

ETSI TS 129 558 V18.11.0 (2026-03)



TECHNICAL SPECIFICATION

**5G;
Enabling Edge Applications;
Application Programming Interface (API) specification;
Stage 3
(3GPP TS 29.558 version 18.11.0 Release 18)**



Reference

RTS/TSGC-0329558vib0

Keywords

5G

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - APE 7112B
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° w061004871

Important notice

The present document can be downloaded from the
[ETSI Search & Browse Standards](#) application.

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the prevailing version of an ETSI deliverable is the one made publicly available in PDF format on [ETSI deliver](#) repository.

Users should be aware that the present document may be revised or have its status changed, this information is available in the [Milestones listing](#).

If you find errors in the present document, please send your comments to the relevant service listed under [Committee Support Staff](#).

If you find a security vulnerability in the present document, please report it through our [Coordinated Vulnerability Disclosure \(CVD\)](#) program.

Notice of disclaimer & limitation of liability

The information provided in the present deliverable is directed solely to professionals who have the appropriate degree of experience to understand and interpret its content in accordance with generally accepted engineering or other professional standard and applicable regulations.

No recommendation as to products and services or vendors is made or should be implied.

No representation or warranty is made that this deliverable is technically accurate or sufficient or conforms to any law and/or governmental rule and/or regulation and further, no representation or warranty is made of merchantability or fitness for any particular purpose or against infringement of intellectual property rights.

In no event shall ETSI be held liable for loss of profits or any other incidental or consequential damages.

Any software contained in this deliverable is provided "AS IS" with no warranties, express or implied, including but not limited to, the warranties of merchantability, fitness for a particular purpose and non-infringement of intellectual property rights and ETSI shall not be held liable in any event for any damages whatsoever (including, without limitation, damages for loss of profits, business interruption, loss of information, or any other pecuniary loss) arising out of or related to the use of or inability to use the software.

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© ETSI 2026.
All rights reserved.

Intellectual Property Rights

Essential patents

IPRs essential or potentially essential to normative deliverables may have been declared to ETSI. The declarations pertaining to these essential IPRs, if any, are publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the [ETSI IPR online database](#).

Pursuant to the ETSI Directives including the ETSI IPR Policy, no investigation regarding the essentiality of IPRs, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Trademarks

The present document may include trademarks and/or tradenames which are asserted and/or registered by their owners. ETSI claims no ownership of these except for any which are indicated as being the property of ETSI, and conveys no right to use or reproduce any trademark and/or tradename. Mention of those trademarks in the present document does not constitute an endorsement by ETSI of products, services or organizations associated with those trademarks.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members. **3GPP™**, **LTE™** and **5G™** logo are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners. **oneM2M™** logo is a trademark of ETSI registered for the benefit of its Members and of the oneM2M Partners. **GSM®** and the GSM logo are trademarks registered and owned by the GSM Association.

Legal Notice

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

The present document may refer to technical specifications or reports using their 3GPP identities. These shall be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between 3GPP and ETSI identities can be found at [3GPP to ETSI numbering cross-referencing](#).

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Contents

Intellectual Property Rights	2
Legal Notice	2
Modal verbs terminology.....	2
Foreword.....	19
1 Scope	21
2 References	21
3 Definitions of terms, symbols and abbreviations	22
3.1 Terms.....	22
3.2 Symbols.....	22
3.3 Abbreviations	22
4 Overview	23
5 Services offered by Edge Enabler Server.....	23
5.1 Introduction	23
5.2 Eees_EASRegistration Service	25
5.2.1 Service Description.....	25
5.2.2 Service Operations.....	26
5.2.2.1 Introduction.....	26
5.2.2.2 Eees_EASRegistration_Request	26
5.2.2.2.1 General	26
5.2.2.2.2 EAS registering to EES using Eees_EASRegistration_Request operation.....	26
5.2.2.3 Eees_EASRegistration_Update.....	26
5.2.2.3.1 General	26
5.2.2.3.2 EAS updating registration information using Eees_EASRegistration_Update operation	27
5.2.2.4 Eees_EASRegistration_Deregister.....	27
5.2.2.4.1 General	27
5.2.2.4.2 EAS deregistering from EES using Eees_EASRegistration_Deregister operation	27
5.3 Eees_UELocation Service	28
5.3.1 Service Description.....	28
5.3.2 Service Operations.....	28
5.3.2.1 Introduction.....	28
5.3.2.2 Eees_UELocation_Get.....	28
5.3.2.2.1 General	28
5.3.2.2.2 EAS obtaining UE location information from EES using Eees_UELocation_Get operation.....	28
5.3.2.2.3 User consent management	29
5.3.2.3 Eees_UELocation_Subscribe	29
5.3.2.3.1 General	29
5.3.2.3.2 EAS subscribing to continuous UE(s) location reporting from EES using Eees_UELocation_Subscribe operation	29
5.3.2.3.3 User consent management	30
5.3.2.4 Eees_UELocation_Notify	31
5.3.2.4.1 General	31
5.3.2.4.2 EES notifying the UE(s) location reporting to EAS using Eees_UELocation_Notify operation	31
5.3.2.4.3 EES notifying the EAS about user consent revocation using Eees_UELocation_Notify operation	31
5.3.2.5 Eees_UELocation_UpdateSubscription	32
5.3.2.5.1 General	32
5.3.2.5.2 EAS updating continuous UE(s) location reporting subscription at EES using Eees_UELocation_UpdateSubscribe operation	32
5.3.2.5.3 User consent management	32
5.3.2.6 Eees_UELocation_Unsubscribe.....	33
5.3.2.6.1 General	33
5.3.2.6.2 EAS unsubscribing to continuous UE(s) location reporting from EES using Eees_UELocation_Unsubscribe operation	33

