Universal Mobile Telecommunications System (UMTS);
LTE;
Allowed Closed Subscriber Group (CSG) list;
Management Object (MO)
(3GPP TS 24.285 version 8.3.0 Release 8)
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Foreword

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Foreword

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

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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 specifies an Allowed Closed Subscriber Group (CSG) List Management Object (MO).

The Allowed CSG List 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 [5].

The Allowed CSG List MO consists of relevant parameters for that can be used by the UE to select the appropriate CSG cell based on its subscription.

The usage of the Allowed CSG List for in the idle mode process and the mobility management procedure is defined in 3GPP TS 23.122 [2], 3GPP TS 24.008 [3] and 3GPP TS 24.301 [4].

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".
[1A] 3GPP TS 23.003: "Numbering, addressing and identification".
[3] 3GPP TS 24.008: "Mobile Radio Interface Layer 3 specification; Core Network Protocols; Stage 3".
[4] 3GPP TS 24.301: "Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS); Stage 3".

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.

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSG</td>
<td>Closed Subscriber Group</td>
</tr>
<tr>
<td>DM</td>
<td>Device Management</td>
</tr>
<tr>
<td>HNB</td>
<td>Home NodeB/eNodeB</td>
</tr>
<tr>
<td>MO</td>
<td>Management Object</td>
</tr>
<tr>
<td>OMA</td>
<td>Open Mobile Alliance</td>
</tr>
</tbody>
</table>
4  Allowed CSG List Management Object

The Allowed CSG List Management Object (MO) is used to manage the list of allowed CSG IDs and the related restricted access information at UE.

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

The OMA DM Access Control List (ACL) property mechanism (see OMA-ERELD-DM-V1_2 [5]) may be used to grant or deny access rights to OMA DM servers in order to modify nodes and leaf objects of the Allowed CSG list MO.

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

```
   <X> AllowedCSGEntries <X> PLMN_ID  
     |                  |          |
     v                  v          |
   <X> CSG_ID  |
     |             |
     v             |
   HNB_Name      |
     |             |
     v             |
   CSG_Type
```

When a UE receives an Allowed CSG List Management Object (MO) from an OMA DM server, it shall update its Allowed CSG list stored in a USIM or in a non-volatile memory in the ME.

5  Management Object parameters

5.1  General

This clause describes the parameters for the Allowed CSG List Management Object (MO).

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>/AllowedCSGEntries

The AllowedCSGEntries interior node is used to allow a reference to a list of allowed CSG entries.

- Occurrence: One
- Format: node
- Access Types: Get
5.4 /<X>/AllowedCSGEntries/<X>

This run-time node acts as a placeholder for one or more allowed CSG entries.
- Occurrence: OneOrMore
- Format: node
- Access Types: Get
- Values: N/A

5.5 /<X>/AllowedCSGEntries/<X>/PLMN_ID

The PLMN_ID leaf represents a PLMN Identifier.
- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: <PLMN Identifier>

The value of the PLMN Identifier shall be a PLMN-Id as specified in 3GPP TS 23.003 [1A].

5.6 /<X>/AllowedCSGEntries/<X>/CSG-entries

The CSG-entries interior node is used to allow a reference to a list of allowed CSG entries in a PLMN.
- Occurrence: One
- Format: node
- Access Types: Get
- Values: N/A

5.7 /<X>/AllowedCSGEntries/<X>/CSG-entries/<X>

This run-time node acts as a placeholder for one or more CSG entries (the CSG Identity, its related HNB Name and CSG Type) in a PLMN.
- Occurrence: OneOrMore
- Format: node
- Access Types: Get
- Values: N/A

5.8 /<X>/AllowedCSGEntries/<X>/CSG-entries/<X>/CSG_ID

The CSG_ID leaf represents a CSG Identifier.
- Occurrence: One
5.9 /<X>/AllowedCSGEntries/<X>/CSG-entries/<X>/HNB_Name

The HNB_name leaf represents a HNB Name.

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

The value of the HNB Name shall be coded as specified in 3GPP TS 23.003 [1A].

5.10 /<X>/AllowedCSGEntries/<X>/CSG-entries/<X>/CSG_Type

The CSG Type leaf represents a CSG type.

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

The value of the CSG Type shall be coded as specified in 3GPP TS 23.003 [1A].
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
<?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>
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    <DFProperties>
      <AccessType> <Get/> </AccessType>
      <DFFormat> <node/> </DFFormat>
      <Occurrence> <ZeroOrOne/> </Occurrence>
      <DFTitle>Root Node of the UE Allowed CSG List</DFTitle>
      <DFType>
        <DDFName>urn:oma:ext-3gpp-csg:1.0</DDFName>
      </DFType>
    </DFProperties>
  </Node>
  <Node>
    <NodeName>AllowedCSGEntries</NodeName>
    <DFProperties>
      <AccessType> <Get/> </AccessType>
      <DFFormat> <node/> </DFFormat>
      <Occurrence> <One/> </Occurrence>
      <DFTitle>This node specifies the parent node for allowed CSG entries</DFTitle>
      <DFType> <node/> </DFType>
    </DFProperties>
  </Node>
  <Node>
    <NodeName>PLMN_ID</NodeName>
    <DFProperties>
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    </DFProperties>
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    <NodeName>CSG_ID</NodeName>
    <DFProperties>
      <AccessType> <Get/> </AccessType>
      <DFFormat> <node/> </DFFormat>
      <Occurrence> <OneOrMore/> </Occurrence>
      <DFTitle>This node specifies CSG entries for specific PLMN</DFTitle>
      <DFType> </DFType>
    </DFProperties>
  </Node>
</MgmtTree>
```
<Node>
  <NodeName> HNB_Name </NodeName>
  <DFProperties>
    <AccessType> <Get /> <Replace/> </AccessType>
    <DFFormat> <chr/> </DFFormat>
    <Occurrence> <One /> </Occurrence>
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</Node>

<Node>
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    <Occurrence> <One /> </Occurrence>
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Annex B (informative):
Change history

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## History

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