**3GPP TSG-CT WG1 Meeting #137-eC1-225241**

**E-Meeting, 18th – 26th August 2022 *was* C1-224695**

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| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** |  | **rev** | **1** | **Current version:** |  |  |
|  |
| *For* [***HELP***](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 | **X** |

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| --- |
|  |
| ***Title:***  | NSAG priority |
|  |  |
| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** | 2022-08-23 |
|  |  |  |  |  |
| ***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)* |
|  |  |
| ***Reason for change:*** | Stage-2 CR3676(S2-2207692) makes it clear that the NSAG priority information for the NSAGs shall be provided by AMF in the NSAG Information.The requirement shall be reflected in stage 3. |
|  |  |
| ***Summary of change:*** | Remove the notes about NSAG priority to align with stage 2. |
|  |  |
| ***Consequences if not approved:*** | Stage 3 conflict with stage 2. |
|  |  |
| ***Clauses affected:*** | 2, 9.11.3.87 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 23.501 CR 3676 |
| ***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 \* \* \* \*

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document in the same Release as the present document.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[1A] 3GPP TS 22.011: "Service accessibility".

[2] 3GPP TS 22.101: "Service aspects; Service principles".

[3] 3GPP TS 22.261: "Service requirements for the 5G system; Stage 1".

[4] 3GPP TS 23.003: "Numbering, addressing and identification".

[4A] 3GPP TS 23.040: "Technical realization of Short Message Service (SMS)".

[4B] 3GPP TS 23.032: "Universal Geographical Area Description (GAD)".

[5] 3GPP TS 23.122: "Non-Access-Stratum functions related to Mobile Station (MS) in idle mode".

[6] 3GPP TS 23.167: "IP Multimedia Subsystem (IMS) emergency sessions".

[6A] 3GPP TS 23.216: "Single Radio Voice Call Continuity (SRVCC); Stage 2".

[6AB] 3GPP TS 23.256: "Support of Uncrewed Aerial Systems (UAS) connectivity, identification and tracking; Stage 2".

[6B] 3GPP TS 23.273: "5G System (5GS) Location Services (LCS); Stage 2".

[6C] 3GPP TS 23.287: "Architecture enhancements for 5G System (5GS) to support Vehicle-to-Everything (V2X) services".

[6D] 3GPP TS 23.316: "Wireless and wireline convergence access support for the 5G System (5GS)".

[6E] 3GPP TS 23.304: "Proximity based Services (ProSe) in the 5G System (5GS)".

[7] 3GPP TS 23.401: "GPRS enhancements for E-UTRAN access".

[8] 3GPP TS 23.501: "System Architecture for the 5G System; Stage 2".

[9] 3GPP TS 23.502: "Procedures for the 5G System; Stage 2".

[10] 3GPP TS 23.503: "Policy and Charging Control Framework for the 5G System; Stage 2".

[10A] 3GPP TS 23.548: "5G System Enhancements for Edge Computing; Stage 2".

[11] 3GPP TS 24.007: "Mobile radio interface signalling layer 3; General aspects".

[12] 3GPP TS 24.008: "Mobile Radio Interface Layer 3 specification; Core Network Protocols; Stage 3".

[13] 3GPP TS 24.011: "Point-to-Point Short Message Service (SMS) support on mobile radio interface".

[13A] 3GPP TS 24.080: "Mobile radio interface layer 3 Supplementary services specification; Formats and coding".

[13B] 3GPP TS 24.193: "Access Traffic Steering, Switching and Splitting; Stage 3".

[13C] 3GPP TS 24.173: "IMS Multimedia telephony communication service and supplementary services; Stage 3".

[13D] 3GPP TS 24.174: "Support of multi-device and multi-identity in the IP Multimedia Subsystem (IMS); Stage 3".

[14] 3GPP TS 24.229: "IP multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3".

[14AA] 3GPP TS 24.237: "IP Multimedia (IM) Core Network (CN) subsystem IP Multimedia Subsystem (IMS) service continuity; Stage 3".

[14A] 3GPP TS 24.250: "Protocol for Reliable Data Service; Stage 3".

[15] 3GPP TS 24.301: "Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS); Stage 3".

[16] 3GPP TS 24.302: "Access to the 3GPP Evolved Packet Core (EPC) via non-3GPP access networks; Stage 3"

[17] 3GPP TS 24.368: "Non-Access Stratum (NAS) configuration Management Object (MO)".

[18] 3GPP TS 24.502: "Access to the 3GPP 5G System (5GS) via non-3GPP access networks; Stage 3".

[19] 3GPP TS 24.526: "UE policies for 5G System (5GS); Stage 3".

[19BA] 3GPP TS 24.539: "5G System (5GS); Network to TSN translator (TT) protocol aspects; Stage 3".