5.4	Eees_UEIdentifier Service	34
5.4.1	Service Description	34
5.4.2	Service Operations	34
5.4.2.1	Introduction	34
5.4.2.2	Eees_UEIdentifier_Get	34
5.4.2.2.1	General	34
5.4.2.2.1A	EAS obtaining UE Identifier Information using "Get" custom operation	34
5.4.2.2.2	EAS obtaining UE identifier from EES using Eees_UEIdentifier_Fetch custom operation	35
5.5	Eees_AppClientInformation Service	35
5.5.1	Service Description	35
5.5.2	Service Operations	35
5.5.2.1	Introduction	35
5.5.2.2	Eees_AppClientInformation_Subscribe	36
5.5.2.2.1	General	36
5.5.2.2.2	EAS subscribing to AC information reporting from EES using Eees_AppClientInformation_Subscribe operation	36
5.5.2.3	Eees_AppClientInformation_Notify	36
5.5.2.3.1	General	36
5.5.2.3.2	EES notifying the AC information to EAS using Eees_AppClientInformation_Notify operation	37
5.5.2.4	Eees_AppClientInformation_UpdateSubscription	37
5.5.2.4.1	General	37
5.5.2.4.2	EAS updating AC information reporting subscription at EES using Eees_AppClientInformation_UpdateSubscribe operation	37
5.5.2.5	Eees_AppClientInformation_Unsubscribe	38
5.5.2.5.1	General	38
5.5.2.5.2	EAS unsubscribing to AC information reporting from EES using Eees_AppClientInformation_Unsubscribe operation	38
5.6	Eees_SessionWithQoS Service	38
5.6.1	Service Description	38
5.6.2	Service Operations	38
5.6.2.1	Introduction	38
5.6.2.2	Eees_SessionWithQoS_Create	39
5.6.2.2.1	General	39
5.6.2.2.2	EAS requesting reservation of resources for a data session between AC and EAS with specific QoS using Eees_SessionWithQoS operation	39
5.6.2.3	Eees_SessionWithQoS_Update	40
5.6.2.3.1	General	40
5.6.2.3.2	EAS updating QoS of a data session between AC and EAS using Eees_SessionWithQoS_Update operation	40
5.6.2.4	Eees_SessionWithQoS_Revoke	41
5.6.2.4.1	General	41
5.6.2.4.2	EAS revoking QoS of a data session between AC and EAS using Eees_SessionWithQoS_Revoke operation	41
5.6.2.5	Eees_SessionWithQoS_Notify	42
5.6.2.5.1	General	42
5.6.2.5.2	EES notifying QoS of a data session between AC and EAS using Eees_SessionWithQoS_Notify operation	42
5.7	Eees_EASDiscovery Service	42
5.7.1	Service Description	42
5.7.2	Service Operations	42
5.7.2.1	Introduction	42
5.7.2.2	Eees_EASDiscovery_TEasDiscRequest	42
5.7.2.2.1	General	42
5.7.2.2.2	Service consumer requesting T-EAS discovery information using Eees_EASDiscovery_TEasDiscRequest operation	43
5.8	Eees_ACRManagementEvent Service	43
5.8.1	Service Description	43
5.8.2	Service Operations	43
5.8.2.1	Introduction	43
5.8.2.2	Eees_ACRManagementEvent_Subscribe	44
5.8.2.2.1	General	44

