Table of Contents

Chapter 1: Introduction.................................................................10
  About this document........................................................................11
  Scope and audience.........................................................................11
  Document organization.................................................................11
  Documentation Admonishments....................................................12
  Related publications.......................................................................13
  Customer Care Center....................................................................13
  Emergency Response.......................................................................16
  Locate Product Documentation on the Customer Support Site....16

Chapter 2: SDM Alarms.................................................................17
  Framework alarms..........................................................................18
    38 - CliInitiatedBackupInProgress...........................................18
    38 - CliInitiatedBackupComplete..............................................18
    39 - CliInitiatedRestoreInProgress..........................................19
    40 - SynchronizingStandbyDatabase.......................................19
    40 - SynchronizingStandbyDatabaseComplete.........................20
    41 - OperatorInitiatedClearAllAlarm........................................20
    53 - AutomaticBackupInProgress............................................21
    300 - CpuLoadMinor...............................................................21
    301 - CpuLoadMajor...............................................................22
    302 - ProcessLoadAverage1MinuteMinor.................................23
    303 - ProcessLoadAverage1MinuteMajor..................................23
    304 - ProcessLoadAverage5MinuteMinor.................................24
    305 - ProcessLoadAverage5MinuteMajor..................................24
    306 - ProcessLoadAverage15MinuteMinor...............................25
    307 - ProcessLoadAverage15MinuteMajor...............................26
    308 - MemoryUsedMinor........................................................26
    309 - MemoryUsedMajor.........................................................27
    310 - SwapUsedMinor............................................................27
    311 - SwapUsedMajor............................................................28
    312 - NicLoadPublicIfMinor....................................................29
    313 - NicLoadPublicIfMajor.....................................................29
    314 - NicInDiscardPublicIfMajor.............................................30
315 - NicOutDiscardPublicIfMajor
316 - NicInErrorPublicIfMajor
317 - NicOutErrorPublicIfMajor
318 - ProcessCpuLoad
2019 - ConnectionLost (Left)
2019 - ConnectionLost (Right)
2205 - ErrorCannotStartGeographicReplication
2207 - GeographicReferenceSiteRunningUnprotected
2210 - StandbyGeographicDbHistoryLost
2211 - GeographicDbHistoryLost
2300 - Geored_tunnel_SCTP_COMM_LOST
2301 - Geored_tunnel_SCTP_COMM_UP
2302 - Geored_tunnel_SCTP_ADDR_UNREACHABLE
2303 - Geored_tunnel_SCTP_ADDR_AVAILABLE
2304 - Geored_tunnel_SCTP_ADDR_CONFIRMED
4031 - SynchronizingWithGeographicSiteDatabase
4033 - ErrorNegociatingGeoRedundancyRole
4034 - ErrorIntermittentConnectionWithGeographicLocation
4035 - ConnectionLostWithGeographicLocation
4037 - CannotFoundLastGeoGraphicReference
4038 - StoppingGeoGraphicRedundancy
4040 - GeoIntegrityPeriodTimeout
4041 - MissingGeoReplicationVip
4042 - GeoRedundancyStopped
4043 - GeoDisableWarning
4044 - SynchronizingLogsGeographicSiteDatabase
4045 - SynchronizingLogsProcessLogs
4104 - SchemaDiff
4115 - ToolStart
4116 - ToolComplete
4117 - ToolInterrupted
4121 - DbConnectionError
4122 - ExtractDataError
4123 - OutputFileError
4124 - OutputDirError
4125 - ArgumentMissing
4126 - DiskThresholdCrossed
4127 - CpuSystemThresholdCrossed
4128 - CpuDbThresholdCrossed
4129 - RemoteHostTransferFailed

System Manager alarms

910-6539-001 Revision F, January 2014 iv
6119 - ShelfRestart....................................................................................................................53
6135 - ServiceFailover...............................................................................................................54
6136 - ServiceSwitchover.........................................................................................................54
6137 - ServiceManualSwitchover...........................................................................................55
6140 - ServiceOOS....................................................................................................................56
6142 - TooManySystemController........................................................................................56
6144 - TraceActivated..............................................................................................................57
6145 - CoreDumpDetected......................................................................................................57
6146 - ServiceLocked................................................................................................................58

OAMP alarms.......................................................................................................................................58
7009 - ActiveSubscribersThresholdReached........................................................................58
7010 - ActiveSubscribersMaxReached...................................................................................59
7011 - TotalSubscribersThresholdReached...........................................................................60
7012 - TotalSubscribersMaxReached.....................................................................................60

SIP server alarms..........................................................................................................................61
8030 - IpAddressFailure..........................................................................................................61
8034 - ConfigurationFailure....................................................................................................61
8042 - MaxPendingHlrRequestsReached..............................................................................62
8043 - MaxPendingHlrRequestsThresholdReached............................................................62
8044 - StackDisabled................................................................................................................63
8045 - ActiveSipSubscribersMaxReached.............................................................................63
8046 - ActiveSipSubscribersThresholdReached...................................................................64

HLR server alarms..........................................................................................................................65
9008 - StandbySynchronization..............................................................................................65
9009 - MapMemoryAllocationFailure...................................................................................65
9038 - OverloadControlCpu.....................................................................................................66
9039 - OverloadControlDlg.....................................................................................................66
9040 - OverloadControlUOS...................................................................................................67
9051 - HlrTransactionLevel1Alarm.......................................................................................67
9052 - HlrTransactionLevel2Alarm.......................................................................................68
9053 - HlrTransactionLevel3Alarm.......................................................................................69
9137 - FeatureActivated...........................................................................................................69
9138 - FeatureDeactivated.......................................................................................................70
9143 - SriRoutingActivated.....................................................................................................71
9144 - SriRoutingDeactivated..................................................................................................71
9250 - MnpActivated................................................................................................................72
9251 - MnpDeactivated...............................................................................................................72
9252 - MnpDbMismatchTypeA..............................................................................................73
9253 - MnpDbMismatchTypeB...............................................................................................74
9254 - MnpDbMismatchTypeC..............................................................................................74
9907 - DlgReinitOverloadDlgsLevel1....................................................................................75
9908 - DlgReinitOverloadDlgsLevel2.................................................................75
9909 - DlgReinitOverloadDlgsLevel3.................................................................76

SS7 - Stack Manager alarms.................................................................76
10102 - GenericSS7SmEmergencyAlarm......................................................76
10103 - GenericSS7Alarm........................................................................77
10105 - SS7NodeReady.............................................................................78
10106 - SS7NodeEnabled.......................................................................78
10107 - SS7NodeNotEnabled.................................................................79
10108 - SS7NotAllRyUP........................................................................80

SS7 - Generic Alarms.............................................................................80
10200 - CLEAR_OLD_ALARMS.................................................................80
10212 - LCM_EVENT_SMEM_ALLOC_FAIL.............................................81
10213 - LCM_EVENT_DMEM_ALLOC_FAIL.............................................81

SS7 - MTP2 layer alarms.......................................................................82
10300 - LSD_EVENT_ENTR_CONG..........................................................82
10301 - LSD_EVENT_EXIT_CONG.............................................................82
10302 - LSD_EVENT_PROT_ST_UP............................................................83
10303 - LSD_EVENT_PROT_ST_DN.............................................................84
10311 - LSD_EVENT_REMOTE_CONG_START.......................................84
10312 - LSD_EVENT_REMOTE_CONG_END.............................................85
10313 - LSD_EVENT_RX_REMOTE_SIPO...............................................85
10314 - LSD_EVENT_RX_REMOTE_SIPI..................................................86
10315 - LSD_EVENT_TX_WINDOW_CONG_START...............................86
10316 - LSD_EVENT_TX_WINDOW_CONG_END.....................................87

SS7 - MTP3 layer alarms.......................................................................87
10400 - LSN_EVENT_PROT_ST_UP............................................................87
10401 - LSN_EVENT_PROT_ST_DN............................................................88
10404 - LSN_EVENT_LOC_INH_ACK......................................................89
10405 - LSN_EVENT_REM_INH_ACK......................................................89
10406 - LSN_EVENT_LOC_UNINHED.....................................................90
10407 - LSN_EVENT_REM_UNINHED.....................................................90
10411 - LSN_EVENT_RMT_BLKD..............................................................91
10412 - LSN_EVENT_RMT_UNBLKD......................................................91
10413 - LSN_EVENT_LOC_BLKD..............................................................92
10414 - LSN_EVENT_LOC_UNBLKD......................................................92
10415 - LSN_EVENT_PAUSE.................................................................93
10416 - LSN_EVENT_RESUME...............................................................93
10417 - LSN_EVENT_CONG.................................................................94
10418 - LSN_EVENT_STPCONG.............................................................95
10419 - LSN_EVENT_RMTUSRUNAV....................................................95
10433 - LSN_EVENT_INV_OPC_OTHER_END.......................................96
10434 - LSN_EVENT_INV_SLC_OTHER_END.................................................................96
10439 - LSN_EVENT_DATA_DRP...............................................................................97
10440 - LSN_EVENT_LSET_ACTIVE.........................................................................97
10441 - LSN_EVENT_LSET_INACTIVE....................................................................98

SS7 - SCCP layer alarms..........................................................................................98
10500 - LSP_EVENT_USER_INS...............................................................................98
10501 - LSP_EVENT_USER_OOS............................................................................99
10505 - LSP_EVENT_HOP_VIOLATION....................................................................100
10506 - LSP_EVENT_ERROR_PERFORMANCE.........................................................100
10508 - LSP_EVENT_RMT_SCCP_UNEQUIP..............................................................102

SS7 - TCAP layer alarms........................................................................................102
10601 - LST_EVENT_MSG_FAIL.............................................................................102
10602 - LST_EVENT_ALOC_FAIL...........................................................................103
10609 - LST_EVENT_ALOC_DLGID_FAIL.................................................................103
10611 - LST_EVENT_MAX_CFG...............................................................................104

SS7 - MAP layer alarms........................................................................................104
10701 - LMA_EVENT_ALOC_DLGID_FAIL.................................................................105

SS7 - SG alarms......................................................................................................105
10903 - LSG_EVENT_FAILURE................................................................................105

SS7 - MR alarms......................................................................................................106
11100 - LMR_EVENT_MEMBUF_NOT_AVAIL...........................................................106

SS7 - RY Alarms.......................................................................................................107
11201 - LRY_USTA_ERR.......................................................................................107
11204 - LRY_USTA_UP..........................................................................................107
11205 - LRY_USTA_DN.........................................................................................108

SS7 - SAAL alarms..................................................................................................108
11300 - LSA_EVENT_PROT_ST_UP........................................................................108
11301 - LSA_EVENT_PROT_ST_DOWN.................................................................109
11302 - LSA_EVENT_BEG_CONG.........................................................................109
11303 - LSA_EVENT_END_CONG..........................................................................110

SS7 - M3UA alarms.................................................................................................111
11403 - LIT_EVENT_SCT_COMM_DOWN.................................................................111
11404 - LIT_EVENT_ESTABLISH_OK.................................................................111
11405 - LIT_EVENT_ECLOSE_OK..........................................................................112
11406 - LIT_EVENT_EOPEN_OK............................................................................112
11407 - LIT_EVENT_ASP_NOT_ACTIVE.................................................................113
11408 - LIT_EVENT_ASP_ACTIVE..........................................................................113
11409 - LIT_EVENT_AS_NOT_ACTIVE.................................................................114
11410 - LIT_EVENT_AS_ACTIVE............................................................................114
11411 - LIT_EVENT_PC_UNAVAILABLE.................................................................115
11412 - LIT_EVENT_PC_AVAILABLE.....................................................................116
List of Tables

Table 1: Admonishments ................................................................................................................................13
Chapter 1

Introduction

Topics:

- About this document.....11
- Scope and audience.....11
- Document organization.....11
- Documentation Admonishments.....12
- Related publications.....13
- Customer Care Center.....13
- Emergency Response.....16
- Locate Product Documentation on the Customer Support Site.....16

This chapter provides general information about manual organization, the scope of this manual, its targeted audience, how to get technical assistance, and how to locate customer documentation on the Customer Support site.
About this document

This document provides SDM alarm information including recovery procedures.

