

SS7 MTP-L3 and M3UA IETF China 1991

Statement of Compliance

STATEMENT OF COMPLIANCE

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1 GENERAL

1.1 INTRODUCTION

This document details how the Ericsson MTPL3& M3UA IETF signaling component conforms with the Chinese standards Reference [1], Reference [2], Reference [3][, and Reference [4].

1.2 Concept

The terms that are used are:

C	The Ericsson signaling component complies with the specified section in the standard.
N	The Ericsson signaling component does not comply with the specified section in the standard.
P	The Ericsson signaling component complies partly with the specified section in the standard.
-	There is nothing to implement in the referred section (always placed in column C).





2 Compliance Lists

2.1 GF 001-9001

2.1.1 Technical Specification of SS7

Table 1

References	C	N	P	Comments
1. Foreword	-			
2. Brief Introduction to SS7	-			
3. Message Transfer Part	-			
3.1 Introduction	-			
3.2 Signaling Data Link (level 1)	-			
3.3 Signaling Link Functions (level 2)	-			
3.4 Signaling Network Functions (level 3)	X			
3.4.1 Signaling Message Handling	X			Note 1 on Page 11
3.4.2 Signaling Network Management	-			
3.4.2.1 Signaling Traffic Management			X	Note 2 on Page 11
3.4.2.2 Signaling Link Management			X	Note 3 on Page 11
3.4.2.3 SignalingRoute Management	X			
3.4.2.3.1 Transfer-Prohibited Procedure	X			
3.4.2.3.2 Transfer-Allowed Procedure	X			
3.4.2.3.3 Transfer-Restricted Procedure	X			Note 5 on Page 11
3.4.2.3.4 Signaling-Route-Set-Test Procedure	X			
3.4.2.3.5 Transfer-Controlled Procedure	X			
3.4.2.3.6 Signaling-Route-Set-Congestion-Test Procedure	X			

Table 1

References	C	N	P	Comments
3.4.3 Allocation of Heading Codes for Signaling Network Management Messages			X	Note 4 on Page 11
3.4.4 Formats and Codes of Signaling Network Management Messages			X	Note 4 on Page 11, Note 6 on Page 11
3.4.5 Signaling Network Structure	-			
3.4.6 Coding for the Signaling Points in the National Network	-			
3.4.7 Performance of the MTP	-			
3.4.8 Monitoring and Measurements for the SS7 Networks	-			
3.4.8.1 Signaling Link Performance	-			
- Table 3-3/1 Duration of link in the In-service state			X	Note 7 on Page 11
- Table 3-3/2 SL failure - All reasons	X			
- Table 3-3/3 SL failure - Abnormal FIBR/BSNR		X		
- Table 3-3/4 SL failure - Excessive delay of ack.		X		
- Table 3-3/5 SL failure - Excessive error rate		X		
- Table 3-3/6 SL failure - Excessive duration of congestion		X		
- Table 3-3/7 SL alignment or proving failure		X		
- Table 3-3/8 Number of signal units received in error		X		Note 8 on Page 11
- Table 3-3/9 Number of negative ack. received		X		
- Table 3-3/10 Local automatic changeover			X	Note 7 on Page 11
- Table 3-3/11 Local automatic changeback			X	Note 9 on Page 11
- Table 3-3/12 SL restoration	X			
3.4.8.2 Signaling Link Availability	-			



Table 1

References	C	N	P	Comments
- Table 3-4/1 Duration of SL unavailability (for any reason)			X	Note 7 on Page 11
- Table 3-4/5 Duration of SL inhibition due to local management actions			X	Note 7 on Page 11
- Table 3-4/6 Duration of SL inhibition due to remote management actions			X	Note 7 on Page 11
- Table 3-4/7 Duration of SL unavailability due to link failure	X			
- Table 3-4/9 Duration of SL unavailability due to remote processor outage			X	Note 7 on Page 11
- Table 3-4/10 Start of remote processor outage	X			
- Table 3-4/11 Stop of remote processor outage	X			
- Table 3-4/13 Local management inhibit		X		
- Table 3-4/14 Local management uninhibit		X		
- Table 3-4/15 Duration of local busy		X		
3.4.8.3 Signaling Link Utilization	-			
- Table 3-5/1 Number of SIF and SIO octets transmitted	X			
- Table 3-5/2 Octets retransmitted	X			
- Table 3-5/3 Number of message signal units transmitted	X			
- Table 3-5/4 Number of SIF and SIO octets received		X		
- Table 3-5/5 Number of message signal units received	X			
- Table 3-5/6 SL congestion indication	X			
- Table 3-5/7 Cumulative duration of SL congestion	X			
- Table 3-5/9 Stop of SL congestion	X			
- Table 3-5/10 MSUs discarded due to SL congestion	X			

