ALARMS

Type:

Diagnosis relevant (Format 3C)

Short text:

Advisory information from second LAN ETHERNET controller.

Cause:

The second LAN ETHERNET controller (chip) detected an overload.

System reaction:

None.

Action:

If this error message appears frequently, save the error message data and contact your [Next level of support](#).

F8280

TRANSSYS

ETH LS DRV ALARMS

Type:

Diagnosis relevant (Format 3B)

Short text:

Advisory information from the second LAN ETHERNET driver.

Cause:

The second LAN ETHERNET driver detected an overload.

System reaction:

None.

Action:

If this error message appears frequently, save the error message data and contact your [Next level of support](#).

F8281

TRANSSYS

ETH LS LINK DOWN

Type:

Service relevant (Format 3C)

Short text:

Controller disconnected by second LAN ETHERNET.

Cause:

The second LAN ETHERNET controller detected that it has been disconnected from the second LAN ETHERNET.

System reaction:

This does not prompt a response if mono and simplex dual systems are used. If duplex dual systems are used, this prompts a switching process if this error is not present in the standby processor.

Action:

Check whether the second LAN ETHERNET cable is defective or missing, whether the second LAN ETHERNET partner (HUB, switch, router, ...) was deactivated or whether the second LAN ETHERNET controller is defective.

F8282

TRANSSYS

ETH LS LINK AGAIN

Type:

Service relevant (Format 3C)

Short text:

Error eliminated.

Cause:

The TRANSSYS ETH SL LINK DOWN ([F8281](#)) error has been eliminated.

System reaction:

None.

Action:

Positive acknowledgment; no measure, therefore, required.

F8283

TRANSSYS

ETH LS DRV STATISTICS

Type:

Diagnosis relevant (Format 3B)

Short text:

Second LAN-specific statistics data.

Cause:

The second LAN ETHERNET driver outputs statistics data.

System reaction:

None.

Action:

No measure required.

F8284

TRANSSYS

ETH LS INIT ERROR

Type:

Service-specific (Format 42)

Short text:

Second LAN module SL100/SL200 initialization error

Cause:

The SL100/SL200 module could not be initialized because

- 1) the Second LAN has not been configured with AMO SIPCO,
- 2) in a mono system an SL100 module is plugged instead of an SL200 module,
- 3) the SL100/SL200 module has already been initialized once,
- 4) the SL100/SL200 module initialization failed.

System reaction:

The AP shelves are not taken into service.

Action:

Check whether the Second LAN is configured (AMO SIPCO). In a monosystem verify that an SL200 module is plugged. If the SL100/SL200 module is already initialized, a restart is necessary to reinitialize the SL100/SL200 module with new configuration data. If the initialization failed, check whether the SL100/SL200 module is plugged and connected with the Second LAN. If that does not work, replace the SL100/SL200 module.

F8285

TRANSSYS

ETH LS SURVIVAL PATH

Type:

Service-specific (Format 0)

Short text:

Signaling connection with AP switched to survivability path.

Cause:

The route of the signaling connection with an AP shelf has been changed to the survivability path (ISDN), because the supervisory connection with the AP shelf via the primary path (LAN) has been lost.

System reaction:

All signaling messages are sent over the survivability path. Payload connections are not available over the survivability path between host system and AP shelf.

Action:

Check the LAN connection between host system and AP shelf (LAN cables, HUBs, routers, ...). Negative acknowledgment of [F8286](#).

F8286

TRANSSYS

ETH LS PRIMARY PATH

Type:

Service-specific (Format 0)

Short text:

Signaling connection with AP switched back to primary path.

Cause:

The route of the signaling connection with an AP shelf has been changed back from the survivability path (ISDN) to the primary path (LAN), because the supervisory connection with the AP shelf via the primary path (LAN) has been established again.

System reaction:

All signaling messages are sent again over the primary path. Payload connections are again available over the primary path between host system and AP shelf.

Action:

Positive acknowledgment of [F8285](#) no action.

F8287

TRANSSYS

ETH LS SV NOT AVAIL

Type:

Service-specific (Format 0)

Short text:

Survivability not available.

Cause:

The supervisory connection between host system and AP shelf could not be established, though the signaling connection is established.

System reaction:

The route of the signaling connection with an AP shelf is not switched to the survivability path. Therefore the AP shelf remains ready, but a loss of the primary path will not be recognized and the signaling connection will not be switched to the survivability path.

Action:

Check the survivability configuration data in the host system and in the AP shelf. If the configuration is correct, reset the AP shelf with AMOs DEACT-USSU and ACT-USSU. If that does not work, correct the missing board data of the NCUI with the CLI.

F8288

TRANSSYS

ETH LS SV CONN NEW

Type:

Service-specific (Format 0)

Short text:

Supervisory connection with AP established.

Cause:

The supervisory connection has been established that supervises the availability of the LAN between host system and the AP shelf.

System reaction:

Survivability is activated. A loss of the supervisory connection triggers the switching of the signaling connection to the survivability path (see [F8285](#)).

Action:

No action.

F8289

TRANSSYS

NET STATISTICS DATA

Type:

Diagnosis-relevant (Format 49)

Short text:

Statistical data of the IPDA network

Cause:

The output of the statistical data for the relevant access point is enabled via the AMO STMIB.

System reaction:

None.

Action:

No action required.

Interpretation of auxiliary data:

The measured values for the round trip delay (maximum delay) or throughput (minimum throughput) of the last 90 seconds are output. The values shown are indicated after the AP number. Meaning of individual fields for Round Trip Delay:

Table 30: F8289 - Round Trip Delay

AP-NUMBER	Number of access points
CONFIGURED SHORT LONG	Configured values in milliseconds Configured value for 15 second interval Configured value for 60 second interval
AVERAGE SHORT LONG	Average values in milliseconds Average value for 15 second interval Average value for 60 second interval

Error messages

HISTORY	Last 30 values at intervals of 3 seconds each

Meaning of individual fields for Throughput:

Table 31: F8289 - Throughput

AP-NUMBER	Number of access points
CONFIGURED SHORT LONG	Configured values in kilobits/second Configured value for 15 second interval Configured value for 60 second interval
AVERAGE SHORT LONG	Average values in kilobits/second Average value for 15 second interval Average value for 60 second interval
HISTORY	Last 30 values at intervals of 3 seconds each

IMPORTANT: The displayed values are decimal values in kbit/s. The target is to have high values: displayed value $\geq$ short value $\Rightarrow$ good displayed value $<$ short value $\Rightarrow$ bad

F8290

TRANSSYS

NET WEAKNESS BEGIN

Type:

Diagnosis-relevant (Format 49)

Short text:

Start of poor network quality.

Cause:

The values for the maximum delay and/or minimum throughput for signaling of the relevant access point are above or below their respective thresholds.

System reaction:

The system response depends on the set mode for a signaling switchover. If STANDARD is set, a check is performed to determine whether or not the network quality is adequate within 2 minutes. For EXTENDED, a switchover to the survivability path occurs, and the network quality is then tested. After at least 2 minutes, signaling switches back to the primary path. The network quality is then tested again for a further two minutes to ensure that it remains acceptable.

Action:

Check the values set using the AMO STMIB.

Interpretation of auxiliary data:

The same auxiliary data is output as for [F8289](#)

In addition, the type of poor network quality is shown, i.e., whether the measured values exceed or fall below the set short and/or long interval for the maximum delay or the minimum throughput, respectively.

IMPORTANT: The displayed values are decimal values in kbit/s. The target is to have high values: displayed value $\geq$ short value $\Rightarrow$ good displayed value $<$ short value $\Rightarrow$ bad

F8291

TRANSSYS

NET WEAKNESS END

Type:

Diagnosis-relevant (Format 49)

Short text:

End of poor network quality.

Cause:

The configured values for the maximum delay and/or minimum throughput for signaling of the relevant access point are no longer above or below their respective thresholds.

System reaction:

None.

Action:

No action required.

Interpretation of auxiliary data:

AP-NUMBER	Number of access points

F8292

TRANSSYS

NET BW EXC BEGIN

Type:

Diagnosis-relevant (Format 49)

Short text:

Start of bandwidth exceeded state

Cause:

The configured bandwidth for the relevant access point has been exceeded for at least 10 seconds.

System reaction:

The system response depends on the set mode for a signaling switchover. If STANDARD is set, a check is performed to determine whether the exceeded bandwidth state ends within 2 minutes. For EXTENDED, a switchover to the survivability path occurs and subsequently switches back to the primary path

Error messages

after 5 minutes. A check is then performed to determine whether the exceeded bandwidth state ends within 2 minutes.

Action:

The bandwidth can be changed via the AMO STMIB.

Interpretation of auxiliary data:

AP-NUMBER	Number of access points
LIMIT	Configured value of bandwidth in kilobits/second
SHAPING TIME	Indicates for how long (in seconds) the sent signaling data is restricted by the bandwidth.

F8293

TRANSSYS

NET BW EXC END

Type:

Diagnosis-relevant (Format 49)

Short text:

End of bandwidth exceeded state

Cause:

The configured bandwidth for the relevant access point is no longer exceeded.

System reaction:

None.

Action:

No action required.

Interpretation of auxiliary data:

AP-NUMBER	Number of access points

F8294

TRANSSYS

NET MSG RUNTIME EXC

Type:

Diagnosis-relevant (Format 49)

Short text:

Message runtime is exceeded.

Cause:

Bandwidth too low.

System reaction:

HSR sends a message per AP every 3 minutes to FA when the message runtime from NCUI to HSR is exceeded.

Action:

The bandwidth can be changed via the AMO STMIB.

Interpretation of auxiliary data:

.

AP-NUMBER	Number of access points
TIME STAMP HSR	Local relative time at the host when the message arrives
TIME STAMP MMX	Relative time at the NCUI when the message is sent
ROUND TRIP DELAY LIMIT	Network transport time of the TCP packet + reaction time of recipient + network transport time of the TCP acknowledgment.
MESSAGE DATA	Text of message; max. 220 bytes in length

F8300

HUBC

INIT ERROR

Type:

Diagnosis-specific (Format 3C)

Short text:

HUBC driver not initialized

Cause:

HUBC driver reports that it was not initialized (software error).

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8301

HUBC

NO INTERRUPT

Type:

Diagnosis-specific (Format 3C)

Short text:

HUBC driver activated

Cause:

Error messages

The HUBC driver was activated even though there is no interrupt (software error).

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8302

HUBC

INTERFACE ERROR

Type:

Service-specific (Format 3C)

Short text:

Internal socket error

Cause:

The HUBC driver reports that an internal interface is defective

Action:

Power off/on on the HUBC board, or replace board.

F8303

HUBC

ERROR

Type:

Service-specific (Format 3C)

Short text:

HUBC out of service

Cause:

The HUBC board is not plugged in or is not functioning

Action:

Install or replace HUBC board.

F8304

HUBC

INVALID PORT

Type:

Diagnosis-specific (Format 3C)

Short text:

Invalid port number for HUBC

Cause:

The HUBC driver was called with an invalid port number (software error).

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8305

HUBC

PLAUS ERROR

Type:

Diagnosis-specific (Format 3C)

Short text:

Implausible return values

Cause:

The HUBC driver supplies invalid return values (software error).

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8306

HUBC

FAULT STATISTIC

Type:

Diagnosis-specific (Format 3B)

Short text:

HUBC deterioration

Cause:

These three statistical messages report the status of the HUBC connections. The server dependability statistics detected a deterioration of the HUBC connections.

Action:

This error must be analyzed based on the data. Save error message data and contact your [Next level of support](#).

F8307

HUBC

STATISTIC DATA

Type:

Diagnosis-specific (Format 3B)

Short text:

HUBC status

Cause:

These three statistical messages report the status of the HUBC connections. These messages are usually suppressed.

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

F8320

BOOT

STATUS INFO

Type:

Diagnosis-specific (Format 17)

Short text:

Boot version loaded into flash memory

Cause:

This message is generated by the boot firmware if a boot version was successfully loaded from the disk into flash memory. The following is displayed: FWLP: xxxx-x-xxx successfully loaded. xxxx-x-xxx is the firmware version of the loaded boot version.

Action:

Positive acknowledgment, no action.

F8321

BOOT

ERROR INFO

Type:

Diagnosis-specific (Format 17)

Short text:

Fatal error in boot module

Cause:

This message is generated by the boot firmware if fatal errors were detected in the boot modules: during processing of the LAN connection when the SWU is being loaded. The following is output in this case: LAN-ERROR 31xxH yyyy.....

during loading of the boot into the flash memory. The following is output in this case: FWLP-ERROR 32xxH yyyyy.....

Action:

If error occurs repeatedly, save the error message data and contact your [Next level of support](#).

Interpretation of auxiliary data:

xx is a specific LAN error code in the range 00H - 0FFH, yyyyy is a stream of auxiliary data intended for the developer.

F8384

TRANSSYS

ETH SL INIT ERROR

Type:

Service-specific (Format 42)

Short text:

Second LAN module SL100/SL200 initialization error

Cause:

The SL100/SL200 module could not be initialized because

- 1) the Second LAN has not been configured with AMO SIPCO,
- 2) in a mono system an SL100 module is plugged instead of an SL200 module,
- 3) the SL100/SL200 module has already been initialized once,
- 4) the SL100/SL200 module initialization failed.

System reaction:

The AP shelves are not taken into service.

Action:

Check whether the Second LAN is configured (AMO SIPCO). In a monosystem verify that an SL200 module is plugged. If the SL100/SL200 module is already initialized, a restart is necessary to reinitialize the SL100/SL200 module with new configuration data. If the initialization failed, check whether the SL100/SL200 module is plugged and connected with the Second LAN. If that does not work, replace the SL100/SL200 module.

F8385

TRANSSYS

ETH SL SURVIVAL PATH

Type:

Service-specific (Format 0)

Short text:

Signaling connection with AP switched to survivability path.

Cause:

The route of the signaling connection with an AP shelf has been changed to the survivability path (ISDN), because the supervisory connection with the AP shelf via the primary path (LAN) has been lost.