Scope and audience

This document provides SDM alarm information, including alarm number, description, and severity, the alarm group, the effect of the alarm, the action to take, and how the alarm clears.

This document is intended for operators that are responsible and qualified for the subject matter of this document.

Document organization

This document is organized into these chapters and alarm sections:

- Introduction
- SDM Alarms
  - Framework alarms
  - System Manager alarms
  - OAMP alarms
  - SIP server alarms
  - HLR server alarms
  - SS7 - Stack Manager alarms
  - SS7 - Generic Alarms
  - SS7 - MTP2 layer alarms
  - SS7 - MTP3 layer alarms
  - SS7 - SCCP layer alarms
  - SS7 - TCAP layer alarms
  - SS7 - MAP layer alarms
  - SS7 - SG alarms
  - SS7 - MR alarms
  - SS7 - RY Alarms
  - SS7 - SAAL alarms
  - SS7 - M3UA alarms
  - SS7 - TUCU alarms
  - Node Manager alarms
  - SIP provisioning alarms
  - HSS provisioning alarms
  - IMS/LTE HSS
  - SIP UA alarms
Referenced information located within the same document is linked and can be reached by clicking the hyperlink.

For references pointing outside of the current document, use these guidelines:

General:
- Locate the referenced section in the Table of Content of the referenced document.
- If not otherwise indicated in the reference, determine the section name that contains the reference and locate the same section name in the referenced document.
- Place the PDF files in one folder or on a disc and use the powerful Adobe PDF search functions to locate related information in one or more documents simultaneously.

Alarms
- *SDM Alarms Dictionary*

Product, features, concepts
- *SDM Product Description*

Monitoring, maintenance, or troubleshooting:
- Procedures: *Monitoring, Maintenance, Troubleshooting User Guide*
- Entities: *Monitoring, Maintenance, Troubleshooting Reference Manual*

Subscriber provisioning:
- Procedures: *Subscriber Provisioning User Guide*
- Entities: *Subscriber Provisioning Reference Manual*

System configuration:
- Procedures: *System Configuration User Guide*
- Entities: *System Configuration Reference Manual*

User Interfaces:
- *User guides*
  - How to use the user interface
  - How to set up users (permissions, groups, services)
- *Reference manuals*
  - About the user interfaces
  - Entities for setting up users

To determine the components of the complete documentation set delivered with the software, refer to the *SDM Documentation Roadmap* delivered with each documentation set.

Documentation Admonishments

Admonishments are icons and text throughout this manual that alert the reader to assure personal safety, to minimize possible service interruptions, and to warn of the potential for equipment damage.
Table 1: Admonishments

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
</table>
| ![Danger Icon](image) | Danger:  
(This icon and text indicate the possibility of personal injury.) |
| ![Warning Icon](image) | Warning:  
(This icon and text indicate the possibility of equipment damage.) |
| ![Caution Icon](image) | Caution:  
(This icon and text indicate the possibility of service interruption.) |
| ![Topple Icon](image) | Topple:  
(This icon and text indicate the possibility of personal injury and equipment damage.) |

Related publications

For a detailed description of the available SDM documentation, refer to the SDM Documentation Roadmap included with your SDM documentation set.

Customer Care Center

The Tekelec Customer Care Center is your initial point of contact for all product support needs. A representative takes your call or email, creates a Customer Service Request (CSR) and directs your requests to the Tekelec Technical Assistance Center (TAC). Each CSR includes an individual tracking number. Together with TAC Engineers, the representative will help you resolve your request.

The Customer Care Center is available 24 hours a day, 7 days a week, 365 days a year, and is linked to TAC Engineers around the globe.

Tekelec TAC Engineers are available to provide solutions to your technical questions and issues 7 days a week, 24 hours a day. After a CSR is issued, the TAC Engineer determines the classification of the trouble. If a critical problem exists, emergency procedures are initiated. If the problem is not critical, normal support procedures apply. A primary Technical Engineer is assigned to work on the CSR and provide a solution to the problem. The CSR is closed when the problem is resolved.

Tekelec Technical Assistance Centers are located around the globe in the following locations:
Tekelec - Global
Email (All Regions): support@tekelec.com

- **USA and Canada**
  
  Phone:
  1-888-367-8552 (toll-free, within continental USA and Canada)
  1-919-460-2150 (outside continental USA and Canada)

  TAC Regional Support Office Hours:
  8:00 a.m. through 5:00 p.m. (GMT minus 5 hours), Monday through Friday, excluding holidays

- **Caribbean and Latin America (CALA)**
  
  Phone:
  +1-919-460-2150

  TAC Regional Support Office Hours (except Brazil):
  10:00 a.m. through 7:00 p.m. (GMT minus 6 hours), Monday through Friday, excluding holidays

- **Argentina**
  
  Phone:
  0-800-555-5246 (toll-free)

- **Brazil**
  
  Phone:
  0-800-891-4341 (toll-free)

  TAC Regional Support Office Hours:
  8:00 a.m. through 5:48 p.m. (GMT minus 3 hours), Monday through Friday, excluding holidays

- **Chile**
  
  Phone:
  1230-020-555-5468

- **Colombia**
  
  Phone:
  01-800-912-0537

- **Dominican Republic**
  
  Phone:
  1-888-367-8552

- **Mexico**
  
  Phone:
  001-888-367-8552

- **Peru**
Phone: 0800-53-087

• Puerto Rico
  Phone: 1-888-367-8552

• Venezuela
  Phone: 0800-176-6497

• Europe, Middle East, and Africa
  Regional Office Hours:
  8:30 a.m. through 5:00 p.m. (GMT), Monday through Friday, excluding holidays

• Signaling
  Phone: +44 1784 467 804 (within UK)

• Software Solutions
  Phone: +33 3 89 33 54 00

• Asia
  • India
    Phone: +91-124-465-5098 or +1-919-460-2150
    TAC Regional Support Office Hours:
    10:00 a.m. through 7:00 p.m. (GMT plus 5 1/2 hours), Monday through Saturday, excluding holidays

• Singapore
  Phone: +65 6796 2288
  TAC Regional Support Office Hours:
  9:00 a.m. through 6:00 p.m. (GMT plus 8 hours), Monday through Friday, excluding holidays
Emergency Response

In the event of a critical service situation, emergency response is offered by the Tekelec Customer Care Center 24 hours a day, 7 days a week. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system’s ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with the Tekelec Customer Care Center.

Locate Product Documentation on the Customer Support Site

Access to Tekelec’s Customer Support site is restricted to current Tekelec customers only. This section describes how to log into the Tekelec Customer Support site and locate a document. Viewing the document requires Adobe Acrobat Reader, which can be downloaded at www.adobe.com.

1. Log into the Tekelec Customer Support site.
   
   Note: If you have not registered for this new site, click the Register Here link. Have your customer number available. The response time for registration requests is 24 to 48 hours.

2. Click the Product Support tab.

3. Use the Search field to locate a document by its part number, release number, document name, or document type. The Search field accepts both full and partial entries.

4. Click a subject folder to browse through a list of related files.

5. To download a file to your location, right-click the file name and select Save Target As.
Chapter 2

SDM Alarms

Topics:
- Framework alarms.....18
- System Manager alarms.....53
- OAMP alarms.....58
- SIP server alarms.....61
- HLR server alarms.....65
- SS7 - Stack Manager alarms.....76
- SS7 - Generic Alarms.....80
- SS7 - MTP2 layer alarms.....82
- SS7 - MTP3 layer alarms.....87
- SS7 - SCCP layer alarms.....98
- SS7 - TCAP layer alarms.....102
- SS7 - MAP layer alarms.....104
- SS7 - SG alarms.....105
- SS7 - MR alarms.....106
- SS7 - RY Alarms.....107
- SS7 - SAAL alarms.....108
- SS7 - M3UA alarms.....111
- SS7 - TUCL alarms.....117
- Node Manager alarms.....120
- SIP provisioning alarms.....122
- HSS provisioning alarms.....123
- IMS/LTE HSS.....126
- SIP UA alarms.....129

SDM alarms use the following ranges:
- Framework alarms: Range 00000-04199
- System manager alarms: Range 06100-06999
- OAMP alarms: Range 07000-07099
- SIP server alarms: Range 08000-08099
- HLR server alarms: Range 09000-09199
- SS7 - stack manager alarms: Range 10100-10199
- SS7 - generic alarms: Range 10200-10299
- SS7 - MTP2 layer alarms: Range 10300-10399
- SS7 - MTP3 layer alarms: Range 10400-10499
- SS7 - SCCP layer alarms: Range 10500-10599
- SS7 - TCAP layer alarms: Range 10600-10699
- SS7 - MAP layer alarms: Range 10700-10999
- SS7 - SG alarms: Range 10900-10999
- SS7 - MR alarms: Range 11100-11199
- SS7 - RY alarms: Range 11200-11299
- SS7 - SAAL alarms: Range 11300-11399
- SS7 - M3UA alarms: Range 11400-11499
- SS7 - TUCL alarms: Range 11600-11699
- SS7 - Node manager alarms: Range 14000-14099
- SS7 - SIP provisioning alarms: Range 15000-15099
- SS7 - HSS provisioning alarms: Range 16000-16099
- SS7 - IMS/LTE-HSS provisioning alarms: Range 17000-17299
- SS7 - SIP UA alarms: Range 18000-18099
Framework alarms

Framework alarms use the range 00000-04199.

38 - CliInitiatedBackupInProgress

Alarm Group
Framework

Severity
Warning

Description:
A backup has been requested manually and is now in progress.

Effect
Make sure that backup are done in low traffic condition.