Table 1

References	C	N	P	Comments
- Table 3-5/11 Number of congestion events resulting in loss of MSUs		X		
3.4.8.4 Signaling Link Set and Route Set Availability	-			
- Table 3-6/2 Duration of unavailability of signaling linkset		X		
- Table 3-6/3 Start of linkset failure			X	
Table 3-6/4 Stop of linkset failure			X	
- Table 3-6/5 Init. of broadcast TFP due to failure of measured linkset			X	
- Table 3-6/6 Init. of broadcast TFA for recovery of measured linkset			X	
- Table 3-6/9 Unavailability of route set to a given destination or set of destinations			X	Note 7 on Page 11
- Table 3-6/10 Duration of unavailability in table 3-6/9		X		
- Table 3-6/11 Start of unavailability in table 3-6/9	X			
- Table 3-6/12 Stop of unavailability in table 3-6/9	X			
- Table 3-6/13 Change in linkset used to adjacent SP		X		
3.4.8.5 Signaling Point Accessibility Status	-			
- Table 3-7/1 Adjacent SP inaccessible	X			
- Table 3-7/2 Duration of adjacent SP inaccessible	X			
- Table 3-7/4 Stop of adjacent SP inaccessible			X	Note 9 on Page 11
- Table 3-7/5 MSU discarded due to a routing data error	X			
3.4.8.6 Signaling Link Traffic Distribution	-			
- Table 3-8/6 MTP Signaling Traffic Distribution (Signaling Route Utilization)	-			



Table 1

References	C	N	P	Comments
- Table 3-8/1 Number of SIF and SIO octets received with given OPC			X	Note 10 on Page 11
- Table 3-8/2 Number of SIF and SIO octets transmitted with given DPC			X	Note 10 on Page 11
- Table 3-8/3 Number of SIF and SIO octets handled with given SIO		X		
- Table 3-8/4 Number of SIF and SIO octets received with given DPC and SIO		X		
- Table 3-8/5 Number of SIF and SIO octets transmitted with given DPC and SIO		X		
- Table 3-8/6 Number of SIF and SIO octets handled with given OPC, DPC and SIO		X		
3.4.9 Man-Machine Commands			X	Note 11 on Page 11
4. TUP	-			

2.2 SUPPLEMENT 1 TO GF001-9001

2.2.1 Supplemented Stipulation About Implementing SS7

Table 2

References	C	N	P	Comments
1. Technical Explanations	-			
1.1 MTP	-			
1.1.1 Signaling Point Restart	X			
1.1.2 Processor Outage	X			
1.1.3 Signaling Link Management	X			
1.1.4 Transfer-Restricted Procedure	-			
1.1.5 Transfer-Controlled Procedure	-			
1.1.6 User Part Flow Control Message	-			
1.1.7 Sub service field (SSF)			X	Note 13 on Page 11
1.2 TUP	-			
2. Supplementary Procedures	-			
3. Interworking Problems			X	Note 12 on Page 11
4. Error Correction	-			

2.3 SUPPLEMENT 2 TO GF001-9001

2.3.1 Supplemented Stipulation About Implementing SS7

Table 3

References	C	N	P	Comments
1. Supplemented Procedures	-			
2. Revision and Error Correction	-			



2.4 SUPPLEMENT 3 TO GF001-9001

2.4.1 Supplemented Stipulation About Implementing SS7

Table 4

References	C	N	P	Comments
1. Technical Explanation	X			





3 NOTES AND COMMENTS

- Note 1** Messages not relating to a signaling link are sent on the first found available link to the destination.
- Note 2** It is the User Part's responsibility to limit traffic in case of congestion.
- Note 3** Automatic allocation or reconfiguration of signaling equipment is not supported.
- Note 4** DCL, CSS, CNS and CNP messages are not supported.
- Note 5** Since version CAA9011817R2Z module can be configured to behave compliant or partly compliant to ability of TFR sending (for configuration options see parameter "Route restriction handling" in Reference [5]). Before this version only partly compliant behavior takes place. In scope of partly compliant behavior, module never initiates sending of TFR, however, an incoming TFR may lead to TFRs being broadcasted.
- Note 6** The following timers are not implemented:

T7, T9, T11, T24.
- Note 7** This module provides the necessary statistics/alarms to generate these measures but does not compute them directly.
- Note 8** To be measured/monitored by MTP L2.
- Note 9** The total number of this event is measured.
- Note 10** Both the total number of MSUs and octets are measured.
- Note 11** Changes are made by updating the configuration file and send a management order to the module to read the file.
- Note 12** TFC and MIM messages are never ignored, that is we do not fully comply with Section 3.1.2.
- Note 13** Standard compliant behavior is a configurable option. It is possible always to send the priority bits transparently to/from the User Part or to set to 00 if the node belongs to International network.





Glossary

DPC

Destination Point Code

MSU

Message Signal Unit

MTP

Message Transfer Part

OPC

Originating Point Code

SIF

Signaling Information Field

SIO

Service Information Octet

SL

Signaling Link

TFA

Transfer Allowed

TFC

Transfer Controlled

TFP

Transfer Prohibited

TFR

Transfer Restricted





Reference List

Chinese Standards

- [1] *GF 001 9001, Technical Specifications of SS7 for the National Telephone Network of China, August 1990*
- [2] *Supplement 1 to Specification GF 001-9001, October 1991*
- [3] *Supplement 2 to Specification GF 001-9001, October 1991*
- [4] *Supplement 3 to Specification GF 001-9001, October 1991*

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- [5] *Configuration File Description for MTPL3 & M3UA IETF, 19073-CAA 901 1817 Uen*