5.8.2.2.2	Service consumer requesting to get notifications of ACR management events using Eees_ACRManagementEvent_Subscribe service operation	44
5.8.2.3	Eees_ACRManagementEvent_UpdateSubscription	44
5.8.2.3.1	General	44
5.8.2.3.2	Service consumer updating an existing Individual ACR Management Events Subscription using Eees_ACRManagementEvent_UpdateSubscription service operation	44
5.8.2.4	Eees_ACRManagementEvent_Unsubscribe	45
5.8.2.4.1	General	45
5.8.2.4.2	Service consumer deleting an existing Individual ACR Management Events Subscription using Eees_ACRManagementEvent_Unsubscribe service operation	45
5.8.2.5	Eees_ACRManagementEvent_Notify	45
5.8.2.5.1	General	45
5.8.2.5.2	EES notifying ACR management events using Eees_ACRManagementEvent_Notify operation	46
5.8.2.5.3	EES notifying the availability of user path management events monitoring via the 3GPP 5GC network using Eees_ACRManagementEvent_Notify operation	46
5.9	Eees_AppContextRelocation Service	46
5.9.1	Service Description	46
5.9.2	Service Operations	47
5.9.2.1	Introduction	47
5.9.2.2	Eees_AppContextRelocation_SelectedTargetEAS_Declare	47
5.9.2.2.1	General	47
5.9.2.2.2	S-EAS informing the S-EES about the selected T-EAS using Eees_AppContextRelocation_SelectedTargetEAS_Declare operation	47
5.9.2.3	Eees_AppContextRelocation_ACRDetermination_Request	47
5.9.2.3.1	General	47
5.9.2.3.2	S-EAS request the S-EES to determine the ACR using Eees_AppContextRelocation_ACRDetermination_Request operation	48
5.10	Eees_EECContextRelocation Service	48
5.10.1	Service Description	48
5.10.2	Service Operations	48
5.10.2.1	Introduction	48
5.10.2.2	Eees_EECContextRelocation_Pull	49
5.10.2.2.1	General	49
5.10.2.2.2	Service consumer pulling the EEC context information from the EES using the Eees_EECContextRelocation_Pull operation	49
5.10.2.3	Eees_EECContextRelocation_Push	49
5.10.2.3.1	General	49
5.10.2.3.2	Service consumer pushing the EEC context information to the EES using the Eees_EECContextRelocation_Push operation	49
5.11	Eees_EELManagedACR Service	50
5.11.1	Service Description	50
5.11.2	Service Operations	50
5.11.2.1	Introduction	50
5.11.2.2	Eees_EELManagedACR_Request	50
5.11.2.2.1	General	50
5.11.2.2.2	EEL Managed ACR Request	50
5.11.2.3	Eees_EELManagedACR_Subscribe	51
5.11.2.3.1	General	51
5.11.2.3.2	Subscribe to ACT status information reporting	51
5.11.2.4	Eees_EELManagedACR_Notify	51
5.11.2.4.1	General	51
5.11.2.4.2	ACT Status Notification	51
5.12	Eees_ACRStatusUpdate Service	52
5.12.1	Service Description	52
5.12.2	Service Operations	52
5.12.2.1	Introduction	52
5.12.2.2	Eees_ACRStatusUpdate_Request	52
5.12.2.2.1	General	52
5.12.2.2.2	ACR Status Update Request	52
5.13	Eees_ACRParameterInformation Service	53
5.13.1	Service Description	53

5.13.2	Service Operations	53
5.13.2.1	Introduction	53
5.13.2.2	Eees_ACRParameterInformation_Request	53
5.13.2.2.1	General	53
5.13.2.2.2	ACR Parameters Information Request	53
5.14	Eees_CommonEASAnnouncement Service	54
5.14.1	Service Description	54
5.14.2	Service Operations	54
5.14.2.1	Introduction	54
5.14.2.2	Eees_CommonEASAnnouncement_Declare	54
5.14.2.2.1	General	54
5.14.2.2.2	Common EAS Information Declaration	54
5.15	Eees_TrafficInfluenceEAS Service	55
5.15.1	Service Description	55
5.15.2	Service Operations	55
5.15.2.1	Introduction	55
5.15.2.2	Eees_TrafficInfluenceEAS_Manage	55
5.15.2.2.1	General	55
5.15.2.2.2	Application Traffic Influence Initiation	55
5.15.2.2.3	Application Traffic Influence Update	56
5.15.2.2.4	Application Traffic Influence Cancellation	56
5.15.2.2.5	Application Traffic Influence Retrieval	56
6	Services offered by Edge Configuration Server	57
6.1	Introduction	57
6.2	Eecs_EESRegistration Service	58
6.2.1	Service Description	58
6.2.2	Service Operations	58
6.2.2.1	Introduction	58
6.2.2.2	Eecs_EESRegistration_Request	58
6.2.2.2.1	General	58
6.2.2.2.2	EES registering to ECS using Eecs_EESRegistration_Request operation	58
6.2.2.3	Eecs_EESRegistration_Update	59
6.2.2.3.1	General	59
6.2.2.3.2	EES updating registration information using Eecs_EESRegistration_Update operation	59
6.2.2.4	Eecs_EESRegistration_Deregister	59
6.2.2.4.1	General	59
6.2.2.4.2	EES deregistering from ECS using Eecs_EESRegistration_Deregister operation	60
6.3	Eecs_TargetEESDiscovery Service	60
6.3.1	Service Description	60
6.3.2	Service Operations	60
6.3.2.1	Introduction	60
6.3.2.2	Eecs_TargetEESDiscovery_Request	60
6.3.2.2.1	General	60
6.3.2.2.2	Service consumer fetching the target Enabler Server information from the ECS using Eecs_TargetEESDiscovery_Request operation	60
6.4	Eecs_EASInfoManagement Service	61
6.4.1	Service Description	61
6.4.2	Service Operations	61
6.4.2.1	Introduction	61
6.4.2.2	Eecs_EASInfoManagement_Get	61
6.4.2.2.1	General	61
6.4.2.2.2	Common EAS Binding Information Retrieval	62
6.4.2.3	Eecs_EASInfoManagement_Store	62
6.4.2.3.1	General	62
6.4.2.3.2	Common EAS Binding Information Storage	62
6.5	Eecs_ECSServiceProvisioning	63
6.5.1	Service Description	63
6.5.2.1	Introduction	63
6.5.2.2	Eecs_ECSServiceProvisioning_Request	63
6.5.2.2.1	General	63
6.5.2.2.2	Service Provisioning Information Retrieval Request	63