Action
None, this message is for informational purpose.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

38 - CliInitiatedBackupComplete

Alarm Group
Framework

Severity
Warning

Description:
Backup is now completed.

Effect
This alarm will appear in history alarm when backup is completed.
Action
None, this message is for informational purpose.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

39 - CliInitiatedRestoreInProgress

Alarm Group
Framework

Severity
Warning

Description:
Restore has been requested manually and is now in progress.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

40 - SynchronizingStandbyDatabase

Alarm Group
Framework

Severity
Warning

Description:
Standby blade is currently synchronizing with the active one.
Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

40 - SynchronizingStandbyDatabaseComplete

Alarm Group
Framework

Severity
Warning

Description:
Synchronization is completed. System now running in HA mode.

Effect
This alarm will appear in the history alarm.

Action
None, this message is for informational purpose.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

41 - OperatorInitiatedClearAllAlarm

Alarm Group
Framework

Severity
Warning
Description:
Clear all alarms as been sent manually

Effect
This alarm will appear in the history alarm.

Action
None, this message is for informational purpose.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

53 - AutomaticBackupInProgress

Alarm Group
Framework

Severity
Warning

Description:
Clear all alarms as been sent manually

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

300 - CpuLoadMinor

Alarm Group
Framework
Severity
Minor

Description:
The load on the CPU has exceeded the threshold value.

Effect
The system is experiencing a high load level. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

301 - CpuLoadMajor

Alarm Group
Framework

Severity
Major

Description:
The load on the CPU has exceeded the threshold value.

Effect
The system is experiencing a high load level. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
302 - ProcessLoadAverage1MinuteMinor

Alarm Group
Framework

Severity
Minor

Description:
The 1 minute load average for the CPU has exceeded the threshold value.

Effect
The system is experiencing a high load level. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

303 - ProcessLoadAverage1MinuteMajor

Alarm Group
Framework

Severity
Major

Description:
The 1 minute load average for the CPU has exceeded the threshold value.

Effect
The system is experiencing a high load level. System performance may be adversely affected.
Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

304 - ProcessLoadAverage5MinuteMinor

Alarm Group
Framework

Severity
Minor

Description:
The 5 minute load average for the CPU has exceeded the threshold value.

Effect
The system is experiencing a high load level. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

305 - ProcessLoadAverage5MinuteMajor

Alarm Group
Framework

Severity
Major
Description:
The 5 minute load average for the CPU has exceeded the threshold value.

Effect
The system is experiencing a high load level. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

306 - ProcessLoadAverage15MinuteMinor

Alarm Group
Framework

Severity
Minor

Description:
The 15 minute load average for the CPU has exceeded the threshold value.

Effect
The system is experiencing a high load level. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
307 - ProcessLoadAverage15MinuteMajor

Alarm Group
Framework

Severity
Major

Description:
The 15 minute load average for the CPU has exceeded the threshold value.

Effect
The system is experiencing a high load level. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

308 - MemoryUsedMinor

Alarm Group
Framework

Severity
Minor

Description:
The total memory used has exceeded the threshold value.

Effect
The system is consuming a higher than usual amount of memory. System performance may be adversely affected.
Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

309 - MemoryUsedMajor

Alarm Group
Framework

Severity
Major

Description:
The total memory used has exceeded the threshold value.

Effect
The system is consuming a higher than usual amount of memory. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

310 - SwapUsedMinor

Alarm Group
Framework

Severity
Minor
Description:
The swap memory used has exceeded the threshold value.

Effect
The system is consuming a higher than usual amount of memory. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

311 - SwapUsedMajor

Alarm Group
Framework

Severity
Major

Description:
The swap memory used has exceeded the threshold value.

Effect
The system is consuming a higher than usual amount of memory. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all service blades are correctly in service. Otherwise additional system capacity may need to be added, if so, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
312 - NicLoadPublicIfMinor

Alarm Group
Framework

Severity
Minor

Description:
The total bandwidth of traffic on the public network interface has exceeded the threshold value.

Effect
The system is experiencing a high level of network traffic. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all nodes on the network are correctly configured.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

313 - NicLoadPublicIfMajor

Alarm Group
Framework

Severity
Major

Description:
The total bandwidth of traffic on the public network interface has exceeded the threshold value.

Effect
The system is experiencing a high level of network traffic. System performance may be adversely affected.
Action
Verify that threshold value is not set too low. Verify that all nodes on the network are correctly configured.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

314 - NicInDiscardPublicIfMajor

Alarm Group
Framework

Severity
Major

Description:
The number of incoming discarded packets on the public network interface has exceeded the threshold value.

Effect
The system is experiencing a high value of discarded incoming network packets. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all nodes on the network are correctly configured.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

315 - NicOutDiscardPublicIfMajor

Alarm Group
Framework

Severity
Major
Description:
The number of outgoing discarded Framework packets on the public network interface has exceeded the threshold value.

Effect
The system is experiencing a high value of discarded outgoing network packets. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all nodes on the network are correctly configured.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

316 - NicInErrorPublicIfMajor

Alarm Group
Framework

Severity
Major

Description:
The number of incoming error packets on the public network interface has exceeded the threshold value.

Effect
The system is experiencing a high value of discarded incoming network packets. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all nodes on the network are correctly configured.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
317 - NicOutErrorPublicIfMajor

Alarm Group
Framework

Severity
Major

Description:
The number of outgoing error packets on the public network interface has exceeded the threshold value.

Effect
The system is experiencing a high value of discarded outgoing network packets. System performance may be adversely affected.

Action
Verify that threshold value is not set too low. Verify that all nodes on the network are correctly configured.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

318 - ProcessCpuLoad

Alarm Group
Framework

Severity
Major

Description:
One thread of one process has been using more than 95% of CPU for 5 minutes and has been killed by the monitoring framework.

Effect
Once the process is killed, it will restart automatically. This has no effect since the system always runs in High Availability mode, in which case the redundant processes take over.
Action
Contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

2019 - ConnectionLost (Left)

Alarm Group
Framework

Severity
Minor

Description:
This means that the slot that reports the error has no more communication with the left switch (switch in slot 7).

Effect
Slot is only reachable by its right interface.

Action
Verify the connector on the network interface. Verify the interface is functioning properly. Verify if the left switch is still running. If problem persist, contact the Tekelec Customer Care Center for assistance.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

2019 - ConnectionLost (Right)

Alarm Group
Framework

Severity
Minor

Description:
This means that the slot that reports the error has no more communication with the right switch (switch in slot 8).
Effect
Slot is only reachable by its left interface.

Action
Verify the connector on the network interface. Verify the interface is functioning properly. Verify if the left switch is still running. If problem persist, contact the Tekelec Customer Care Center for assistance.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

2205 - ErrorCannotStartGeographicReplication

Alarm Group
Framework

Severity
Warning

Description:
The Geographic redundancy mechanism cannot be restarted after a Restore Database operation is performed.

Effect
The system is not geographically protected. A connection may be lost with the geo-redundant site or the geo-redundant site might no longer be working.

Action
Verify that the IP connection on the replication link is functional (You should be able to ping the GeoReplication VIP of the peer site). If the link is the problem, fix the replication link and restart the system to re-activate geo-redundancy.

If it is not a connection problem or to restart the system, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

2207 - GeographicReferenceSiteRunningUnprotected

Alarm Group
Framework
Severity
Critical

Description:
In a geo-redundant deployment, two sites are geographically synchronized, one of the sites runs in Reference Protected mode while the other runs in Replica mode. This alarm is critical and is raised in the case where the reference system is first started, but the replica is still not properly connected.

Effect
The system is not geographically protected. A connection may be lost with the geo-redundant site or the geo-redundant site might no longer be working.

Action
Verify that the IP connection on the replication link is functional (You should be able to ping the GeoReplication VIP of the peer site). If the link is the problem, fix the replication link and the geo-redundancy should restart automatically.
Otherwise, the peer site may not be working correctly. Verify the status of the peer site. If the peer site is recovered, geo-redundancy should restart automatically.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the Replica is properly connected and Geographic reference site is running protected.

2210 - StandbyGeographicDbHistoryLost

Alarm Group
Framework

Severity
Minor

Description:
This alarm is raised when the standby blade has restarted while the georedundant connection is lost.

Effect
The standby blade DB logs have been erased.

Action
Make sure to recover the geo-redundant connection before switching over to this blade.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
2211 - GeographicDbHistoryLost

Alarm Group
Framework

Severity
Critical

Description:
This alarm is raised when the georedundant connection is lost and the database logs, created when
the connection was lost, no longer exist. This alarm is usually raised after a switch-over occurs after
the alarm 2210 was raised.

Effect
Geo-redundancy is automatically stopped.

Action
Recover geo IP connection and restart the site.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear
it once the condition has been rectified.

2300 - Geored_tunnel_SCTP_COMM_LOST

Alarm Group
Framework

Severity
Critical

Description:
Geored Tunnel SCTP communication is lost (state%1).

Effect
Connection to the georedundant system is not possible.

Action
• If there is no active system controller on the peer, recover it to reset this alarm.
If all the SCTP connection to the peer are down (alarm 2302), recover at least one connection to reset this alarm.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified (by clear alarm ID 2301).

2301 - Geored_tunnel_SCTP_COMM_UP

Alarm Group
Framework

Severity
Critical

Description:
Geored Tunnel SCTP communication is UP (state=%1).

Effect
Connection to the Georedundant system is restored.

Action
No action necessary.

Received
The System SCTP module will send this notification when the association goes up.

Clear
This alarm clears alarm 2300.

2302 - Geored_tunnel_SCTP_ADDR_UNREACHABLE

Alarm Group
Framework

Severity
Major

Description:
Geored Tunnel SCTP address(%1) is unreachable (error=%2).
Effect
None, as long as there is at least one remaining path that is up (if there is no remaining path, Critical
Alarm 2300 will be raised).

Received
The System SCTP module will send this notification when one of the association path is down.

Action
There is a communication problem on this SCTP path with the peer. Restore this path by troubleshooting
the associated network.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear
it once the condition has been rectified (by clear alarm ID 2303 or 2304).

2303 - Geored_tunnel_SCTP_ADDRAVAILABLE

Alarm Group
Framework

Severity
Major

Description:
Geored Tunnel SCTP address(%1) is now available (error%2).

Effect
None, an additional path in the multi-homing Georedundant connection is now available

Action
No action necessary

Received
The System SCTP module will send this notification when one of the association paths is recovered.

Clear
This alarm clears alarm 2302.
2304 - Geored_tunnel_SCTP_ADDR_CONFIRMED

Alarm Group
Framework

Severity
Major

Description:
Geored Tunnel SCTP address(%1) is confirmed (error=%2).

Effect
None. There is now one more path in our multi-homing georedundant connection.

Action
No action necessary

Received
The System SCTP module will send this notification for all alternate’s association path when the tunnel is established.

Clear
This alarm clears alarm 2302.

