ETSI TS 124 315 V14.0.0 (2017-03)



Universal Mobile Telecommunications System (UMTS); LTE;

IP Multimedia Subsystem (IMS)
Operator Determined Barring (ODB);
Stage 3: protocol specification
(3GPP TS 24.315 version 14.0.0 Release 14)



Reference RTS/TSGC-0124315ve00 Keywords LTE.UMTS

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 - NAF 742 C Association à but non lucratif enregistrée à la Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

The present document can be downloaded from: http://www.etsi.org/standards-search

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 only prevailing document is the print of the Portable Document Format (PDF) version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx

If you find errors in the present document, please send your comment to one of the following services: https://portal.etsi.org/People/CommiteeSupportStaff.aspx

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.

© European Telecommunications Standards Institute 2017.
All rights reserved.

DECT[™], **PLUGTESTS**[™], **UMTS**[™] and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members. **3GPP**[™] and **LTE**[™] are Trade Marks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is 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 Web server (https://ipr.etsi.org/).

Pursuant to the ETSI IPR Policy, no investigation, 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.

Foreword

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, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under http://webapp.etsi.org/key/queryform.asp.

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 <u>ETSI Drafting Rules</u> (Verbal forms for the expression of provisions).

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

Contents

Intell	ectual Property Rights	2
Forev	word	2
Moda	al verbs terminology	2
Forev	word	4
1	Scope	5
2	References	5
3	Definitions and abbreviations	
3.1 3.2	Definitions	
4	Operator Determined Barring Service Description	6
5 5.1	Barring of Communication	
5.1.1	General	7
5.1.2 5.1.3	Procedures in the Application Server Determining whether a category applies to a communication	8
5.2 5.2.2	Barring of incoming Communication	
5.2.3	Determining whether a category applies to a communication	
6 6.1	Barring of Roaming General	
7 7.1	Barring of Supplementary Services Configuration and Invocation Barring of Management of supplementary service settings and invocation	
7.1.1 7.1.2	GeneralXCAP Procedures in the Application Server	11
7.1.3 7.1.4	SIP Procedures for service configuration in the Application Server	12
7.1.4 7.2 7.2.1	Barring of user invocation of supplementary service Barring of manipulation of communication diversion settings General	12
7.2.2	XCAP Procedures in the Application Server	13
7.2.3 7.3	SIP Procedures in the Application Server Barring of invocation of call transfer	13
7.3.1 7.3.2	General	
Anne	ex A (informative): Change history	15
Histo	arv	16

Foreword

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

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

1 Scope

The present document specifies the stage three, Protocol Description of the network feature Operator Determined Barring (ODB) of IMS Multimedia Telephony Services. It is based on the requirements described in 3GPP TS 22.041 [11]. It provides the protocol details in the IP Multimedia (IM) Core Network (CN) subsystem based on the Session Initiation Protocol (SIP) and the Session Description Protocol (SDP).). In addition, it provides protocol details for XCAP for barring of supplementary services configuration.

The present document is applicable to:

- the Application Server (AS) intended to support Operator Determined Barring for communications;
- the AS that provides the XCAP based interface for manipulation of the settings for a supplementary service as defined in 3GPP TS 24.623 [9]; and
- the AS that supports the SIP based configuration for a supplementary service as defined in 3GPP TS 24.238 [8].

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.

message contents".

- 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 24.229: "Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3.
[3]	IETF RFC 3261 (June 2002): "SIP: Session Initiation Protocol".
[4]	IETF RFC 3264 (June 2002): "An Offer/Answer Model with Session Description Protocol (SDP)".
[5]	ITU-T Recommendation I.210: "Principles of telecommunication services supported by an ISDN and the means to describe them".
[6]	3GPP TS 24.628: "Common Basic Communication procedures using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".
[7]	IETF RFC 4566: "SDP: Session Description Protocol".
[8]	3GPP TS 24.238: "Session Initiation Protocol (SIP) based user configuration; stage 3".
[9]	3GPP TS 24.623: "Extensible Markup Language (XML) Configuration Access Protocol (XCAP) over the Ut interface for Manipulating Supplementary Services".
[10]	3GPP TS 24.604: "Communication Diversion (CDIV); using IP Multimedia (IM)Core Network (CN) subsystem; Protocol specification".
[11]	3GPP TS 22.041: "Operator Determined Barring (ODB)".
[12]	3GPP TS 29.329: "Sh interface based on the Diameter protocol; Protocol detail".
[13]	3GPP TS 29.228: "IP Multimedia (IM) Subsystem Cx and Dx Interfaces; Signalling flows and