System reaction:

All signaling messages are sent over the survivability path. Payload connections are not available over the survivability path between host system and AP shelf.

Action:

Check the LAN connection between host system and AP shelf (LAN cables, HUBs, routers, ...). Negative acknowledgment of [F8386](#).

F8386

TRANSSYS

ETH SL PRIMARY PATH

Type:

Service-specific (Format 0)

Short text:

Signaling connection with AP switched back to primary path.

Cause:

The route of the signaling connection with an AP shelf has been changed back from the survivability path (ISDN) to the primary path (LAN), because the supervisory connection with the AP shelf via the primary path (LAN) has been established again.

System reaction:

All signaling messages are sent again over the primary path. Payload connections are again available over the primary path between host system and AP shelf.

Action:

Positive acknowledgment of [F8385](#), no action.

F8387

TRANSSYS

ETH SL SV NOT AVAIL

Type:

Service-specific (Format 0)

Short text:

Survivability not available.

Cause:

The supervisory connection between host system and AP shelf could not be established, though the signaling connection is established.

System reaction:

The route of the signaling connection with an AP shelf is not switched to the survivability path. Therefore the AP shelf remains ready, but a loss of the primary path will not be recognized and the signaling connection will not be switched to the survivability path.

Action:

Check the survivability configuration data in the host system and in the AP shelf. If the configuration is correct, reset the AP shelf with AMOs DEACT-USSU and ACT-USSU. If that does not work, correct the missing board data of the NCUI with the CLI.

F8388

TRANSSYS

ETH SL SV CONN NEW

Type:

Service-specific (Format 0)

Short text:

Supervisory connection with AP established.

Cause:

The supervisory connection has been established that supervises the availability of the LAN between host system and the AP shelf.

System reaction:

Survivability is activated. A loss of the supervisory connection triggers the switching of the signaling connection to the survivability path (see [F8385](#)).

Action:

No action.

F8500

TERM

L2 BS LOAD ERROR

Type:

Service-specific (Format 22)

Short text:

Load error of base station

Cause:

Base station not loaded by cordless board or load canceled.

Action:

- Service center: Load base station with EXEC-DSSU command. - On-site: Try unplugging / replugging line to base station in order to start automatic loading.

Interpretation of auxiliary data:
Byte 0 = 5F Number of bytes max. 95
Byte 1 = Error type (DB_M_QF_CIR_L2_ERR_SET) 11 Load error of base station
See also [Section 8.14, “Device names”](#).

F8501

TERM
L2 BS NO RESPONSE
Type:
Service-specific (Format 22)
Short text:
Base station not responding
Cause:
Cordless board has no access to base station.
1) Service center: Load base station with EXEC-DSSU command.

- On-site: Check line to base station. Try unplugging / replugging in order to start automatic loading.

Interpretation of auxiliary data:

Byte 0	=	5F Number of bytes max. 95
Byte 1	=	Error type (DB_M_QF_CIR_L2_ERR_SET)
	12	Base station not responding

See also [Section 8.14, “Device names”](#).

F8502

TERM
RESTORED
Type:
Service-specific (Format 18)
Short text:
Terminal reset after blocking
Cause:
ISDN terminal remained in NPR state following restore procedure and was reset.
Action:
No action required, since terminal has been put back in service by dependability.
Interpretation of auxiliary data:

No auxiliary data output

See also [Section 8.14](#), “Device names”.

8.10 System Messages (PFS)

Breach of contract

CONFIGURATION AMOS OF SWU HAVE BEEN BLOCKED
DUE TO AN INCONSISTENCY IN YOUR CONTRACTED DATA.
RECOMMENDED ACTIONS: SEE SERVICE HANDBOOK ERROR F2244

User interface block: YES.

This message is output in English, regardless of the AMO language configured.

Codeword expiry date

The following message appears when a codeword has been successfully configured with an expiry date:

*** PFS CHECK TASK: ***

CODEWORD WILL EXPIRE AT <dd>.<mm>.< yyyy>

CODEWORD GUELTIG BIS < dd>.< mm>.<yyyy>

dd: Day mm: Month yyyy: Year

This message is output in English and German, regardless of the AMO language configured.

Counter error for used licences

The control count for licences used for a feature outputs a value other than those configured in AMO setup. This error message indicates an internal software error. There is either a counting error in the PFS task or in the AMO setup of the feature to be counted:

--- PFS CHECK TASK: FEATURE COUNT ERROR ---

THE COUNTED VALUE OF THE FOLLOWING FEATURE DOES NOT MATCH
WITH THE ASSIGNED

VALUE ADJUSTED BY AM:

FEATURE: <Feature> AM: <Value1> COUNTED: <Value2>

THE ASSIGNED VALUE IS SET TO THE COUNTED!!!

User interface block: NO.

This message is output in English, regardless of the AMO language configured.

Codeword check error

An error occurred during the codeword check.

--- PFS CHECK TASK: CODEWORD INVALID ---

THE CODEWORD CHECK WAS FINISHED WITH ERROR CODE: <error
code>

THE AMO INTERFACE WILL BE LOCKED!!!

<error code>:

Error messages

WRONG HW ID	The codeword does not match
WRONG VERSION	The codeword does not match the PBX variant
NO SYSTEMDATE	There is no valid system date
CONTRACT EXCCUDE	For one or more features, the codeword contains a licence number lower than that already in use
DATE EXPIRED	The codeword has an invalid expiry date
ILLEGAL CODEW LEN	The length of the codeword is invalid
WRONG SERIAL NUMBER	The serial number of the new codeword is lower than the number already configured.

User interface block: YES.

This message is output in English, regardless of the AMO language configured.

Dongle check error

Dongle not available or dongle communication error (dongle is defective)

--- PFS CHECK TASK: DONGLE MISSING OR READ ERROR ---

THE AMO INTERFACE WILL BE LOCKED!!!

User interface block: YES.

This message is output in English, regardless of the AMO language configured.

Codeword expired

The codeword expiry date has been reached:

--- PFS CHECK TASK: BYPASS CODEWORD EXPIRED ---

THE AMO INTERFACE WILL BE LOCKED!!!

User interface block: YES.

This message is output in English, regardless of the AMO language configured.

User interface block

Once the user interface has been blocked, the following message appears when certain AMOs are called:

S48: STARTEN DES AMO <amo-noun> NICHT ERFOLGREICH

GRUND : EINE INKONSISTENZ IN IHRER SOFTWAREFREISCHALTUNG WURDE FESTGESTELLT

BITTE GEBEN SIE DIESE MELDUNG AN IHREN ZUSTAENDIGEN SERVICE WEITER

S48: START OF AMO SBCSU NOT SUCCESSFUL

CAUSE : AN INCONSISTENCY IN YOUR CONTRACTED SW HAS BEEN DETECTED

PLEASE CONTACT YOUR SERVICE CENTER AND QUOTE THIS MESSAGE

Logon to blocked user interface

The following system output appears if the user interface is already blocked when logon is executed.

ADMINISTRATION DER SWU IST BLOCKIERT:
EINE INKONSISTENZ IN IHRER SOFTWAREFREISCHALTUNG WURDE
FESTGESTELLT
BITTE GEBEN SIE DIESE MELDUNG AN IHREN ZUSTAENDIGEN SERVICE
WEITER
ADMINISTRATION OF SWU IS BLOCKED:
AN INCONSISTENCY IN YOUR CONTRACTED SOFTWARE HAS BEEN
DETECTED
PLEASE CONTACT YOUR SERVICE CENTER AND QUOTE THIS MESSAGE

8.11 Error messages structure

8.11.1 Signaling

Since the system security logic (DEP-S) for error signaling does not have direct access to the internal peripherals in the operating and data server (ADS), it will require a communication partner there. This is the signaling task (SIT).

The task of the SIT is to prepare the error messages and alarms for device classes that have been received with differently structured formats and to distribute them to defined output devices as signaling messages. These messages must be selectable and suppressible. This is particularly important for PABX startup as well as for Maintenance and Customer Service. The signaling messages can be re-routed to other output devices with the AMO SIGNL.

8.11.2 Message composition

The signaling messages consist of the following elements making it easy for operators and maintenance staff to assess them at a glance and facilitating automatic evaluation in the Service Center:

- Unique message identification with key identification and number
 - Error class/error location
 - Type of error
 - Action taken
 - Date and time
 - Supplementary information
- Supplementary information includes the following
- Message priority for evaluation in the Service Center,
 - Error diagnosis results for
 - hardware errors: physical structure data such as cabinet, shelf, board, slot, line, device,
 - SW errors: program information (e.g. error codes, program addresses)
 - Error-specific auxiliary data.

8.11.3 Format structure

The scope and variety of the information means that the signaling messages have to be classified and formatted in signaling formats.

The *signaling formats* consist of the following

- Header line,
- DEV-CLASS Each error message contains the DEV-CLASS line which is required by NMC / DMS for search functions. The DEV-CLASS line is divided into
 - the central device class,
 - the SWU periphery device class,
 - the SWU logical device class and
 - the server periphery device class.
- Additional line(s) for information explaining the content of the message for
 - HW errors with slot information,
 - SW errors with program information,
 - text messages with user-specific texts
 as well as for existing additional lines with optional
- auxiliary data lines.

Example for hardware error:

F7551	E4	N0043	OUT	SERV	BPR	LCU	LCU	CENTRAL	ERROR	90-08-21	*1
	DEV-CLASS:		00000000	00000000	00000000	00000000	00000000	00000000	00000000		*2
	P105:SM	:TF11:013:	Q2051	VCD	BGS:01	FW:A333-A					*3
	P105:SM	:TF11:037:02	Q2036	LCC	BGS:01	FW:A333-A					*3
	0103	0918	0000	0000	0000	0000	0000	0000			*4

*1	Header line
*2	DEV-CLASS line for NMC/DMS searches
*3	Additional lines (HW errors with slot information)
*4	Aux. data line

Example for software error:

F6063	E4	N3456			A1	CMS	MES	HEAD	FAULT	90-08-27	*1
	DEV-CLASS:		00000000	0000	00000000	00000000	00000000	00000000	00000000		*2
	CC:37011	EC:35001	UA:0000A700:013	ESP:0000:A308:0201	LD:						*3

*1	Header line
*2	DEV-CLASS line for NMC/DMS searches
*3	Additional lines (SW errors with program information)
*4	Aux. data line

The output formats are designed for standard output on a service terminal with 80 characters/line.

The same output messages go to the attendant console, but not more than 3 text lines. Since the display on the attendant console is limited to a maximum of 40 columns / line, a page break occurs after the 40th column.

8.11.4 Header line for HW/SW messages

The header line with the fields a-h applies to both hardware and software messages alike. The number bar 1-80 indicates the exact column position of the individual fields on the screen.

This is not displayed, but serves to clarify the description.

Output columns and field numbering on the service terminal

aaaaa	bb	cccc	ddddddd	eeee	f1====f1	f2=====f2	gg-gg-gg	hh:hh:hh

Example:

F5264	E4	N0010	OUT SERV	BPR	CONF	HW ERROR	91-03-27	17:22:34
F7537	E4	N0034	LCX REST	A1	LCX	LCX PLAUS ERROR	91-02-28	17:22:35

Explanations:

a Message identification

Each output message is assigned a unique message identification consisting of a key identification and message number

The following key identifications have been defined:

The following ranges generally apply for message numbering

A range of numbers is assigned to each signaling format, e.g. F2017-F2048 are software messages of the operating system (OS).

A for alarm messages F for error (standard identification) H for advisory information U for undefined error element

1000 ... 1110 for SIT, 2000 ... 8013 for SWU/SM hardware and software messages, 9000 ... 9005 for NMC/DMS alarm messages.

b Message priority

for Automatic Fault Report (AFR) to the Service Center

The priorities for AFR consist of a key identification and a single decimal digit. The following key identifications have been defined: The priority is supplied for each individual message. It is used as a basis for making decisions as to what action should be taken in the Service Center or in the Service Call Center.

Error messages

E for unique messages M for ambiguous messages 1 ... 8 priority number range

c Message serial number

This serial number is simply used for classification and as an aid for responding to the output messages. The date and time are also required for uniquely identifying the message. The messages are numbered in cycles within the range: 0001 - 9999

d ACTION

Using the ACTION set, the security logic (FA-SWU or DEP-SM) make known the action carried out in the system for signaling. The signaling task (SIT) finds out the relevant output text from a coordination table (SDT). The field length is fixed at a maximum of 8 characters for the output texts. The following entries are possible:

CHAN OOS = channel not operating HRCCTSA = hard restart CC target state active HRCCTSS = hard restart CC target state standby HRLTGSA = hard restart LTG target state active HRLTGSS = hard restart LTG target state standby HREXSRRE = soft restart changed to hard restart (due to DB inconsistencies) IN SERV = in service OUT SERV = out of service SR-CC = soft restart CC SWITCH CCG = switch CCG SWITCH LTG = switch LTG SWITCH SWU = switch SWU

e Sender module/unit

Sender modules are the data processors (DP) or base processors (BP) and group processors (GP) of the switching unit (SWU) as well as the maximum of 16 possible servers (SM). The number of servers is limited by the number of stations on the IEC bus. LTGs can also send messages to the SWU. The output message text is ascertained by the signaling task (SIT). Output message text length: 5 characters max.

f1/f2 Error class and error

The field lengths are defined as follows for the message texts: 8 characters max. for: error class (EVENT-CODE) or error location 22 characters max. for: error type (SUBEVENT-CODE)

g/h Date/time

Date/time contain the information about the time when the error was noticed by the security logic. This does not have to be the time on the printout, i.e. consecutive error messages in the printout do not have to have consecutive times.

8.11.5 Hardware slot information

A hardware error message can consist of 1 - 6 slot lines; this will depend on how many boards are logged on simultaneously.

