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**LTE;
Evolved Universal Terrestrial Radio
Access Network (E-UTRAN);
S1 Application Protocol (S1AP)
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Contents

Intellectual Property Rights	2
Foreword.....	2
Modal verbs terminology.....	2
Foreword.....	13
1 Scope	14
2 References	14
3 Definitions and abbreviations.....	16
3.1 Definitions	16
3.2 Abbreviations	17
4 General	18
4.1 Procedure Specification Principles.....	18
4.2 Forwards and Backwards Compatibility	19
4.3 Specification Notations	19
5 S1AP Services	20
6 Services Expected from Signalling Transport.....	21
7 Functions of S1AP	22
8 S1AP Procedures	24
8.1 List of S1AP Elementary procedures	24
8.2 E-RAB Management procedures.....	26
8.2.1 E-RAB Setup	26
8.2.1.1 General	26
8.2.1.2 Successful Operation.....	26
8.2.1.3 Unsuccessful Operation	27
8.2.1.4 Abnormal Conditions	28
8.2.2 E-RAB Modify	28
8.2.2.1 General	28
8.2.2.2 Successful Operation.....	28
8.2.2.3 Unsuccessful Operation	29
8.2.2.4 Abnormal Conditions	29
8.2.3 E-RAB Release	30
8.2.3.1 General	30
8.2.3.2 Successful Operation.....	30
8.2.3.2.1 E-RAB Release – MME initiated	30
8.2.3.2.2 E-RAB Release Indication – eNB initiated	31
8.2.3.3 Abnormal Conditions	31
8.2.4 E-RAB Modification Indication	31
8.2.4.1 General	31
8.2.4.2 Successful Operation.....	32
8.2.4.3 Unsuccessful Operation	32
8.2.4.4 Abnormal Conditions	33
8.3 Context Management procedures	33
8.3.1 Initial Context Setup	33
8.3.1.1 General	33
8.3.1.2 Successful Operation.....	33
8.3.1.3 Unsuccessful Operation	37
8.3.1.4 Abnormal Conditions	37
8.3.2 UE Context Release Request (eNB initiated)	37
8.3.2.1 General	37
8.3.2.2 Successful Operation.....	37
8.3.3 UE Context Release (MME initiated).....	38
8.3.3.1 General	38

8.3.3.2	Successful Operation.....	38
8.3.3.3	Abnormal Conditions	39
8.3.4	UE Context Modification.....	39
8.3.4.1	General	39
8.3.4.2	Successful Operation.....	39
8.3.4.3	Unsuccessful Operation	41
8.3.4.4	Abnormal Conditions	41
8.3.5	UE Radio Capability Match.....	41
8.3.5.1	General	41
8.3.5.2	Successful Operation.....	42
8.3.5.3	Unsuccessful Operation	42
8.3.5.4	Abnormal Conditions	42
8.3.6	UE Context Modification Indication	42
8.3.6.1	General	42
8.3.6.2	Successful Operation.....	43
8.3.6.3	Unsuccessful Operation	43
8.3.6.4	Abnormal Conditions	43
8.3.7	UE Context Suspend	43
8.3.7.1	General	43
8.3.7.2	Successful Operation.....	43
8.3.8	UE Context Resume.....	44
8.3.8.1	General	44
8.3.8.2	Successful Operation.....	44
8.3.8.3	Unsuccessful Operation	45
8.3.9	Connection Establishment Indication	45
8.3.9.1	General	45
8.3.9.2	Successful Operation.....	45
8.3.9.3	Unsuccessful Operation	45
8.3.9.4	Abnormal Conditions	46
8.3.10	Retrieve UE Information	46
8.3.10.1	General	46
8.3.10.2	Successful Operation.....	46
8.3.10.3	Unsuccessful Operation	46
8.3.10.4	Abnormal Conditions	46
8.3.11	UE Information Transfer	46
8.3.11.1	General	46
8.3.11.2	Successful Operation.....	46