6.5.2.3	Eecs_ECSServiceProvisioning_Subscribe	64
6.5.2.3.1	General	64
6.5.2.3.2	Service Provisioning Subscription Creation	64
6.5.2.4	Eecs_ECSServiceProvisioning_UpdateSubscription	64
6.5.2.4.1	General	64
6.5.2.4.2	Service Provisioning Subscription Update	64
6.5.2.5	Eecs_ECSServiceProvisioning_Unsubscribe	65
6.5.2.5.1	General	65
6.5.2.5.2	Service Provisioning Subscription Deletion	65
6.5.2.6	Eecs_ECSServiceProvisioning_Notify	65
6.5.2.6.1	General	65
6.5.2.6.2	Service Provisioning Notification	65
6.6	Eecs_ECSDiscovery Service	66
6.6.1	Service Description	66
6.6.2	Service Operations	66
6.6.2.1	Introduction	66
6.6.2.2	Eecs_ECSDiscovery_Request	66
6.6.2.2.1	General	66
6.6.2.2.2	Service consumer fetching partner ECS information from the ECS using the Eecs_ECSDiscovery_Request operation	66
6.6.2.3	Eecs_ECSDiscovery_Request	66
6.6.2.3.1	General	66
6.6.2.3.2	ECS notifying the ECS information to the service consumer using Eecs_ECSDiscovery_Notification operation	67
6A	Services offered by the Cloud Application Server (CAS)	67
6A.1	Introduction	67
6A.2	Ecas_SelectedEES Service	67
6A.2.1	Service Description	67
6A.2.2	Service Operations	67
6A.2.2.1	Introduction	67
6A.2.2.2	Ecas_SelectedEES_Request	68
6A.2.2.2.1	General	68
6A.2.2.2.2	Service consumer informing the CAS of the selected EES using Ecas_SelectedEES_Declare operation	68
6B	Services offered by the Cloud Enabler Server (CES)	68
6B.1	Introduction	68
7	Information applicable to several APIs	69
7.1	General	69
7.2	Data Types	69
7.2.1	General	69
7.2.2	Referenced structured data types	70
7.2.3	Referenced simple data types and enumerations	70
7.3	Usage of HTTP	70
7.4	Content type	70
7.5	URI structure	70
7.5.1	Resource URI structure	70
7.5.2	Custom operations URI structure	71
7.6	Notifications	71
7.7	Error handling	71
7.8	Feature negotiation	71
7.9	HTTP headers	71
7.10	Conventions for Open API specification files	72
8	Edge Enabler Server API Definitions	72
8.1	Eees_EASRegistration API	72
8.1.1	Introduction	72
8.1.2	Resources	72
8.1.2.1	Overview	72
8.1.2.2	Resource: EAS Registrations	73
8.1.2.2.1	Description	73

