**3GPP TSG-CT WG1 Meeting #141-eC1-23XXXX**

**Online 17– 21 April 2023**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.501** | **CR** | **5039** | **rev** | **3** | **Current version:** | **18.2.1** |  |
|  | | | | | | | | |
| *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 | **x** | Radio Access Network |  | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | UE-initiated state indication procedure when lacking UPSC | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Lenovo | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GProtoc18 | | | | |  | ***Date:*** | | | 2023-04-08 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | When performing UE-initiated state indication procedure, the UE is expected to inlude the at least a UPSC in the UPSI list IE of the UE STATE INDICATION message. The UE may however not know that value for a certain PLMN.  In order for the UE to be able to request policy sections at the time of registration, there is a need for a solution. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | This CR proposes thet the UE assigns the hexidecimal digit "0000" to the UPSC. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | If the UE does not have any UPSC value for a PLMN/SNPN, the UE cannot request policy section. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | D.6.4 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

-------------------------------------- Next Change --------------------------------------

-------------------------------------- Next Change --------------------------------------

## D.6.4 UPSI list

The purpose of the UPSI list information element is to transfer from the UE to the PCF a list of UPSIs.

The UPSI list information element is coded as shown in figure D.6.4.1, figure D.6.4.2, and table D.6.4.1.

The UPSI list information element has a minimum length of 10 octets and a maximum length of 65532 octets.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| UPSI list IEI | | | | | | | | octet 1 |
| Length of UPSI list contents | | | | | | | | octet 2  octet 3 |
| UPSI sublist (PLMN 1) | | | | | | | | octet 4  octet a |
| UPSI sublist (PLMN 2) | | | | | | | | octet a+1\*  octet b\* |
| … | | | | | | | | octet b+1\*  octet c\* |
| UPSI sublist (PLMN N) | | | | | | | | octet c+1\*  octet z\* |

Figure D.6.4.1: UPSI list information element

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Length of UPSI sublist | | | | | | | | octet d  octet d+1 |
| MCC digit 2 | | | | MCC digit 1 | | | | octet d+2 |
| MNC digit 3 | | | | MCC digit 3 | | | | octet d+3 |
| MNC digit 2 | | | | MNC digit 1 | | | | octet d+4 |
| UPSC | | | | | | | | octet d+5  octet d+6 |
| UPSC | | | | | | | | octet d+7\*  octet d+8\* |
| … | | | | | | | | octet d+9\*  octet e\* |
| UPSC | | | | | | | | octet e+1\*  octet e+2\* |

Figure D.6.4.2: UPSI sublist

Table D.6.4.1: UPSI list information element

|  |
| --- |
| MCC, Mobile country code (octet d+2, and bits 4 to 1 of octet d+3) |
|  |
| The MCC field is coded as in ITU-T Recommendation E.212 [42], annex A. |
|  |
| MNC, Mobile network code (bits 8 to 5 of octet d+3, and octet d+4) |
|  |
| The coding of this field is the responsibility of each administration but BCD coding shall be used. The MNC shall consist of 2 or 3 digits. If a network operator decides to use only two digits in the MNC, MNC digit 3 shall be coded as "1111". |
|  |
| UPSC (octets d+5 to d+6) |
|  |
| This field contains the binary encoding of the UPSC. The value of the UPSC is set by the PCF. If the UE doesn't have any stored UPSC with the value set by the PCF, the UE shall use hexadecimal digit "0000" as the UPSC. |
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-------------------------------------- End of Changes --------------------------------------