

ETSI TS 124 117 V16.1.0 (2023-07)



LTE;
TV service configuration Management Object (MO)
(3GPP TS 24.117 version 16.1.0 Release 16)



Reference

RTS/TSGC-0124117vg10

Keywords

LTE

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:
<https://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>

If you find a security vulnerability in the present document, please report it through our
Coordinated Vulnerability Disclosure Program:
<https://www.etsi.org/standards/coordinated-vulnerability-disclosure>

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 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 2023.
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 Web server (<https://ipr.etsi.org/>).

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™** 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.

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 <https://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	6
4 TV service configuration MO	6
4.1 General	6
4.2 TV service configuration MO structure.....	6
5 TV service configuration MO parameters.....	7
5.1 General	7
5.2 Node: <X>	7
5.3 <X>/Name	7
5.4 <X>/PLMNLList.....	7
5.5 <X>/PLMNLList/<X>/.....	7
5.6 <X>/PLMNLList/<X>/PLMNId	8
5.7 <X>/PLMNLList/<X>/TMGIConfiguration	8
5.8 <X>/PLMNLList/<X>/TMGIConfiguration/TMGIListForSA	8
5.8a <X>/PLMNLList/<X>/TMGIConfiguration/TMGIListForSA/<X>	8
5.8b <X>/PLMNLList/<X>/TMGIConfiguration/TMGIListForSA/<X>/TMGI	9
5.8c <X>/PLMNLList/<X>/TMGIConfiguration/TMGIListForSA/<X>/USD	9
5.9 <X>/PLMNLList/<X>/TMGIConfiguration/TMGIListForService	9
5.10 <X>/PLMNLList/<X>/TMGIConfiguration/TMGIListForService/<X>	9
5.11 <X>/PLMNLList/<X>/TMGIConfiguration/TMGIListForService/<X>/TMGI	10
5.11a <X>/PLMNLList/<X>/TMGIConfiguration/TMGIListForService/<X>/USD.....	10
5.12 <X>/PLMNLList/<X>/RANInfo.....	10
5.13 <X>/PLMNLList/<X>/RANInfo/<X>	10
5.14 <X>/PLMNLList/<X>/RANInfo/<X>/EARFCN	11
5.15 Void.....	11
5.16 <X>/Ext	11
Annex A (informative): TV service configuration MO DDF	12
Annex B (informative): Change history	17
History	18

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

The present document defines a Management Object (MO) that can be used to configure the parameters related to TV service provided via a PLMN.

The MO is compatible with the OMA Device Management (DM) protocol specifications, version 1.2 and upwards, and is defined using the OMA DM Device Description Framework (DDF) as described in the Enabler Release Definition OMA-ERELD-DM-V1_2 [2].

The MO consists of nodes and leaves conveying configuration parameters used for selecting and receiving TV service from a PLMN, according to the procedures described in 3GPP TS 23.246 [3] and 3GPP TS 24.116 [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.
- 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] OMA-ERELD-DM-V1_2: "Enabler Release Definition for OMA Device Management".
- [3] 3GPP TS 23.246: "Multimedia Broadcast/Multicast Service (MBMS); Architecture and functional description".
- [4] IETF RFC 3629 (November 2003): "UTF-8, a transformation format of ISO 10646".
- [5] "Unicode 5.1.0, Unicode Standard Annex #15; Unicode Normalization Forms", March 2008.
<http://www.unicode.org>.
- [6] 3GPP TS 23.003: "Numbering, addressing and identification".
- [7] 3GPP TS 36.101: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio transmission and reception".
- [8] 3GPP TS 24.116: "Stage 3 aspects of architecture enhancements for TV service".
- [9] 3GPP TS 26.346: "Multimedia Broadcast/Multicast Service (MBMS); Protocols and Codecs".

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] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TR 21.905 [1].

For the purposes of the present document, the following terms and definitions given in 3GPP TS 24.116 [8] apply:

Receive only mode

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].

MO	Management object
TV	Television

4 TV service configuration MO

4.1 General

The TV service configuration MO is used to manage configuration parameters related to the TV service in receive only mode, as defined in the 3GPP TS 24.116 [8], for a device supporting provisioning of such information.

The MO identifier is: urn:oma:mo:ext-3gpp-tv-config:1.0.

The OMA DM Access Control List (ACL) property mechanism (see OMA-ERELD-DM-V1_2 [2]) may be used to grant or deny access rights to OMA DM servers in order to modify nodes and leaf objects of the TV service configuration MO.