4031 - SynchronizingWithGeographicSiteDatabase

Alarm Group
Framework

Severity
Warning

Description:
Replica site is currently synchronizing with reference site.

Effect
None

Action
None, this message is for informational purpose.
Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

4033 - ErrorNegociatingGeoRedundancyRole

Alarm Group
Framework

Severity
Warning

Description:
This alarm is raised if the site failed to negotiate geo-redundancy role with peer site.

Effect
Geo-redundancy will be stopped.

Action
Verify geo-redundancy configuration on both site. Make sure that the last reference site is started first. If configuration is fixed, restart the site. If problem persist or to restart the system, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

4034 - ErrorIntermittentConnectionWithGeographicLocation

Alarm Group
Framework

Severity
Warning

Description:
This alarm is raised if connection with geo-redundant peer has been established and then lost 5 times at start/stop.

Effect
Geo-redundancy will be stopped.
Action
Verify connection and restart the shelf to re-enable georedundancy. If problem persist or to restart the shelf, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

4035 - ConnectionLostWithGeographicLocation

Alarm Group
Framework

Severity
Warning

Description:
This alarm is critical and is raised when the communication with geo-redundant site is lost.

Effect
Geo-redundancy is out of service.

Action
Verify connection with peer site; Verify that peer site is still working. If problem persist, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

4037 - CannotFoundLastGeoGraphicReference

Alarm Group
Framework

Severity
Warning

Description:
This alarm is raised if the site cannot connect to the last reference georedundancy site saved in the database.
Effect
Geo-redundancy will be stopped.

Action
Start the last reference peer site first or contact the Tekelec Customer Care Center to force this site to start as reference.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

4038 - StoppingGeoGraphicRedundancy

Alarm Group
Framework

Severity
Warning

Description:
This alarm is raised if geo-redundancy is being stopped.

Effect
Geo-redundancy is stopped.

Action
Verify the communication link with peer. Verify that peer is functional. If the peer site is stopped, make sure that the peer was not holding the last reference DB. If problem persist, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

4040 - GeoIntegrityPeriodTimeout

Alarm Group
Framework

Severity
Warning
Description:
The system has remained more than twenty-four hours in UnassignedEnabled, UnassignedDisabled or PendingReference.

Effect
Geo-redundancy is stopped.

Action
If Geo-Redundancy has previously been disabled, this alarm is only for informational purpose. Otherwise, verify geo-redundancy configuration; verify communication with peer site; shelf must be restarted to re-activated geo-redundancy; in that case, contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

4041 - MissingGeoReplicationVip

Alarm Group
Framework

Severity
Warning

Description:
Error, the geo-redundancy has been enabled but no VIP of type GeoReplication has been defined. Therefore, geo-redundancy cannot be enabled and will go to a stopped state.

Effect
Geo-redundancy will enter a stopped state and therefore will not be activated. The system will not be geographically protected.

Action
Add a VIP of type Geo-Replication and contact the Tekelec Customer Care Center to restart the system to reenable geo-redundancy.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
**4042 - GeoRedundancyStopped**

**Alarm Group**
Framework

**Severity**
Warning

**Description:**
Geo-redundancy is activated but has switched to Stopped state. Possible reasons are:
- The system failed to mount Geo Replication VIP
- Synchronisation has failed with the Reference site
- The Reference site cannot be reached
- System has lost connection with peer site during initial synchronization
- Integrity timeout has expired while site was unassignedDisabled, unassignedEnabled or pendingReference

**Effect**
Geo-redundancy is no longer working. The site must be restarted in order to reactivate geo-redundancy.

**Action**
Contact the Tekelec *Customer Care Center*.
Verify the following:
- the cause of the event
- the connection with the peer site
- the sanity with the peer site. If the peer site is running and is reference, restart the local site and it will go to replica state. This operation will overwrite the local site subscribers database with the content of the reference site's database. If you want to restart the site as reference:
  - make sure the peer site is not running
  - stop the site
  - clear geo-redundancy status
  - start again the site

**Clear**
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

**4043 - GeoDisableWarning**

**Alarm Group**
Framework
**Severity**
Warning

**Description:**
Geo-redundancy has been disabled by a user operation.

**Effect**
Geo-redundancy is no longer working. Geo-redundancy can be re-enabled and resumed within the next 2 hours. After that, the site will need to be restarted to reactivate geo-redundancy.

**Action**
Verify the reason why Geo-redundancy has been disabled. In the case where Geo-redundancy should be activated, enable and resume geo-redundancy within a maximum of 24 hours, otherwise contact the Tekelec Customer Care Center.

**Clear**
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

**4044 - SynchronizingLogsGeographicSiteDatabase**

**Alarm Group**
Framework

**Severity**
Warning

**Description:**
The site is currently replaying database logs with the geo-redundant site after the connection has been reestablished.

**Effect**
The system is being synchronized with the georedundant site.

**Action**
This alarm is simply for informational purposes. No further action is required.

**Clear**
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
4045 - SynchronizingLogsProcessLogs

**Alarm Group**
Framework

**Severity**
Warning

**Description:**
Latest database transactions with geographic database site ProcessLogs error.

**Effect**
After a switchover or a short connection loss in a geo-redundant configuration, the system replays (re-executes) the database logs with the Geo-redundant site's database. This alarm indicates that the database log replay has failed. Some Write operations done onto the database during the switchover or connection loss may have been lost if this alarm is raised.

**Action**
Contact the Tekelec *Customer Care Center*.

**Clear**
This alarm can be cleared manually by the Network Operator or the system will automatically clear it once the condition has been rectified.

4104 - SchemaDiff

**Alarm Group**
Framework

**Severity**
Critical

**Description:**
The database schema of the current blade doesn’t match with the schema on the active System Controller blade.

**Effect**
The data will be out-of-sync due to data replication failure.
Action
Contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

4115 - ToolStart

Alarm Group
Framework

Severity
Warning

Description:
The Database Extraction Tool has been started.

Effect
None

Action
None, this message is for informational purposes.

Clear
This alarm can be cleared manually by the Network Operator or the system will automatically clear this alarm once the condition has been rectified. Alarms 4116-4117 and 4121-4129 can also clear this alarm.

4116 - ToolComplete

Alarm Group
Framework

Severity
Warning

Description:
The Database Extraction Tool has completed an extraction.
Effect
Will clear alarm 4115.

Action
None, this message is for informational purposes.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear this alarm once the condition has been rectified.

4117 - ToolInterrupted

Alarm Group
Framework

Severity
Warning

Description:
The Database Extraction Tool was interrupted.

Effect
Will clear alarm 4115.

Action
None, this message is for informational purposes.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear this alarm once the condition has been rectified.

4121 - DbConnectionError

Alarm Group
Framework

Severity
Warning
Description:
The Database Extraction Tool failed to connect to the database server.

Effect
Will clear alarm 4115.

Action
None, this message is for informational purposes.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear this alarm once the condition has been rectified.

4122 - ExtractDataError

Alarm Group
Framework

Severity
Warning

Description:
The Database Extraction Tool failed to extract data.

Effect
Will clear alarm 4115.

Action
None, this message is for informational purposes.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear this alarm once the condition has been rectified.

4123 - OutputFileError

Alarm Group
Framework
Severity
Warning

Description:
The Database Extraction Tool failed to open an output file.

Effect
Will clear alarm 4115.

Action
None, this message is for informational purposes.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear this alarm once the condition has been rectified.

4124 - OutputDirError

Alarm Group
Framework

Severity
Warning

Description:
The Database Extraction Tool failed to create an output directory.

Effect
Will clear alarm 4115.

Action
None, this message is for informational purposes.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear this alarm once the condition has been rectified.
**4125 - ArgumentMissing**

**Alarm Group**
Framework

**Severity**
Warning

**Description:**
The Database Extraction Tool detected a missing input argument.

**Effect**
Will clear alarm 4115.

**Action**
None, this message is for informational purposes.

**Clear**
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear this alarm once the condition has been rectified.

---

**4126 - DiskThresholdCrossed**

**Alarm Group**
Framework

**Severity**
Warning

**Description:**
The Database Extraction Tool was interrupted because a storage threshold was crossed.

**Effect**
Will clear alarm 4115.

**Action**
None, this message is for informational purposes.
Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear this alarm once the condition has been rectified.

4127 - CpuSystemThresholdCrossed

Alarm Group
Framework

Severity
Warning

Description:
The Database Extraction Tool was interrupted because an overall CPU usage threshold was crossed.

Effect
Will clear alarm 4115.

Action
None, this message is for informational purposes.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear this alarm once the condition has been rectified.

4128 - CpuDbThresholdCrossed

Alarm Group
Framework

Severity
Warning

Description:
The Database Extraction Tool interrupted because a database CPU usage threshold was crossed.

Effect
Will clear alarm 4115.
Action
None, this message is for informational purposes.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear this alarm once the condition has been rectified.

4129 - RemoteHostTransferFailed

Alarm Group
Framework

Severity
Warning

Description:
The Database Extraction Tool failed to transfer data to the remote host.

Effect
Will clear alarm 4115.

Action
None, this message is for informational purposes.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear this alarm once the condition has been rectified.

System Manager alarms
System Manager alarms use the range 06100-06999

6119 - ShelfRestart

Alarm Group
System Manager

Severity
Warning
Description:
The shelf is starting up or has restarted.

Effect
None

Action
None if the restart was expected. For an unexpected restart, the problems might be due to power failure or failure of both System Controller slots.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

6135 - ServiceFailover

Alarm Group
System Manager

Severity
Warning

Description:
A failure occurs on a service that works in PureFT redundancy mode (i.e. CoreSystemController, ChassisManagement) forcing a switchover.

Effect
None

Action
The service should restart automatically. If not, manual intervention is required. See user guide to see how to restart a service. Contact the Tekelec Customer Care Center for logs analysis.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

6136 - ServiceSwitchover

Alarm Group
System Manager
Severity
Warning

Description:
A manual switchover of active Framework CoreSystemController was initiated by the operator on slot X.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

6137 - ServiceManualSwitchover

Alarm Group
System Manager

Severity
Warning

Description:
A manual switchover of active CoreSystemController is initiating by the operator on slot X.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
6140 - ServiceOOS

Alarm Group
System Manager

Severity
Critical

Description:
Service Z on slot X of shelf W is out of service.

Effect
Service Z on slot X of shelf W is out of service.

Action
Try to manually start service on Slot X. If does not start successfully, contact the Tekelec Customer Care Center for assistance.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

6142 - TooManySystemController

Alarm Group
System Manager

Severity
Critical

Description:
Trying to start more than two system controllers.

Effect
Cannot have more than two CoreSystemController running on the same system.

Action
Removed Extra CoreSystemController before trying to start it. Contact the Tekelec Customer Care Center for assistance.
Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

6144 - TraceActivated

Alarm Group
System Manager

Severity
Warning

Description:
Debug traces have been activated by a user operation for the specified module.