8.3.11.3	Unsuccessful Operation	47
8.3.11.4	Abnormal Conditions	47
8.4	Handover Signalling.....	47
8.4.1	Handover Preparation	47
8.4.1.1	General	47
8.4.1.2	Successful Operation.....	47
8.4.1.3	Unsuccessful Operation	51
8.4.1.4	Abnormal Conditions	51
8.4.2	Handover Resource Allocation.....	51
8.4.2.1	General	51
8.4.2.2	Successful Operation.....	52
8.4.2.3	Unsuccessful Operation	55
8.4.2.4	Abnormal Conditions	55
8.4.3	Handover Notification	56
8.4.3.1	General	56
8.4.3.2	Successful Operation.....	56
8.4.3.3	Abnormal Conditions	56
8.4.4	Path Switch Request	56
8.4.4.1	General	56
8.4.4.2	Successful Operation.....	56
8.4.4.3	Unsuccessful Operation	58
8.4.4.4	Abnormal Conditions	58
8.4.5	Handover Cancellation	59
8.4.5.1	General	59
8.4.5.2	Successful Operation.....	59

8.4.5.3	Unsuccessful Operation	59
8.4.5.4	Abnormal Conditions	59
8.4.6	eNB Status Transfer	59
8.4.6.1	General	59
8.4.6.2	Successful Operation.....	60
8.4.6.3	Unsuccessful Operation	60
8.4.6.4	Abnormal Conditions	60
8.4.7	MME Status Transfer.....	60
8.4.7.1	General	60
8.4.7.2	Successful Operation.....	61
8.4.7.3	Unsuccessful Operation	61
8.4.7.4	Abnormal Conditions	61
8.5	Paging.....	61
8.5.1	General.....	61
8.5.2	Successful Operation	62
8.5.3	Unsuccessful Operation	63
8.5.4	Abnormal Conditions.....	63
8.6	NAS transport.....	63
8.6.1	General.....	63
8.6.2	Successful Operations.....	63
8.6.2.1	Initial UE Message.....	63
8.6.2.2	DOWNLINK NAS TRANSPORT.....	64
8.6.2.3	UPLINK NAS TRANSPORT	65
8.6.2.4	NAS NON DELIVERY INDICATION.....	66
8.6.2.4a	NAS DELIVERY INDICATION	66
8.6.2.5	Reroute NAS Request	66
8.6.3	Unsuccessful Operation	67
8.6.4	Abnormal Conditions.....	67
8.7	Management procedures.....	67
8.7.1	Reset	67
8.7.1.1	General	67
8.7.1.2	Successful Operation.....	67
8.7.1.2.1	Reset Procedure Initiated from the MME.....	67
8.7.1.2.2	Reset Procedure Initiated from the E-UTRAN	68
8.7.1.3	Abnormal Conditions	69
8.7.1.3.1	Abnormal Condition at the EPC	69
8.7.1.3.2	Abnormal Condition at the E-UTRAN.....	69
8.7.1.3.3	Crossing of Reset Messages	69
8.7.2	Error Indication.....	70
8.7.2.1	General	70
8.7.2.2	Successful Operation.....	70
8.7.2.3	Abnormal Conditions	70
8.7.3	S1 Setup	70
8.7.3.1	General	70
8.7.3.2	Successful Operation.....	71
8.7.3.3	Unsuccessful Operation	71
8.7.3.4	Abnormal Conditions	72
8.7.4	eNB Configuration Update	72
8.7.4.1	General	72
8.7.4.2	Successful Operation.....	72
8.7.4.3	Unsuccessful Operation	73
8.7.4.4	Abnormal Conditions	73
8.7.5	MME Configuration Update	73
8.7.5.1	General	73
8.7.5.2	Successful Operation.....	73
8.7.5.3	Unsuccessful Operation	74
8.7.5.4	Abnormal Conditions	74
8.7.6	Overload Start.....	74
8.7.6.1	General	74
8.7.6.2	Successful Operation.....	75
8.7.6.3	Unsuccessful Operation	75
8.7.7	Overload Stop	76

8.7.7.1	General	76
8.7.7.2	Successful Operation.....	76
8.7.7.3	Unsuccessful Operation	76
8.8	S1 CDMA2000 Tunnelling Procedures.....	76
8.8.1	General.....	76
8.8.2	Successful Operations.....	77
8.8.2.1	Downlink S1 CDMA2000 Tunnelling	77