Output columns on the service terminal

	jjj.	kkkkk.	llll	.mmm.nn	oooooooooooo	pppp	BGS:qq	FW:rrrrrr

Example:

	P205.B	:LTU3:013:01		Q2057-X	SLMA	BGS:01	FW:A996-A

Other examples:

P205.B :LTU3 :013: 01 Q2057-X SLMA BGS:01 FW:A996-A

** :LTG1 :LTU2 :031: 0 : 0 Q2158-X SLMO24 BST:01 PLS:-A4

** : :CC :103: 0 : 0 Q2246-X SLMA24 BST:01 FW: -

** : :A1 B :062: Q2230-X100 DM3L BST:01 FW: D653-E

j Physical cabinet name

consisting of

1) Cabinet row : Pn e.g.: P2, Cabinet number: mm e.g.: 05.

** : no cabinet name (monoprocessor system, e.g. 80CM)

k Logical cabinet name (CAB)

consisting of

CAB_TYP : max. 3 characters right-justified (e.g: B,E,C,P,SM,LTG),

CAB_TYP_NUM: max. 2 characters left-justified (range 1-32).

l Logical shelf number

consisting of

Consecutive LTU number: 1 ... 16, Shelf index: 1, 2, 3 for server.

m Circuit PEN

(slot)

n Optional field for sub-unit

consisting of

Circuit number (SU) or Line number or Channel number or Terminal number.

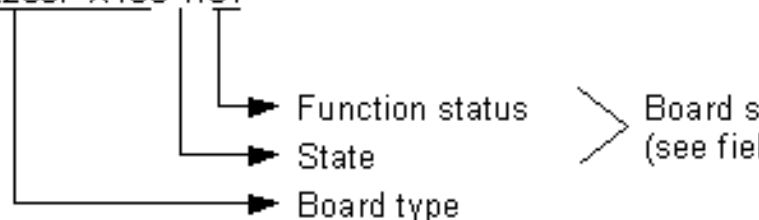
Remark: Error messages for terminals contain an additional terminal number in addition to the circuit number. This number is always '0' for analog or

functional terminals. In the case of S0 bus connections, this number is the TSI (terminals selection ID) and can range between 1 - 8.

o Brd. ID in Part No

(abbreviation of the parts list number)

Example: S30810-Q2057-X100-1/01



The table for converting board type to board part number and vice versa is contained on the hard disk and must be loaded subsequently by the signaling task (SIT).

State: Change status within a specific function status; changes with error corrections in the board without functional changes.

Function status: Functionality; changes when board functions are changed or upgraded.

p Board abbreviation

e.g. SLMA

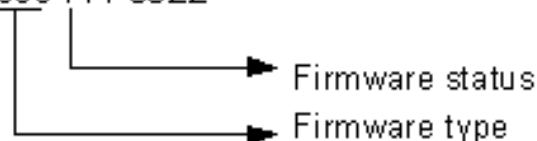
q Board status (BGS:02)

Generic term from "board type" and "board status", value range: 1 to 16 The *board status* is implemented by means of 4-bit bridge variants on the board and changes when components or circuit diagrams are changed.

r Firmware ID (FW)

The *Firmware ID* consists of the 2nd and 3rd block of the master data name. It changes to the firmware status in correction versions.

Example: V30113-A999-A-1-80ZZ



Parts list number status (PLS)

Instead of the FW status, the PLS (Part List Status) can also be given for new components with flash memory. This name refers to the parts list of the component.

8.11.6 Software program information

Instead of slot information (for hardware messages), software messages have a line with program information or operating system information. In addition, this can be followed by 1 - 8 lines of hexadecimal data.

Output columns on the service terminal

CC:jjjjj	EC:kkkkk	UA:llll:llll:llll	SP:mmmm:mmmm:mmmm	LD:n-n-nnn-nn

Example:

CC:15008	EC:202	UA:0612:D1E1:BDCC	SP:020A:4B3F:03C6	LD:01-1-001-01

Explanations:

j CALL CODE (ON_M_WORD_RNG)

The CALL CODE refers to the position in the program which identified the error.
(Error location)

Signaling format:

max. 5-digit with no leading zeroes (decimal number)

k EXCEPTION CODE (DB_M_WORD_RNG)

The EXCEPTION CODE establishes what type of error occurred in the program.
(Error type e.g.: TIMEOUT or unknown EVENT)

Signaling format:

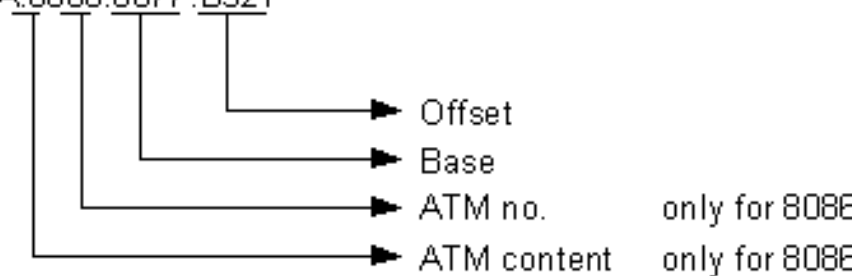
max. 5-digit with no leading zeroes (decimal number)

l USER ADDRESS (ON_M_ADDRESS_STR)

The USER ADDRESS (continuation address) contains the currently valid command counter status for OS-CALL errors.

Signaling format:

Example: UA:0000:0877:B321

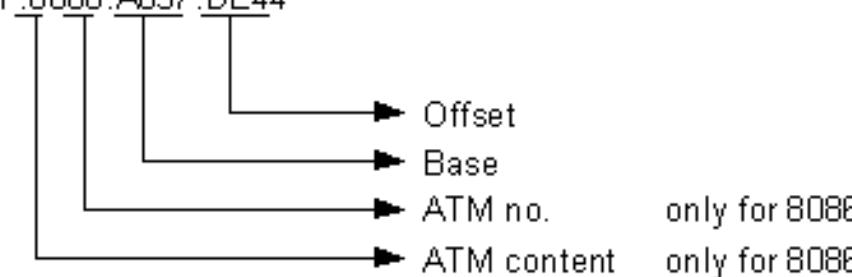


m STACK POINTER (ON_M_ADDRESS_STR)

This data unit supplies the contents of the currently valid task stack pointer for OS-CALL errors.

Signaling format:

Example: SP:0000:A657:DE44



n LOGICAL DEVICE

In the case of plausibility errors in the SWU programs, the peripheral device addresses are output with decimal numbers in the following format: LTG-LTU-SLOT-CIRCUIT

8.11.7 Error structure data

In addition to the program information or operating system information line, software messages can also contain a line with error structure data. In addition, this can be followed by 1 - 8 lines of hexadecimal data.

Output columns on the service terminal:

CC:jjjjj	EC:kkkkk	UA:lll:lll:lll			SP:mmmm:mmmm:mmmm	DB:n-n-nnn-nn
DT:oo	ST:pp	SN:qqqq	CEVT:rr	CSEV:ss	CST:tt	

Explanations:

o	Destination task
p	Source task
q	Sequence number
r	Event code
s	Subevent code
t	State (State)

8.11.8 Operating system (OS) information

Output columns on the service terminal

PARTNER-PROCESSOR:jjjjj	DEST-TYPE:kkkkkkkk	DEST:llllllllll

Example:

PARTNER-PROCESSOR:T1	DEST-TYPE:TOKEN	DEST:00280000xxxxxx

Explanations:

j PARTNER PROCESSOR (TX_PARTNER_PROC DB_M_PROCESSOR_ID_SET)

The processor name is entered in field j in the character format. (Partner processors: partner with regard to message traffic)

k DESTINATION-TYPE (TX_DEST_TYPE ON_M_DEST_TYPE_SET)

The elements of the ON_M_DEST_TYPE_SET (DESTINATION) provide information on how the destination of a message specified in ON_M_DEST_STR is to be interpreted.

DIRECT : The destination of the message is specified by the following structure:

Byte 0 (no information)

Byte 1 Processor ID of the destination processor

Byte 2-5 24-bit address of the destination data field

INDEX M : The destination of the message is specified by an index:

Byte 0.1 Index (for module index catalog) of the destination mailbox

INDEX S : The destination of the message is specified by an index:

Byte 0.1 Index (for system index catalog) of the destination mailbox

NAME M : The destination of the message is specified by a name:

Byte 0-6 Name (for module name catalog) of the destination mailbox

NAME S : The destination of the message is specified by a name:

Byte 0-6 Name (for system name catalog) of the destination mailbox

TOKEN : The destination of the message is specified by a token:

Byte 0-3 Token of the destination mailbox

OS : The destination of the message is the operating system (OS) internal mailbox of the respective destination processor

Byte 0 (no information)

Byte 1 Processor ID of the destination processor

ACK TSM : Acknowledgment for long messages. The destination of the message is the transport controller of the respective destination processor

Byte 0 (no information)

Byte 1 Processor ID of the destination processor

ACK TSDD : Acknowledgment for long messages. The destination of the message is the transport controller of the respective destination processor

Byte 0 (no information)

Byte 1 Processor ID of the destination processor

TERM DIRECT : Recipient = node. Identical to DIRECT, but ignores the specified processor ID. Message is always intended for the received processor. The destination of the message is specified by the following structure:

Byte 0 (no information)

Byte 1 Processor ID of the destination processor

Byte 2-5 24-bit address of the destination data field

TERM TOKEN : Recipient = node. Same as TOKEN, processor ID specified is ignored. Message is always intended for the received processor. The destination of the message is specified by a token:

Byte 0-3 Token of the destination mailbox

TERM OS : Recipient = node. Same as OS, processor ID specified is ignored. Message is always intended for the received processor. The destination of the message is the operating system (OS) internal mailbox of the respective destination processor

Error messages

- 1) Byte 0 (no information)
- Byte 1 Processor ID of the destination processor

IMPORTANT: A destination that was specified by the message sender using the type INDEX M :, INDEX S :, NAME M :, NAME S :, OS or TERM, can (!) have been converted into the type TOKEN : already in the error message.

I DESTINATION (TX_DEST ON_M_DEST_STR)

The field I contains the data that depend on the DESTINATION-TYPE in hexadecimal format. The following apply for each destination type:

DIRECT : 6 byte code

INDEX M : 2 byte code

INDEX S : 2 byte code

NAME M : 7 byte code

NAME S : 7 byte code

TOKEN : 4 byte code

OS : 2 byte code

8.11.9 Channel data

Output columns on the service terminal

	CHAN-NO:ss	CHAN-TYP:tttttttttt	CHAN-SI:uuuuuuuuuuuuuuuuuu

Example:

CHAN-NO:01	CHAN-TYP:2.B2 CHAN	CHAN-SI:HDCL V24 AM

Explanations:

s	Channel number
t	Channel type
u	Channel service

8.11.10 DAT drive and FM data

Output columns on the service terminal

Drive:															
FORMAT: 11															
aaaa	aaaa	bbbb	cccc	cccc	dddd	eeee	eeee	ffff	gggg	gggg	hhhh	iiii	iiii	kkkk	kkkk

iiii	iiii	kkkk	kkkk	llll	mmmm	mmmm	nnnn	oooo	oooo	pppp	qqqq	qqqq	rrrr	ssss	ssss
tttt	uuuu	uuuu	vvvv	vvvv	wwww	wwww	xxxx	xxxx	yyyy	zzzz	zzzz	zzzz	zzzz	zzzz	zzzz
zzzz	zzzz	zzzz	zzzz	zzzz	zzzz										

Explanations:

a-l	New Log Book information
m-y	Old Log Book information
z	Volume name
a,m	Current number of groups copied
b,n	Current number of read attempts after write procedure
c,o	Current number of groups read
d,p	Current number of ecc_3 retries Remark: Current values are valid during a session (ACT-RTAPE to DEACT-RTAPE).
e,q	Previous number of groups copied
f,r	Previous number of read attempts following write procedure
g,s	Previous number of groups read
h,t	Previous number of ecc_3 retries Remark: Previous values are not evaluated by the security logic.
l,u	Sum of groups copied
k,v	Sum of read attempts after write procedure
l,w	Sum of groups read
m,x	Sum of ecc_3 retries Remark: Sum values are only reset when the tape is formatted.
n,y	Tape change counter

8.11.11 OMS data

Output columns on the service terminal

	OMS-SEV:ss	DEP-CODE:tttt

Example:

OMS-SEV:47	DEP-CODE:D000

Explanations:

Error messages

s	OMS subevent code
t	DEP code
	Byte 1 = Subevent code
	Byte 2 = OMS PID

8.11.12 Test cancellation data

Output columns on the service terminal

	LAST-TEST:ssssssssssss	CHAN-NO:tt

Example:

LAST-TEST:FCD LOBA TEST	CHAN-NO:04

Explanations:

s	Name of the last test
t	Channel number

8.11.13 Interrupt data

Output columns on the service terminal

	PROCs	CELL	PHYS:ttttttt			
	NMI	LOG-ADR:	uuuu:vvvv	NMI	PHYS-ADR:	wwwwwwwww
	NMI	LOG-STACK	:xxxx:yyyy	NMI	PHYS-STACK:zzzzzzzz	
	TASK	START ADDR	:++++:++++	STATICPRIO:@@		DYNAMIC PRIO:% %

Explanations:

s	MB_PROC 0-7
t	MEM_CELL_PHYS
u	NMI logical address BASE
v	NMI logical address OFFSET
w	NMI physical address
x	NMI logical stack address BASE
y	NMI logical stack address OFFSET
z	NMI physical stack address

+	Start address of the ready task
@	Priority when copying the task
%	Priority assigned in the short term, e.g. to release regions

8.11.14 INFO data

Output columns on the service terminal

	CS-TYP:iiii	FEHLERORT:jjjj

Example:

CS-TYP:IOCG	FEHLERORT:GPA

Explanations:

I	Module/unit consisting of IOCC, IOCG or IP-SM.
j	Converted processor identification

8.11.15 Auxiliary data

Specification of auxiliary data in the DEP-S message is optional. The auxiliary data area (AUX-DATA in the error message) with a length of a maximum of 256 bytes can contain implausible data that could not be interpreted by the system security logic (DEP-S) or the signaling task (SIT). The auxiliary data is output in hexadecimal format without structuring.