8.1.2.2.2	Resource Definition	73
8.1.2.2.3	Resource Standard Methods	73
8.1.2.2.4	Resource Custom Operations	74
8.1.2.3	Resource: Individual EAS Registration	74
8.1.2.3.1	Description	74
8.1.2.3.2	Resource Definition	74
8.1.2.3.3	Resource Standard Methods	74
8.1.2.3.4	Resource Custom Operations	78
8.1.3	Custom Operations without associated resources	78
8.1.4	Notifications	78
8.1.5	Data Model	78
8.1.5.1	General	78
8.1.5.2	Structured data types	80
8.1.5.2.1	Introduction	80
8.1.5.2.2	Type: EASRegistration	80
8.1.5.2.3	Type: EASProfile	81
8.1.5.2.4	Type: EASServiceKPI	84
8.1.5.2.5	Type: EndPoint	84
8.1.5.2.6	Type: EASRegistrationPatch	84
8.1.5.2.7	Type: TransContSuppDetails	85
8.1.5.2.8	Type: EASBundleInfo	85
8.1.5.2.9	Type: EASBdlReqs	85
8.1.5.2.10	Type: CoordinatedAcrReqs	86
8.1.5.3	Simple data types and enumerations	86
8.1.5.3.1	Introduction	86
8.1.5.3.2	Simple data types	86
8.1.5.3.3	Enumeration: PermissionLevel	86
8.1.5.3.4	Enumeration: EASCategory	87
8.1.5.3.5	Enumeration: TransportProtocol	87
8.1.5.3.6	Enumeration: BdlType	87
8.1.5.3.7	Enumeration: Affinity	87
8.1.5.3.8	Enumeration: FailureAction	88
8.1.6	Error Handling	88
8.1.7	Feature negotiation	88
8.2	Eees_UELocation API	88
8.2.1	Introduction	88
8.2.2	Resources	89
8.2.2.1	Overview	89
8.2.2.2	Resource: Location Information Subscriptions	89
8.2.2.2.1	Description	89
8.2.2.2.2	Resource Definition	90
8.2.2.2.3	Resource Standard Methods	90
8.2.2.2.4	Resource Custom Operations	91
8.2.2.3	Resource: Individual Location Information Subscription	91
8.2.2.3.1	Description	91
8.2.2.3.2	Resource Definition	91
8.2.2.3.3	Resource Standard Methods	91
8.2.2.3.4	Resource Custom Operations	95
8.2.3	Custom Operations without associated resources	95
8.2.3.1	Overview	95
8.2.3.2	Operation: Fetch	96
8.2.3.2.1	Description	96
8.2.3.2.2	Operation Definition	96
8.2.4	Notifications	97
8.2.4.1	General	97
8.2.4.2	Location Information Notification	98
8.2.4.2.1	Description	98
8.2.4.2.2	Target URI	98
8.2.4.2.3	Standard Methods	98
8.2.4.3	User Consent Revocation Notification	99
8.2.4.3.1	Description	99
8.2.4.3.2	Target URI	99

8.2.4.3.3	Standard Methods	99
8.2.5	Data Model	100
8.2.5.1	General	100
8.2.5.2	Structured data types	102
8.2.5.2.1	Introduction	102
8.2.5.2.2	Type: LocationSubscription	102
8.2.5.2.3	Type: LocationSubscriptionPatch	104
8.2.5.2.4	Type: LocationNotification	104
8.2.5.2.5	Type: LocationEvent	104
8.2.5.2.6	Type: LocationRequest	105
8.2.5.2.7	Type: LocationResponse	105
8.2.5.2.8	Type: ConsentRevocNotif	105
8.2.5.2.9	Type: ConsentRevoked	106
8.2.5.3	Simple data types and enumerations	106
8.2.6	Error Handling	106
8.2.6.1	General	106
8.2.6.2	Protocol Errors	106
8.2.6.3	Application Errors	106
8.2.7	Feature negotiation	106
8.3	Eees_UEIdentifier API	107
8.3.1	Introduction	107
8.3.2	Resources	107
8.3.3	Custom Operations without associated resources	107
8.3.3.1	Overview	107
8.3.3.2	Operation: Fetch	108
8.3.3.2.1	Description	108
8.3.3.2.2	Operation Definition	108
8.3.3.3	Operation: Get	109
8.3.3.3.1	Description	109
8.3.3.3.2	Operation Definition	109
8.3.4	Notifications	110
8.3.5	Data Model	110
8.3.5.1	General	110
8.3.5.2	Structured data types	111
8.3.5.2.1	Introduction	111
8.3.5.2.2	Type: UserInformation	111
8.3.5.2.3	Type: UserInfo	112
8.3.5.2.4	Type: UeIdInfo	112
8.3.5.2.5	Type: UeId	113
8.3.5.3	Simple data types and enumerations	113
8.3.5.3.1	Introduction	113
8.3.5.3.2	Simple data types	113
8.3.6	Error Handling	113
8.3.6.1	General	113
8.3.6.2	Protocol Errors	113
8.3.6.3	Application Errors	113
8.3.7	Feature negotiation	114
8.4	Eees_AppClientInformation API	114
8.4.1	Introduction	114
8.4.2	Resources	114
8.4.2.1	Overview	114
8.4.2.2	Resource: Application Client Information Subscriptions	115
8.4.2.2.1	Description	115
8.4.2.2.2	Resource Definition	115
8.4.2.2.3	Resource Standard Methods	116
8.4.2.2.4	Resource Custom Operations	116
8.4.2.3	Resource: Individual Application Client Information Subscription	116
8.4.2.3.1	Description	116
8.4.2.3.2	Resource Definition	116
8.4.2.3.3	Resource Standard Methods	117
8.4.2.3.4	Resource Custom Operations	121
8.4.3	Custom Operations without associated resources	121

