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

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

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

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|  |
| ***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 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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***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. |
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| ***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. |
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| ***Consequences if not approved:*** | The latter case above is not captured in the current spec. |
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| ***Clauses affected:*** | 9.11.3.82 |
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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:*** |  |

\*\*\*\*\*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.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| NSSRG information IEI | octet 1 |
| Length of NSSRG information contents | octet 2octet 3 |
| NSSRG values for S-NSSAI 1 | octet 4octet 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

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Length of NSSRG values for S-NSSAI | octet 4 |
| S-NSSAI value | octet 5octet 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

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| --- |
| 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 \*\*\*\*\*