**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** | | | | | | | | |
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|  | **32.160** | **CR** | **0008** | **rev** | **1** | **Current version:** | **16.2.0** |  |
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| *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 | | | | | | | | | |
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| ***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 can be 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. S5-201xxx  Contact statement missing  Wrong mapping of structured attributes | | | | | | | | |
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| ***Clauses affected:*** | | 6.2.1.b, 6.2.1.d, 6,2,12,1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 ... | | |
|  | |  | | | | | | | | |
| ***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** |