8.4.4	Notifications	121
8.4.4.1	General	121
8.4.4.2	AC Information Notification	121
8.4.4.2.1	Description	121
8.4.4.2.2	Target URI	121
8.4.4.2.3	Standard Methods	121
8.4.5	Data Model	122
8.4.5.1	General	122
8.4.5.2	Structured data types	125
8.4.5.2.1	Introduction	125
8.4.5.2.2	Type: ACInfoSubscription	125
8.4.5.2.3	Type: ACInfoSubscriptionPatch	126
8.4.5.2.4	Type: ACFilters	126
8.4.5.2.5	Type: ACInfoNotification	127
8.4.5.2.6	Type: ACInformation	127
8.4.5.2.7	Type: EASBdlInd	128
8.4.5.3	Simple data types and enumerations	128
8.4.5.3.1	Introduction	128
8.4.5.3.2	Simple data types	128
8.4.5.3.3	Enumeration: TrigCondParams	129
8.4.6	Error Handling	129
8.4.6.1	General	129
8.4.6.2	Protocol Errors	129
8.4.6.3	Application Errors	129
8.4.7	Feature negotiation	129
8.5	Eees_SessionWithQoS API	130
8.5.1	Introduction	130
8.5.2	Resources	130
8.5.2.1	Overview	130
8.5.2.2	Resource: Sessions with QoS	131
8.5.2.2.1	Description	131
8.5.2.2.2	Resource Definition	131
8.5.2.2.3	Resource Standard Methods	131
8.5.2.2.4	Resource Custom Operations	133
8.5.2.3	Resource: Individual Session with QoS	133
8.5.2.3.1	Description	133
8.5.2.3.2	Resource Definition	133
8.5.2.3.3	Resource Standard Methods	134
8.5.2.3.4	Resource Custom Operations	138
8.5.3	Custom Operations without associated resources	138
8.5.4	Notifications	138
8.5.4.1	General	138
8.5.4.2	User Plane Event Notification	138
8.5.4.2.1	Description	138
8.5.4.2.2	TargetURI	138
8.5.4.2.3	Standard Methods	138
8.5.5	Data Model	139
8.5.5.1	General	139
8.5.5.2	Structured data types	141
8.5.5.2.1	Introduction	141
8.5.5.2.2	Type: SessionWithQoS	141
8.5.5.2.3	Type: SessionWithQoS Patch	144
8.5.5.2.4	Type: UserPlaneEventNotification	144
8.5.5.3	Simple data types and enumerations	145
8.5.6	Error Handling	145
8.5.6.1	General	145
8.5.6.2	Protocol Errors	145
8.5.6.3	Application Errors	145
8.5.7	Feature negotiation	145
8.6	Eees_ACRManagementEvent API	145
8.6.1	Introduction	145
8.6.2	Resources	146

8.6.2.1	Overview	146
8.6.2.2	Resource: ACR Management Events Subscriptions	147
8.6.2.2.1	Description	147
8.6.2.2.2	Resource Definition	147
8.6.2.2.3	Resource Standard Methods	147
8.6.2.2.4	Resource Custom Operations	149
8.6.2.3	Resource: Individual ACR Management Events Subscription	149
8.6.2.3.1	Description	149
8.6.2.3.2	Resource Definition	149
8.6.2.3.3	Resource Standard Methods	149
8.6.2.3.4	Resource Custom Operations	153
8.6.3	Custom Operations without associated resources	153
8.6.4	Notifications	154
8.6.4.1	General	154
8.6.4.2	ACR Management Events Notification	154
8.6.4.2.1	Description	154
8.6.4.2.2	Notification definition	154
8.6.4.3	User Plane Path Change Availability Notification	155
8.6.4.3.1	Description	155
8.6.4.3.2	Target URI	155
8.6.4.3.3	Standard Methods	156
8.6.5	Data Model	156
8.6.5.1	General	156
8.6.5.2	Structured data types	159
8.6.5.2.1	Introduction	159
8.6.5.2.2	Type: AcrMgntEventsSubscription	159
8.6.5.2.3	Type: AcrMgntEventSubsc	162
8.6.5.2.4	Type: AcrMgntEventsSubscriptionPatch	164
8.6.5.2.5	Type: AcrMgntEventsNotification	165
8.6.5.2.6	Type: AcrMgntEventReport	166
8.6.5.2.7	Type: FailureAcrMgntEventInfo	168
8.6.5.2.8	Type: TargetUeIdentification	168
8.6.5.2.9	Type: UpPathChangeInfo	169
8.6.5.2.10	Type: IndUeIdentification	169
8.6.5.2.11	Type: AvailabilityNotif	169
8.6.5.2.12	Type: SelectedACRScenarios	170
8.6.5.2.13	Type: ACRParameters	170
8.6.5.2.14	Type: TrafficFilterInfo	170
8.6.5.2.15	Type: EasAckInformation	171
8.6.5.2.16	Type: EasInBundleInfo	171
8.6.5.3	Simple data types and enumerations	171
8.6.5.3.1	Introduction	171
8.6.5.3.2	Simple data types	171
8.6.5.3.3	Enumeration: AcrMgntEvent	171
8.6.5.3.4	Enumeration: AcrMgntEventFilter	172
8.6.5.3.5	Enumeration: ActStatus	172
8.6.5.3.6	Enumeration: AcrMgntEventFailureCode	172
8.6.5.3.7	Enumeration: AvailabilityStatus	172
8.6.5.3.8	Enumeration: ResultCode	172
8.6.6	Error Handling	173
8.6.6.1	General	173
8.6.6.2	Protocol Errors	173
8.6.6.3	Application Errors	173
8.6.7	Feature negotiation	173
8.7	Eees_EECContextRelocation API	173
8.7.1	API URI	173
8.7.1A	Usage of HTTP	174
8.7.2	Resources	174
8.7.2.1	Overview	174
8.7.2.2	Resource: EEC Contexts	174
8.7.2.2.1	Description	174
8.7.2.2.2	Resource Definition	174