Effect
Debug traces have been activated and have been written on the local slot into the folder /blue/var/trace/. Debug trace can dramatically reduce system performance and stability and should never be enabled in normal operating condition.

Action
Verify with the Tekelec Customer Care Center that the debug trace is required. If not, deactivate debug trace.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

6145 - CoreDumpDetected

Alarm Group
System Manager

Severity
Major

Description:
A new core dump file has been detected under /blue/var/debug.

Effect
A process has failed. The system may work abnormally.
Action
Contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

6146 - ServiceLocked

Alarm Group
System Manager

Severity
Warning

Description:
This alarm is raised when the Tekelec personnel has locked a Service instance in order to perform safely maintenance activity on the SBC.

Effect
The service takes an unassigned HA role and is now out of service. An out of service alarm is also raised. This alarm is automatically cleared when the service is unlocked.

Action
This alarm is only for informational purposes and will be cleared when the service is unlocked.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

OAMP alarms

OAMP alarms use the range 07000-07099.

7009 - ActiveSubscribersThresholdReached

Alarm Group
OAMP
Severity
Warning

Description:
Active subscribers license warning.

Effect
None

Action
Increase threshold or buy license.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

7010 - ActiveSubscribersMaxReached

Alarm Group
OAMP

Severity
Critical

Description:
Active subscribers license violation.

Effect
None

Action
Buy license.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
7011 - TotalSubscribersThresholdReached

    Alarm Group
    OAMP

    Severity
    Warning

    Description:
    Total subscribers license warning.

    Effect
    None

    Action
    Increase threshold or buy license.

    Clear
    This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

7012 - TotalSubscribersMaxReached

    Alarm Group
    OAMP

    Severity
    Critical

    Description:
    Total subscribers license violation.

    Effect
    None

    Action
    Buy license.
Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

**SIP server alarms**

SIP server alarms use the range 08000-08099.

**8030 - IpAddressFailure**

<table>
<thead>
<tr>
<th>Alarm Group</th>
<th>SIP Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Critical</td>
</tr>
</tbody>
</table>

**Description:**
Unable to create SIP IP address.

**Effect**
The SipServer IP address could not be created. The SipServer may not be operational.

**Action**
Verify that IP address specified for SipServer is correct and restart Hlr service.

**Clear**
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

**8034 - ConfigurationFailure**

<table>
<thead>
<tr>
<th>Alarm Group</th>
<th>SIP Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity</td>
<td>Critical</td>
</tr>
</tbody>
</table>

**Description:**
SipServer configuration error.
Effect
An error was detected in the SipServer configuration. The SipServer is most likely not operational.

Action
Verify that the configuration of the SipServer is correct and restart Hlr service.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

8042 - MaxPendingHlrRequestsReached

Alarm Group
SIP Server

Severity
Critical

Description:
The maximum number of pending internal requests issued by SIP to HLR application has been reached.

Effect
SIP messages received are rejected by SIP application (internal requests are NOT sent to HLR application).

Action
If the overload condition persists, check if the system is otherwise operating normally. If it is, please contact your Tekelec Sales representative to order a system expansion.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

8043 - MaxPendingHlrRequestsThresholdReached

Alarm Group
SIP Server

Severity
Warning
Description:
The threshold for the number of maximum HLR pending requests issued by SIP has been reached.

Effect
This is a warning for the operator that the HLR cannot respond fast enough to the internal SIP requests.

Action
If the overload condition persists, check if the system is otherwise operating normally. If it is, please contact your Tekelec Sales representative to order a system expansion.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

8044 - StackDisabled

Alarm Group
SIP Server

Severity
Critical

Description:
The Sip Server stack has been disabled by the operator.

Effect
When this alarm is raised, the SIP server will answer 503 error messages to ALL requests received.

Action
Enable the Sip Server stack if SIP traffic is needed and ngHLR system is operational.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

8045 - ActiveSipSubscribersMaxReached

Alarm Group
SIP Server
Severity
Critical

Description:
The number of active SIP Server subscribers, i.e. registration bindings, has reached the maximum number of active SIP Server subscribers allowed by the license.

Effect
There is no traffic impact.

Action
The customer must upgrade its license in order to accommodate its traffic model. To do so, contact the Tekelec Sales Team.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

8046 - ActiveSipSubscribersThresholdReached

Alarm Group
SIP Server

Severity
Warning

Description:
The threshold for the number of SIP server active subscribers, i.e. registration bindings, has been reached.

Effect
There is no traffic impact.

Action
The customer shall upgrade its license in the near future in order to accommodate its traffic model.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
HLR server alarms

HLR server alarms use the range 09000-09199.

9008 - StandbySynchronization

Alarm Group
HLR Server

Severity
Warning

Description:
StandbySynchronization

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

9009 - MapMemoryAllocationFailure

Alarm Group
HLR Server

Severity
Warning

Description:
MapMemoryAllocationFailure

Effect
None
Action
Contact the Tekelec *Customer Care Center*.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

9038 - OverloadControlCpu

Alarm Group
HLR Server

Severity
Major

Description:
Hlr Overload Control: the Cpu usage is higher than the threshold (value=%1, threshold=%2).

Effect
The HLR will refuse all new transactions (incoming or outgoing) for the next 200ms.

Action
Contact the Tekelec *Customer Care Center* to diagnose the problem. The most probable cause is that the maximum capacity has been reached for the system’s configuration. The solution in that case would be to add more HLR services.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear it once the condition has been rectified.

9039 - OverloadControlDlg

Alarm Group
HLR Server

Severity
Major

Description:
Hlr Overload Control: all available transaction already open (value=%1, max=%2).
Effect
The HLR will refuse all new transactions (incoming or outgoing) until the transaction queue is below the overload threshold.

Action
Contact the Tekelec Customer Care Center to diagnose the problem. The most probable cause is that the maximum capacity has been reached for the system’s configuration. The solution in that case would be to add more HLR services.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear it once the condition has been rectified.

9040 - OverloadControlUOS

Alarm Group
HLR Server

Severity
Major

Description:
The HLR CPU or queue overload is continuously in and out of the overload condition.

Effect
The TCAP service will be put out of service (for all HLR instance) for the next 10 sec.

Action
Contact the Tekelec Customer Care Center to diagnose the problem, the most probable cause is that the maximum capacity has been reached for the system’s configuration, the solution in that case would be to add more Hlr services.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

9051 - HlrTransactionLevel1Alarm

Alarm Group
HLR Server
Severity
Minor

Description:
Alarm to monitor the number of transactions.

Effect
Set when the number of transactions reaches 50% of the 4000 available transactions.

Action
Contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

9052 - HlrTransactionLevel2Alarm

Alarm Group
HLR Server

Severity
Major

Description:
Alarm to monitor the number of transactions.

Effect
Set when the number of transactions reaches 75% of the 4000 available transactions.

Action
Contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
9053 - HlrTransactionLevel3Alarm

Alarm Group
HLR Server

Severity
Critical

Description:
Alarm to monitor the number of transactions.

Effect
Set when the number of transactions reaches 95% of the 4000 available transactions.

Action
Contact the Tekelec Customer Care Center.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

9137 - FeatureActivated

Alarm Group
HLR Server

Severity
Warning

Description:
This alarm is raised each time a feature/function of the Hlr has been activated (see description in next column for the list of features/functions). It is also raised each time the VLR link congestion feature goes from Disabled to Enabled and every time the IsdCompressed_percent/PrnSuppressed_percent parameters are modified.

Effect
One of the following features/functions has been activated:
- SSR function
- Enhanced control of SCCP Routing parameters
- Update of SCCP Calling Address Only for Update Location
- Enhanced SCCP Allowed PLMN
- Mobile Terminated Roaming Retry
- Dialogue Re-initiation upon Failure

Or the VLR link congestion feature has gone from Disabled to Enabled or the IsdCompressed_percent/Prn Suppressed_percnt parameters have been modified.

For the ngHLR's behaviour when these features/functions are active/enabled, refer to the "Subscriber Signaling Router", "Enhanced Control of SCCP Routing" and "VLR link congestion" descriptions in the SDM Product Description.

**Action**

This alarm is simply for informational purposes to indicate to the Network Operator that a feature/function of the Hlr has been activated (see description in the Effect column for the list of features/functions). No further action is required.

**Clear**

This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

**9138 - FeatureDeactivated**

**Alarm Group**

HLR Server

**Severity**

Warning

**Description:**

This alarm is raised each time a Framework feature/function of the Hlr has been deactivated (see description in next column for the list of features/functions).

**Effect**

One of the following features/functions has been deactivated:

- SSR function
- Enhanced control of SCCP Routing parameters
- Update of SCCP Calling Address Only for Update Location
- Enhanced SCCP Allowed PLMN
- Mobile Terminated Roaming Retry
- Dialogue Re-initiation upon Failure

Or the VLR link congestion feature has gone from Disabled to Enabled or the IsdCompressed_percent/Prn Suppressed_percnt parameters have been modified.
Action
This alarm is simply for informational purposes to indicate to the Network Operator that a feature/function of the Hlr has been deactivated (see description in the Effect column for the list of features/functions). No further action is required.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

9143 - SriRoutingActivated

Alarm Group
HLR Server

Severity
Warning

Description:
SriRoutingActivated

Effect
The SRI Routing function is active.

Action
The alarm is simply for informational purposes to indicate to the Network Operator that the SRI Routing function is active. No further action is required.

Clear
This alarm can be acknowledged and cleared manually by the Network Operator. It can only be cleared from within the CLI.

9144 - SriRoutingDeactivated

Alarm Group
HLR Server

Severity
Warning

Description:
SriRoutingDeactivated
Effect
The SRI Routing function is not active.

Action
The alarm is simply for informational purposes to indicate to the Network Operator that the SRI Routing function is not active. No further action is required.

Clear
This alarm can be acknowledged and cleared manually by the Network Operator. It can only be cleared from within the CLI.

9250 - MnpActivated

Alarm Group
HlrServer

Severity
Warning

Description:
This alarm is raised when the Mobile Framework Number Portability (MNP) function is activated manually by the operator, or during the Hlr startup sequence if the MNP function is already activated (state is stored in the database).

Effect
The MNP function is active.

Action
This alarm is simply for informational purposes to indicate to the Network Operator that the MNP function is active. No further action is required.

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.

9251 - MnpDeactivated

Alarm Group
HlrServer
Severity
Warning

Description:
Number Portability has been deactivated.

Effect
The MNP function is not active.

Received
MNP has been deactivated.

Action
This alarm is for informational purposes to indicate to the Network Operator that the MNP function is not active. No further action is required.

Clear
This alarm cannot be cleared manually by the Network Operator. The system will automatically clear it once the condition has been rectified.

9252 - MnpDbMismatchTypeA

Alarm Group
HlrServer

Severity
Warning

Description:
Number ported to another OLO.