The data is output as and from column 10 in the signaling message (with 9 leading blanks). 16 or 32 bytes are edited for each line. Each byte is represented by two hexadecimal digits.

The output is limited to:

- 64 bytes = 4 lines in H formats (hexadecimal formats, 16 bytes per line)
- 128 bytes = 4 lines in H formats (expand. hexadecimal formats, 32 bytes per line)
- 256 bytes = 8 lines in X formats (expand. hexadecimal formats, 32 bytes per line)

Auxiliary data examples:

- Line data
- Message header
- Mailbox TOKEN
- Implausible message

In the case of service-specific error messages additional data is listed that output

- auxiliary data in their message (AUX-DATA) and
- can be interpreted by the service department on site.

Error messages

Counting of the bytes always begins with byte 0 in the auxiliary data line.

Example of the counting method:

[illegible]

05 = Byte 0 (first byte)

00 = Byte 1 (second byte)

Example of the interpretation in the service manual:

F5412 L1 ERROR

Byte 0	= Error type (DB_M_QF_CIR_L1_ERR_SET)	
	00	= corruption on the line
	01	= corruption on the line
	02	= corruption on the line
	03	= line interruption
	etc.	

8.11.16 Advisory information texts

Advisory texts can also be output on the service terminal with an error message.

Output columns on the service terminal

[illegible]

Example:

Example:

```

CDR: INCORRECT    TARIFF TABLE ENTRY
021122
└──┬───┐
   │   └─> Auxiliary file start
   └───> Auxiliary file length (here 2 bytes)

```

Explanations:

t	Advisory information text (TEXT_IDX RANGE (0:255))
	An advisory information text which is limited to 74 characters is signalled.
y	Auxiliary data (ARRAY (0:45 ON_M_BYTE_RNG))

8.11.17 SIT-specific messages

Error messages whose assignment is not known can also be output. These errors are packaged into an array of 256 bytes and output with header information.

The formats consist of the following:

1	Line for header information
1-8	Lines for optional auxiliary data in different output formats.

8.11.18 Undefined, non-plausible messages

Output columns on the service terminal

aaaaa	bb	ccccc	dddddddddddddddddddddddddddddddddddddddddddddddddd	gggggggg	hhhhhhh

Example:

F1030	E4	V0011	MESSAGE NOT PLAUSIBLE	91-02-21	16:22:35			
	5800	0000	0000	0000	0000	0000	0000	0000
	0000	0000	0000	0000	0000	0000	0000	0000
	0000	0000	0000	0000	0000	0000	0000	0000
	0000	0000	0000	0000	0000	0000	0000	0000
	max. 4 LINES = 64 Bytes							

Explanations:

a Message identification

Each output message is allocated a unique message identification consisting of key identification and message number. The following key identifications have been identified: A for alarm message F for error (standard identification) H for advisory information U for undefined error element

The following ranges generally apply for message numbering 1000 ... 1110 for SIT, p. 2000 ... 8107 for SWU/SM hardware and software messages, 9000 ... 9005 for NMC/DMS alarm messages.

Each signaling format has been allocated a part number range.

b Message priority for Automatic Fault Report Task (AFRT)

(automatic transfer of error to Service Center) The priorities for AFR consist of a key identification and a single decimal digit. The following key identifications have been defined: E for unique messages M for ambiguous messages 1 ... 8 priority number range

The priority is established for each individual message in the message distribution table (SDT) by initializing it.

c Message serial number

This serial number is simply used for classification and as an aid for responding to the output messages. The date and time are also required for uniquely identifying the message. The numbering is cyclical in the range 0001 - 9999

d Message text

Messages for which the event code status has been entered in the distribution table as undefined (DA_ST_EVT_UNDEF) are assigned the message text EVENT NOT DEFINED in field d of the header line.

Messages in which sender and/or error class are not plausible are assigned the message text MESSAGE NOT PLAUSIBLE in the header line.

Messages in which the message class is not plausible are assigned the message text MESSAGE CLASS NOT DEFINED in the header line.

Messages in which the error type is not defined are assigned the message text SUB-EVENT NOT DEFINED in the header line.

Messages in which the action has not been defined are assigned the message text ACTION NOT DEFINED in the header line.

8.11.19 Error message evaluation

In the following sections error messages from the security logic (DEP) are listed according to their complexes. Error messages that are not accessed are not documented.

These error messages are listed with

- the error number,
- the event,
- the subevent (error message text),
- the appropriate format for the error and
- the following cause and action: This text explains the error and, if possible, a remedy is described or the action taken by the PABX.

Procedure for tracing errors with DEP error messages:

- Using the error number (serves as a search word) search for the associated explanation. The error number is not always binding, i.e. if error numbers were output whose sub-event (error message text) does not match the specified error number, the error must always be interpreted according to the error number and not according to the sub-event. This error may be due to the fact that the security logic subsystem does not have the same output status in the administration and data server ADS as the security logic subsystem in the switching unit SWU.
- Each error message in the security logic is assigned a specific format. The format associated with the error complex is specified with its hexadecimal value. The format number is also output with error messages. The hexadecimal data values are output as additional interpretation aids. Due to different error outputs for specific messages, several formats may apply.

IMPORTANT: All error messages are flagged as service-specific or diagnosis-specific. Notify your product specialist if you are unable to evaluate diagnosis-relevant error messages.

8.12 SW/Interrupt/Stack message interpretation

This chapter deals largely with the interpretation of so-called stack messages. The examples show which messages are associated with one another and from which function complex they originate.

Due to their complexity, specific actions in the event of such errors cannot be given here. Nevertheless, in the case of software messages for example, certain data from the message can be used for searches. For example, the CC (call code) / EC (exception code) / UA (user address) can be used to search for patches or preliminary corrections that may be available, thus making it possible to find a solution. A possible solution can thus be determined.

If an immediate solution is not possible, all data relating to the error situation should be saved and passed on to the system specialist (see also [Section 9.17, "Next level of support"](#)). It is also important to know which actions preceded the error, e.g. starting AMOs, so that it can be further interpreted by the developers for example. The data backup should always contain the last AMO commands (see AMO logbook). In some situations it is also advisable to back up the history file (at least the last two hours before the error occurred).

- [Stack outputs for interrupts, SYSLOAD](#)
 - [Temporary subsystems signaling](#)
 - [Stack signaling](#)
 - [Task address signaling](#)
 - [Stack header message signaling](#)
- Stack outputs for non-maskable interrupts (NMIs), ZONINTH0:
 - [Watchdog](#)
 - [Multibus timeout](#)
 - [Example: Stack data message](#)
 - [Example: Header message](#)
- [Software exception handling in the SWU / ADP](#)

- Interpretation of hexadecimal data in the stack message:
 - [Stack and stack pointer](#)
 - [Stack data messages](#)
 - [Format for stack outputs](#)
 - [Restart prevention for call processing \(CP\) protection error](#)

8.12.1 Stack outputs for interrupts, SYSLOAD

The SYSLOAD handles processor interrupts. When the system has finished booting, all interrupts apart from INT2 (NMI) are handled by SYSLOAD. The number of messages output for an interrupt depends on a number of requirements - however the sequence in which they are output is fixed. Throughout the following all of the messages are listed in the order in which they are output.

8.12.2 Temporary subsystems signaling

The originator will determine whether or not a "TEMPORARY SUSY" message (F2204) is output first for an interrupt. This message is generated only for tasks of a reloadable subsystem.

Example:

```
F2204 M4 N0089 NO ACT BPA PROC INT INFO TEMPORARY SUSY
96-08-20 14:47:03

ALARM CLASS:CENTRAL:005 FORMAT:17

:AMO:REGEN/C

92B81E0D 92C83305 92C029F3 92D80D94 92E026E7 92D00023 9248240B
92F00027

92F82D0C 93080926 93000009 931006FE 93180011 93200003
```

The first line under the format specification contains the name of the temporary subsystem. This is followed by a maximum of two more lines which consist of blocks of four bytes; the first word contains the selector of a code or data segment, the second contains the relevant limit. The mapping of the subsystem can be used to determine which module is using which selector. This information is obtained through the unique allocation of the selectors to the module names in the mapping.

Should it become necessary to abort signaling of temporary subsystems because the limit of the reentry capability has been reached, an advisory message to this effect is displayed.

Example:

```
F2204 M4 N0089 NO ACT BPA PROC INT INFO TEMPORARY SUSY
96-08-20 14:47:03

ALARM CLASS:CENTRAL:005

FORMAT:17

SIGNALLING TMP SUSYS STOPPED
```

8.12.3 Stack signaling

A fixed component of interrupt signaling is the output of the stack. This can consist of up to 5 messages depending on the stack size.

Example:

(Stack message 1:)

F2201 M4 N0010 NO ACT A1 PROC INT STACK 96-06-13 14:19:07 ALARM
CLASS:CENTRAL:010

CC: 1 EC: 5 UA:0000:0280:3969 SP:0000:0024:0000

FORMAT:14

00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000

00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000

00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000

00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000

(Stack message 2:)

F2201 M4 N0011 NO ACT A1 PROC INT STACK 96-06-13 14:19:07

ALARM CLASS:CENTRAL:010

CC: 2 EC: 5 UA:0000:0280:3969 SP:0000:0024:0080

FORMAT:14

00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000

00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000

00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000

00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000

The number of stack messages to be signaled is set out in EC; the messages are counted in the entry CC. The user address (UA) is always the same in these messages. The stack pointer SP points to the first byte in the hexadecimal data.

8.12.4 Task address signaling

The output of the running task address also forms a component part of interrupt signaling.

Example:

F2203 M4 N0033 NO ACT BPA PROC INT TASK ADDRESS 97-07-07 09:56:44

ALARM CLASS:CENTRAL:005

FORMAT:17 MESSAGE-ID: 00001

TASKADDRESS 4F58:042D

The first word of the hexadecimal data under the format specification indicates the selector, the second indicates the offset of the address.

8.12.5 Stack header message signaling

SYSLOAD interrupt signaling is concluded by the stack header message. It provides information on the register contents at the time when the interrupt occurs and the stack is linked.

Example:

F2218 M4 N0092 SOFTREST BPA PROC INT GENERAL PROTECTION
96-08-20 14:47:03

ALARM CLASS:CENTRAL:005

INTERRUPT:0D AX:C701 BX:0011 CX:07F0 DX:92FC BP:08BC SI:0002
DI:06E0

CS:92FC IP:083C CSLIM:2D0C CSAR:9B SS:946C SP:08AC SSLIM:08FF
SSAR:93

DS:9304 DSLIM:0009 DSAR:93 ES:9884 ESLIM:0029 ESAR:93 NMI
REG:0000

STACK: 013F 930C 0000 947C 08EA 5A5A 0000 05F4 9314 0000

5A5A 0000 05F4 9314 0000 947C 0002 9594 0001 001F

06F1 0000 947C 0000 947C 0000 ffff 9474 06BA 9314

0000 0000 0000 0000 0000 0000 0000 0000 0000

FORMAT:2C

Meaning of individual fields:

The entries show the important register contents at the time of the interrupt.

Interrupt	Number of interrupts
AX, BX, CX, DX, BP, SI, DI:	Default register
CS:	Code segment selector
IP:	Offset for the location of the error
CSLIM:	Code segment limiter
CSAR:	Code segment access rights
SS:	Stack segment selector
SP:	Stack pointer
SSLIM:	Stack segment limit
SSAR:	Stack segment access rights

Interrupt	Number of interrupts
DS:	Data segment selector
DSLIM:	Data segment limit
DSAR:	Data segment access rights
ES:	Extra segment selector
ESLIM:	Extra segment limit
ESAR:	Extra segment access rights
NMI REG:	NMI register for specifying the interrupt

8.12.6 Watchdog

In the case of Watchdog 0 and Watchdog 1 NMI's not only is the data relating to the task that was interrupted (running task) output, but also information on the tasks that were in "ready" mode at the time of the Watchdog run.

The values for the tasks in "ready" mode are output for the tasks with task priority 35 - 189 (WD0) or 35 - 192 (WD1). Thus, tasks that are continuously running in the background such as RTO tasks are not displayed as they are not relevant to the diagnosis.

The number of tasks output per interrupt is limited to 8 tasks due to the size of the BCA memory.

For each task, the data output consists of (depending on the length of the stack area occupied) 1 - 5 stack data messages and a header message (message block).

The data of the running tasks are always output in the first block. If the stack pointer addresses of the NMIs and the OS data are not identical, 2 message blocks are output for the running task.

The same stack and user address are used to identify associated header and stack messages.

8.12.7 Multibus timeout

If an address that is not contained in the multibus address catalog is addressed, i.e. that the read or write command is not acknowledged by the addressed hardware unit (e.g. memory chip), a multibus timeout (MBTO) is initiated.

The interrupt handler logs this interrupt with 1 - 5 stack data messages and a header message.

The same stack and user address are used to identify associated header and stack messages.

Example: Stack data message

F3150 M4 N6568 NO ACT BPA SWU-INT WATCHDOG 0 96-01-12 14:18:03
ALARM CLASS:CENTRAL:005

CC: 2 EC: 3 UA:0000:BBC8:7B61 SP:0000:CFF0:0D26

Error messages

FORMAT:14

4E200D52 0E62B8D0 0634BE38 00020D84 001C05DF B8D0546F B8D00002
0D840002

0D840E62 52940007 17B8002F 0E6201B4 BB500002 0D840002 0D840000
00000000

00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000

00000000 0000B8B8 A0816370 0698B8B8 25766480 0DA405B7 B9900000
3B860DAC

Action is always NO ACT for stack data messages.

CC:	serial number of the stack data message
EC:	number of stack data messages (max. 5)
UA:	Interruption address.
SP:	the address always points to the first word of the stack data message.

In the auxiliary data, the stack data is output with incrementing addresses word for word.

