

ETSI TS 124 286 V16.0.0 (2020-07)



**Digital cellular telecommunications system (Phase 2+) (GSM);
Universal Mobile Telecommunications System (UMTS);
LTE;
IP Multimedia (IM) Core Network (CN)
subsystem Centralized Services (ICS);
Management Object (MO)
(3GPP TS 24.286 version 16.0.0 Release 16)**



Reference

RTS/TSGC-0124286vg00

Keywords

GSM,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 prevailing version of an ETSI deliverable is the one made publicly available in PDF format at www.etsi.org/deliver.

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/CommitteeSupportStaff.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.

© ETSI 2020.

All rights reserved.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members.

3GPP™ and **LTE™** 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.

Intellectual Property Rights

Essential patents

IPRs essential or potentially essential to normative deliverables 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.

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.

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 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 [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.....	4
1 Scope	5
2 References	5
3 Definitions and abbreviations.....	5
3.1 Definitions	5
3.2 Abbreviations	5
4 ICS Managed Object	6
5 Management Object parameters	6
5.1 General	6
5.2 Node: <X>	6
5.3 /<X>/Name	6
5.4 /<X>/ICS_Capabilities_Enabled.....	7
5.5 /<X>/I1_Capabilities_Enabled	7
5.6 /<X>/Ext/	7
Annex A (informative): Management Object DDF	8
Annex B (informative): Change history	10
History	11

Foreword

This Technical Specification has been produced by the 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.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

1 Scope

This document defines the IMS Centralised Services Management Object (MO). The management object is compatible with OMA Device Management protocol specifications, version 1.2 and upwards, and is defined using the OMA DM Device Description Framework as described in the Enabler Release Definition OMA-ERELED_DM-V1_2 [4].

The IMS Centralised Services Management Object consists of relevant parameters that can be managed for ICS.

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 23.003: "Numbering, addressing and identification".
- [3] 3GPP TS 24.292: "IP Multimedia (IM) Core Network (CN) subsystem; Centralized Services (ICS); Stage 3".
- [4] OMA-ERELED-DM-V1_2: "Enabler Release Definition for OMA Device Management".
- [5] 3GPP TS 23.292: "IP Multimedia Subsystem (IMS) Centralized Services; Stage 2".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] apply.

For the purposes of the present document, the following terms and definitions given in 3GPP TS 23.003 [2] apply:

Home Network Domain Name

For the purposes of the present document, the following terms and definitions given in 3GPP TS 23.292 [5] apply:

ICS UE

3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

DM	Device Management
ICS	IMS Centralised Services
IMS	IP Multimedia core network Subsystem
IP	Internet Protocol
MO	Management Object

OMA Open Mobile Alliance
 UE User Equipment

4 ICS Managed Object

The ICS Management Object (MO) is used to configure ICS UE behaviour for IMS Centralised Services.

The Management Object Identifier is: urn:oma:mo:ext-3gpp-ICS:1.0.

Protocol compatibility: This MO is compatible with OMA DM 1.2.

The OMA DM Access Control List (ACL) property mechanism (see OMA-ERELED-DM-V1_2 [4]) may be used to grant or deny access rights to OMA DM servers in order to modify nodes and leaf objects of the ICS MO.

The following nodes and leaf objects are possible under the ICS node as described in figure 4-1:

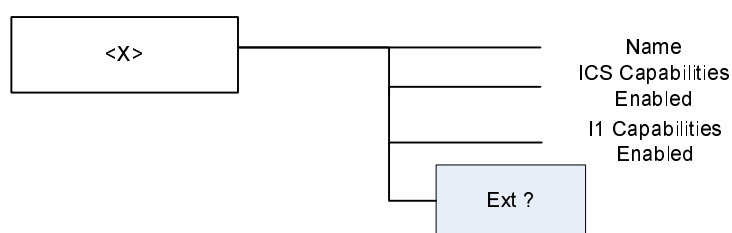


Figure 4-1: The ICS Management Object

5 Management Object parameters

5.1 General

This clause describes the parameters for the IMS Centralised Services Management Object (MO).

5.2 Node: <X>

This interior node acts as a placeholder for the IMS Centralised Services Management Object (MO).

- Occurrence: ZeroOrOne
- Format: node
- Access Types: Get
- Values: N/A

5.3 /<X>/Name

The Name leaf is a name for the IMS Centralised Services settings.

- Occurrence: ZeroOrOne
- Format: chr
- Access Types: Get
- Values: <User displayable name>

5.4 /<X>/ICS_Capabilities_Enabled

The ICS_Capabilities_Enabled leaf indicates an operator's preference to enable or disable IMS Centralised Services.

- Occurrence: One
- Format: bool
- Access Types: Get, Replace
- Values: 0, 1
 - 0 – Indicates that IMS Centralised Services capabilities over Gm are enabled.
 - 1 – Indicates that IMS Centralised Services capabilities over Gm are disabled.

The default value is that IMS Centralised Services over Gm are disabled when the IMS Centralised Services Management Object is not provisioned. Use of the ICS_Capabilities_Enabled leaf is specified in 3GPP TS 24.292 [3].

5.5 /<X>/I1_Capabilities_Enabled

The I1_Capabilities_Enabled leaf indicates an operator's preference to enable or disable support for the I1 protocol.

- Occurrence: One
- Format: int
- Access Types: Get, Replace
- Values: 0, 1
 - 0 – Indicates that IMS Centralised Services capabilities over I1 are disabled.
 - 1 – Indicates that IMS Centralised Services capabilities over I1 are enabled if concurrent use of CS RAT and PS RAT is not supported.