Effect
None.

Action
Gather the relevant information in the corresponding log(s) (/blue/var/log/current.xml) of the active SystemController blade and take the appropriate corrective action.

Clear
This alarm can be manually cleared by the Network Operator from within the WebCI and CLI.
9253 - MnpDbMismatchTypeB

Alarm Group
HLR Server

Severity
Warning

Description:
Number is NOT ported in the network corresponding to the RgN.

Effect
None.

Action
Gather the relevant information in the corresponding log(s) (/blue/var/log/current.xml) of the active SystemController blade and take the appropriate corrective action.

Clear
This alarm can be manually cleared by the Network Operator from within the WebCI and CLI.

9254 - MnpDbMismatchTypeC

Alarm Group
HLRServer

Severity
Warning

Description:
Number ported to another OLO that is different from the Mobile Operator indicated by the RN.

Effect
None.

Action
Gather the relevant information in the corresponding log(s) (/blue/var/log/current.xml) of the active SystemController blade and take the appropriate corrective action.
### 9907 - DlgReinitOverloadDlgsLevel1

**Alarm Group**
HLR Server

**Severity**
Warning

**Description:**
Dialogue Reinitiation Overload - Dialogues Level 1: The number of dialogues waiting for retries was reached.

**Effect**
None

**Action**
Check networking connectivity.

**Clear**
This alarm clears automatically.

### 9908 - DlgReinitOverloadDlgsLevel2

**Alarm Group**
HLR Server

**Severity**
Minor

**Description:**
Dialogue Reinitiation Overload - Dialogues Level 2: The number of dialogues waiting for retries is higher than the threshold (value=\%1, threshold=\%2).

**Effect**
None
Subscriber Data Management Alarm Dictionary

9909 - DlgReinitOverloadDlgsLevel3

<table>
<thead>
<tr>
<th>Action</th>
<th>Clear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check networking connectivity.</td>
<td>This alarm clears automatically.</td>
</tr>
</tbody>
</table>

Alarm Group
HLR Server

Severity
Major

Description:
Dialogue Reinitiation Overload - Dialogues Level 3: The number of dialogues waiting for retries was reached. Any other dialogue will be reinitialized.

Effect
Any dialogue will be reinitialized.

Action
Check networking connectivity and contact the Customer Care Center

Clear
This alarm clears automatically.

SS7 - Stack Manager alarms

Stack Manager alarms use the range 10100-10199.

10102 - GenericSS7SmEmergencyAlarm

Alarm Group
SS7 - Stack Manager

Severity
Major
Description:
This alarm is raised if a SS7 Bucket has exceeded the threshold.

Effect
The bucket has reached over the threshold of the available resource.

Action
Contact the Tekelec Customer Care Center for an investigation of the source of the problem, which could be a leak.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10103 - GenericSS7Alarm

Alarm Group
SS7 - Stack Manager

Severity
Critical

Description:
This alarm can be raised in the following two different scenarios:
Scenario 1:
This alarm is raised when a SS7 Bucket has exceeded the threshold for too long.
Scenario 2:
This alarm is raised when the Interphase device driver (SS7 card) is not detected by the Operating System.

Effect
Scenario 1:
The bucket has reached over the threshold of the available resources for the last 3 consecutive minutes.
The ngHLR will be restarted automatically.
Scenario 2:
The Tekelec Operating System cannot detect a blade's SS7 card and consequently the HLR service running on that blade won't restart.
Action

Scenario 1:
After the restart of the ngHLR, the available resource should be back to normal. Contact the Tekelec Customer Care Center for an investigation of the source of the problem.

Scenario 2:
• In the case where the MTP2 Layer is used, remove and re-install the blade. The blade on which the SS7 card cannot be detected must be physically removed from the SDM Chassis and at least 10 seconds must pass before re-installing the blade back into the chassis.
• In the case where only SIGTRAN is used (the MTP2 or SAAL Layers won’t be used), disable the SS7Mtp2Layer and SS7SaalLayer in the configuration of the HLR service’s ServiceInstance Option.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10105 - SS7NodeReady

Alarm Group
SS7 - Stack Manager

Severity
Warning

Description:
The Node is ready to be enabled.

Effect
The HLR service will start activating its HA functionality and SS7 stack layers.

Action
None, this message is for informational purposes.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10106 - SS7NodeEnabled

Alarm Group
SS7 - Stack Manager
Severity
Warning

Description:
The HLR service successfully started its Framework HA functionality and SS7 stack layers.

Effect
The HLR service is started successfully and is now ready for operation.

Action
None, this message is for informational purposes.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10107 - SS7NodeNotEnabled

Alarm Group
SS7 - Stack Manager

Severity
Warning

Description:
A problem occurred during the initialization of the HLR service.

Effect
The HLR service will restart on that blade.

Action
None

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
10108 - SS7NotAllRyUP

Alarm Group
SS7 - Stack Manager

Severity
Critical

Description:
Connectivity problem were found during Stack initialization, the HLR service will restart.

Effect
The HLR service will restart on that blade.

Action
The reason for the unsuccessful start must be investigated. It may be possible to recover by stopping and restarting the HLR services on all the blades.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

SS7 - Generic Alarms

SS7 generic alarms use the range 10200-10299.

10200 - CLEAR_OLD_ALARMS

Alarm Group
SS7 - Generic Alarms

Severity
Warning

Description:
CLEAR_OLD_ALARMS

Effect
None
Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10212 - LCM_EVENT_SMEM_ALLOC_FAIL

Alarm Group
SS7 - Generic Alarms

Severity
Major

Description:
Static memory alloc fail

Effect
None

Action
This alarm must be manually cleared.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10213 - LCM_EVENT_DMEM_ALLOC_FAIL

Alarm Group
SS7 - Generic Alarms

Severity
Major

Description:
Dynamic memory alloc fail
Effect
None

Action
This alarm must be manually cleared.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

SS7 - MTP2 layer alarms

SS7 MTP2 layer alarms use the range 10300-10399.

10300 - LSD_EVENT_ENTR_CONG

Alarm Group
SS7 - MTP2 Layer Alarms

Severity
Minor

Description:
Link entered congestion due to: management initiated or unknown reason.

Effect
None

Action
Adds capacity

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10301 - LSD_EVENT_EXIT_CONG

Alarm Group
SS7 - MTP2 Layer Alarms
Severity
Minor

Description:
Link leaving congestion due to: management initiated or unknown reason.

Effect
Will clear alarm 10300.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10302 - LSD_EVENT_PROT_ST_UP

Alarm Group
SS7 - MTP2 Layer Alarms

Severity
Major

Description:
Link is up at physical level.

Effect
Will clear alarm 10303.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
10303 - LSD_EVENT_PROT_ST_DN

Alarm Group
SS7 - MTP2 Layer Alarms

Severity
Major

Description:
Link is down at MAC layer: due to management initiated or unknown reason.

Effect
Link is down.

Action
Verify physical connectivity with the far end office. See troubleshooting section 13.3 (ss7) of the user guide.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10311 - LSD_EVENT_REMOTE_CONG_START

Alarm Group
SS7 - MTP2 Layer Alarms

Severity
Minor

Description:
Remote end congestion (SIB received) started for unknown reason.

Effect
None

Action
None, this message is for informational purpose.
Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10312 - LSD_EVENT_REMOTE_CONG_END

Alarm Group
SS7 - MTP2 Layer Alarms

Severity
Minor

Description:
Remote end congestion stopped.

Effect
Will clear 10311.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10313 - LSD_EVENT_RX_REMOTE_SIPO

Alarm Group
SS7 - MTP2 Layer Alarms

Severity
Warning

Description:
Remote end processor outage started.

Effect
None
Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10314 - LSD_EVENT_RX_REMOTE_SIPR

Alarm Group
SS7 - MTP2 Layer Alarms

Severity
Warning

Description:
Remote end processor outage stopped

Effect
Will clear alarm 10313.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10315 - LSD_EVENT_TX_WINDOW_CONG_START

Alarm Group
SS7 - MTP2 Layer Alarms

Severity
Warning

Description:
Window congestion start.
Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10316 - LSD_EVENT_TX_WINDOW_CONG_END

Alarm Group
SS7 - MTP2 Layer Alarms

Severity
Warning

Description:
Window congestion stop.

Effect
Will clear alarm 10315.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

SS7 - MTP3 layer alarms

SS7 MTP3 layer alarms use the range 10400-10499.

10400 - LSN_EVENT_PROT_ST_UP

Alarm Group
SS7 - MTP3 Layer Alarms
Severity
Major

Description:
Link is up.

Effect
Will clear alarm 10401.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10401 - LSN_EVENT_PROT_ST_DN

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Major

Description:
Link is down.

Effect
Link is down.

Action
Verify lower layer (MTP1 & MTP2). See troubleshooting section 13.3 (ss7) of the user guide.
OR
Verify lower layer (MTP1 & MTP2); try to manually activate the link. See troubleshooting section 13.3 (ss7) of the user guide.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
10404 - LSN_EVENT_LOC_INH_ACK

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Warning

Description:
Link inhibited locally.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10405 - LSN_EVENT_REM_INH_ACK

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Warning

Description:
Link inhibited remotely.

Effect
None

Action
None, this message is for informational purpose.
Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10406 - LSN_EVENT_LOC_UNINHED

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Warning

Description:
Link uninhibited locally.

Effect
Will clear alarm 10404.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10407 - LSN_EVENT_REM_UNINHED

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Warning

Description:
Link uninhibited by remote end.

Effect
Will clear alarm 10405.
Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10411 - LSN_EVENT_RMT_BLKD

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Warning

Description:
Link remotely blocked.

Effect
Link is down.

Action
Try to unblock the far end.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10412 - LSN_EVENT_RMT_UNBLKD

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Warning

Description:
Link remotely unblocked.
Effect
Will clear alarm 10411.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10413 - LSN_EVENT_LOC_BLKED

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Warning

Description:
Link locally blocked.

Effect
Link is down.

Action
Try to locally unlock the link.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10414 - LSN_EVENT_LOC_UNBLKD

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Warning
Description:
Link locally unblocked.

Effect
Will clear alarm 10413.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10415 - LSN_EVENT_PAUSE

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Critical

Description:
DPC is not reachable.

Effect
All messages to this destination will be lost.

Action
Check route, combinedLinkset and linkset for this dpc. Call far end office to see why DPC is unreachable.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10416 - LSN_EVENT_RESUME

Alarm Group
SS7 - MTP3 Layer Alarms
Severity
Critical

Description:
DPC is now reachable.

Effect
Will clear alarm 10415.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10417 - LSN_EVENT_CONG

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Minor

Description:
Concerned DPC network congested.

Effect
A DPC has experience congestion.

Action
Add capacity to this DPC.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
10418 - LSN_EVENT_STPCONG

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Minor

Description:
Concerned DPC stop network congestion.