Example: Header message

Watchdog message:

F3150 M4 N6571 SOFTREST BPA SWU-INT WATCHDOG 0 96-01-12
14:18:03

ALARM CLASS:CENTRAL:005

P001: :CC A :058: Q2250-X DP4L/3 BST:01 FW: D654-D

PROC1 CELL PHYS::

NMI LOG ADDR: 1160:D1 NMI PHYS ADDR: 16469E1

NMI LOG STACK:31D8:261E NMI PHYS STACK:16B5898

TASK START ADDR:FFFF:FFFF STATIC PRIO:FF DYNAMIC PRIO:FF

FORMAT:28

Multibus timeout:

F3153 M8 N3804 STATIST BPA SWU-INT MULTIBUS TIMEOUT 95-08-01
15:59:52

DEV CLASS:00020000 0000 0000000000000000 0000000000000000 000000

P104: :CC A:020: Q2200-X100 DP486 BST:01 FW:C960-E

PROC1 CELL PHYS::

NMI LOG ADDR: 1160:D1 NMI PHYS ADDR: 16469E1

NMI LOG STACK:31D8:261E NMI PHYS STACK:16B5898

TASK START ADDR:FFFF:FFFF STATIC PRIO:FF DYNAMIC PRIO:FF

FORMAT:28

- Action: WD: only differs from NO ACT for the running task. MBTO: STATIST, after the 3rd interrupt SOFTREST

- The 3rd line describes the location of the DP on which the NMI was identified.
- PROC1: number of the processor that caused the MBTO (only relevant in the case of MBTO)
- CELL PHYS: describes the physical address that was incorrectly addressed (only relevant in the case of MBTO)
- NMI LOG ADDR: interrupt address
- NMI LOG STACK: value of the stack pointer at the time of the interrupt
- TASK START ADDR: start address of the task (only relevant in the case of ready tasks, otherwise FF).
- STATIC PRIO: static priority of the task (only relevant in the case of ready tasks, otherwise FF).
- DYNAMIC PRIO: dynamic priority of the task (only in the case of ready tasks with WD interrupt, otherwise FF)

8.12.8 Software exception handling in the SWU / ADP

The error analysis in the SWU / ADP handles software exceptions which generate user tasks in the SWU / ADP. These exceptions are output with several stack messages and a header message. Messages with the same CC, EC, UA and SP field belong to one and the same exception. First of all, up to 5 stack messages are output, then the header message is output. If the user task belongs to a reloadable subsystem (AMOs), a "Temporary subsystem message" (F2205) is also output prior to all other messages. For a description of the ["Temporary subsystems signaling"](#), see above.

Example

(Stack message 1:)

F4250 M4 N0998 STATIST BPB DEP IMPLAUSIBLE EVT CODE 97-04-17
14:16:09

ALARM CLASS:CENTRAL:023

CC:25306 EC: 9045 UA:0000:34F0:4854 SP:0000:F478:27E0 LD:01-01-031-00

DT:40 ST:AE SN: 1B CEVT::1A CSEV::50 CST::FF

FORMAT:24

2BB02BB0 34A81386 34F0001B 01000007 F7280102 00000200 2BB0F390
138D0007

000B10E8 0000005D 0000F468 FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
FFFFFFFF

FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
FFFFFFFF FFFFFFFF

FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
FFFFFFFF FFFFFFFF

FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
FFFFFFFF FFFFFFFF

FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF FFFFFFFF
FFFFFFFF FFFFFFFF

FFFFFFFF FFFFFFFF

Error messages

(Stack message 2:)

F4250 M4 N0999 STATIST BPB DEP IMPLAUSIBLE EVT CODE 97-04-17
14:16:09

ALARM CLASS:CENTRAL:023

CC:25306 EC: 9045 UA:0000:34F0:4854 SP:0000:F478:27E0 LD:01-01-031-00

DT:40 ST:AE SN: 1B CEVT::1A CSEV::50 CST::FF

FORMAT:24

FFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF
FFFFFFFF FFFFFFFFF

FFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF
FFFFFFFF FFFFFFFFF

FFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF
FFFFFFFF FFFFFFFFF

FFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF FFFFFFFFF
FFFFFFFF FFFFFFFFF

FFFFFFFF FFFFFFFFF 56FF9300 80002900 00F01170 11782952 0A061110
298CF478

018E0000 56FC0000 296808EB F490298C 2966F478 0091F528 29680523
00010000

29900EDE 1110298C

(Header message:)

F4250 M4 N1003 STATIST BPB DEP IMPLAUSIBLE EVT CODE 97-04-17
14:18:09

ALARM CLASS:CENTRAL:023

CC:25306 EC: 9045 UA:0000:34F0:4854 SP:0000:F478:27E0 LD:01-01-031-00

DT:40 ST:AE SN: 1B CEVT::1A CSEV::50 CST::FF

FORMAT:24

0040AE1B 001A5000 00000001 02012007 2D423120 20200100 00005A5A
00840001

005AA08E 37360000 07010102 02040200 01000615 02020200 01000100
0100ffff

00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000

00000000 00FFFFFF FFFFFFFFF FFFFFFFF5A 5A5A5A5A 5AA00000 00

Meaning of individual fields

Error class	Complex of the user task which generated the exception
Error:	Type of exception
CC:	Call code; location of the exception
EC:	Exception code; further specification of the type of exception
UA:	User address; user address at which the exception was generated

SP:	Stack pointer at the time when the exception was generated
LD:	Logical device insofar as the exception occurs in the context of a device
DT:	Destination task
ST:	Source task
SN:	Sequence number
CEVT:	Current event
CSEV:	Current subevent
CST:	Current state

Hex. data of stack message: Contents of the stack Hex. data of header message: Data of user tasks

Comment on LD: If the LD field contains a valid address, e.g. LTG / LTU / slot / circuit, it can be used to ascertain the status of the relevant units (LTU / BOARD / CIR / DEV) by means of AMO-SDSU. The information in the LD field can also be used to ascertain all error messages affecting this situation from the history file via AMO-HISTA. This information together with the above-mentioned error messages should always be part of a data backup.

8.12.9 Stack and stack pointer

As part of the startup procedure, each task is allocated a memory area (stack memory) for storing temporary data. Data such as return addresses for procedure calls (command CALL), transfer parameters for procedure calls, data description entries at procedure level or saved register values (command PUSH) are stored in this memory area.

The next free address in the stack memory is stored in the stack pointer (SS:SP). The offset of the stack pointer (SP) is assigned the value of the stack segment limit at the start of the task and is decremented each time data is stacked. This means that the older data is assigned higher addresses and the more recent data is assigned the lower addresses.

In the case of a procedure return (command RET) the offset of the stack pointer is increased by the number of the parameter and the return address so that the stack memory is freed up again. The same applies to the reading of saved data (command POP).

The register BP is important. At the beginning of each procedure the command sequence PUSH BP MOV BP,SP is used to store the current value of the SP so that the location of the data in the higher procedure in the stack memory can be worked out from this.

8.12.10 Stack data messages

The first word in the first stack data message contains the last word saved and the stack pointer points to this word (SS:SP). The addresses are counted in

ascending order in the messages and the last word (if all data is displayed, max. 5 messages) corresponds to the oldest entry.

What is important for the diagnosis is the establishment of the respective addresses of the individual procedures involved in the interrupt or exception in order to be able to trace the sequence of the program. The parameters for calling the procedure are of secondary importance.

Both pieces of information are stored in the stack memory as shown in the above figure.

To ascertain the respective return addresses, the stack data (beginning with the first stack data message) is searched for possible selectors (end digit 0 or 8).

The relevant offset is immediately in front of this. This CS:IP value can be used to find the corresponding program location in the DALIST with the function "Locate".

The procedure parameters are immediately after the return address whereby the last parameter is located immediately after the return address.

The BP value is stored immediately in front of the return address or is separated from the return address by a stored register. This value points to the offset of the next procedure level. The return address of the next procedure level is stored after this offset.

Example:

F4066 M8 N0621 NO ACT BPA CP ADVISORY 97-02-24 09:29:58

ALARM CLASS:CENTRAL:023

CC:15215 EC:02019 UA:0000:BE70:017E SP:0000:CDC8:0844

LD:05-04-025-09

DT:6C ST:6C SN:FB01 CEVT: B CSEV:: 0 CST: 0

FORMAT:24

5A5A0000 FFFFCDD0 097EB978

APS S0-EH0.10.40

The call location of ON_P_SIGNAL_EXCEPTION is ascertained from the exception address (UA:BE70:017E) with the "Locate" function in the Dalist:

--> Procedure CP_P_SYM_GEN_ADVISORY in the module CB050SC.

CP_P_SYM_GEN_ADVISORY was called up by a procedure with the return address BE78:213E (first selector of the stack data)

--> Procedure CP_P_DLG_MENU_AFT_STATE_TR in the module CB50SD, CP_P_SYM_GEN_ADVISORY is called on offset 2139.

The location of the data of the next highest procedure is ascertained from the BP value 858 (first word of the stack data with the address SS:SP, therefore CDC8:0844):

BP on address CDC8:0858 with the value 0862

The next return address is stored after this (BE78:224E):

--> CP_P_DLG_MENU_AFT_STATE_TR in the procedure CP_P_DLG_MENU_AND_STORE called up with the parameter 0045 (value immediately after the return address).

Data of the next highest procedure:

BP on address CDC8:0862 with the value 0878

Return address: BBB8:0C9E

Next level:

BP on address CDC8:0878 with the value 0888

Return address: B978:1331 etc.

8.12.11 Format for stack outputs

Stack data message:

F3153 M4 N0376 STATIST BPA SWU-INT MULTIBUS TIMEOUT 97-05-06
10:45:49

ALARM CLASS: CENTRAL:017

CC: 0 EC: 0 UA: 2128:003C SP: 8178:0594 BP: 059C LD: 00-00-000-00

FORMAT: 45 MESSAGE-ID: 00009

STACK-DATA-MESSAGE 01 OF 04

---4---6 ---8---A ---C---E ---0---2 ---4---6 ---8---A ---C---E ---0---2

007E8178 05BA17E0 05BE2023 21F005BA 81789FFF 00530206 05B814EC
9FFF5A5A

00020000 00C021F8 01F8065C 177E5A5A 5A5A5A5A 5A5A5A5A FF5A5A9F
025A0800

00000100 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A
5A5A5A5A 5A5A5A5A

5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A
5A5A5A5A 5A5A5A5A

5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A
5A5A5A5A 5A5A5A5A

5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A 5A5A5A5A
5A5A5A5A 00010000

CC:	Call Code, for NMI's assigned the default value 0.
EC:	Exception code, for NMI's assigned the default value 0.
UA:	Interruption address.
SP:	The address always points to the first word of the respective stack data message.
BP:	Value of the BPs (address of the subsequent BPs in the stack data, here with the value 05BE).
LD:	Location, for NMIs assigned 0.
MESSAGE-ID:	Messages with the same message ID belong to a single event
STACK-DATA_MESSAGE N OF M:	message of m.

The ruler shows the value of the lowest half-byte of the SS:SP address (here "4" from 8178:0594). The first word in the first line of the stack data thus has the address 8178:0594, the second word has the address 8178:596, etc. The first word of the second line of the stack data therefore has the address 8178:05C4, the second word has the address 8178:5C6, etc.

In the auxiliary data, the stack data is output with incrementing addresses word for word.

8.12.12 Restart prevention for call processing (CP) protection error

If a processor interrupt 13 occurs while the CP task is running, a soft restart is generally not executed, but error messages are generated with stack data, task address, register data and user data (received CP message and extract from call-related data). This type of error is signaled with CC: 9999 and EC 9999

The relevant connection is cleared down. If this CP response is not practical (because the relevant device cannot be cleared down) or clearing down the connection would result in subsequent errors, a soft restart is executed after all.

Even if the restart is prevented in this case, a 'CC RESTARTS' alarm signal need not occur. This means that the error profile is only signaled in the same way as a normal user error.

However, the search for this error profile in the Histo file is also facilitated by a unique call / exception code (= 9999). The error messages corresponding to the error profile of a customary protection error are also output without being modified (with the exception of the 'Action' field in the messages).

It is therefore advisable to use both the station PEN address or the telephone number and the CC/EC=9999 in the future when searching for user error messages in the Histo file using the HISTA AMO.

IMPORTANT: It may also be practical to disable this function, i.e. to permit restarts, for analysis purposes in certain diagnosis situations. Use the DIAGS AMO (diagnosis switch S01 of the complex CP) to disable the function. To do this, the switch must be set to 'ON' (CHANGE-DIAGS: CC, CP, ON;).

