**3GPP TSG-SA5 Meeting #130-e *S5-202212***

**Online, , 20th Apr 2020 - 28th Apr 2020**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **32.160** | **CR** | **0008** | **rev** | **1** | **Current version:** | **16.2.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network | **X** |

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| ***Title:***  | Update YANG Guidelines |
|  |  |
| ***Source to WG:*** | Ericsson Hungary Ltd |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | eNRM |  | ***Date:*** | 2020-04-10 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-16 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)Rel-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
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| ***Reason for change:*** | The TDOC numbers in the reference statements are changing with each update and often were not updated by the author. CR numbers are more stable |
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| ***Summary of change:*** | Change from TDOC number to CR number in the YANG modules revision/reference statement.Add a new rule about YANG contact statement.Correct error in YANG example. It contradicts the description text (which is correct) |
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| ***Consequences if not approved:*** | Incorrect, not updated TDOC numbers in the YANG modules e.g. S5-201xxxContact statement missingWrong mapping of structured attributes |
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| ***Clauses affected:*** | 6.2.1.b, 6.2.1.d, 6,2,12,1 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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| **1st Change** |

6.2.1.b Module header statements

A module’s organization and description statements shall be present. The organization shall include the string "3GPP".

A module shall contain the following contact statement:

 contact “<https://www.3gpp.org/DynaReport/TSG-WG--S5--officials.htm?Itemid=464>;

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| **Next Change** |

6.2.1.d YANG module revisions

A separate "revision" statement shall be present for each published version of a module. The revision statement shall contain a reference substatement listing the numbers of all 3GPP change requests (using the CR number(s)) and any other documents that resulted in the creation of the new revision.

**Example**

revision 1956-10-13 {

 reference “CR-0258, CR-0267”;}

If multiple change requests modify the new revision of a YANG module, the content of the reference substatements should be merged.

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| **Next Change** |

6.2.12.1 YANG Mapping

Structured attributes are mapped to a grouping containing member parts; and a list using the grouping. (Structured attributes that are not used in multiple places may define the member parts directly in the list.)

// attribute, structured, isUnique=true OR isWritable=false

grouping pLMNIdGrp {

 description "PLMN-Id= Mobile Country Codes (MCC) &

 Mobile Network Codes(MNC)";

 leaf MCC {

 type t\_mcc;

 }

 leaf MNC {

 type t\_mnc;

 }

}

list pLMNIdList {

 key "MCC MNC";

 config true;

 description "a list of PLMN-Ids";

 ordered-by user;

 uses pLMNIdGrp;

}

// attribute, structured, isUnique=false, isWritable=true

list pLMNIdList {

 key "idx";

 leaf idx { type uint32 ; };

 leaf member1 { type xxx ; }

 leaf member2 { type yyy ; }

}

If the attribute is isUnique=true in YANG all member parts should be specified as keys. If it is known that one or a subset of members are unique without considering the rest of the members, it is allowed to specify only the unique subset as keys.

If the attribute is isUnique=false and isWritable=false, the YANG "key" statement is not used. YANG allows defining ReadOnly lists without a key.

If the attribute is isUnique=false and isWritable=true an additional dummy index shall be defined in YANG. The name of the dummyIndex shall be idx and shall have a type uint32 or uint64.

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| **End of Change** |