8.7.2.2.3	Resource Standard Methods	175
8.7.2.2.4	Resource Custom Operations	176
8.7.3	Custom Operations without associated resources	176
8.7.4	Notifications	176
8.7.5	Data Model	176
8.7.5.1	General	176
8.7.5.2	Structured data types	177
8.7.5.2.1	Introduction	177
8.7.5.2.2	Type: SessionContexts	177
8.7.5.2.3	Type: IndividualSessionContext.....	177
8.7.5.2.4	Type: EECContextPush.....	178
8.7.5.2.5	Type: EECContext.....	178
8.7.5.2.6	Type: EECContextPushRes.....	179
8.7.5.2.7	Type: ImplicitRegDetails	179
8.7.5.2.8	Type: EECSrvContinuitySupport	179
8.7.5.3	Simple data types and enumerations	179
8.7.5.3.1	Introduction	179
8.7.5.3.2	Simple data types.....	179
8.7.5.4	Data types describing alternative data types or combinations of data types	180
8.7.5.5	Binary data	180
8.7.5.5.1	Binary Data Types	180
8.7.6	Error Handling	180
8.7.6.1	General	180
8.7.6.2	Protocol Errors	180
8.7.6.3	Application Errors.....	180
8.7.7	Feature negotiation	180
8.8	Eees_EELManagedACR API.....	181
8.8.1	Introduction.....	181
8.8.2	Usage of HTTP.....	181
8.8.3	Resources.....	181
8.8.3.1	Overview.....	181
8.8.3.2	Resource: ACT Status Subscriptions	182
8.8.3.2.1	Description	182
8.8.3.2.2	Resource Definition.....	182
8.8.3.2.3	Resource Standard Methods	182
8.8.3.2.4	Resource Custom Operations	184
8.8.3.3	Resource: Individual ACT Status Subscription.....	184
8.8.3.3.1	Description	184
8.8.3.3.2	Resource Definition.....	184
8.8.3.3.3	Resource Standard Methods	184
8.8.3.3.4	Resource Custom Operations	185
8.8.4	Custom Operations without associated resources	186
8.8.4.1	Overview.....	186
8.8.4.2	Operation: RequestEELManagedACR.....	186
8.8.4.2.1	Description	186
8.8.4.2.2	Operation Definition.....	186
8.8.5	Notifications	187
8.8.5.1	General	187
8.8.5.2	ACT Status Notification.....	187
8.8.5.2.1	Description	187
8.8.5.2.2	Target URI.....	187
8.8.5.2.3	Standard Methods.....	188
8.8.6	Data Model	188
8.8.6.1	General	188
8.8.6.2	Structured data types	189
8.8.6.2.1	Introduction	189
8.8.6.2.2	Type: EELACRReq.....	189
8.8.6.2.3	Type: EELACRResp	190
8.8.6.2.4	Type: ACTStatusSubsc	190
8.8.6.2.5	Type: ACTStatusNotif.....	190
8.8.6.3	Simple data types and enumerations	190
8.8.6.3.1	Introduction	190