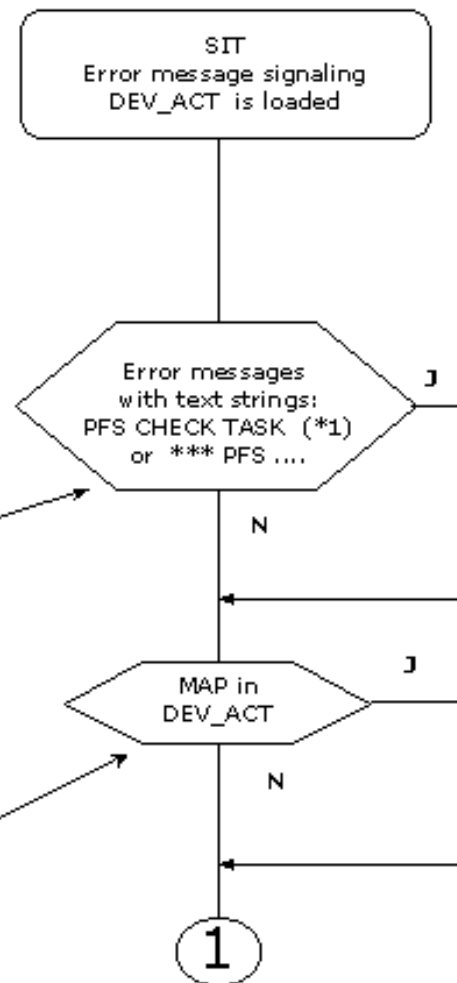
8.13 Error message signaling in SIT

DEV_ACT (internal SIT variable) contains all currently configured output devices. Loaded in SIT when message processing is started with value from ALLMSG switch
e.g. **ADD-SIGNL:ALLMSG,AFR1;**
or the individual setting from the relevant F no. e.g. **CHA-SIGNL:MID,F,3062,DPT2;**
or the general setting, e.g. via **CHA-SIGNL:EVT,EVT=ALL,FREE,AFR1,AFR1;**
(all F nos. contain AFR1 as output device)

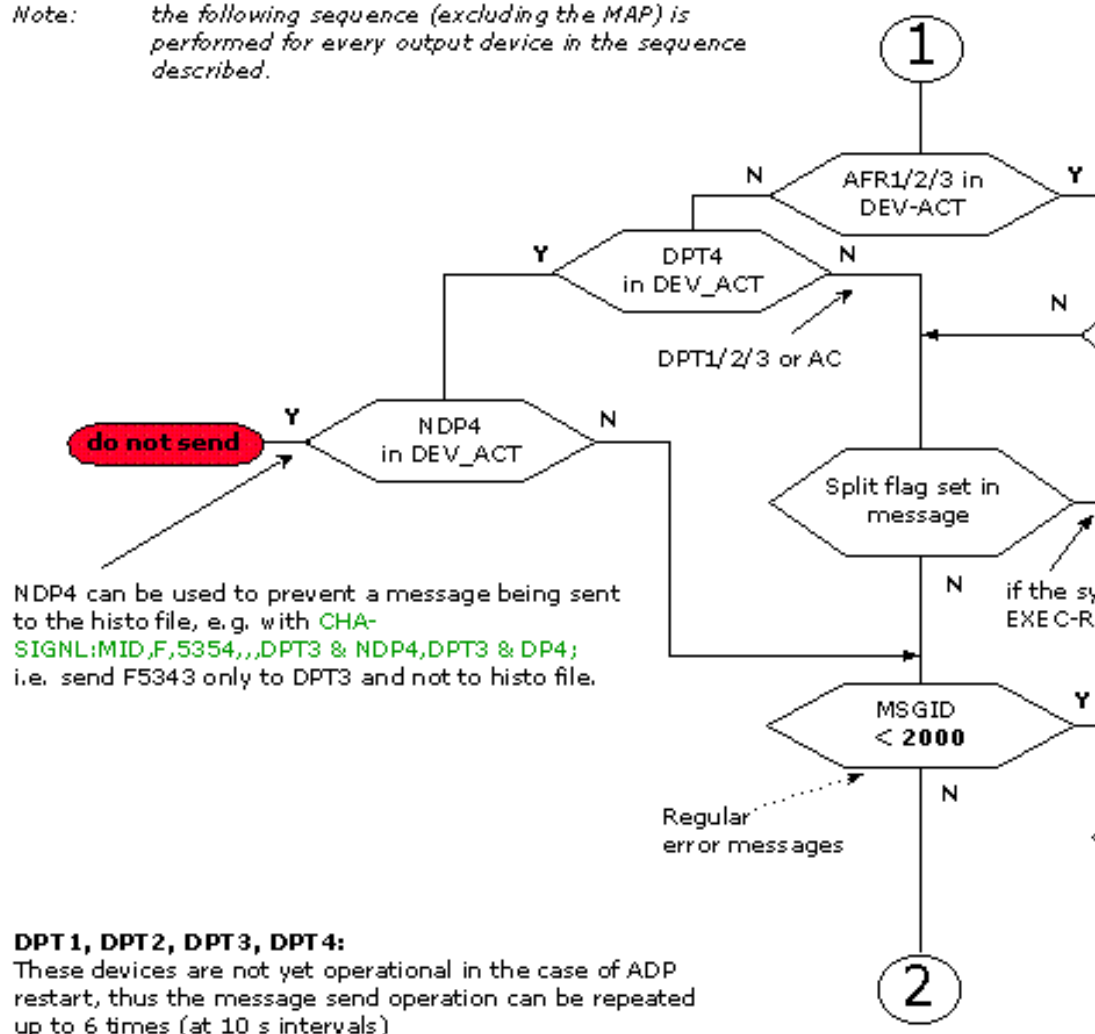
Messages with these text strings indicate dongle misuse and **musts be** sent to all available output devices.

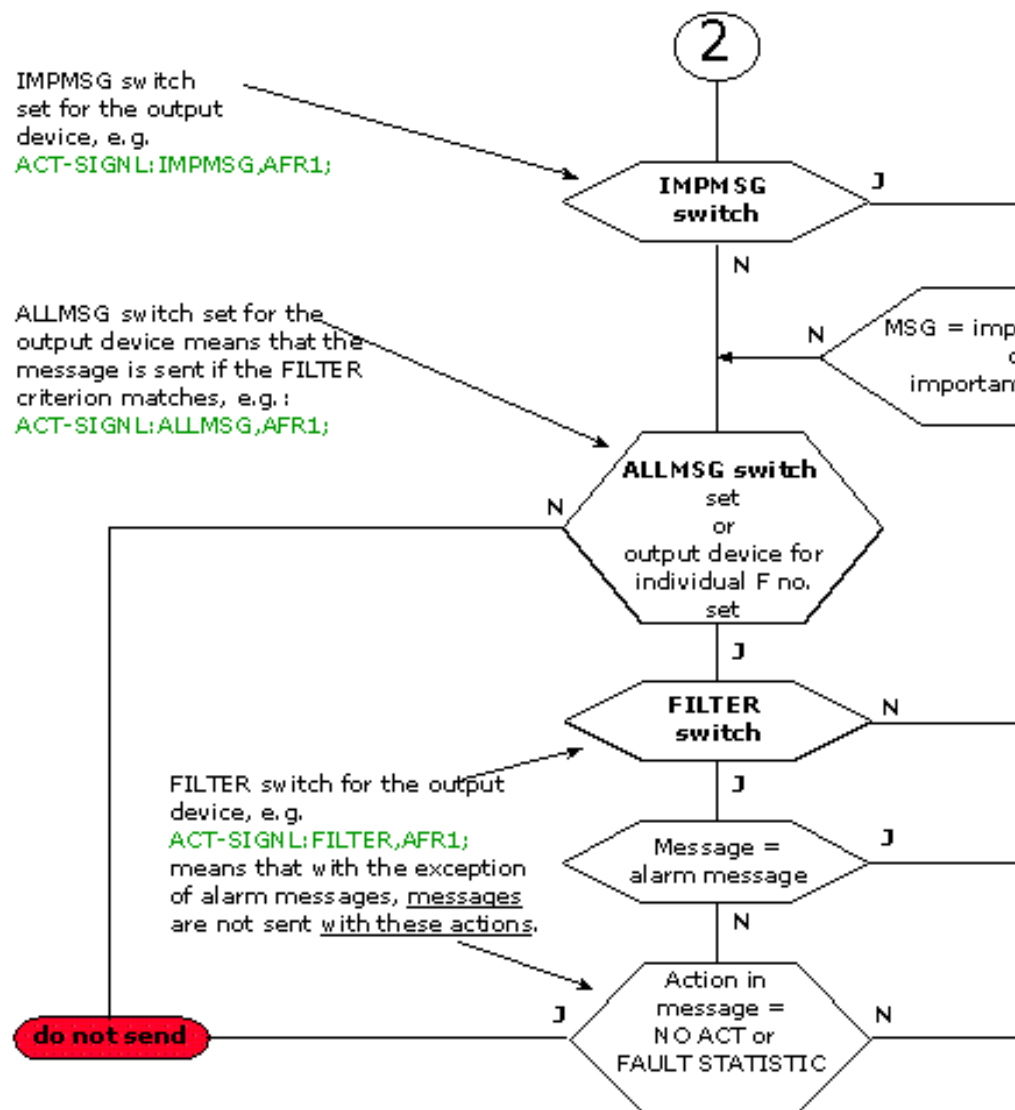
(*1) : PFS CHECK TASK:
...BYPASS CODEWORD EXPIRED...
...DONGLE MISSING ...
... CODEWORD INVALID ...

MAP: if this output device is in DEV_ACT (i.e. assigned to the fault report), the alarm status of the relevant error message is always signaled without any further criteria at the alarm LED (DP) or IOP.



Note: the following sequence (excluding the MAP) is performed for every output device in the sequence described.





NOTICE: CP-MSG alarms (MCID/Fangen) are purposely not sent to AFR1 if not filtered out via IMPMSG. Examples of CP-MSG alarms are F2750-F2757.

8.14 Device names

Valid for error messages with the Event TERM or CIRCUIT.

The SWU periphery error messages for circuits and terminals generally contain a device name. This device name is identical to the device names configured using the configuration AMO.

Example of an error message with device names:

F5645 M4 N0379 OUT SERV BPB CIRCUIT L1 ERROR S0 97-07-24 10:00:15

ALARM CLASS:SWU-PER:004

P101:LTG1 :LTU1 :091: 1 : 0 Q2115-X SLMU16 BST:01 FW: C812-G

REASON:04H NO SIGNAL (LOCAL ALARM)

FORMAT:36 DEVICE NAME: CPP

DEVICE NAME: CPP

(Device name CPP has the following meaning: circuit line with cornet point-to-point connection)

The 7 s below contain all of the error messages that feature in the error messages, their meanings, as well as their allocation to the configuration AMO.

- [AMO ACSU](#)
- [AMO MPOOL](#)
- [AMO SBCSU](#)
- [AMO SCSU](#)
- [AMO SSCSU](#)
- [AMO TACSU](#)
- [AMO TDCSU](#)
- [AMO TSCSU](#)
- [Special allocation for circuit error messages](#)

Allocation to the DB_M_DH_GERAETE_TYP_SET (see [Device type / Board](#)) is also available. This connection is derived from the device type which is allocated to an [SWU periphery alarm class](#) described in the Alarm concept.

8.14.1 AMO SCSU

DB_M_DH_GERAETE_TYP_SET

(DB_DH_DEV_TYP_..	Device names AMO (D)	device name AMO (GB)	Meaning
ANATE	ANATE	ANATE	Analog telephone
ANATE	ANATEGEB	ANATECM	Analog telephone with call charge counter
ANATE	ANA&BTX	ANA&VTX	VTX device (analog ss)
U_STERN_CLC	CLC	CLC	CLC server fixed
ANATE	ANA&DEE	ANA&DTE	DTE device (analog ss)
CTE_X21	DEED	DTEDIG	DTE device (x.21 ss)
DIGITE	DIGI211	DIGI211	Voice terminal 211
DIGITE	DIGI260	DIGI260	Voice terminal 260
ANATE	ANA&FAX	ANA&FAX	Fax machine
DIG_M	SET400	SET400	Voice terminal 400 (digitem)
CTE_X21	TTX	TTX	TTX device (analog ss)

8.14.2 AMO TSCSU

DB_M_DH_GERAETE_TYP_SET

(DB_DH_DEV_TYP)	Device names AMO (D)	device name AMO (GB)	Meaning
APSE_ANSE_A	ANSEA	RA	Recorded announcement
APSE_ANSEM	ANSEM	ANS	Answering machine
APSE_ANSE_S	ANSES	RAS	Recorded announcement device, synchronized
TMX21	ASX21DEE	TCX21DTE	Trunk circuit x21 for DTE
TMX21	ASX21TTX	TCX21TTX	Trunk circuit x21 for TTX
APSE_DE	DIKT	DICT	Dictating machine
TMCL_HA	HAMFCALT	MMCOLD	MFC call data line in a main PBX of type HDW/EMD
TMCL_HA	HAMFNEU	MMFNEW	MFC call data line in a main PBX of type ESK/EMS
APSE_ELA	LAUT	SPKR	Loudspeaker
APSE_PSE	PSE	CC	Code calling device, single
APSE_PSM	PSM	CCM	Code calling device, multiple
TMX21	QSX21DEE	TLX21DTE	Tie line X.21 for DTE
TMX21	QSX21TTX	TLX21TTX	Tie line X.21 for TTX
SM_FAX	SMFAX	SMFAX	Service module for fax service
SM_TTX	SMTTX	SMTTX	Service module for TTX service
SM_VM	SMVM	SMVM	Service module for voice mail service
APSE_TE	TUER	DOOR	Door phone
TMCL_UA	UAMFCALT	SMFNEW	MFC call data line in satellite PBX of type HDW/EMD
TMCL_UA	UAMFNEU	SMCOLD	MFC call data line in satellite PBX of type ESK/EMS

8.14.3 AMO SBSCSU

DB_M_DH_GERAETE_TYP_SET

(DB_DH_DEV_TYP)	Device names AMO (D)	device name AMO (GB)	Meaning
SYM_ANA_EG	ANABTX	ANAVTX	Analog terminal for VTX service
SYM_ANA_EG	ANADEE	ANADTE	Analog terminal for DTE service
SYM_ANA_EG	ANAEG	ANADEV	Analog terminal for all services

Error messages

(DB_DH_DEV_TYP_	Device names AMO (D)	device name AMO (GB)	Meaning
SYM_ANA_EG	ANAFAX	ANAFAX	Analog terminal for fax service
SYM_ANA_EG	ANATTX	ANATTX	Analog terminal for TTX service
SYM_CMI_BASE	BASIS	BASE	CMI base station, UP0/Cornet-TS
SB_ALLG	BTX	VTX	Terminal or terminal adapter for VTX service
SYM_CMI_ADMI	CMIADM	CMIADM	CMI board administration, UP0/Cornet-TS
CRNT_DATA	DCI500	DCI500	Integrated terminal adapter V24, UP0/Cornet-TS
CRNT_DATA	DCI700	DCI700	Stand-alone terminal adapter V24, S0/Cornet
SB_ALLG	DEE	DTE	Terminal or terminal adapter for DTE service
SB_ALLG	FAX	FAX	Terminal or terminal adapter for fax service
CRNT_VOICE	KEY300	KEY300	Voice terminal KEY300
SYM_CMI_OPTI	MOBIL	RADIO	CMI mobile voice terminal, UP0/Cornet-TS
MSN_DEVICE	MSN	MSN	MSN phone number
SYMPHONY	OPTISET	OPTISET	Optiset voice terminal, UPN/Cornet-TS
CRNT_DATA	PCCARD	PCCARD	PC card with UP0 interface
CRNT_VOICE	SET5/700	SET5/700	Voice terminal SET500, UP0/Cornet
SB_ALLG	SET600	SET600	Voice terminal SET600, S0/DKZ
CRNT_VOICE	SET700	SET700	Voice terminal SET700, S0/Cornet
SB_ALLG	TTX	TTX	Terminal or terminal adapter for the TTX service
SB_ALLG	VLVERB	EXTLINE	CMI extended lines, S0/DKZ
SB_ALLG	S0PP	S0PP	S0 point-to-point connection, 2 B-channels
SB_ALLG	S2PP	S2PP	S2 point-to-point connection, 30 B-channels