8.8.2.2	Uplink S1 CDMA2000 Tunnelling	77
8.8.3	Unsuccessful Operation	78
8.8.4	Abnormal Conditions.....	78
8.9	UE Capability Info Indication	78
8.9.1	General.....	78
8.9.2	Successful Operation	78
8.10	Trace Procedures	79
8.10.1	Trace Start.....	79
8.10.1.1	General	79
8.10.1.2	Successful Operation.....	79
8.10.2	Trace Failure Indication	80
8.10.2.1	General	80
8.10.2.2	Successful Operation.....	80
8.10.3	Deactivate Trace	80
8.10.3.1	General	80
8.10.3.2	Successful Operation.....	80
8.10.4	Cell Traffic Trace.....	81
8.10.4.1	General	81
8.10.4.2	Successful Operation.....	81
8.11	Location Reporting Procedures	81
8.11.1	Location Reporting Control	81
8.11.1.1	General	81
8.11.1.2	Successful Operation.....	81
8.11.1.3	Abnormal Conditions	82
8.11.2	Location Report Failure Indication	82
8.11.2.1	General	82
8.11.2.2	Successful Operation.....	82
8.11.3	Location Report	82
8.11.3.1	General	82
8.11.3.2	Successful Operation.....	82
8.11.3.3	Abnormal Conditions	83
8.12	Warning Message Transmission Procedures	83
8.12.1	Write-Replace Warning	83
8.12.1.1	General	83
8.12.1.2	Successful Operation.....	83
8.12.1.3	Abnormal Conditions	84
8.12.2	Kill.....	84
8.12.2.1	General	84
8.12.2.2	Successful Operation.....	84
8.12.3	PWS Restart Indication.....	85
8.12.3.1	General	85
8.12.3.2	Successful Operation.....	85
8.12.4	PWS Failure Indication.....	85
8.12.4.1	General	85
8.12.4.2	Successful Operation.....	86
8.13	eNB Direct Information Transfer	86
8.13.1	General.....	86
8.13.2	Successful Operation	86
8.13.2.1	eNB Direct Information Transfer	86
8.13.3	Abnormal Conditions.....	86
8.14	MME Direct Information Transfer	87
8.14.1	General.....	87
8.14.2	Successful Operation	87
8.14.2.1	MME Direct Information Transfer.....	87
8.14.3	Abnormal Conditions.....	87

8.15	eNB Configuration Transfer.....	87
8.15.1	General.....	87
8.15.2	Successful Operation	88
8.15.2.1	eNB Configuration Transfer.....	88
8.15.3	Abnormal Conditions.....	88
8.16	MME Configuration Transfer.....	88
8.16.1	General.....	88
8.16.2	Successful Operation	88
8.16.2.1	MME Configuration Transfer	88
8.16.3	Abnormal Conditions.....	89
8.17	LPPa transport	89
8.17.1	General.....	89
8.17.2	Successful Operations.....	90
8.17.2.1	DOWNLINK UE ASSOCIATED LPPA TRANSPORT	90
8.17.2.2	UPLINK UE ASSOCIATED LPPA TRANSPORT	90
8.17.2.3	DOWNLINK NON UE ASSOCIATED LPPA TRANSPORT	90
8.17.2.4	UPLINK NON UE ASSOCIATED LPPA TRANSPORT.....	91
8.17.3	Unsuccessful Operation	91
8.17.4	Abnormal Conditions.....	91
9	Elements for S1AP Communication	92
9.1	Message Functional Definition and Content	92
9.1.1	General.....	92
9.1.2	Message Contents	92
9.1.2.1	Presence	92
9.1.2.2	Criticality	92
9.1.2.3	Range	92
9.1.2.4	Assigned Criticality.....	92
9.1.3	E-RAB Management Messages	93
9.1.3.1	E-RAB SETUP REQUEST.....	93
9.1.3.2	E-RAB SETUP RESPONSE.....	94
9.1.3.3	E-RAB MODIFY REQUEST	95
9.1.3.4	E-RAB MODIFY RESPONSE	95
9.1.3.5	E-RAB RELEASE COMMAND	96
9.1.3.6	E-RAB RELEASE RESPONSE	96
9.1.3.7	E-RAB RELEASE INDICATION.....	97