[19A] 3GPP TS 24.535: "Device-Side Time-Sensitive Networking (TSN) Translator (DS-TT) to Network-Side TSN Translator (NW-TT) protocol aspects; Stage 3".

[19B] 3GPP TS 24.587: "Vehicle-to-Everything (V2X) services in 5G System (5GS); Protocol aspects; Stage 3"

[19C] 3GPP TS 24.588: "Vehicle-to-Everything (V2X) services in 5G System (5GS); User Equipment (UE) policies; Stage 3"

[19D] Void.

[19E] 3GPP TS 24.554: "Proximity-service (ProSe) in 5G System (5GS) protocol aspects; Stage 3".

[19F] 3GPP TS 24.555: "Proximity-services (ProSe) in 5G System (5GS); User Equipment (UE) policies; Stage 3".

[20] 3GPP TS 24.623: "Extensive Markup Language (XML) Configuration Access Protocol (XCAP) over the Ut interface for Manipulating Supplementary Services".

[20AA] 3GPP TS 29.500: "5G System; Technical Realization of Service Based Architecture; Stage 3".

[20A] 3GPP TS 29.502: "5G System; Session Management Services; Stage 3".

[20AB] 3GPP TS 29.503: "5G System; Unified Data Management Services; Stage 3".

[20B] 3GPP TS 29.518: "5G System; Access and Mobility Management Services; Stage 3".

[21] 3GPP TS 29.525: "5G System; UE Policy Control Service; Stage 3".

[21A] 3GPP TS 29.526: "5G System; Network Slice-Specific Authentication and Authorization (NSSAA) services; Stage 3".

[21B] 3GPP TS 29.256: "5G System; Uncrewed Aerial Systems Network Function (UAS-NF); Aerial Management Services; Stage 3.

[22] 3GPP TS 31.102: "Characteristics of the Universal Subscriber Identity Module (USIM) application".

[22A] 3GPP TS 31.111: "USIM Application Toolkit (USAT)".

[22B] 3GPP TS 31.115: "Secured packet structure for (Universal) Subscriber Identity Module (U)SIM Toolkit applications".

[23] 3GPP TS 33.102: "3G security; Security architecture".

[23A] 3GPP TS 33.401: "3GPP System Architecture Evolution; Security architecture".

[24] 3GPP TS 33.501: "Security architecture and procedures for 5G System".

[24A] 3GPP TS 33.535: "Authentication and Key Management for Applications (AKMA) based on 3GPP credentials in the 5G System (5GS)".

[24B] 3GPP TS 33.256: "Security aspects of Uncrewed Aerial Systems (UAS)".

[25] 3GPP TS 36.323: "NR; Packet Data Convergence Protocol (PDCP) specification".

[25A] 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC) protocol specification".

[25B] 3GPP TS 36.300: "Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description".

[25C] 3GPP TS 36.304: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) procedures in idle mode".

[25D] 3GPP TS 36.306: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio access capabilities".

[25E] 3GPP TS 36.321: "Evolved Universal Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification".

[26] 3GPP TS 37.355: "LTE Positioning Protocol (LPP)".

[27] 3GPP TS 38.300: "NR; NR and NG-RAN Overall Description; Stage 2".

[28] 3GPP TS 38.304: "New Generation Radio Access Network; User Equipment (UE) procedures in Idle mode".

[29] 3GPP TS 38.323: "Evolved Universal Terrestrial Radio Access (E-UTRA); Packet Data Convergence Protocol (PDCP) specification".

[30] 3GPP TS 38.331: "NR; Radio Resource Control (RRC); Protocol Specification".

[31] 3GPP TS 38.413: "NG Radio Access Network (NG-RAN); NG Application Protocol (NGAP)".

[31A] IEEE Std 802.3™-2018: "Ethernet".

[31AA] 3GPP TS 38.509: "Special conformance testing functions for User Equipment (UE)".

[32] IETF RFC 768: "User Datagram Protocol".

[33] IETF RFC 793: "Transmission Control Protocol."

[33A] IETF RFC 3095: "RObust Header Compression (ROHC): Framework and four profiles: RTP, UDP, ESP and uncompressed".

[33B] Void.

[33C] Void.

[33D] IETF RFC 8415: "Dynamic Host Configuration Protocol for IPv6 (DHCPv6)".

[34] IETF RFC 3748: "Extensible Authentication Protocol (EAP)".

[34A] IETF RFC 3843: "RObust Header Compression (ROHC): A Compression Profile for IP".

[35] Void.

[35A] IETF RFC 4122: "A Universally Unique IDentifier (UUID) URN Namespace".

[36] IETF RFC 4191: "Default Router Preferences and More-Specific Routes".

[37] IETF RFC 7542: "The Network Access Identifier".

[38] IETF RFC 4303: "IP Encapsulating Security Payload (ESP)".

[38A] IETF RFC 4815: "RObust Header Compression (ROHC): Corrections and Clarifications to RFC 3095".