8.14.4 AMO TDCSU

DB_M_DH_GERAETE_TYP_SET

(DB_DH_DEV_TYP_	Device names AMO (D)	device name AMO (GB)	Meaning
NW_DIGITAL_P	ATMIW	ATMIW	Digital ATM circuit for interworking
NW_DIGITAL_P	ATMPBB	ATMPBB	Digital ATM circuit for PBX backboning

(DB_DH_DEV_TYP_	Device names AMO (D)	device name AMO (GB)	Meaning
NW_DIGITAL_P	LAN	LAN	Digital LAN tie line circuit
NW_DIGITAL_P	MKAMT	MCCOD	Digital multi-channel trunk circuit
NW_DIGITAL_P	MKTERM	MCTERM	Digital multi-channel terminal
NW_DIGITAL_P	MKVERB	MCCONN	Digital multi-channel tie line circuit
NW_DIGITAL_B	S0AMT	S0COD	Digital trunk circuit with S0 interface
NW_DIGITAL_B	S0VERB	S0CONN	Digital tie line circuit with S0 interface
NW_DIGITAL_P	S2AMT	S2COD	Digital trunk circuit with S2 interface
NW_DIGITAL_P	S2VERB	S2CONN	Digital tie line circuit with S2 interface
NW_DIGITAL_P	S7AMT	S7COD	Digital trunk circuit with SS7 interface
NW_DIGITAL_P	S7VERB	S7CONN	Digital tie line circuit with SS7 interface
NW_DIGITAL_P	SKAMT	VCCOD	Digital trunk circuit with voice compression
NW_DIGITAL_P	SKVERB	VCCONN	Digital tie line circuit with voice compression

8.14.5 AMO SCSU

DB_M_DH_GERAETE_TYP_SET

(DB_DH_DEV_TYP_	Device names AMO (D)	device name AMO (GB)	Meaning
SB_ALLG	DEE	DTE	Hicom Trading Board data terminal
SKY_LINE	HTBLINE	HTBLINE	Hicom Trading Board line
SKY_MANAGER	HTBMNGR	HTBMNGR	Hicom Trading Board Manager
SKY_PHONE	HTBPHONE	HTBPHONE	Hicom Trading Board Manager
SB_ALLG	HTBVLV	HTBVLV	Hicom Trading Board extended connection
SB_ALLG	NTVLV	NTEXT	Net-Team Extended Connection
TYP_SYMPHONY	REMOPTI	REMOPTI	Physically Remote Optiset
TC_FIC_PORT	REMOPTI	REMOPTI	Logical Telecommuting Subscriber
TC_REM_PORT	TCVLV	TCEXT	Telecommuting Extended Connection

8.14.6 AMO ACSU

DB_M_DH_GERAETE_TYP_SET

Error messages

(DB_DH_DEV_TYP_...	Device names AMO (D)	device name AMO (GB)	Meaning
VPL	AC2	AC2	Attendant Console on SLMB
AC_CRNT_TS	AC3	AC3	Attendant Console on SLMO or SLMQ
AC_CRNT_T	ACWIN	ACWIN	Attendant Console PC application on SLMO or SLMQ

8.14.7 AMO MPOOL

DB_M_DH_GERAETE_TYP_SET

(DB_DH_DEV_TYP_...	Device names AMO (D)	device name AMO (GB)	Meaning
MOPO_DIG	MOPOOL	MOPOOL	Modem Pool

8.14.8 AMO TACSU

DB_M_DH_GERAETE_TYP_SET

(DB_DH_DEV_TYP_...	Device names AMO (D)	device name AMO (GB)	Meaning
TMLS	A3GUSL	A3CISL	Trunk circuit, 3-wire, DC-Sign., local, for CIS
TMLS	A3GUST	A3CIST	Trunk circuit, 3-wire, DC-Sign., local, for CIS
TMLS	ANDIDL1	ANDIDL1	Trunk circuit 2-wire, loop signaling
TMLS	ANDIDL2	ANDIDL2	Trunk circuit 2-wire, loop signaling
TMLS	ANDIDL3	ANDIDL3	Trunk circuit 2-wire, loop signaling
TMLS	ANDIDL4	ANDIDL4	Trunk circuit 2-wire, loop signaling
TMLS	ANDIOL1	ANDIOL1	Trunk circuit 2-wire, loop signaling
TMLS	ANDIOL2	ANDIOL2	Trunk circuit 2-wire, loop signaling
TMLS	ANHKZ	ANMOSIG	Trunk circuit, 2-wire, loop sign, MSI
TMLS	ASDCL	BWLD	Bothway trunk circuit, loop calling
TMLS	ASEC	BWEDG	Bothway trunk circuit, ground start
TMLS	ASELS	BWELS	MSI exchange, Bothway with loop interruption
TMLS	ASELSC	BWELSC	MSI exchange, Bothway release control (China)
TMFS_AMT	ASFS	BWFS	Bothway trunk circuit, f-criteria
TMLS	ASGCL	BWLG	Bothway trunk circuit, loop calling

(DB_DH_DEV_TYP	Device names AMO (D)	device name AMO (GB)	Meaning
TMLS	ASGS	BWGS	Bothway trunk circuit, ground start
TMLS	ASLRS	BWLRS	Bothway trunk circuit, France, no DID
TMLS	ASLS	BWLS	Bothway trunk circuit, loop start
TMLS	ASLSR	DIDLSR	Incoming circuit, Italy
TMLS	ASSR	BWSR	Bothway trunk circuit, silent reversal
TMLS	DFADAS1	DFADAS1	Bothway trunk circuit, 600/750 hz, CIS (adase)
QS_TF	DFADASE	DFADASE	Bothway trunk circuit, 1200/1600hz, CIS (adase)
TMLS	DIDBELG	DIDBELG	Incoming circuit, Belgium
TMLS	DIDIT	DIDIT	Incoming circuit, Italy
TMLS	DIDLRB	DIDLRB	Incoming circuit, Brazil
TMLS	DIDN2	DIDN2	Incoming circuit, Finland
TMLS	DIUCBRAS	DIUBRAZ	Bothway trunk circuit, Brazil
TMLS	DIUCQ421	DIUCQ41	Bothway trunk circuit, Brazil
TMLS	DODBELG	DOBELG	Outgoing circuit, Belgium
TMLS	DODFR	DODFR	Outgoing circuit, France
TMLS	DODIT	DODIT	Outgoing circuit, Italy
TMLS	DODN2	DODN2	Outgoing circuit, Finland
TMLS	EB5NAL	EB5NAL	Bothway trunk circuit (German Reichsbahn)
TMLS	EMCONT	EMCONT	CO/tie trunk, e&m/pcm30, India
TMLS	EMDISC	EMDISC	CO/tie trunk, e&m/pcm30, India
TMLS	GW	GW	Group selector - connection
NW_ANALOG	HAEM	MAINEM	Main PABX circuit for e&m/wtk1 Networking
NW_ANALOG	HASCHNW	MAINLPNW	Main PABX circuit, DC loop, Networking
NW_ANALOG	HAWTK	MAINVFSS	Main PABX circuit for wtk1, Networking
HKZ	HKZ	MOSIG	Main station signaling
TMLS	HKZA	BWA	Bothway trunk circuit, no DID, Brazil
TMLS	HKZALS70	BWALS70	Bothway trunk circuit, no DID
TMLS	HKZCH	BWMSCH	Bothway trunk circuit, no DID
TMLS	HKZCSU	BWCSU	Bothway trunk circuit, Czech Rep./Slovakia

Error messages

(DB_DH_DEV_TYP	Device names AMO (D)	device name AMO (GB)	Meaning
TMLS	HKZDK	BWDK	Bothway trunk circuit (MSI-sig. Denmark)
TMLS	HKZFR	BWMFR	Bothway trunk circuit, no DID
TMLS	HKZU	BW	Bothway trunk circuit, no DID
IKZ	IKZ	DP	Pulse signaling
TMLS	IKZALS70	DIDALS70	Incoming circuit, with DID
TMLS	IKZCSK	BWCSK	Bothway trunk circuit, Czech Rep./Slovakia
TMLS	IKZDK	BWDK	Bothway trunk circuit (DP-sig. Denmark)
TMLS	IKZGRI	BWGR	Bothway trunk circuit, DP, Greece
TMLS	IKZGUSL	BWCISL	Bothway trunk circuit, DP, CIS, local
TMLS	IKZGUST	BWCIST	Bothway trunk circuit, DP, GUS, fern
TMLS	IKZPOL0	BWPOL0	Bothway trunk circuit (Poland)
TMLS	IKZPOL1	BWPOL1	Bothway trunk circuit (inverse sig. Poland)
TMLS	IKZRSA	BWRSA	Bothway trunk circuit, South Africa
TMLS	IKZSF	BWFIN	Bothway trunk circuit, Finland
TMLS	IKZVRC	BWCHINA	Bothway trunk circuit with DID (csn1-r2)
TMLS	LSF	ICF	Incoming circuit, MFC-DID
TMLS	LSLCH	ICLCH	Incoming circuit, MFC-DID
TMLS	LSLN	ICLLP	Incoming circuit, block: low-resistance
TMLS	LSLP	ICLFB	Incoming circuit, block: potential
TMLS	LSLU	ICLIB	Incoming circuit, block: interruption
TMLS	LW	LNSEL	Line selector - connection
IKZ	N2G	OGN2	Outgoing circuit, n2 criteria
TMLS	N2S	ICN2	Incoming circuit, n2 criteria
TMLS	NDIDIT	NDIDIT	Bothway trunk circuit, Italy
TMLS	NDIDN2	NDIDN2	Incoming circuit, Finland
TMLS	OB	OB	Trunk circuit, OB signaling, Poland)
TMLS	QSABZ	TSBR	Tie trunk, branching line
QS_SCH	QSAUS	TSAUST	Tie trunk, DC loop (Australian Version)
QS_EM	QSEMAL	TSEMU	Bothway tie trunk (gen. cont. signal)

(DB_DH_DEV_TYP	Device names AMO (D)	device name AMO (GB)	Meaning
QS_EM	QSEMAL2	TSEMU2	Bothway tie trunk (gen. cont. signal)
QS_EM	QSEMCOF	TSECOF	Bothway tie trunk (earth off idle)
QS_EM	QSEMCON	TSECON	Bothway tie trunk (earth on idle)
QS_EM	QSEMDD	TSEMD	Bothway tie trunk, delayed dial
QS_EM	QSEMDD2	TSEMD	Bothway tie trunk, delayed dial
QS_EM	QSEMID	TSEMI	Bothway tie trunk, immediate dial
QS_EM	QSEMID2	TSEMD2	Bothway tie trunk, immediate dial
QS_EM	QSEML1	TSEML1	Bothway tie trunk (cept-l1)
QS_EM	QSEML12	TSEML12	Bothway tie trunk (cept-l1)
QS_EM	QSEMSCH	TSEML	Bothway tie trunk (loop signaling)
QS_EM	QSEMSCH2	TSEML2	Bothway tie trunk (loop signaling)
QS_EM	QSEMUSD	TSMUSD	Bothway tie trunk (usa, delay dial.)
QS_EM	QSEMUSD2	TSEMUSD2	Bothway tie trunk (usa, delay dial.)
QS_EM	QSEMUSI	TSEMUSI	Bothway tie trunk (usa,immediate dial)
QS_EM	QSEMUSI2	TSEMUSI2	Bothway tie trunk (usa,immediate dial)
QS_EM	QSEMUSW	TSMUSW	Bothway tie trunk (usa, wink start)
QS_EM	QSEMUSW2	TSEMUW2	Bothway tie trunk (usa, wink start)
HKZ	QSFS	TSRTT	Bothway tie trunk (simple tie traffic)
TMLS	QSLW	TSD	Tie trunk, line selector - connection
QS_SCH	QSSCH	TSILP	Tie trunk, DC loop (idle: loop)
QS_SIM	QSSIM	TSSIM	Tie trunk, DC - simultaneous dial
QS_SCH	QSSPE	TSIFD	Tie trunk, DC loop (idle: feed)
QS_TF	QSTF	TSC	Bothway tie trunk (pulse signaling)
QS_TF	QSTF2	TSC2	Bothway tie trunk (pulse signaling)
TMLS	QSTFZ	TSCZ	Bothway tie trunk (German Reichsbahn)
QS_WES	QSWES	TSAC	Tie trunk, AC dial
TMLS	SFADASJ	SFADASJ	Bothway tie trunk, 1600/2600 hz, CIS (adase)
TMLS	SFGUSL	SFCISL	Trunk circuit, 4-wire, 2600hz-sign., local, for CIS
TMLS	SFGUST	SFCIST	Trunk circuit, 4-wire, 2600hz- sign., local, for CIS

Error messages

(DB_DH_DEV_TYP	Device names AMO (D)	device name AMO (GB)	Meaning
TMLS	SMFSPA	SOCSPA	Incoming circuit, Spain
TMLS	SOCOTFR	SOCFR	Incoming circuit, France
TMLS	SOCOTFR2	SOCFR2	Incoming circuit, France
TMLS	TFUNG	TSEHUN	Bothway tie trunk, carrier frequency, Hungary
TMLS	TMLRUD	TMLRUD	Bothway tie trunk, r2, with DID, India
NW_ANALOG	UAEM	SATEM	Main PABX circuit for e&m/wtk1, Networking
NW_ANALOG	UASCHNW	SATLPNW	Satellite PABX circuit, DC loop, Networking
NW_ANALOG	UAWTK	SATVFSS	Satellite PABX circuit for wtk1, Networking
TMLS	UEFS	SFS	Incoming circuit
TMLS	VRC2600	PRC2600	Bothway trunk circuit, 2600 hz, China
NW_ANALOG	ZVG2	ITT2	Inter tie trunk outgoing, 2-wire
NW_ANALOG	ZVG4	ITT4	Inter tie trunk outgoing, 4-wire
NW_ANALOG	ZVK	ITTIC	Inter tie trunk incoming

8.14.9 Special allocation table for circuit error messages

In a number of circuit error messages the device name is not identical to the configured device names. This applies to circuits with device bus connection. Therefore names that point to the bus connection or the bus configuration are output.

