**3GPP TSG-CT WG1 Meeting #124-eC1-203412**

**Electronic meeting, 2-10 June 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.526** | **CR** | **0078** | **rev** | **-** | **Current version:** | **16.4.1** |  |
|  | | | | | | | | |
| *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:*** | Specify UE behavior when pre-configured policy is syntactically incorrect | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | BlackBerry UK Ltd., NTAC (?), Ministère Economie et Finances (?), The Police of the Netherlands (?), BT (?) | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GS\_Ph1-CT | | | | |  | ***Date:*** | | | 2020-05-15 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-1Rel-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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The rules for handling of syntactically incorrect optional information elements are defined in 24.501 sc. 7.7.1. N3AN node selection information is not formally identified as information element, sop a clarification is helpful to calrify the error handling related to N3AN node selection information. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Clarifies that error handling for N3AN node selection information follows 24.501 sc. 7.7.1. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Unclear how to handle syntactically incorrect policies. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.1, 5.3.3.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \*\*\*

\*\*\* Next change \*\*\*

## 4.1 Overview

The UE policies for 5GS include:

- UE route selection policy (URSP) (see subclause 4.2); and

- Access network discovery and selection policy (ANDSP) (see subclause 4.3).

The UE policies can be delivered from the PCF to the UE. The UE policy delivery procedure is specified in 3GPP TS 24.501 [11].

The UE policies can also be pre-configured in the UE. The pre-configured policy shall be applied by the UE only when the UE has not received the same type of policy from the PCF. The implementation of pre-configured UE policies is out of scope of this specification.

\*\*\* Next change \*\*\*

#### 5.3.3.2 N3AN node selection information

The content of N3AN node selection information contains a sequence of the N3AN node selection information entries. Each N3AN node selection information entry contains a PLMN ID and information for the PLMN ID. The content of N3AN node selection information contain at least an N3AN node selection information entry with information for the HPLMN and an N3AN node selection information entry for any PLMN.

NOTE: If N3AN node selection information does not contain at least one N3AN node selection information entry with information for the HPLMN and at least one N3AN node selection information entry for any PLMN, the N3AN node selection information is handled as a syntactically incorrect IE according to 3GPP TS 24.501 [11].

The content is encoded according to figure 5.3.3.2.1, figure 5.3.3.2.2 and table 5.3.3.2.1.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
| N3AN node selection information entry 1 | | | | | | | | octet x+5 |
| octet y |
| N3AN node selection information entry 2 | | | | | | | | octet y+1  octet t |
| … | | | | | | | |  |
| N3AN node selection information entry n | | | | | | | | octet u  octet v |

Figure 5.3.3.2.1: Content of N3AN node selection information

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | | 5 | | 4 | 3 | 2 | 1 |  |
| Length of N3AN node selection information entry | | | | | | | | | | octet x+5 |
| MCC digit 2 | | | | | | MCC digit 1 | | | | octet x+6 |
| MNC digit 3 | | | | | | MCC digit 3 | | | | octet x+7 |
| MNC digit 2 | | | | | | MNC digit 1 | | | | octet x+8 |
| FQDN format | | | Preference | | Priority | | | | | octet x+9 |

Figure 5.3.3.2.2: N3AN node selection information entry

Table 5.3.3.2.1: N3AN node selection information

|  |  |  |
| --- | --- | --- |
| Length of N3AN node selection information entry (octet x+5) contains length of subsequent fields in the N3AN node selection information entry. | | |
| PLMN ID (octet x+6 to x+7) field shall be set to zero if it indicates "any\_PLMN". Otherwise, | | |
|  | | |
| MCC, Mobile country code (octet x+6, and bits 5 to 1 of octet x+7) | | |
| The MCC field is encoded as in ITU-T Recommendation E.212 [10], annex A. | | |
|  | | |
| MNC, Mobile network code (bits 8 to 5 of octet x+7, and octet x+8) | | |
| The encoding 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 encoded as "1111". | | |
|  | | |
| Priority (bits 5 to 1 of octet x+9) indicates the preference order given to N3AN nodes of a PLMN. The lower value indicates higher priority. If the PLMN is the UE's HPLMN or the PLMN ID indicates "any\_PLMN", this priority filed shall be ignored. | | |
|  | | |
| Preference (bit 6 of octet x+9) indicates which N3AN node type is preferred in this PLMN and is encoded as follows. | | |
| **6** |  | |
| 0 | N3IWF is preferred | |
| 1 | ePDG is preferred | |
|  | | |
| FQDN format (bits 8 to 7 of octet x+9) indicates format to be used when the FQDN is constructed by the UE. This field is encoded as follows. | | |
| **8** | **7** |  |
| 0 | 0 | Operator identifier based ePDG FQDN format or operator identifier based N3IWF FQDN. |
|  |  |  |
| 0 | 1 | Tracking/location area identity based ePDG FQDN format or tracking area identity based N3IWF FQDN format. |
| All other values are reserved. | | |
|  | | |

\*\*\* No more changes \*\*\*