4.2 TV service configuration MO structure

The structure of the TV service configuration MO is shown in figure 4-1 and figure 4-2:

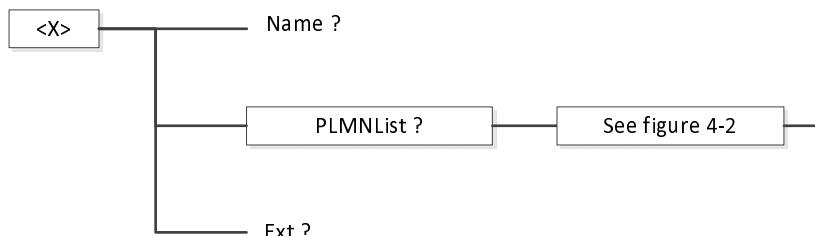


Figure 4-1: TV service configuration MO

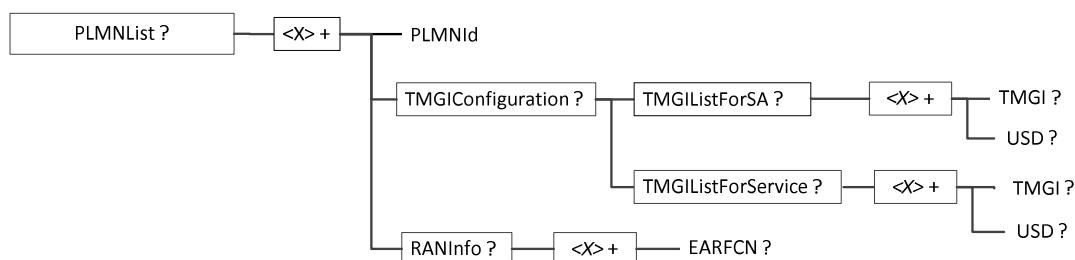


Figure 4-2: PLMNList node

5 TV service configuration MO parameters

5.1 General

This clause describes the nodes and leaves of the TV service configuration MO conveying the configuration parameters.

5.2 Node: <X>

This interior node acts as a placeholder for zero or one accounts for a fixed node.

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

5.3 <X>/Name

The Name leaf is a name for the TV service configuration MO settings.

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

The User displayable name shall be represented by Unicode characters encoded as UTF-8 as specified in IETF RFC 3629 [4] and formatted using Normalization Form KC (NFKC) as specified in Unicode Standard Annex #15; Unicode Normalization Forms [5].

5.4 <X>/PLMNList

The PlmnList node acts as a placeholder for per-PLMN TV service configuration.

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

5.5 <X>/PLMNList/<X>/

This interior node acts as a placeholder for a TV service configuration for one PLMN.

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

5.6 <X>/PLMNList/<X>/PLMNIId

The PlmnlId leaf indicates a PLMN identity of the PLMN for which the TV service configuration applies.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: <PLMN identity>

The format of the PLMN identity is specified in 3GPP TS 23.003 [6].

5.7 <X>/PLMNList/<X>/TMGIConfiguration

The TMGIConfiguration node acts as a placeholder for the TMGI configuration in the PLMN identified by the PlmnlId leaf.

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

5.8 <X>/PLMNList/<X>/TMGIConfiguration/TMGIListForSA

The TMGIViaSA node acts as a placeholder for the TMGI list and the MBMS Service Announcement information for MBMS Service Announcement service for broadcast TV services.

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

5.8a <X>/PLMNList/<X>/TMGIConfiguration/TMGIListForSA/<X>

This node acts as a placeholder for one or more TMGI and the MBMS Service Announcement information for MBMS Service Announcement service for broadcast TV service.

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

5.8b

<X>/PLMNList/<X>/TMGIConfiguration/TMGIListForSA/<X>/TMGI

The TMGI leaf indicates a TMGI for the MBMS Service Announcement information for MBMS Service Announcement service for broadcast TV service.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: <TMGI>

The format of the TMGI is specified in 3GPP TS 23.003 [6]. The TMGI is a reserved value according to 3GPP 24.116 [8].

5.8c

<X>/PLMNList/<X>/TMGIConfiguration/TMGIListForSA/<X>/USD

The USD leaf provides a the MBMS Service Announcement information for MBMS Service Announcement service for broadcast TV service.

- Occurrence: ZeroOrOne
- Format: chr
- Access Types: Get, Replace
- Values: <USD>

The format of the USD is defined in 3GPP TS 26.346 [9].

5.9 <X>/PLMNList/<X>/TMGIConfiguration/TMGIListForService

The TMGIListForService node acts as a placeholder for the TMGI list and MBMS User Service Announcement information for the MBMS User Service for broadcast TV services.

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

5.10

<X>/PLMNList/<X>/TMGIConfiguration/TMGIListForService/<X>

This node acts as a placeholder for one or more TMGI and MBMS User Service Announcement information for the MBMS User Service for broadcast TV service configurations.