9.1.3.8	E-RAB MODIFICATION INDICATION	98
9.1.3.9	E-RAB MODIFICATION CONFIRM	99
9.1.4	Context Management Messages	99
9.1.4.1	INITIAL CONTEXT SETUP REQUEST	99
9.1.4.2	Void.....	100
9.1.4.3	INITIAL CONTEXT SETUP RESPONSE	101
9.1.4.4	INITIAL CONTEXT SETUP FAILURE.....	101
9.1.4.5	UE CONTEXT RELEASE REQUEST	101
9.1.4.6	UE CONTEXT RELEASE COMMAND	102
9.1.4.7	UE CONTEXT RELEASE COMPLETE	102
9.1.4.8	UE CONTEXT MODIFICATION REQUEST.....	102
9.1.4.9	UE CONTEXT MODIFICATION RESPONSE.....	103
9.1.4.10	UE CONTEXT MODIFICATION FAILURE.....	103
9.1.4.11	UE RADIO CAPABILITY MATCH REQUEST	104
9.1.4.12	UE RADIO CAPABILITY MATCH RESPONSE	104
9.1.4.13	UE CONTEXT MODIFICATION INDICATION	104
9.1.4.14	UE CONTEXT MODIFICATION CONFIRM	104
9.1.4.15	UE CONTEXT SUSPEND REQUEST	105
9.1.4.16	UE CONTEXT SUSPEND RESPONSE	105
9.1.4.17	UE CONTEXT RESUME REQUEST.....	105
9.1.4.18	UE CONTEXT RESUME RESPONSE.....	106
9.1.4.19	UE CONTEXT RESUME FAILURE	106
9.1.4.20	CONNECTION ESTABLISHMENT INDICATION.....	107
9.1.4.21	RETRIEVE UE INFORMATION	107
9.1.4.22	UE INFORMATION TRANSFER	107
9.1.5	Handover Signalling Messages.....	108

9.1.5.1	HANDOVER REQUIRED	108
9.1.5.2	HANDOVER COMMAND	109
9.1.5.3	HANDOVER PREPARATION FAILURE	110
9.1.5.4	HANDOVER REQUEST	111
9.1.5.5	HANDOVER REQUEST ACKNOWLEDGE.....	112
9.1.5.6	HANDOVER FAILURE	113
9.1.5.7	HANDOVER NOTIFY	113
9.1.5.8	PATH SWITCH REQUEST	114
9.1.5.9	PATH SWITCH REQUEST ACKNOWLEDGE	115
9.1.5.10	PATH SWITCH REQUEST FAILURE	116
9.1.5.11	HANDOVER CANCEL	116
9.1.5.12	HANDOVER CANCEL ACKNOWLEDGE	116
9.1.5.13	eNB STATUS TRANSFER.....	116
9.1.5.14	MME STATUS TRANSFER.....	116
9.1.6	PAGING	117
9.1.7	NAS Transport Messages	118
9.1.7.1	INITIAL UE MESSAGE	118
9.1.7.2	DOWNLINK NAS TRANSPORT.....	119
9.1.7.3	UPLINK NAS TRANSPORT.....	119
9.1.7.4	NAS NON DELIVERY INDICATION.....	119
9.1.7.4a	NAS DELIVERY INDICATION	120
9.1.7.5	REROUTE NAS REQUEST	120
9.1.8	Management messages	120
9.1.8.1	RESET	120
9.1.8.2	RESET ACKNOWLEDGE	121
9.1.8.3	ERROR INDICATION	121
9.1.8.4	S1 SETUP REQUEST	121
9.1.8.5	S1 SETUP RESPONSE	122
9.1.8.6	S1 SETUP FAILURE	123
9.1.8.7	ENB CONFIGURATION UPDATE	123
9.1.8.8	ENB CONFIGURATION UPDATE ACKNOWLEDGE	124
9.1.8.9	ENB CONFIGURATION UPDATE FAILURE.....	124
9.1.8.10	MME CONFIGURATION UPDATE.....	124
9.1.8.11	MME CONFIGURATION UPDATE ACKNOWLEDGE.....	125
9.1.8.12	MME CONFIGURATION UPDATE FAILURE	125
9.1.8.13	OVERLOAD START	125
9.1.8.14	OVERLOAD STOP	126
9.1.9	S1 CDMA2000 Tunnelling Messages	127
9.1.9.1	DOWNLINK S1 CDMA2000 TUNNELLING	127
9.1.9.2	UPLINK S1 CDMA2000 TUNNELLING.....	127
9.1.10	UE CAPABILITY INFO INDICATION.....	127
9.1.11	Trace Messages.....	128
9.1.11.1	TRACE START	128
9.1.11.2	TRACE FAILURE INDICATION	128
9.1.11.3	DEACTIVATE TRACE	128
9.1.12	Location Reporting Messages.....	129
9.1.12.1	LOCATION REPORTING CONTROL	129
9.1.12.2	LOCATION REPORT FAILURE INDICATION	129
9.1.12.3	LOCATION REPORT	129
9.1.13	Warning Message Transmission Messages.....	129
9.1.13.1	WRITE-REPLACE WARNING REQUEST	129