The default value is that IMS Centralised Services over I1 are disabled when the IMS Centralised Services Management Object is not provisioned. Use of the I1_Capabilities_Enabled leaf is specified in 3GPP TS 24.292 [3].

5.6 /<X>/Ext/

The Ext is an interior node for where the vendor specific information about the IMS Centralised Services MO is being placed (vendor meaning application vendor, device vendor etc.). Usually the vendor extension is identified by vendor specific name under the ext node. The tree structure under the vendor identified is not defined and can therefore include one or more un-standardized sub-trees.

- Occurrence: ZeroOrOne
- Format: node
- Access Types: Get, Replace
- Values: N/A

Annex A (informative): Management Object DDF

This DDF is the standardized minimal set. A vendor can define its own DDF for the complete device. This DDF can include more features than this minimal standardized version.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE MgmtTree PUBLIC "-//OMA//DTD-DM-DDF 1.2//EN"
"http://www.openmobilealliance.org/tech/DTD/dm_ddf-v1_2.dtd">
<MgmtTree>
  <VerDTD>1.2</VerDTD>
  <Node>
    <NodeName>IMS Centralised Services</NodeName>
    <DFProperties>
      <AccessType>
        <Get/>
      </AccessType>
      <Description> IMS Centralised Services settings</Description>
      <DFFormat>
        <node/>
      </DFFormat>
      <Occurrence>
        <OneOrMore/>
      </Occurrence>
      <DFTitle>The IMS Centralised Services Management Object.</DFTitle>
      <DFType>
        <DDFName/>
      </DFType>
    </DFProperties>
  </Node>
  <Node>
    <NodeName>Name</NodeName>
    <DFProperties>
      <AccessType>
        <Get/>
      </AccessType>
      <DFFormat>
        <chr/>
      </DFFormat>
      <Occurrence>
        <ZeroOrOne/>
      </Occurrence>
      <DFTitle>User displayable name for the node</DFTitle>
      <DFType>
        <MIME>text/plain</MIME>
      </DFType>
    </DFProperties>
  </Node>
  <Node>
    <NodeName>ICS_Capabilities_Enabled</NodeName>
    <DFProperties>
      <AccessType>
        <Get/>
        <Replace/>
      </AccessType>
      <DFFormat>
        <bool/>
      </DFFormat>
      <Occurrence>
        <One/>
      </Occurrence>
      <DFTitle>This leaf specifies an operator's preference to enable or disable IMS
Centralised Services capabilities.</DFTitle>
      <DFType>
        <MIME>text/plain</MIME>
      </DFType>
    </DFProperties>
  </Node>
  <Node>
    <NodeName>I1_Capabilities_Enabled</NodeName>
    <DFProperties>
      <AccessType>
        <Get/>
        <Replace/>
      </AccessType>
    </DFProperties>
  </Node>
</MgmtTree>
```

```
        </AccessType>
        <DFFormat>
          <int/>
        </DFFormat>
        <Occurrence>
          <One/>
        </Occurrence>
        <DFTitle>This leaf specifies an operator's preference to enable or disable I1
capabilities.</DFTitle>
        <DFType>
          <MIME>text/plain</MIME>
        </DFType>
      </DFProperties>
    </Node>

    <Node>
      <NodeName>Ext</NodeName>
      <!-- The Extension node starts here. -->
      <DFProperties>
        <AccessType>
          <Get/>
          <Replace/>
        </AccessType>
        <DFFormat>
          <node/>
        </DFFormat>
        <Occurrence>
          <ZeroOrOne/>
        </Occurrence>
        <DFTitle>A collection of all Extension objects.</DFTitle>
        <DFType>
          <DDFName/>
        </DFType>
      </DFProperties>
    </Node>

  </Node>
</MgmtTree>
```

Annex B (informative): Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2009-11					Version 0.0.1: Preliminary proposal		0.0.1
2009-11					Version 0.0.2: Revision based on comments in CT1#62		0.0.2
2009-11					Version 0.0.3: Revision based on further comments in CT1#62		0.0.3
2009-11					Version 0.0.4: Cleanup of whitespace and styles and specification number (24.xyz)		0.0.4
2009-11					Further editorial cleanups	0.0.4	0.0.5
2009-11					Further editorial cleanups	0.05	0.0.6
2009-12	CT-46				V1.0.0 created by MCC for presentation to CT-46 for information and approval	0.0.6	1.0.0
2009-12	CT-46				V8.0.0 created by MCC after approval at CT-46	1.0.0	8.0.0
2009-12	CT-46				Upgrade to Rel-9	8.0.0	9.0.0
2009-12	CT-46				Editorial correction	9.0.0	9.0.1
2010-03	CT-47	CP-100137	0001	1	Enable use of I1 when the home operator has configured it to do so	9.0.1	9.1.0
2011-03	CT-51	CP-110170	0006		MO identifier registered by OMNA	9.1.0	9.2.0
2011-03	CT-51				Upgrade to Rel-10	9.2.0	10.0.0
2012-09	CT-57				Upgrade to Rel-11	10.0.0	11.0.0
2014-09	CT-65				Upgrade to Rel-12	11.0.0	12.0.0
2015-12	CT-70				Upgrade to Rel-13	12.0.0	13.0.0

Change history							
Date	Meeting	TDoc	CR	Rev	Cat	Subject/Comment	New version
2017-03	CT-75					Upgrade to Rel-14	14.0.0
2018-06	SA-80	-	-	-	-	Update to Rel-15 version (MCC)	15.0.0
2020-07	SA-88e	-	-	-	-	Update to Rel-16 version (MCC)	16.0.0

History

Document history		
V16.0.0	July 2020	Publication