DB_M_BUS_TYPE_SET db_bus_...	Device names AMO (D)	device name AMO (GB)	Meaning
FUNKT_CORNET	MBUS	MBUS	Circuit connection contains mixed bus connection (CorNet-T terminals and functional terminals)
NUR_FUNKT	FBUS	FBUS	Circuit connection with fbus (only functional terminals)
NUR_CORNET_T	CBUS	CBUS	Circuit connection with cbus (only cornet-t terminals)
PUNKT_PUNKT_COR	CPP	CPP	Circuit connection with cornet point-to-point connection
PUNKT_PUNKT_S0	FPPS0PP	FPPS0PP	Circuit connection with point-to-point connections for functional S0 connections
PUNKT_PUNKT_S2	FPPS2PP	FPPS2PP	Circuit connection point-to-point connections for functional S2 connections
FUNKT_MIT_EAZ	FKTEAZ	FKTEAZ	-

DB_M_BUS_TYPE_SET db_bus_...	Device names AMO (D)	device name AMO (GB)	Meaning
S0_NI)	S0NI	S0NI	-
ONLY_SYMPHONY	ONLYSYM	ONLSYM	Circuit connection contains device bus with Optiset terminals only
SYMPHONY_CORNET	SYMCRT	SYCRNT	Circuit connection contains device bus with Optiset and Cornet terminals
SYMPHONY_FUNCT	SYMFNCT	SYMNCT	Circuit connection contains device bus with Optiset and functional terminals
SYM_CORNET_FUNCT	SYMCRFNT	SYMCRFNT	Circuit connection contains device bus with Optiset / Cornet and functional terminals
ONLY_AC_CRNT_T	OACCRT	OACCRT	Attendant console with Cornet-T connection
ONLY_AC_CRNT_TS	OACCRS	OACRTS	Attendant console with Cornet-TS connection

8.15 Device type / Board table

Device types that are allocated to an [SWU peripheral alarm class](#) (as describe din the Alarm concept).

Device type DB_DH_DEV_TYP_	Board
ANATE	SLMA
APSE_ANSE_A	TMOM
APSE_ANSE_M	TMOM
APSE_DE	TMOM
APSE_ELA	TMOM
APSE_PSE	TMOM
APSE_PSM	TMOM
APSE_TE	TMOM
APSE_WKE	TMOM
CRNT_DATA	SLMU, SLMQ, SLMS, STMD
CRNT_KEYSYS	xx
CRNT_VOICE	SLMU, SLMQ, SLMS, STMD, (SET 500 / 700)
CTE	SLMA, TMX21
CTE_AB	SLMA, TMX21
CTE_X21	TMX21

Error messages

Device type DB_DH_DEV_TYP_	Board
DCI_U200	
DIG_M	SLMB, (Set400)
DIGITE	SLMB, SLMB16, SLMD
DIGITE_DYAD	xx
HAS_SCH	TMBM
HAS_WTK	
HAUSPOST	SLMD
HKZ	TMBD, TMFS, DIUC, DIUC64
IKZ	TMBD, DIUC, DIUC64
KEYSYSTEM	xx
MSN_DEVICE	SLMU, SLMQ, SLMS, STMD
MULTI_LINE_30	DIUS2, VCM
MULTI_LINE_8	SLMU, SLMQ, SLMS, STMD, VCM
MOPO_DIG	xx
NW_ANALOG	TMBC_NW, TMBS, TMEM_NW, TMIPI, TMIPO,
NW_DIGITAL_B	STMD
NW_DIGITAL_P	DIUS2, SLMN, WAML
NW_S1	xx
NW_S1_D	xx
OPS	xx
QS_EM	TMEMW, TMEM, TMSVF, DIUC, DIUC64, TMEMW, TMSVF
QS_SCH	TMLR
QS_SIM	TMBP
QS_TF	TMEMW, TMEM, DIUC, DIUC64
QS_WES	TMBC, DIUC, DIUC64
SB_ALLG	SLMU, SLMQ, SLMS, STMD, (Set 600)
SB_FTK_EG	SLMU, SLMQ, SLMS, STMD, DIUS2
SM_FAX	SLMD
SM_FAXTTX	SLMD
SM_TTX	SLMD

Device type DB_DH_DEV_TYP_	Board
SM_VM	SLMD
S3510	SLMD
SYM_CMI_BASE	SLMC
SYM_CMI_OPTI	SLMC
SYM_CMI_ADMI	SLMC
SYMPHONY	SLMO, SLMQ
TMAG	
TMAU_ABZ	TMAU
TMAU_LW	TMAU
TMAU_LW_QV	TMAU
TMAU_UEF	TMAU
TMCL_HA	TMCL
TMCL_UA	TMCL
TMD_VERB_ISDN	WAML
TMFS_AMT	TMFS, DIUC, DIUC64
TMGSR_GS	
TMGSR_SR	
TMLS	DIUC, DIUC64, TMBLN, TMEW, TMACH, TMAG, TMAU, TMAS, TMAS8, TMEDG, TMGSR, TMCOW, TMELS, TMGSR, TMLRW, TMLBL, TMEW, TMLRS, TMLRW, TMLRP, TMLSF, TMLSL, TMLSR, TMN2S
TMX21	TMX21
TMX21PPH	
T3510	SLMD
U_STERN_CLC	
VPL	SLMD
X21_NC	
SYM_FICTITIO	SMY
TC_REM_PORT	WAML2
TC_FIC_PORT	WAML2

Error messages

Error message formats

8.16 Error message formats

Table 32: Error message formats

Format	FORMAT DB_RS_	Structure
00	NO_FORMAT	
01	FORM_OS_ERR	DB_M_TX_DP_PLAUS_ER_STR
02	SWU_FORM_CP_MSG	DB_M_RS_AUX_SWU_CP_MSG_STR
03	SM_FORM_1_BOARD	DB_M_RS_AUX_SM_1_BOARD_ARY
04	SM_FORM_N_BOARD	DB_M_RS_AUX_SM_N_BOARD_STR
05	SM_FORM_LCX_PLAUS	DB_M_RS_AUX_SM_LCX_PL_STR
06	SM_FORM_LCX_SPO	DB_M_RS_AUX_SM_LCX_SPO_STR
07	SM_FORM_LCX_UNL	DB_M_RS_AUX_SM_LCX_UNL_STR
08	SM_FORM_CHARGE_COM	DB_M_RS_AUX_SM_CHARCOM_STR
09	SM_FORM_LCX_OMS	DB_M_RS_AUX_SM_LCX_OMS_STR
0A	SM_FORM_LCX_TAB	DB_M_RS_AUX_SM_LCX_TAB_STR
0B	SM_FORM_LCR_SPO	DB_M_RS_AUX_SM_LCR_SPO_STR
0C	SM_FORM_RES8	DB_M_RS_AUX_SM_TEXT8_STR
0D	SM_FORM_CHAN_HWN	DB_M_RS_AUX_SM_CH_HWN_STR
0E	SM_FORM_CHAN_SPO	DB_M_RS_AUX_SM_CH_SPO_STR
0F	SM_FORM_CHAN_TO	DB_M_RS_AUX_SM_CH_TO_STR
10	SM_FORM_LINE	DB_M_RS_AUX_SM_LINE_STR
11	SM_FORM_DRIVE	DB_M_RS_AUX_SM_DR_ER_STR
12	SM_FORM_MEM	DB_M_RS_AUX_SM_STR
13	SM_FORM_IP	DB_M_RS_AUX_SM_STR
14	SM_FORM_DP_PLAUS	DB_M_TX_DP_PLAUS_ER_STR
15	SM_FORM_TEXT	DB_M_RS_AUX_SM_TEXT8_STR
16	SM_FORM_INS	LO_M_RBCA_STR
17	SM_FORM_TEXT8	DB_M_RS_AUX_SM_TEXT8_STR
18	SWU_FORM_1_BOARD	DB_M_RS_AUX_SWU_1_BD_ARY
19	SWU_FORM_2_BOARD	DB_M_RS_AUX_SWU_2_BD_ARY
1A	SWU_FORM_PCG	DB_M_RS_AUX_SWU_PCG_STR
1B	SWU_FORM_DP_I	DB_M_RS_AUX_SWU_DP_I_STR

Format	FORMAT DB_RS_	Structure
1C	SWU_FORM_MEM_I	DB_M_RS_AUX_SWU_MEM_I_STR
1D	SWU_FORM_MEM_1B	DB_M_RS_AUX_SWU_MEM_1B_STR
1E	SWU_FORM_FW_ERR	DB_M_RS_AUX_SWU_FW_ERR_STR
1F	SWU_FORM_DCL_P	DB_M_RS_AUX_SWU_DCL_P_STR
20	SWU_FORM_SIU	DB_M_RS_AUX_SWU_SIU_STR
21	SWU_FORM_1_PORT	DB_M_QF_MTS_CDC_STR
22	SWU_FORM_BOARD_DATA	DB_M_RS_AUX_BOARD_DATA_STR
23	SWU_FORM_BOARD_INIT	DB_M_RS_AUX_BOARD_INIT_STR
24	SWU_FORM_SW_ERROR	DB_M_TX_DP_PLAUS_ER_STR
25	SWU_FORM_REC	DB_M_RS_AUX_DATA_REC_ARY
26	SWU_FORM_VECO	DB_M_TX_DP_PLAUS_ER_STR
27	SM_FORM_DP	DB_M_RS_AUX_SM_STR
28	SWU_FORM_INT	DB_M_RS_AUX_SWU_INT_STR
29	SWU_FORM_INFO	DB_M_RS_AUX_SWU_INFO_STR
2A	SWU_FORM_TEXT	DB_M_MMI_MASK_IDX_RNG
2B	FORM_PROC_INTERR	DB_M_RS_AUX_PROC_INTERR_ST
2C	FORM_NCC_ALARM	DB_M_RS_AUX_NCC_DEPALA_STR
2D	FORM_NCC_UPDATE	DB_M_RS_AUX_NCC_UPDATE_STR
2E	SWU_FORM_CP_TRACE	DB_M_RS_AUX_SWU_CP_TR_STR
2F	SM_FORM_IP_PARTNER	DB_M_RS_AUX_SM_IP_STR
30	FORM_NCC_ALARM_MIRROR	not defined
31	SM_FORM_WATCHDOG	DB_M_RS_AUX_SM_WD_STR
32	SM_FORM_IOP	DB_M_RS_AUX_SM_IOP_STR
33	FORMAT_MAINTENANCE	DB_M_RS_AUX_ALARM_DATA_STR
34	SWU_FORM_CP_PIN	DB_M_RS_AUX_SWU_CP_PIN_STR
35	FORM_NCC_AL_AMO	DB_M_RS_AUX_NCC_AL_AMO_STR
36	SWU_FORM_PCM	DB_M_RS_AUX_BOARD_DATA_STR
37	SWU_FORM_PCM_TOT	DB_M_RS_AUX_BOARD_DATA_STR
38	SWU_FORM_RMS_US	DB_M_RS_AUX_BOARD_DATA_STR
39	SWU_FORM_RMS_EU	DB_M_RS_AUX_BOARD_DATA_STR

Error messages

Next level of support

Format	FORMAT DB_RS_	Structure
3A	FORM_UNIX	DB_M_RS_AUX_SM_UNIX_STR
3B	FORM_SW_FW_LW	DB_M_RS_AUX_SW_FW_LW_STR
3C	FORM_FRU	DB_M_RS_AUX_FRU_STR
3D	FORM_AL_SUM	DB_M_RS_AUX_AL_SUM_STR
3E	FORM_STNO	DB_M_RS_AUX_STNO_STR
3F	FORM_PEN	DB_M_RS_AUX_PEN_STR
40	SWU_FORM_BOARD_TEXT	DB_M_RS_AUX_BOARD_TEXT_STR
41	FORM_REST_LEVEL	DB_M_RS_AUX_REST_LEV_STR
42	FORM_TEXT_VAR	DB_M_RS_AUX_TEXT_VAR_STR
43	FORM_BOARD_TEXT_VAR	DB_M_RS_AUX_BD_TXT_VAR_STR
44	FORM_MAINT_VAR	DB_M_RS_AUX_MAINT_STR
45	FORMAT_STACK	DB_M_RS_AUX_STACK_STR
46	FORM_INFO_ADP	DB_M_RS_AUX_INFO_ADP_STR
47	FORMAT_PCI	DB_M_RS_AUX_PCI_STR
48	FORM_CPU_LOAD	DB_M_RS_AUX_CPU_LOAD_STR
49	FORMAT_ASCII	DB_M_RS_AUX_ASCII_STR
4A	-	-

8.17 Next level of support

“Save error message data and contact your next level of support or notify product specialist”

Error messages that suggest this action are generally software error messages. You should find out whether a patch is available which can solve this problem.

In general, if other actions are not suggested, or if a specialist has to be consulted for the interpretation of auxiliary data, the next level up in the Service Department must be contacted, e.g. CSC -> ITSC -> Product Support.

Save all information pertaining to the error (this includes the error messages or the HISTO file dump (see [Section 2.11.2, “Saving and searching for alarm/error messages in HISTO files”](#)) as well as all previous operations carried out in the system, e.g. AMO-LOGBUCH) and discuss how you should proceed with the next highest level in the Service Department.

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