9.1.13.2	WRITE-REPLACE WARNING RESPONSE	130
9.1.13.3	KILL REQUEST.....	130
9.1.13.4	KILL RESPONSE.....	130
9.1.13.5	PWS RESTART INDICATION	131
9.1.13.6	PWS FAILURE INDICATION	131
9.1.14	eNB DIRECT INFORMATION TRANSFER	132
9.1.15	MME DIRECT INFORMATION TRANSFER	132
9.1.16	eNB CONFIGURATION TRANSFER.....	132
9.1.17	MME CONFIGURATION TRANSFER.....	132
9.1.18	CELL TRAFFIC TRACE	132
9.1.19	LPPa Transport Messages.....	133

9.1.19.1	DOWNLINK UE ASSOCIATED LPPA TRANSPORT	133
9.1.19.2	UPLINK UE ASSOCIATED LPPA TRANSPORT	133
9.1.19.3	DOWNLINK NON UE ASSOCIATED LPPA TRANSPORT	134
9.1.19.4	UPLINK NON UE ASSOCIATED LPPA TRANSPORT	134
9.2	Information Element Definitions	134
9.2.0	General	134
9.2.1	Radio Network Layer Related IEs	134
9.2.1.1	Message Type	134
9.2.1.2	E-RAB ID	135
9.2.1.3	Cause	135
9.2.1.3a	RRC Establishment Cause	139
9.2.1.4	Trace Activation	139
9.2.1.5	Source ID	140
9.2.1.6	Target ID	140
9.2.1.7	Source eNB to Target eNB Transparent Container	141
9.2.1.8	Target eNB to Source eNB Transparent Container	142
9.2.1.9	Source RNC to Target RNC Transparent Container	142
9.2.1.10	Target RNC to Source RNC Transparent Container	142
9.2.1.11	Source BSS to Target BSS Transparent Container	142
9.2.1.12	Target BSS to Source BSS Transparent Container	142
9.2.1.13	Handover Type	142
9.2.1.14	Extended RNC-ID	143
9.2.1.15	E-RAB Level QoS Parameters	143
9.2.1.16	Paging DRX	143
9.2.1.17	Paging Cause	143
9.2.1.18	GBR QoS Information	143
9.2.1.19	Bit Rate	144
9.2.1.20	UE Aggregate Maximum Bit Rate	144
9.2.1.21	Criticality Diagnostics	144
9.2.1.22	Handover Restriction List	145
9.2.1.23	CDMA2000-PDU	146
9.2.1.24	CDMA2000 RAT Type	146
9.2.1.25	CDMA2000 Sector ID	147
9.2.1.26	Security Context	147
9.2.1.27	UE Radio Capability	148
9.2.1.28	CDMA2000 HO Status	148
9.2.1.29	CDMA2000 HO Required Indication	148
9.2.1.30	1xRTT MEID	148
9.2.1.31	eNB Status Transfer Transparent Container	148
9.2.1.32	COUNT Value	150
9.2.1.33	CDMA2000 1xRTT RAND	150
9.2.1.34	Request Type	150
9.2.1.35	CDMA2000 1xRTT SRVCC Info	151
9.2.1.36	E-RAB List	151
9.2.1.37	Global eNB ID	152
9.2.1.38	E-UTRAN CGI	152
9.2.1.39	Subscriber Profile ID for RAT/Frequency priority	152
9.2.1.40	UE Security Capabilities	152
9.2.1.41	Security Key	153
9.2.1.42	UE History Information	153
9.2.1.43	Last Visited Cell Information	153
9.2.1.43a	Last Visited E-UTRAN Cell Information	154
9.2.1.43b	Last Visited GERAN Cell Information	154
9.2.1.44	Message Identifier	154
9.2.1.45	Serial Number	155
9.2.1.46	Warning Area List	155
9.2.1.47	Emergency Area ID	155
9.2.1.48	Repetition Period	155
9.2.1.49	Number of Broadcasts Requested	156
9.2.1.50	Warning Type	156
9.2.1.51	Warning Security Information	156
9.2.1.52	Data Coding Scheme	156

9.2.1.53	Warning Message Contents.....	156
9.2.1.54	Broadcast Completed Area List	156
9.2.1.55	Inter-system Information Transfer Type	157
9.2.1.56	Source To Target Transparent Container	157
9.2.1.57	Target To Source Transparent Container	158