Effect
Will clear alarm 10417.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10419 - LSN_EVENT_RMTUSRUNAV

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Warning

Description:
Concerned DPC remote user unavailable.

Effect
Remote user (map, sccp, etc.) DPC is unavailable.

Action
Check far end.
Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10433 - LSN_EVENT_INV_OPC_OTHER_END

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Major

Description:
Invalid OPC configured on other end.

Effect
None

Action
Check far end OPC.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10434 - LSN_EVENT_INV_SLC_OTHER_END

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Minor

Description:
Invalid SLC configured on other end.

Effect
None
Action
Check far end SLC.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10439 - LSN_EVENT_DATA_DRP

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Major

Description:
Invalid DPC.

Effect
MTP3 layer not coming up because of an invalid DPC.

Action
Check if DPC is correctly configured.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10440 - LSN_EVENT_LSET_ACTIVE

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Major

Description:
Linkset is up.
Effect
Will clear alarm 10441.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10441 - LSN_EVENT_LSET_INACTIVE

Alarm Group
SS7 - MTP3 Layer Alarms

Severity
Major

Description:
Linkset is down.

Effect
All links to this linkset are down.

Action
Try to bring links associated to this linkset into service.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

SS7 - SCCP layer alarms

SS7 SCCP layer alarms use the range 10500-10599.

10500 - LSP_EVENT_USER_INS

Alarm Group
SS7 - SCCP Layer Alarms
Severity
Critical

Description:
SccpUsap is in service.

Effect
Will clear alarm 10501.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10501 - LSP_EVENT_USER_OOS

Alarm Group
SS7 - SCCP Layer Alarms

Severity
Critical

Description:
SccpUsap is out of service.

Effect
SCCP routing out of service.

Action
Make sure TCAP sap is activated. If not, activate it. If the alarm persists, contact the Tekelec Customer Care Center.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
10505 - LSP_EVENT_HOP_VIOLATION

Alarm Group
SS7 - SCCP Layer Alarms

Severity
Warning

Description:
Hop counter violation.

Effect
HLR received a message with the hop count greater than the hop count setting in SCCP network sap.

Action
Make sure the hop count configuration is ok in SCCP. Network sap.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10506 - LSP_EVENT_ERROR_PERFORMANCE

Alarm Group
SS7 - SCCP Layer Alarms

Severity
Warning

Description:
1. SCCP Error Performance as per Q.752 Framework (dialogue allocation failure).
2. SCCP Error Performance as per Q.752 (SSN unequiped).
3. SCCP Error Performance as per Q.752 (no translation for this specific address).
4. Invocation of dialogue has failed at SCCP level.
5. SCCP Error Performance (remote SP is unavailable).

Effect
1. Message lost.
2. HLR received message with SSN that is not in is routing table.
3. HLR received message with Global Title that is not in its routing table.
5. The remote signaling point is not available.

Received: Alarm from:
SCCP

AlarmName:
LSP_EVENT_ERROR_PERFORMANCE [262]

AlarmDescription:
SCCP Error Pe CauseDescription:formance

CauseName:
LSP_CAUSE_RMT_SP_INACC [291]

CauseDescription:
no extraInformation available./SCCP/0/LSP_CAUSE_RMT_SP: nwld=[], sw=[], dpc=[], ssn=[]

AlarmInformation
Remote sp inaccessible.

Action
Check the traffic on the network and the state of the peers nodes. For software releases 4.1 and higher, verify if there are overload alarms raised. If the problem persists, contact the Tekelec Customer Care Center.

Check far end SCCP, and network configuration leading to it.

CauseDescription:
Remote sp inaccessible.

CauseName:
LSP_CAUSE_RMT_SP_INACC [291]

AlarmName:
LSP_EVENT_ERROR_PERFORMANCE [262]

Clear
This alarm cannot be cleared manually by the Network Operator, the system will automatically clear it once the condition has been rectified.
10508 - LSP_EVENT_RMT_SCCP_UNEQUIP

Alarm Group
SS7 - SCCP Layer Alarms

Severity
Warning

Description:
Remote SCCP unequipped.

Effect
None

Action
Check far end SCCP.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

SS7 - TCAP layer alarms

SS7 TCAP layer alarms use the range 10600-10699.

10601 - LST_EVENT_MSG_FAIL

Alarm Group
SS7 - TCAP Layer Alarms

Severity
Major

Description:
This event is generated if an attempt to allocate/deallocate/add/remove a message buffer (dynamic memory) fails.

Effect
None
Action
Verify the state of the node and check for other alarms. If the traffic is not affected, clear the alarm. If the problem persists, contact the Tekelec Customer Care Center.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10602 - LST_EVENT_ALOC_FAIL

Alarm Group
SS7 - TCAP Layer Alarms

Severity
Major

Description:
This event is generated if an attempt to allocate/deallocate a static buffer fails.

Effect
None

Action
Verify the state of the node and check for other alarms. If the traffic is not affected, clear the alarm. If the problem persists, contact the Tekelec Customer Care Center.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10609 - LST_EVENT_ALOC_DLGID_FAIL

Alarm Group
SS7 - TCAP Layer Alarms

Severity
Major

Description:
This event is generated if no dialogue ID can be allocated for the new dialogue (component/data) request. This happens if the entire dialogue ID range is in use.
Effect
None

Action
Clear dialogs if the operation is available. Check the traffic on the network and the state of the peers nodes. For software releases 4.1 and higher, verify if there are overload alarms raised. If the problem persists, contact the Tekelec Customer Care Center.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

10611 - LST_EVENT_MAX_CFG

Alarm Group
SS7 - TCAP Layer Alarms

Severity
Major

Description:
This event is generated if the maximum resource, configuration limit is reached, and no new resource (dialogue/invoke) can be allocated.

Effect
None

Action
Check the traffic on the network and the state of the peers nodes. For software releases 4.1 and higher, verify if there are overload alarms raised. If the problem persists, contact the Tekelec Customer Care Center.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

SS7 - MAP layer alarms

SS7 MAP layer alarms use the range 10700-10799
10701 - LMA_EVENT_ALOC_DLGID_FAIL

Alarm Group
SS7 - MAP Layer Alarms

Severity
Major

Description:
This event is generated if no dialogue ID can be allocated for the new dialogue (component/data) request. This happens if the entire dialogue ID range is in use.

Effect
None

Action
Check the traffic on the network and the state of the peers nodes. For software releases 4.1 and higher, verify if there are overload alarms raised. If the problem persists, contact the Tekelec Customer Care Center.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

SS7 - SG alarms
SS7 SG alarms use the range 10900-10999.

10903 - LSG_EVENT_FAILURE

Alarm Group
SS7 - SG Alarms

Severity
Warning

Description:
Generated when an error is encountered within the standby copy of the system manager while processing update messages from the active copy of the system manager.
Effect
None

Action
The standby copy of the System Manager must be made Out Of Service on receiving this alarm as it has lost synchronization with its active counterpart.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

SS7 - MR alarms

SS7 MR alarms use the range 11100-11199.

11100 - LMR_EVENT_MEMBUF_NOT_AVAIL

Alarm Group
SS7 - MR Alarms

Severity
Major

Description:
Memory not available.

Effect
None

Action
Verify the state of the node and check for other alarms. If the traffic is not affected, clear the alarm. If the problem persists, contact the Tekelec Customer Care Center.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
SS7 - RY Alarms

SS7 RY alarms use the region 11200-11299.

11201 - LRY_USTA_ERR

Alarm Group
SS7 - RY Alarms

Severity
Critical

Description:
Keep Alive timeout.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11204 - LRY_USTA_UP

Alarm Group
SS7 - RY Alarms

Severity
Critical

Description:
Channel up to remote processor.

Effect
Will clear alarm 11205.
Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11205 - LRY_USTA_DN

Alarm Group
SS7 - RY Layer Alarms

Severity
Critical

Description:
Channel down to remote processor with ChannelID=1.

Effect
RY channel down between two entities.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

SS7 - SAAL alarms

S7 SAAL alarms use the range 11300-11399.

11300 - LSA_EVENT_PROT_ST_UP

Alarm Group
SS7 - SAAL Layer Alarms

Severity
Major
Description:
Link is up at MAC layer.

Effect
Will clear alarm 11301.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11301 - LSA_EVENT_PROT_ST_DN

Alarm Group
SS7 - SAAL Layer Alarms

Severity
Major

Description:
Link is down at MAC layer due to: management initiated or unknown reason.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11302 - LSA_EVENT_BEG_CONG

Alarm Group
SS7 - SAAL Layer Alarms
Severity
Warning

Description:
Congestion begin.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11303 - LSA_EVENT_END_CONG

Alarm Group
SS7 - SAAL Layer Alarms

Severity
Warning

Description:
Congestion end.

Effect
Will clear alarm 11302.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
SS7 - M3UA alarms

SS7 M3UA Alarms use the range 11400-11499.

11403 - LIT_EVENT_SCT_COMM_DOWN

Alarm Group
SS7 - M3UA Layer Alarms

Severity
Major

Description:
The SCTP association has lost communication.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11404 - LIT_EVENT_ESTABLISH_OK

Alarm Group
SS7 - M3UA Layer Alarms

Severity
Major

Description:
The SCTP association is established successfully.

Effect
Will clear alarm 11403.
Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11405 - LIT_EVENT_ECLOSE_OK

Alarm Group
SS7 - M3UA Layer Alarms

Severity
Major

Description:
End Point closed successfully.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11406 - LIT_EVENT_EOPEN_OK

Alarm Group
SS7 - M3UA Layer Alarms

Severity
Major

Description:
Opening End Point is successful.
Effect
Will clear alarm 11405.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11407 - LIT_EVENT_ASP_NOT_ACTIVE

Alarm Group
SS7 - M3UA Layer Alarms

Severity
Major

Description:
The remote PSP or the local ASP is not ready to receive data.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11408 - LIT_EVENT_ASP_ACTIVE

Alarm Group
SS7 - M3UA Layer Alarms

Severity
Major
Description:
The ASP is ready to process signalling traffic for a particular AS.

Effect
Will clear alarm 11407.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11409 - LIT_EVENT_AS_NOT_ACTIVE

Alarm Group
SS7 - M3UA Layer Alarms

Severity
Major

Description:
The AS has moved to the AS-DOWN state.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11410 - LIT_EVENT_AS_ACTIVE

Alarm Group
SS7 - M3UA Layer Alarms
Severity
Major

Description:
The AS has moved to the AS-ACTIVE state.

Effect
Will clear alarm 11409.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11411 - LIT_EVENT_PC_UNAVAILABLE

Alarm Group
SS7 - M3UA Layer Alarms

Severity
Critical

Description:
The remote Signalling Point is unavailable.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
11412 - LIT_EVENT_PC_AVAILABLE

Alarm Group
SS7 - MUA Layer Alarms

Severity
Critical

Description:
The remote Signaling Point is available.