[38B] IETF RFC 4861: "Neighbor Discovery for IP version 6 (IPv6)".

[39] IETF RFC 4862: "IPv6 Stateless Address Autoconfiguration".

[39A] IETF RFC 5225: "RObust Header Compression (ROHC) Version 2: Profiles for RTP, UDP, IP, ESP and UDP Lite".

[39B] IETF RFC 5795: "The RObust Header Compression (ROHC) Framework".

[40] IETF RFC 5448: "Improved Extensible Authentication Protocol Method for 3rd Generation Authentication and Key Agreement (EAP-AKA')".

[40A] IETF RFC 6603: "Prefix Exclude Option for DHCPv6-based Prefix Delegation".

[40B] IETF RFC 6846: "RObust Header Compression (ROHC): A Profile for TCP/IP (ROHC-TCP)".

[41] IETF RFC 7296: "Internet Key Exchange Protocol Version 2 (IKEv2)".

[42] ITU-T Recommendation E.212: "The international identification plan for public networks and subscriptions", 2016-09-23.

[43] IEEE Std 802-2014: "IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture" (30 June 2014).

[43A] IEEE Std 802.1AS-2020: "IEEE Standard for Local and metropolitan area networks--Timing and Synchronization for Time-Sensitive Applications".

[43B] IEEE Std 1588™-2019: "IEEE Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems".

[43C] Void.

[43D] Void.

[43E] Void.

[44] Void.

[45] Void.

[46] Void.

[47] Void.

[48] IEEE "Guidelines for Use of Extended Unique Identifier (EUI), Organizationally Unique Identifier (OUI), and Company ID (CID)".

[49] BBF TR-069: "CPE WAN Management Protocol".

[50] BBF TR-369: "User Services Platform (USP)".

[51] 3GPP TS 37.340: "Evolved Universal Terrestrial Radio Access (E-UTRA) and NR; Multi-connectivity; Stage 2".

[52] IETF RFC 8106:"IPv6 Router Advertisement Options for DNS Configuration".

[53] 3GPP TS 23.247: "Architectural enhancements for 5G multicast-broadcast services; Stage 2".

[54] 3GPP TS 23.380: "IMS Restoration Procedures".

[55] IETF RFC 3948: "UDP Encapsulation of IPsec ESP Packets".

[56] 3GPP TS 33.503: "Security Aspects of Proximity based Services (ProSe) in the 5G System (5GS)".

[57] 3GPP TS 33.246: "Security of Multimedia Broadcast/Multicast Service (MBMS)".

[xx] 3GPP TS 38.321: "NR; Medium Access Control (MAC); Protocol specification".

\* \* \* Next Change \* \* \* \*

#### 9.11.3.87 NSAG information

The purpose of the NSAG information information element is to provide NSAG information to the UE.

The NSAG information information element is coded as shown in figures 9.11.3.87.1, 9.11.3.87.2, 9.11.3.87.3 and table 9.11.3.87.1.

The NSAG information information element can contain a maximum of 32 NSAG entries.

The NSAG information is a type 6 information element, with a minimum length of 10 octets.

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

Figure 9.11.3.87.1: NSAG information information element

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Length of NSAG | octet 4 |
| octet 5 |
| NSAG identifier | octet 6 |
| S-NSSAI list of NSAG | octet 7octet j |
| NSAG priority | octet j+1 |
| TAI list | octet j+2\*octet m\* |

Figure 9.11.3.87.2: NSAG

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| Length of S-NSSAI list of NSAG | octet 7 |
| S-NSSAI value 1 | octet 8octet k |
| S-NSSAI value 2 | octet k+1\*octet s\* |
| … | octet s+1\*octet i-1\* |
| S-NSSAI value x | octet i\*octet j\* |

Figure 9.11.3.87.3: S-NSSAI list of NSAG

Table 9.11.3.87.1: NSAG information information element

|  |
| --- |
| NSAG part of the NSAG information information element (octet 4 to m)Each entry of the NSAG information information element consists of one NSAG in the NSAG information IE. |
| NSAG identifier(octet 6)NSAG identifier field contains an 8 bits NSAG ID value. |
| S-NSSAI list of NSAG (octet 7 to j)S-NSSAI list of NSAG field consists of one or more S-NSSAIs in the configured NSSAI. Each S-NSSAI in S-NSSAI list of NSAG field 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, without the mapped HPLMN SST field and without the mapped HPLMN SD field. |
| NSAG priority (octet j+1) The NSAG priority field indicates the priority of NSAG for cell reselection (see 3GPP TS 38.304 [28]) and random access (see 3GPP TS 38.321 [xx]). |
| TAI list (octet j+2 to m)The TAI list field is coded as the length and value part of the 5GS tracking area identity list IE defined in subclause 9.11.3.9 starting with the second octet. |
|  |

\* \* \* End of Changes \* \* \* \*