9.2.1.58	SRVCC Operation Possible	159
9.2.1.59	SRVCC HO Indication.....	159
9.2.1.60	Allocation and Retention Priority	159
9.2.1.61	Time to wait	160
9.2.1.62	CSG Id	160
9.2.1.63	CSG Id List	160
9.2.1.64	MS Classmark 2	161
9.2.1.65	MS Classmark 3	161
9.2.1.66	Cell Type.....	161
9.2.1.67	Old BSS to New BSS Information.....	161
9.2.1.68	Layer 3 Information	161
9.2.1.69	E-UTRAN Round Trip Delay Estimation Info	161
9.2.1.70	Broadcast Cancelled Area List.....	161
9.2.1.71	Number of Broadcasts.....	162
9.2.1.72	Concurrent Warning Message Indicator.....	162
9.2.1.73	CSG Membership Status	163
9.2.1.74	Cell Access Mode	163
9.2.1.75	Extended Repetition Period.....	163
9.2.1.76	Data Forwarding Not Possible	163
9.2.1.77	PS Service Not Available.....	163
9.2.1.78	Paging Priority	163
9.2.1.79	Relay Node Indicator	164
9.2.1.80	Correlation ID	164
9.2.1.81	MDT Configuration	164
9.2.1.82	MME Relay Support Indicator.....	167
9.2.1.83	Management Based MDT Allowed.....	167
9.2.1.84	GW Context Release Indication.....	167
9.2.1.85	Voice Support Match Indicator	168
9.2.1.86	M3 Configuration.....	168
9.2.1.87	M4 Configuration.....	168
9.2.1.88	M5 Configuration.....	168
9.2.1.89	MDT PLMN List	168
9.2.1.90	COUNT Value Extended	169
9.2.1.91	Kill-all Warning Messages Indicator	169
9.2.1.92	LHN ID	169
9.2.1.93	User Location Information.....	169
9.2.1.94	MBSFN-ResultToLog.....	169
9.2.1.95	EARFCN.....	170
9.2.1.96	Expected UE Behaviour	170
9.2.1.97	Expected UE Activity Behaviour.....	171
9.2.1.98	UE Radio Capability for Paging.....	171
9.2.1.99	ProSe Authorized	171
9.2.1.100	COUNT Value for PDCP SN Length 18.....	172
9.2.1.101	M6 Configuration.....	172
9.2.1.102	M7 Configuration.....	172
9.2.1.103	Assistance Data for Paging	173
9.2.1.104	Assistance Data for Recommended Cells	173
9.2.1.105	Information on Recommended Cells and eNBs for Paging	173
9.2.1.106	Recommended Cells for Paging.....	173
9.2.1.107	Recommended eNBs for Paging	174
9.2.1.108	Assistance Data for CE capable UEs	174
9.2.1.109	Cell Identifier and Coverage Enhancement Level.....	175
9.2.1.110	Paging Attempt Information.....	175
9.2.1.111	Paging eDRX Information	175
9.2.1.112	UE Retention Information.....	175
9.2.1.113	UE User Plane CIoT Support Indicator.....	175
9.2.1.114	NB-IoT Default Paging DRX.....	176

9.2.1.115	NB-IoT Paging eDRX Information.....	176
9.2.1.116	Bearer Type.....	176
9.2.1.117	RAT Type	176
9.2.1.118	CE-mode-B Support Indicator	176
9.2.1.119	SRVCC Operation Not Possible	176
9.2.1.120	V2X Services Authorized	177
9.2.1.121	Served DCNs Items.....	177
9.2.1.122	UE Sidelink Aggregate Maximum Bit Rate.....	177
9.2.1.123	Enhanced Coverage Restricted.....	177
9.2.2	Transport Network Layer Related IEs	178
9.2.2.1	Transport Layer Address.....	178
9.2.2.2	GTP-TEID.....	178
9.2.2.3	Tunnel Information	178
9.2.3	NAS Related IEs.....	178
9.2.3.1	LAI.....	178
9.2.3.2	RAC	178
9.2.3.3	MME UE S1AP ID	179
9.2.3.4	eNB UE S1AP ID	179
9.2.3.5	NAS-PDU	179
9.2.3.6	S-TMSI	179