Effect
Will clear alarm 11411.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11414 - M3UA MSG-FAIL

Alarm Group
SS7 - M3UA Layer Alarms

Severity
Critical

Description:
This alarm is raised when the M3UA has a memory allocation failure during message handling.

Effect
Messages may be dropped.

Action
If this alarm is manually cleared, and is re-set automatically, then the system might be in partial outage. The slot that reported the alarm should be restarted.
Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged.

SS7 - TUCL alarms

SS7 TUCL alarms use the range 11600-11699.

11610 - TuclTxqCongestionSet

Alarm Group
SS7 - TUCL Layer Alarms

Severity
Minor

Description:
Transmit queue congestion start.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11612 - TuclTxqCongestionClear

Alarm Group
SS7 - TUCL Layer Alarms

Severity
Minor

Description:
Transmit queue congestion stop.
Effect
Will clear alarm 11612.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11613 - TuclResCongestionSet

Alarm Group
SS7 - TUCL Layer Alarms

Severity
Minor

Description:
Resource congestion start.

Effect
None

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11615 - TuclResCongestionClear

Alarm Group
SS7 - TUCL Layer Alarms

Severity
Minor
Description:
Resource congestion stop.

Effect
Will clear alarm 11613.

Action
None, this message is for informational purpose.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

11616 - TuclSCTPPeerAddressAvailable

Alarm Group
SS7 - TUCL Layer Alarms

Severity
Minor

Description:
One of the multi-homing peer address is now available.

Effect
Will clear alarm 11617.

Action
None, this message is for informational purpose.

Clear
This alarm is a clear.

11618 - TuclSCTPPeerAddressMadePrimary

Alarm Group
SS7 - TUCL Layer Alarms

Severity
Minor
Description:
The multi-home peer address was made primary.

Effect
This alarm indicate what multi-home peer address is use as the primary.

Action
None, this message is for informational purpose.

Clear
This alarm can not be clear.

Node Manager alarms
Node Manager alarms use the range 14000-14099.

14000 - DiskSpaceWarning

Alarm Group
Node Manager Alarms

Severity
Warning

Description:
DiskSpaceWarning

Effect
The partition specified has exceeded the specified disk space threshold (60% full).

Action
Free up some disk space. Refer to "Viewing the Disk Space Usage" in the SDM Monitoring, Maintaining, Troubleshooting User Guide.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
14001 - DiskSpaceMinor

Alarm Group
Node Manager Alarms

Severity
Minor

Description:
DiskSpaceMinor

Effect
The partition specified has exceeded the specified disk space threshold (80% full).

Action
Free up some disk space. Refer to "Viewing the Disk Space Usage" in the SDM Monitoring, Maintaining, Troubleshooting User Guide.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

14002 - DiskSpaceMajor

Alarm Group
Node Manager Alarms

Severity
Major

Description:
DiskSpaceMajor

Effect
The partition specified has exceeded the specified disk space threshold (95% full).

Action
Free up some disk space. Refer to "Viewing the Disk Space Usage" in the SDM Monitoring, Maintaining, Troubleshooting User Guide.
Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

SIP provisioning alarms

SIP provisioning alarms use the range 15000-15099.

15023 - SipSubscribersMaxReached

Alarm Group
SIP Provisioning Manager

Severity
Critical

Description:
The number of provisioned SIP subscribers, i.e. AORs, has reached the maximum number of total SIP subscribers allowed by the license.

Effect
The current and the subsequent provisioning AOR requests are rejected.

Action
Buy license.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

15024 - SipSubscribersThresholdReached

Alarm Group
SIP Provisioning Manager

Severity
Warning
Description:
The threshold for the number of provisioned SIP subscribers, i.e. AORs, has been reached.

Effect
There is no traffic impact.

Action
Increase threshold or buy license.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

HSS provisioning alarms

HSS provisioning alarms use the range 16000-16099.

16129 - HssSubscribersMaxReached

Alarm Group
HSS Provisioning Manager

Severity
Critical

Description:
The number of provisioned HSS subscribers has reached the maximum number of total HSS subscribers allowed by the license.

Effect
The current and the subsequent provisioning HSS requests are rejected.

Action
Buy license

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
16130 - HssSubscribersThresholdReached

Alarm Group
HSS Provisioning Manager

Severity
Warning

Description:
The threshold for the number of provisioned HSS subscribers has been reached.

Effect
There is no traffic impact.

Action
Increase treshold or buy license.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

16132 - SlfSubscribersMaxReached

Alarm Group
HSS Provisioning Manager

Severity
Critical

Description:
The number of provisioned SLF subscribers has reached the maximum number of total SLF subscribers allowed by the license.

Effect
The current and the subsequent provisionning SLF requests are rejected.

Action
Buy license.
Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

16133 - SlfSubscribersThresholdReached

Alarm Group
HSS Provisioning Manager

Severity
Warning

Description:
The threshold for the number of provisioned SLF subscribers has been reached.

Effect
There is no traffic impact.

Action
Increase threshold or buy license.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

16135 - AaaSubscribersMaxReached

Alarm Group
HSS Provisioning Manager

Severity
Critical

Description:
The number of provisioned AAA subscribers has reached the maximum number of total AAA subscribers allowed by the license.

Effect
The current and the subsequent provisioning AAA requests are rejected.
Action
Buy license.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

16136 - AaaSubscribersThresholdReached

Alarm Group
HSS Provisioning Manager

Severity
Warning

Description:
The threshold for the number of provisioned AAA subscribers has been reached.

Effect
There is no traffic impact.

Action
Increase threshold or buy license.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

IMS/LTE HSS

IMS/LTE HSS alarms use the range 17000-17299.

17001 - LostPeerConnection

Alarm Group
IMS/LTE HSS

Severity
Major
Description:
The connection between the IMS/LTE HSS and a peer node is down.

Effect
The IMS/LTE HSS service may not be operational.

Action
Verify that the state of the network or verify that the peer node is in service.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

17002 - CongestionDetected

Alarm Group
IMS/LTE HSS

Severity
Warning

Description:
The IMS/LTE HSS has detected congestion in the Diameter network traffic.

Effect
Level 1 means that messages are received but we send an immediate DIAMETER_TOO_BUSY response. Level 2 means that messages are discarded without a response.

Action
Verify that the Diameter nodes in the network are properly configured.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

17017 - NoHandlerInstance

Alarm Group
IMS/LTE HSS
Severity
Warning

Description:
There is an outgoing message (PPR, RTR, PNR/ CLR, DSR, IDR) which is supposed to be sent to a SCSCF/ MME/SGSN with the given host/realm, but no IMS/LTE HSS instance has been found to which that S-CSCF/MME/SGSN is connected.

Effect
As a result, the message is discarded.

Action
Verify if the S-CSCF/MME/SGSN is connected to the IMS/LTE HSS; if so, disconnect and reconnect that SCSCF/ MME/SGSN.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

17102 - AAACongestionDetected

Alarm Group
IMS/LTE HSS

Severity
Warning

Description:
The number of messages received has caused the AAA message handling to be affected.

Effect
Level 1 means that messages are received but we send an immediate RADIUS_TOO_BUSY response. Level 2 means that messages are discarded without a response.

Action
No action. If this alarm is raised often on a regular basis, contact the Tekelec Customer Care Center.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
17200 - DnsCongestionDetected

Alarm Group
IMS/LTE HSS

Severity
Warning

Description:
The number of messages received has caused the DNS message handling to be affected.

Effect
Level 1 means that messages are received but we send an immediate ServFail response. Level 2 means that messages are discarded without a response.

Action
No action. If this alarm is raised often on a regular basis, contact the Tekelec Customer Care Center.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

SIP UA alarms

SIP UA alarms use the range 18000-18099

18002 - TimeslotOverflow

Alarm Group
SIP UA

Severity
Major

Description:
The SIP UA has encountered an error while performing refresh of registrations.

Effect
Some SIP UA registrations may temporarily expire.
Action
Verify the configuration of the FMC-SIP feature. If possible, lengthen SipUa registration expiry time.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

18003 - RegisterExpiresTooSmall

Alarm Group
SIP UA

Severity
Minor

Description:
The registration expiry time received by the SIP UA is lower than the acceptable limit.

Effect
SIP UA registrations will expire prior to being refreshed. Service degradation will occur.

Action
Lengthen the registration expiry time of the SIP peer node.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

18004 - CscfTimeout

Alarm Group
SIP UA

Severity
Critical

Description:
A SIP UA registration attempt encountered a network error or a timeout.
Effect
Request timeout (no answer received from registrar).

Action
Verify the network connections between nodes.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

18022 - ConfigurationFailure

Alarm Group
SIP UA

Severity
Critical

Description:
There is an error with the configuration of the SIP UA.

Effect
The SIP UA service may not be operational or only partially operational.

Action
Verify that the configuration of the SIP UA is correct and restart Hlr service.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

18023 - IpAddressFailure

Alarm Group
SIP UA

Severity
Critical
Description:
Failed to create SIP UA IP address.

Effect
The SIP UA IP address could not be created. The SipUa may not be operational.

Action
Verify that IP address specified for SIP UA is correct and restart Hlr service.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

18025 - ActiveSipSubscribersMaxReached

Alarm Group
SIP UA

Severity
Critical

Description:
The number of active SIP UA subscribers, i.e. registration bindings, has reached the maximum number of active SIP subscribers allowed by the license.

Effect
There is no traffic impact.

Action
Buy license.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.

18026 - ActiveSipSubscribersThresholdReached

Alarm Group
SIP UA
Severity
Warning

Description:
The threshold for the number of SIP UA active subscribers, i.e. registration bindings, has been reached.

Effect
There is no traffic impact.

Action
Increase threshold or buy license.

Clear
This alarm can be cleared manually by the Network Operator once it has been acknowledged and once the condition has been rectified.
## Glossary

**C**

- **CPU**
  - Central Processing Unit

**D**

- **DB**
  - Database
  - Data bus

- **DPC**
  - Destination Point Code
  
  DPC refers to the scheme in SS7 signaling to identify the receiving signaling point. In the SS7 network, the point codes are numeric addresses which uniquely identify each signaling point. This point code can be adjacent to the EAGLE 5 ISS, but does not have to be.

**O**

- **OLO**
  - Other Licensed Operator

**R**

- **RN**
  - Routing Number
  
  The number provided by the Freephone Service Provider (FSP) to the Access Service Provider (ASP) to enable a pre-determined routing of traffic to a specific network/carrier/customer.

**S**

- **SCCP**
  - Signaling Connection Control Part
  
  The signaling connection control part with additional functions for the Message Transfer Part (MTP) in SS7 signaling. Messages can be transmitted between arbitrary
<table>
<thead>
<tr>
<th>S</th>
<th>nodes in the signaling network using a connection-oriented or connectionless approach.</th>
</tr>
</thead>
</table>
| SIP | Session Initiation Protocol  
A peer-to-peer protocol used for voice and video communications. |
| SLF | Subscription Locator Function |