**3GPP TSG-CT WG1 Meeting #137-eC1-224813**

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

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.008** | **CR** | **3313** | **rev** | **-** | **Current version:** | **17.7.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network |  | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Clarification of the codec of Network Name | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | ZTE | | | | | | | | | |
| ***Source to TSG:*** | CT1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI18 | | | | |  | ***Date:*** | | | 2022-08-07 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | For codec of the IE of Network Name in accordance to GSM 7 bit default alphabet, the <CR>(“0001101”) may be added to the octet boundary instead of “0000000”(@). In this case, the number of spare bits in last octet should be also set to “111”.  If the “Coding Scheme” = 001(UCS2), it is unnecessary to pad zero. Thus the number of spare bits in last octet shall be set to “000” to indicates that this field carries no information about the number of spare bits in octet n. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Clarify the codec of IE of Network Name in accordance to GSM 7 bit default alphabet. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | It is unclear how to set the number of spare bits in last octet if <CR> is added to the octet boundary instead of “0000000”(@). | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.5.3.5a | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \*

#### 10.5.3.5a Network Name

The purpose of this information element is to pass a text string to the mobile station.

The *Network Name* information element is coded as shown in figure 10.5.80/3GPP TS 24.008 and table 10.5.94/3GPP TS 24.008.

If the coding scheme UCS2 is used and Chinese-Japanese-Korean-Vietnamese (CJKV) ideographs as defined in ISO/IEC 10646 [72] are received in the text string, the MS shall use the MCC of the PLMN from which it received the network name information element to determine the language for those CJKV ideographs as specified in table 10.5.93a/3GPP TS 24.008:

Table 10.5.93a/3GPP TS 24.008: MCC to CJKV ideograph language mapping table

|  |  |  |
| --- | --- | --- |
| MCC(s) | Country/Region | Language (C, J, K, or V) |
| 460, 461 | Mainland China | Chinese-G |
| 466 | Taiwan | Chinese-T |
| 454 | HongKong | Chinese-T |
| 455 | Macao | Chinese-T |
| 440, 441 | Japan | J (Kanji) |
| 450, 467 | Korea | K (Hanja) |
| 452 | Vietnam | V (Chunom) |

NOTE: This is due to CJKV ideograph language ambiguity in UCS2, in the sense that the same hexadecimal code can be mapped to different character displays dependent on the used language. The coding of CJKV ideographs itself does not allow to discriminate the CJKV ideograph language.

The *Network Name* is a type 4 information element with a minimum length of 3 octets. No upper length limit is specified except for that given by the maximum number of octets in a L3 message (see 3GPP TS 44.006 [19]).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |
|  | Network Name IEI | | | | | | | octet 1 |
| Length of Network Name contents | | | | | | | | octet 2 |
| ext  1 | coding scheme | | | Add  CI | Number of spare  bits in last octet | | | octet 3 |
|  | | | | | | | | octet 4 |
| Text String | | | | | | | |  |
|  | | | | | | | | octet n |

Figure 10.5.80/3GPP TS 24.008 *Network Name* information element

Table 10.5.94/3GPP TS 24.008 *Network Name* information element

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Number of spare bits in last octet (octet 3, bits 1 to 3) | | | | | |
|  | | | | | |
| 2 | 1 |  |  | |  |
| 0 | 0 | 1 |  | | bit 8 is spare and set to "0" in octet n |
| 0 | 1 | 0 |  | | bits 7 and 8 are spare and set to "0" in octet n |
| 0 | 1 | 1 |  | | bits 6 to 8(inclusive) are spare and set to "0" in octet n |
| 1 | 0 | 0 |  | | bits 5 to 8(inclusive) are spare and set to "0" in octet n |
| 1 | 0 | 1 |  | | bits 4 to 8(inclusive) are spare and set to "0" in octet n |
| 1 | 1 | 0 |  | | bits 3 to 8(inclusive) are spare and set to "0" in octet n |
| 1 | 1 | 1 |  | | bits 2 to 8(inclusive) are spare and set to "0" in octet n |
| 0 | 0 | 0 |  | | this field carries no information about the number of spare bits in octet n |
|  |  |  |  | |  |
| Add CI (octet 3, bit 4) | | | | | |
|  | | | | | |
| 0 |  |  |  | | The MS should not add the letters for the Country's Initials to the text string |
| 1 |  |  |  | | The MS should add the letters for the Country's Initials and a separator |
|  |  |  |  | | (e.g. a space) to the text string |
|  | | | | | |
| Coding Scheme (octet 3, bits 5-7) | | | | | |
|  | | | | | |
| 0 | 0 | 0 |  | | Cell Broadcast data coding scheme, GSM default alphabet, language unspecified, defined in 3GPP TS 23.038 [8b] |
| 0 | 0 | 1 |  | | UCS2 (16 bit) [72] |
| 0 | 1 | 0 |  | |  |
| to | | | | reserved | |
| 1 | 1 | 1 |  | |  |
|  |  |  |  | |  |
| If Coding Scheme = "000" and the <CR> as specified in 3GPP TS 23.038 [8b] is intended to be added to the octet boundary, the Number of spare bits in last octet is set to "111".  All values of number of spare bits in last octet are interpreted as "this field carries no information about the number of spare bits in octet n" if Coding Scheme is not equal to "000".  Text String (octet 4 to octet n, inclusive) | | | | | |
| Encoded according to the Coding Scheme defined by octet 3, bits 5-7 | | | | | |

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