**3GPP TSG-CT WG1 Meeting #137-eC1-224888**

**E-Meeting, 18th – 26th August 2022**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.501** | **CR** | **4566** | **rev** | **-** | **Current version:** | **17.7.1** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Associate NSSRG values with HPLMN S-NSSAI | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, HiSilicon | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eNS\_Ph2 | | | | |  | ***Date:*** | | | 2022-08-10 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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:*** | | The NSSRG values are associated with the HPLMN S-NSSAI.  Hence, in non-roaming case, the NSSRG values are associated with each of the S-NSSAIs in a configured NSSAI; in roaming case, the NSSRG values are associated with the mapped S-NSSAI for each of the S-NSSAIs in a configured NSSAI. Current spec only captures the former case, see below:  *The purpose of the NSSRG information information element is to identify one or more NSSRG values associated with each of the S-NSSAIs in a configured NSSAI.*  The latter case is also needed to be captured. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Capture the case that the NSSRG values are associated with the mapped S-NSSAI for each of the S-NSSAIs in a configured NSSAI. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The latter case above is not captured in the current spec. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 9.11.3.82 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

\*\*\*\*\*First change \*\*\*\*\*

#### 9.11.3.82 NSSRG information

The purpose of the NSSRG information information element is to identify one or more NSSRG values associated with each of the HPLMN S-NSSAIs in a configured NSSAI.

The NSSRG information information element is coded as shown in figure 9.11.3.82.1, figure 9.11.3.82.2 and table 9.11.3.82.1.

The NSSRG information is a type 6 information element with minimum length of 7 octets and maximum length of 65538 octets.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| NSSRG information IEI | | | | | | | | octet 1 |
| Length of NSSRG information contents | | | | | | | | octet 2  octet 3 |
| NSSRG values for S-NSSAI 1 | | | | | | | | octet 4  octet m |
| NSSRG values for S-NSSAI 2 | | | | | | | | octet m+1\*  octet n\* |
| … | | | | | | | | octet n+1\*  octet u\* |
| NSSRG values for S-NSSAI x | | | | | | | | octet u+1\*  octet v\* |

Figure 9.11.3.82.1: NSSRG information information element

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Length of NSSRG values for S-NSSAI | | | | | | | | octet 4 |
| S-NSSAI value | | | | | | | | octet 5  octet w |
| NSSRG value 1 for the S-NSSAI | | | | | | | | octet w+1 |
| NSSRG value 2 for the S-NSSAI | | | | | | | | octet w+2\* |
| … | | | | | | | | octet w+3\*  octet m-1\* |
| NSSRG value y for the S-NSSAI | | | | | | | | octet m\* |

Figure 9.11.3.82.2: NSSRG values for S-NSSAI

Table 9.11.3.82.1: NSSRG information information element

|  |
| --- |
| Value part of the NSSRG information information element (octet 4 to v)  The value part of the NSSRG information information element consists of one or more NSSRG values for each S-NSSAI in the Configured NSSAI IE.  S-NSSAI value (octet 5 to w) (see NOTE 2)  S-NSSAI value is coded as the length and value part of S-NSSAI information element as specified in subclause 9.11.2.8 starting with the second octet. See NOTE 1. |
| NSSRG value for the S-NSSAI (octet w+1) |
| This field contains the 8 bit NSSRG value. |
| NOTE 1: If a mapped HPLMN SST is included in a S-NSSAI value, then the NSSRG value(s) are associated with the Mapped HPLMN SST, and the Mapped HPLMN SD, if included.  NOTE 2: The NSSRG information IE shall contain the complete set of S-NSSAI(s) included in the configured NSSAI. |

\*\*\*\*\* End of changes \*\*\*\*\*