- Occurrence: OneOrMore

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

5.11

<X>/PLMNList/<X>/TMGIConfiguration/TMGIListForService /<X>/TMGI

The TMGI leaf indicates a TMGI for broadcast TV service.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: <TMGI>

The format of the TMGI is specified in 3GPP TS 23.003 [6]. The TMGI is a reserved value according to 3GPP 24.116 [8].

5.11a

<X>/PLMNList/<X>/TMGIConfiguration/TMGIListForService /<X>/USD

The USD leaf provides an USD for broadcast TV service using MBMS. The USD leaf provides the MBMS User Service Announcement information for the MBMS User Service corresponding to the broadcast TV service.

- Occurrence: ZeroOrOne
- Format: chr
- Access Types: Get, Replace
- Values: <USD>

The format of the USD is defined in 3GPP TS 26.346 [9].

5.12 <X>/PLMNList/<X>/RANInfo

The RANInfo node acts as a placeholder for the RAN-specific information.

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

5.13 <X>/PLMNList/<X>/RANInfo/<X>

This node acts as a placeholder for one or more E-UTRA ARFCN values of one or more MBMS frequencies.

- Occurrence: OneOrMore
- Format: node

- Access Types: Get, Replace
- Values: N/A

5.14 <X>/PLMNList/<X>/RANInfo/<X>/EARFCN

The EARFCN leaf indicates the E-UTRA ARFCN value of one MBMS frequency.

- Occurrence: One
- Format: int
- Access Types: Get, Replace
- Values: <EARFCN>

The value of the EARFCN is a 32-bit long unsigned integer. The format of the EARFCN is specified in 3GPP TS 36.101 [7].

5.15 Void

5.16 <X>/Ext

The Ext is an interior node for where the vendor specific information about the TV service configuration 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 identifier is not defined and can therefore include one or more non-standardized sub-trees.

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

Annex A (informative): TV service configuration MO 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>
  <Man>--The device manufacturer--</Man>
  <Mod>--The device model--</Mod>

  <Node>
    <NodeName/>
    <DFProperties>
      <AccessType>
        <Get/>
      </AccessType>
      <Description>TV service configuration for receive only mode</Description>
      <DFFormat>
        <node/>
      </DFFormat>
      <Occurrence>
        <ZeroOrOne/>
      </Occurrence>
      <DFTitle>The TV service configuration Management Object.</DFTitle>
      <DFType>
        <DDFName>urn:oma:mo:ext-3gpp-tv-config:1.0</DDFName>
      </DFType>
    </DFProperties>

    <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>ReceiveOnlyModeActivated</NodeName>
      <DFProperties>
        <AccessType>
          <Get/>
          <Replace/>
        </AccessType>
        <DFFormat>
          <bool/>
        </DFFormat>
        <Occurrence>
          <ZeroOrOne/>
        </Occurrence>
        <DFTitle>Receive only mode activated or not.</DFTitle>
        <DFType>
          < MIME>text/plain</ MIME>
        </DFType>
      </DFProperties>
    </Node>

    <Node>
      <NodeName>PlmnList</NodeName>

```

```

<!-- The per-PLMN configuration starts here. -->
<DFProperties>
  <AccessType>
    <Get/>
    <Replace/>
  </AccessType>
  <DFFormat>
    <node/>
  </DFFormat>
  <Occurrence>
    <ZeroOrOne/>
  </Occurrence>
  <DFTitle>Per-PLMN configuration for TV service.</DFTitle>
  <DFType>
    <DDFName/>
  </DFType>
</DFProperties>

<Node>
  <NodeName></NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <node/>
    </DFFormat>
    <Occurrence>
      <OneOrMore/>
    </Occurrence>
    <DFType>
      <DDFName></DDFName>
    </DFType>
  </DFProperties>

  <Node>
    <NodeName>PlmnId</NodeName>
    <DFProperties>
      <AccessType>
        <Get/>
        <Replace/>
      </AccessType>
      <DFFormat>
        <chr/>
      </DFFormat>
      <Occurrence>
        <One/>
      </Occurrence>
      <DFTitle>PLMN identity.</DFTitle>
      <DFType>
        < MIME>text/plain</ MIME>
      </DFType>
    </DFProperties>
  </Node>

  <Node>
    <NodeName>TmgiConfiguration</NodeName>
    <!-- The per-PLMN TMGI configuration starts here. -->
    <DFProperties>
      <AccessType>
        <Get/>
        <Replace/>
      </AccessType>
      <DFFormat>
        <node/>
      </DFFormat>
      <Occurrence>
        <ZeroOrOne/>
      </Occurrence>
      <DFTitle>Per-PLMN TMGI configuration.</DFTitle>
      <DFType>
        <DDFName/>
      </DFType>
    </DFProperties>

