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TECHNICAL SPECIFICATION

LTE;
Management Object (MO) for Basic Communication Part (BCP)
of IMS Multimedia Telephony (MMTEL) communication service
(3GPP TS 24.275 version 16.0.0 Release 16)

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Contents

Foreword

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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 the management object (MO) for Basic Communication Part (BCP) of IMS Multimedia Telephony (MMTEL) communication service.

The MO for BCP of MMTEL communication service 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-ERELD_DM-V1_2 [2].

The MO for BCP of MMTEL communication service consists of relevant configuration parameter that can be managed for a UE supporting the timer RequestTimeout specified in 3GPP TS 24.173 [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]   OMA-ERELD-DM-V1_2-20070209-A: "Enabler Release Definition for OMA Device Management, Version 1.2".

[3]   3GPP TS 24.173: " IMS multimedia telephony communication service and supplementary services".

[4]   3GPP TS 22.011: "Service accessibility".

[5]   3GPP TS 23.122: "Non-Access-Stratum functions related to Mobile Station (MS) in idle mode".

3 Definitions, symbols 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 22.011 [r22011] apply:

3GPP PS data off
3GPP PS data off exempt service

For the purposes of the present document, the following terms and definitions given in 3GPP TS 24.173 [3] apply:

MMTEL voice
MMTEL video

For the purposes of the present document, the following terms and definitions given in 3GPP TS 23.122 [5] apply:

Equivalent Home PLMN (EHPLMN)

Home PLMN (HPLMN)
Visited PLMN (VPLMN)

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].

DDF   Device Description Framework
DM   Device Management
MO   Management Object
OMA   Open Mobile Alliance
BCP   Basic Communication Part
UE   User Equipment

4 MO for BCP of MMTEL communication service

The MO for BCP of MMTEL communication service is used to manage settings of the UE, which supports a RequestTimeout timer. The timer RequestTimeout is configurable as specified in 3GPP TS 24.173 [3].

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

Protocol compatibility: This MO is compatible with OMA DM 1.2.
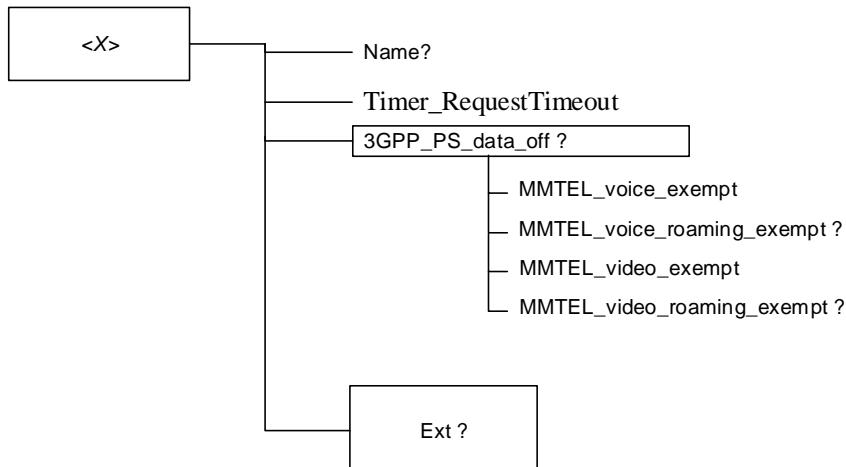
Figure 4-1: MO for BCP of MMTEL communication service

5 MO configuration parameters

5.1 General

This clause describes the configuration parameters for the MO for BCP of MMTEL communication service.

5.2 Node: /*<X>*

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

- Occurrence: OneOrMore

- Format: node

- Access Types: Get, Replace

- Values: N/A

The interior node is mandatory for a UE supporting the UE role specified in 3GPP TS 24.173 [3].

   NOTE: One node is normally used. More nodes are only used in case the terminal supports multiple UICCs.

Child nodes of this interior node which are not defined in this version of the present document are ignored.

5.3 /<X>/Name

This leaf is a name for the settings for BCP of MMTEL communication service.

- Occurrence: ZeroOrOne

- Format: chr

- Access Types: Get, Replace

- Values: <User displayable name>

5.4 /<X>/Timer_RequestTimeout

The Timer_RequestTimeout leaf defines the time between sending of an initial INVITE request and receipt of any SIP response.

- Occurrence: One

- Format: int

- Access Types: Get, Replace

- Values: <The time for INVITE request timeout>

The Timer_RequestTimeout leaf is the time between sending from the UE the initial INVITE request and the receptions of any SIP responce. The timer value shall be given in seconds. The configurable value is between 5 and 15 seconds referring to 3GPP TS 24.173 [3]. The Timer_RequestTimeout is a 16 bits unsigned integer.