8.8.6.3.2	Simple data types.....	190
8.8.6.4	Data types describing alternative data types or combinations of data types	191
8.8.6.5	Binary data	191
8.8.6.5.1	Binary Data Types	191
8.8.7	Error Handling	191
8.8.7.1	General	191
8.8.7.2	Protocol Errors	191
8.8.7.3	Application Errors.....	191
8.8.8	Feature negotiation	191
8.9	Eees_ACRStatusUpdate API.....	191
8.9.1	Introduction.....	191
8.9.2	Usage of HTTP	192
8.9.3	Resources.....	192
8.9.4	Custom Operations without associated resources	192
8.9.4.1	Overview.....	192
8.9.4.2	Operation: RequestACRUpdate	193
8.9.4.2.1	Description	193
8.9.4.2.2	Operation Definition.....	193
8.9.5	Notifications	193
8.9.6	Data Model	194
8.9.6.1	General	194
8.9.6.2	Structured data types	194
8.9.6.2.1	Introduction	194
8.9.6.2.2	Type: ACRUpdateData	195
8.9.6.2.3	Type: ACRDataStatus	195
8.9.6.2.4	Type: ACTResultInfo.....	196
8.9.6.3	Simple data types and enumerations	196
8.9.6.3.1	Introduction	196
8.9.6.3.2	Simple data types.....	196
8.9.6.3.3	Enumeration: ACTResult	196
8.9.6.3.4	Enumeration: E3SubscsStatus	196
8.9.6.3.5	Enumeration: ACTFailureCause	197
8.9.6.4	Data types describing alternative data types or combinations of data types	197
8.9.6.5	Binary data	197
8.9.6.5.1	Binary Data Types.....	197
8.9.7	Error Handling.....	197
8.9.7.1	General	197
8.9.7.2	Protocol Errors	197
8.9.7.3	Application Errors.....	197
8.9.8	Feature negotiation	197
8.10	Eees_ACRParameterInformation API.....	198
8.10.1	Introduction.....	198
8.10.2	Usage of HTTP	198
8.10.3	Resources.....	198
8.10.4	Custom Operations without associated resources	198
8.10.4.1	Overview.....	198
8.10.4.2	Operation: Request.....	199
8.10.4.2.1	Description	199
8.10.4.2.2	Operation Definition.....	199
8.10.5	Notifications	200
8.10.6	Data Model	200
8.10.6.1	General	200
8.10.6.2	Structured data types	200
8.10.6.2.1	Introduction	200
8.10.6.2.2	Type: ACRParamsInfo	200
8.10.6.3	Simple data types and enumerations	200
8.10.6.3.1	Introduction	200
8.10.6.3.2	Simple data types.....	201
8.10.6.4	Data types describing alternative data types or combinations of data types	201
8.10.6.5	Binary data	201
8.10.6.5.1	Binary Data Types.....	201
8.10.7	Error Handling.....	201

8.10.7.1	General	201
8.10.7.2	Protocol Errors	201
8.10.7.3	Application Errors	201
8.10.8	Feature negotiation	201
8.11	Eees_CommonEASAnnouncement API	202
8.11.1	Introduction.....	202
8.11.2	Usage of HTTP	202
8.11.3	Resources.....	202
8.11.4	Custom Operations without associated resources	202
8.11.4.1	Overview	202
8.11.4.2	Operation: Declare	203
8.11.4.2.1	Description	203
8.11.4.2.2	Operation Definition.....	203
8.11.5	Notifications	204
8.11.6	Data Model	204
8.11.6.1	General	204
8.11.6.2	Structured data types	204
8.11.6.2.1	Introduction	204
8.11.6.2.2	Type: CommonEASInfo.....	204
8.11.6.3	Simple data types and enumerations	204
8.11.6.3.1	Introduction	204
8.11.6.3.2	Simple data types.....	205
8.11.6.4	Data types describing alternative data types or combinations of data types	205
8.11.6.5	Binary data	205
8.11.6.5.1	Binary Data Types	205
8.11.7	Error Handling	205
8.11.7.1	General	205
8.11.7.2	Protocol Errors	205
8.11.7.3	Application Errors	205
8.11.8	Feature negotiation	205
8.12	Eees_TrafficInfluenceEAS API	206
8.12.1	Introduction.....	206
8.12.2	Usage of HTTP	206
8.12.3	Resources.....	206
8.12.3.1	Overview.....	206
8.12.3.2	Resource: Application Traffic Influence.....	207
8.12.3.2.1	Description	207
8.12.3.2.2	Resource Definition.....	207
8.12.3.2.3	Resource Standard Methods	207
8.12.3.2.4	Resource Custom Operations	208
8.12.3.3	Resource: Individual Application Traffic Influence.....	208
8.12.3.3.1	Description	208
8.12.3.3.2	Resource Definition.....	208
8.12.3.3.3	Resource Standard Methods	208
8.12.3.3.4	Resource Custom Operations	212
8.12.4	Notifications	212
8.12.5	Data Model	212
8.12.5.1	General	212
8.12.5.2	Structured data types	213
8.12.5.2.1	Introduction	213
8.12.5.2.2	Type: AppTrafficInfluence.....	214
8.12.5.2.3	Type: AppTrafficInfluencePatch.....	215
8.12.5.3	Simple data types and enumerations	215
8.12.5.3.1	Introduction	215
8.12.5.3.2	Simple data types.....	215
8.12.5.4	Data types describing alternative data types or combinations of data types	215
8.12.5.5	Binary data	215
8.12.5.5.1	Binary Data Types.....	215
8.12.6	Error Handling.....	216
8.12.6.1	General	216
8.12.6.2	Protocol Errors	216
8.12.6.3	Application Errors.....	216