9.2.3.7	TAC.....	179
9.2.3.8	PLMN Identity	179
9.2.3.9	GUMMEI.....	180
9.2.3.10	UE Identity Index value	180
9.2.3.11	IMSI	180
9.2.3.12	MMEC	180
9.2.3.13	UE Paging Identity.....	181
9.2.3.14	DL Forwarding.....	181
9.2.3.15	Direct Forwarding Path Availability	181
9.2.3.16	TAI.....	181
9.2.3.17	Relative MME Capacity.....	182
9.2.3.18	UE S1AP ID pair.....	182
9.2.3.19	Overload Response.....	182
9.2.3.20	Overload Action.....	182
9.2.3.21	CS Fallback Indicator.....	182
9.2.3.22	CN Domain	183
9.2.3.23	RIM Transfer.....	183
9.2.3.24	RIM Information	183
9.2.3.25	RIM Routing Address	183
9.2.3.26	SON Configuration Transfer	184
9.2.3.27	SON Information.....	184
9.2.3.28	SON Information Reply	185
9.2.3.29	X2 TNL Configuration Info	185
9.2.3.30	NAS Security Parameters from E-UTRAN.....	186
9.2.3.31	NAS Security Parameters to E-UTRAN	186
9.2.3.32	LPPa-PDU.....	187
9.2.3.33	Routing ID.....	187
9.2.3.34	Time Synchronisation Info.....	187
9.2.3.35	Void.....	187
9.2.3.36	Traffic Load Reduction Indication.....	187
9.2.3.37	Additional CS Fallback Indicator.....	187
9.2.3.38	Masked IMEISV	188
9.2.3.41	Muting Pattern Information.....	188
9.2.3.42	Synchronisation Information.....	189
9.2.3.43	Listening Subframe Pattern.....	189
9.2.3.44	MME Group ID.....	189
9.2.3.45	Additional GUTI.....	189
9.2.3.46	Extended UE Identity Index Value	190
9.2.3.47	NB-IoT UE Identity Index Value.....	190
9.2.3.48	DL NAS PDU Delivey Request.....	190
9.3	Message and Information Element Abstract Syntax (with ASN.1).....	191
9.3.0	General.....	191

9.3.1	Usage of private message mechanism for non-standard use.....	191
9.3.2	Elementary Procedure Definitions.....	192
9.3.3	PDU Definitions.....	206
9.3.4	Information Element Definitions.....	261
9.3.5	Common Definitions.....	303
9.3.6	Constant Definitions.....	303
9.3.7	Container Definitions.....	310
9.4	Message Transfer Syntax.....	315
9.5	Timers.....	315
10	Handling of Unknown, Unforeseen and Erroneous Protocol Data.....	316
10.1	General.....	316
10.2	Transfer Syntax Error.....	316
10.3	Abstract Syntax Error.....	316
10.3.1	General.....	316
10.3.2	Criticality Information.....	317
10.3.3	Presence Information.....	317
10.3.4	Not comprehended IE/IE group.....	318
10.3.4.1	Procedure Code.....	318
10.3.4.1A	Type of Message.....	318
10.3.4.2	IEs other than the Procedure Code and Type of Message.....	318
10.3.5	Missing IE or IE group.....	319
10.3.6	IEs or IE groups received in wrong order or with too many occurrences or erroneously present.....	320
10.4	Logical Error.....	321
10.5	Exceptions.....	321
10.6	Handling of AP ID.....	322
Annex A (informative):	S1AP Transparent containers content.....	323
Annex B (normative):	IEs for SON Transfer.....	324
B.1	Tabular definition.....	324
B.1.1	SON Transfer Application Identity.....	324
B.1.2	SON Transfer Request Container.....	324
B.1.3	SON Transfer Response Container.....	325
B.1.4	SON Transfer Cause.....	326
B.1.5	Cell Load Reporting Response.....	328