5.5 /<X>/Ext/

The Ext is an interior node for where the vendor specific information about the 3GPP-IMS 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

- Values: N/A

5.6 /<X>/3GPP_PS_data_off

The interior node contains configuration parameters for 3GPP PS data off.

- Occurrence: ZeroOrOne

- Format: node

- Access Types: Get, Replace

- Values: N/A

5.7 /<X>/3GPP_PS_data_off/MMTEL_voice_exempt

The leaf indicates whether the MMTEL voice is a 3GPP PS data off exempt service.

- Occurrence: One

- Format: bool

- Access Types: Get, Replace

- Values: 0, 1

    0 - Indicates that the MMTEL voice is not a 3GPP PS data off exempt service.

    1 - Indicates that the MMTEL voice is a 3GPP PS data off exempt service.

NOTE: This MO is used when the UE is in the home PLMN or the EHPLMN, or the UE is in the VPLMN and the MMTEL_voice_roaming_exempt node is not configured.

5.7a /<*X*>/3GPP_PS_data_off/MMTEL_voice_roaming_exempt

The leaf indicates whether the MMTEL voice is a 3GPP PS data off exempt service when the UE is in the VPLMN.

- Occurrence: ZeroOrOne

- Format: bool

- Access Types: Get, Replace

- Values: 0, 1

    0 - Indicates that the MMTEL voice is not a 3GPP PS data off roaming exempt service.

    1 - Indicates that the MMTEL voice is a 3GPP PS data off roaming exempt service.

5.8 /<*X*>/3GPP_PS_data_off/MMTEL_video_exempt

The leaf indicates whether the MMTEL video is a 3GPP PS data off exempt service.

- Occurrence: One

- Format: bool

- Access Types: Get, Replace

- Values: 0, 1

    0 - Indicates that the MMTEL video is not a 3GPP PS data off exempt service.

    1 - Indicates that the MMTEL video is a 3GPP PS data off exempt service.

NOTE: This MO is used when the UE is in the home PLMN or the EHPLMN, or the MMTEL_video_roaming_exempt node is not configured when the UE is in the VPLMN.

5.8a /<*X*>/3GPP_PS_data_off/MMTEL_video_roaming_exempt

The leaf indicates whether the MMTEL video is a 3GPP PS data off exempt service when the UE is in the VPLMN.

- Occurrence: ZeroOrOne

- Format: bool

- Access Types: Get, Replace

- Values: 0, 1

    0 - Indicates that the MMTEL video is not a 3GPP PS data off roaming exempt service.

    1 - Indicates that the MMTEL video is a 3GPP PS data off roaming exempt service.

Annex A (informative):
DDF of MO for BCP of MMTEL communication service

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/>
                <Replace/>
            </AccessType>
            <Description>Configuration parameters for BCP of MMTEL communication
service</Description>
            <DFFormat>
                <node/>
            </DFFormat>
            <Occurrence>
                <OneOrMore/>
            </Occurrence>
            <Scope>
                <Permanent/>
            </Scope>
            <DFTitle>The Management Object (MO) for Basic Communication Part (BCP) of IMS Multimedia
Telephony(MMTEL) communication service.</DFTitle>
            <DFType>
                <DDFName>urn:oma:mo:ext-3gpp-bcp:1.0</DDFName>
            </DFType>
        </DFProperties>
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            <DFProperties>
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                    <chr/>
                </DFFormat>
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                <Scope>
                    <Dynamic/>
                </Scope>
                <DFTitle>The name for BCP of MMTEL communication service.</DFTitle>
                <DFType>
                    <MIME>text/plain</MIME>
                </DFType>
            </DFProperties>
        </Node>
        <Node>
            <NodeName>Timer_RequestTimeout</NodeName>
            <DFProperties>
                <AccessType>
                    <Get/>
                    <Replace/>
                </AccessType>
                <DFFormat>
                    <int/>
                </DFFormat>
                <Occurrence>
                    <One/>
                </Occurrence>
                <Scope>
                    <Permanent/>
                </Scope>
```

```
                    <DFTitle>Timer RequestTimeout.</DFTitle>
                    <DFType>
                        <MIME>text/plain</MIME>
                    </DFType>
                </DFProperties>
            </Node>

