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*Technical Specification*

**Universal Mobile Telecommunications System (UMTS);  
LTE;  
Allowed Closed Subscriber Group (CSG) List;  
Management Object (MO)  
(3GPP TS 24.285 version 8.0.0 Release 8)**

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**Reference**

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# Foreword

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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.

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# 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-ERELED-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].

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# 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 23.122: "Non-Access-Stratum functions related to Mobile Station (MS) in idle mode".
- [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"
- [5] OMA-ERELED-DM-V1\_2: "Enabler Release Definition for OMA Device Management".

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# 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:

|     |                         |
|-----|-------------------------|
| CSG | Closed Subscriber Group |
| DM  | Device Management       |
| MO  | Management Object       |
| OMA | Open Mobile Alliance    |
| UE  | User Equipment          |

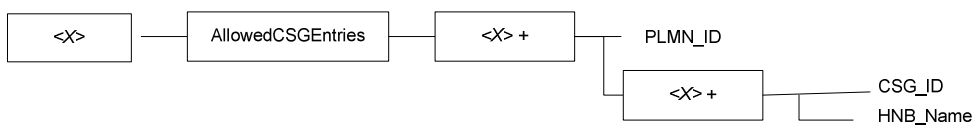
## 4 Allowed CSG List Management Object

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.

**Editor's note:** This value needs to be registered with OMA.

The OMA DM Access Control List (ACL) property mechanism [5] may be used to grant or deny access rights to OMA DM servers in order to modify nodes and leaf nodes of the Allowed CSG list MO. The following nodes and leaf nodes are possible under the Allowed CSG List node:



**Figure 1: The Allowed CSG List Management Object**

**Editor's note:** It is FFS if the time related information for the CSG ID would be also added in the allowed CSG list.

## 5 Management Object parameters

### 5.1 General

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

### 5.2 <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 PLMN\_IDs.

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

### 5.4 /<X>/AllowedCSGEntries/<X>

This run-time node acts as a placeholder for one or more PLMN IDs.

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

## 5.5 /<X>/AllowedCSGEntries/<X>/PLMN\_ID

The PLMN\_ID interior node is used to allow a reference to a list of CSG ID and HNB\_name

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

NOTE: the value shall be a PLMN ID as specified in 3GPP TS 23.003 [x].

## 5.6 /<X>/AllowedCSGEntries/<X>/<X>

This run-time node acts as a placeholder for one or more CSG ID and HNB Name.

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

## 5.7 /<X>/AllowedCSGEntries/<X>/<X>/CSG\_ID

The CSG\_ID leaf represents one or more CSG IDs.

- Occurrence: One
- Format: bin
- Access Types: Get, Replace
- Values: <CSG ID>

NOTE: the value shall be a CSG ID as specified in 3GPP TS 23.003 [x].

## 5.8 /<X>/AllowedCSGEntries/<X>/<X>/HNB\_Name

The HNB\_name leaf represents one or more HNB Names.

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

NOTE: the value shall be a HNB Name as specified in 3GPP TS 23.003 [x].



## 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.

```
<!DOCTYPE MgmtTree PUBLIC "-//OMA//DTD-DM-DDF 1.2//EN"
"http://www.openmobilealliance.org/tech/DTD/DM_DDF-V1_2.dtd"
[<?oma-dm-ddf-ver supported-versions="1.2"?>]>

<MgmtTree>
  <VerDTD>1.2</VerDTD>
  <Node>
    <NodeName/>
    <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/>
    <DFProperties>
      <AccessType> <Get/> </AccessType>
      <DFFormat> <node/> </DFFormat>
      <Occurrence> <OneOrMore/> </Occurrence>
      <DFTitle>This node specifies the parent node for PLMN entries</DFTitle>
      <DFType/>
    </DFProperties>
  </Node>
  <Node>
    <NodeName>PLMN_ID</NodeName>
    <DFProperties>
      <AccessType> <Get /> <Replace/></AccessType>
      <DFFormat> <chr/> </DFFormat>
      <Occurrence> <One /> </Occurrence>
      <DFTitle>This node specifies the PLMN ID</DFTitle>
      <DFType> <MIME>text/plain</MIME> </DFType>
    </DFProperties>
  </Node>
  <Node>
    <NodeName/>
    <DFProperties>
      <AccessType> <Get/> </AccessType>
      <DFFormat> <node/> </DFFormat>
      <Occurrence> <OneOrMore/> </Occurrence>
      <DFTitle>This node specifies CSG entries for specific PLMN</DFTitle>
      <DFType/>
    </DFProperties>
  </Node>
  <Node>
    <NodeName>CSG_ID</NodeName>
    <DFProperties>
      <AccessType> <Get /> <Replace/></AccessType>
      <DFFormat> <bin /> </DFFormat>
      <Occurrence> <One /> </Occurrence>
      <DFTitle>This leaf node specifies the CSG identifier</DFTitle>
    </DFProperties>
  </Node>
</MgmtTree>
```

```
        <DFType> <MIME>text/plain</MIME> </DFType>
      </DFProperties>
    </Node>
  <Node>
    <NodeName> HNB_Name </NodeName>
    <DFProperties>
      <AccessType> <Get /> <Replace/></AccessType>
      <DFFormat> <chr/> </DFFormat>
      <Occurrence> <One /> </Occurrence>
      <DFTitle>This leaf node specifies the HNB Identifier</DFTitle>
      <DFType> <MIME>text/plain</MIME> </DFType>
    </DFProperties>
  </Node>
</Node>
</Node>
</Node>
</Node>
</MgmtTree>
```

---

## Annex B (informative): Change history

| Change history |       |          |    |     |   |       |       |
|----------------|-------|----------|----|-----|---|-------|-------|
| Date           | TSG # | TSG Doc. | CR | Rev | Subject/Comment   | Old   | New   |
| 2008-09        |       |          |    |     | Version 0.0.1: Preliminary proposal                             |       | 0.0.1 |
| 2008-10        |       |          |    |     | Version 0.0.2: TS number is added                               | 0.0.1 | 0.0.2 |
| 2008-11        |       |          |    |     | C1-085374   | 0.0.2 | 0.1.0 |
| 2008-11        |       |          |    |     | Editorial corrections   | 0.1.0 | 0.1.1 |
| 2008-11        |       |          |    |     | Version 1.0.0 created for presentation to CT#42 for information | 0.1.1 | 1.0.0 |
| 2009-02        |       |          |    |     | C1-090705   | 1.0.0 | 1.1.0 |
| 2009-02        | CT-43 |          |    |     | Version 2.0.0 created for presentation to CT#43 for approval    | 1.1.0 | 2.0.0 |
| 2009-03        | CT-43 |          |    |     | Version 8.0.0 created after approval at CT#43                   | 2.0.0 | 8.0.0 |

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# History

| <b>Document history</b> |            |             |
|-------------------------|------------|-------------|
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