    <Node>
      <NodeName>TmgiViaSA</NodeName>

```

```

<DFProperties>
    <AccessType>
        <Get/>
        <Replace/>
    </AccessType>
    <DFFormat>
        <bool/>
    </DFFormat>
    <Occurrence>
        <ZeroOrOne/>
    </Occurrence>
    <DFTitle>TMGI provided via service announcement or not.</DFTitle>
    <DFType>
        < MIME>text/plain</MIME>
    </DFType>
</DFProperties>
</Node>

<Node>
    <NodeName>TmgiList</NodeName>
    <!-- The per-PLMN configuration starts here. -->
    <DFProperties>
        <AccessType>
            <Get/>
            <Replace/>
        </AccessType>
        <DFFormat>
            <node/>
        </DFFormat>
        <Occurrence>
            <ZeroOrOne/>
        </Occurrence>
        <DFTitle>List of TMGI for TV service in receive only mode.</DFTitle>
        <DFType>
            <DDFName/>
        </DFType>
    </DFProperties>

    <Node>
        <NodeName></NodeName>
        <DFProperties>
            <AccessType>
                <Get/>
                <Replace/>
            </AccessType>
            <DFFormat>
                <node/>
            </DFFormat>
            <Occurrence>
                <OneOrMore/>
            </Occurrence>
            <DFType>
                <DDFName></DDFName>
            </DFType>
        </DFProperties>

        <Node>
            <NodeName>Tmgi</NodeName>
            <DFProperties>
                <AccessType>
                    <Get/>
                    <Replace/>
                </AccessType>
                <DFFormat>
                    <chr/>
                </DFFormat>
                <Occurrence>
                    <One/>
                </Occurrence>
                <DFTitle>TMGI for TV service in receive only mode.</DFTitle>
                <DFType>
                    < MIME>text/plain</MIME>
                </DFType>
            </DFProperties>
        </Node>
    </Node>
</Node>
</Node>

```

```

<Node>
  <NodeName>RanInfo</NodeName>
  <!-- The per-PLMN RAN configuration starts here. -->
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <node/>
    </DFFormat>
    <Occurrence>
      <ZeroOrOne/>
    </Occurrence>
    <DFTitle>RAN-specific info for TV service in receive only mode.</DFTitle>
    <DFType>
      <DDFName/>
    </DFType>
  </DFProperties>

  <Node>
    <NodeName></NodeName>
    <DFProperties>
      <AccessType>
        <Get/>
        <Replace/>
      </AccessType>
      <DFFormat>
        <node/>
      </DFFormat>
      <Occurrence>
        <OneOrMore/>
      </Occurrence>
      <DFType>
        <DDFName></DDFName>
      </DFType>
    </DFProperties>

    <Node>
      <NodeName>Earfcn</NodeName>
      <DFProperties>
        <AccessType>
          <Get/>
          <Replace/>
        </AccessType>
        <DFFormat>
          <int/>
        </DFFormat>
        <Occurrence>
          <One/>
        </Occurrence>
        <DFTitle>EARFCN of one MBMS frequency.</DFTitle>
        <DFType>
          < MIME>text/plain</ MIME>
        </DFType>
      </DFProperties>
    </Node>
  </Node>
</Node>

<Node>
  <NodeName>Usd</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <chr/>
    </DFFormat>
    <Occurrence>
      <ZeroOrOne/>
    </Occurrence>
    <DFTitle>user service description</DFTitle>
    <DFType>
      < MIME>text/plain</ MIME>
    </DFType>
  </DFProperties>

```

```
</DFProperties>
</Node>
</Node>

<Node>
  <NodeName>Ext</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
    </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	Meeting	TDoc	CR	Rev	Cat	Subject/Comment	New version
2016-11	CT1#101					Skeleton for the TV service configuration MO (C1-165344)	0.0.0
2016-11	CT1#101					Inclusion of C1-165396, C1-163597 and editorial changes from the rapporteur.	0.1.0
2016-11	CT-74	CP-160779				Creation of v1.0.0 for presentation for information to CT plenary	1.0.0
2017-01	CT-74					Spec number added	1.0.1
2017-02	CT1#101bis					Inclusion of C1-170204, C1-170501 and C1-171215.	1.1.0
2017-02	CT-75					Creation of v2.0.0 for presentation for approval to CT plenary	2.0.0
2017-03	CT-75					Creation of v14.0.0 after approval at CT plenary	14.0.0
2017-06	CT-76	CP-171070	0001	4	B	Addition of Service Announcement and USD configuration	14.1.0
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
2023-06	CT-100	CP-231224	0004	-	A	Correction to the format of the <X> node of RANInfo	16.1.0
2023-06	CT-100	CP-231224	0008	1	A	Correction to the TMGIConfiguration node	16.1.0

History

Document history		
V16.0.0	July 2020	Publication
V16.1.0	July 2023	Publication