B.1.6	E-UTRAN Cell Load Reporting Response.....	328
B.1.7	Multi-Cell Load Reporting Request.....	329
B.1.8	IRAT Cell ID.....	329
B.1.9	Multi-Cell Load Reporting Response.....	329
B.1.10	Cell Load Reporting Cause.....	330
B.1.11	Event-Triggered Cell Load Reporting Request.....	331
B.1.12	Event-triggered Cell Load Reporting Response.....	331
B.1.13	HO Report.....	331
B.1.14	Cell Activation Request.....	332
B.1.15	Cell Activation Response.....	333
B.1.16	Cell State Indication.....	333
B.1.17	Failure Event Report.....	333
B.1.18	eHRPD Sector ID.....	334
B.1.19	eHRPD Sector Load Reporting Response.....	334
B.1.20	eHRPD Composite Available Capacity.....	334
B.1.21	eHRPD Sector Capacity Class Value.....	335
B.1.22	eHRPD Capacity Value.....	335
B.1.23	Candidate PCI.....	335
B.2	ASN.1 definition.....	335
Annex C (informative):	Processing of Transparent Containers at the MME.....	340
Annex D (informative):	Change history.....	341
History.....		348

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

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1 Scope

The present document specifies the E-UTRAN radio network layer signalling protocol for the S1 interface. The S1 Application Protocol (S1AP) supports the functions of S1 interface by signalling procedures defined in this document. S1AP is developed in accordance to the general principles stated in TS 36.401 [2] and TS 36.410 [3].

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 36.401: "E-UTRAN Architecture Description".
- [3] 3GPP TS 36.410: "S1 General Aspects and Principles".
- [4] ITU-T Recommendation X.691 (07/2002): "Information technology – ASN.1 encoding rules: Specification of Packed Encoding Rules (PER)".
- [5] ITU-T Recommendation X.680 (07/2002): "Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation".
- [6] ITU-T Recommendation X.681 (07/2002): "Information technology – Abstract Syntax Notation One (ASN.1): Information object specification".
- [7] Void
- [8] 3GPP TS 23.402: "Architecture enhancements for non-3GPP accesses".
- [9] 3GPP TS 23.216: "Single Radio Voice Call Continuity (SRVCC)".
- [10] 3GPP TS 32.422: "Trace control and configuration management".
- [11] 3GPP TS 23.401: "General Packet Radio Service (GPRS) enhancements for E-UTRAN access".
- [12] 3GPP TS 36.414: "Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 data transport".
- [13] 3GPP TS 23.203: "Policy and charging control architecture"
- [14] 3GPP TS 36.300: "Evolved Universal Terrestrial Radio Access (E-UTRA), Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description; Stage 2".
- [15] 3GPP TS 33.401: "Security architecture".
- [16] 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRAN); Radio Resource Control (RRC) Protocol Specification".
- [17] 3GPP TS 23.272: "Circuit Switched Fallback in Evolved Packet System; Stage 2".
- [18] 3GPP TS 48.018: "General Packet Radio Service (GPRS); BSS GPRS Protocol (BSSGP)".
- [19] 3GPP TS 25.413: "UTRAN Iu interface RANAP signalling".