            <Node>
                <NodeName>3GPP_PS_data_off</NodeName>
                <DFProperties>
                    <AccessType>
                        <Replace/>
                        <Get/>
                    </AccessType>
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                    </DFFormat>
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                    <DFType>
                        <DDFName/>
                    </DFType>
                </DFProperties>
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                            <Replace/>
                        </AccessType>
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                            <bool/>
                        </DFFormat>
                        <Occurrence>
                            <One/>
                        </Occurrence>
                        <Scope>
                            <Dynamic/>
                        </Scope>
                        <DFTitle>Whether the MMTEL voice is a 3GPP PS data off exempt service.</DFTitle>
                        <DFType>
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                        </DFType>
                    </DFProperties>
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                <Node>
                    <NodeName>MMTEL_voice_roaming_exempt</NodeName>
                    <DFProperties>
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                            <Replace/>
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                        </DFFormat>
                        <Occurrence>
                            <ZeroOrOne/>
                        </Occurrence>
                        <Scope>
                            <Dynamic/>
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service.</DFTitle>
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                        </DFType>
                    </DFProperties>
                </Node>

                <Node>
                    <NodeName>MMTEL_video_exempt</NodeName>
                    <DFProperties>
                        <AccessType>
```

```
                    <Get/>
                    <Replace/>
                </AccessType>
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                    <bool/>
                </DFFormat>
                <Occurrence>
                    <One/>
                </Occurrence>
                <Scope>
                    <Dynamic/>
                </Scope>
                <DFTitle>Whether the MMTEL video is a 3GPP PS data off exempt service.</DFTitle>
                <DFType>
                    <MIME>text/plain</MIME>
                </DFType>
            </DFProperties>
        </Node>
        <Node>
            <NodeName>MMTEL_video_roaming_exempt</NodeName>
            <DFProperties>
                <AccessType>
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                    <Replace/>
                </AccessType>
                <DFFormat>
                    <bool/>
                </DFFormat>
                <Occurrence>
                    <ZeroOrOne/>
                </Occurrence>
                <Scope>
                    <Dynamic/>
                </Scope>
                <DFTitle>Whether the MMTEL video is a 3GPP PS data off roaming exempt
service.</DFTitle>
                <DFType>
                    <MIME>text/plain</MIME>
                </DFType>
            </DFProperties>
        </Node>
    </Node>

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

Annex B (informative): Change history

<table>
<tr><td colspan="8" align="center">Change history</td></tr>
<tr><td>Date</td><td>Meeting</td><td>TDoc</td><td>CR</td><td>Rev</td><td>Cat</td><td>Subject/Comment</td><td>New version</td></tr>
<tr><td>2016-11</td><td></td><td></td><td></td><td></td><td></td><td>Description of the new MO.</td><td>0.1.0</td></tr>
<tr><td>2016-11</td><td>CT-74</td><td>CP-160780</td><td></td><td></td><td></td><td>Version 1.0.0 created for presentation for information to CT plenary.</td><td>1.0.0</td></tr>
<tr><td>2016-12</td><td>CT-74</td><td>CP-160830</td><td></td><td></td><td></td><td>Version 1.0.1 (with TS-number added) created for presentation for information to CT plenary.</td><td>1.0.1</td></tr>
<tr><td>2017-01</td><td>CT1-101BIS</td><td>C1-170328</td><td></td><td></td><td></td><td>Version 1.1.0 created for adding MMTEL voice and MMTEL video configuration for PS data off</td><td>1.1.0</td></tr>
<tr><td>2017-02</td><td>CT1-102</td><td>C1-170602</td><td></td><td></td><td></td><td>Version 1.2.0 created to remove editor's note for MO identifier (C1-170602) and to remove additional line</td><td>1.2.0</td></tr>
<tr><td>2017-02</td><td>CT-75</td><td>CP-170159</td><td></td><td></td><td></td><td>Version 2.0.0 created for presentation for approval to CT plenary.</td><td>2.0.0</td></tr>
<tr><td>2017-03</td><td>CT-75</td><td></td><td></td><td></td><td></td><td>Version 14.0.0 created after approval at CT75</td><td>14.0.0</td></tr>
<tr><td>2018-06</td><td>CT-80</td><td>CP-181074</td><td>0001</td><td>2</td><td>B</td><td>MMTEL voice and MMTEL video configuration for 3GPP PS Data Off2</td><td>15.0.0</td></tr>
<tr><td>2018-12</td><td>CT-82</td><td>CP-183077</td><td>0002</td><td></td><td>F</td><td>Addition of the object identifier in the DDF of the 3GPP Management Object</td><td>16.0.0</td></tr>
</table>

History

Document history		
V16.0.0	November 2020	Publication