**3GPP TSG-CT WG1 Meeting #132-eC1-217070**

**E-meeting, 11-19 November 2021**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **23.122** | **CR** | **0796** | **rev** | **2** | **Current version:** | **17.4.0** |  |
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| *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 | **x** |

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| ***Title:***  | Clarification of provision of ‘list of PLMNs to be used in Disaster condition” during registration procedure. |
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| ***Source to WG:*** | Huawei, HiSilicon |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | MINT |  | ***Date:*** | 2021-11-04 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | Following conclusions were made in 24.811*The list is either pre-configured in the USIM or provided by the HPLMN following a successful registration procedure.**While roaming, the Registered PLMN may provide the 'list of PLMN(s) to be used in disaster condition' after a successful registration procedure. The UE shall ignore this information if 'list of PLMN(s) to be used in disaster condition' is empty ..* |
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| ***Summary of change:*** | Added clarification that the 'list of PLMN(s) to be used in disaster condition' maybe received from the network during a successful registration procedure or configuration update procedure. |
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| ***Consequences if not approved:*** | Requirement not satisfied. |
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| ***Clauses affected:*** | 3.10 |
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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 ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* First Change \* \* \* \*

## 3.10 Minimization of service interruption

The MS may support Minimization of service interruption (MINT).

MINT is not applicable in SNPNs.

If the MS supports MINT, the MS can be provisioned by the network with:

a) a "list of PLMN(s) to be used in disaster condition", consisting of zero or more entries, each containing a PLMN ID. The PLMNs are listed in order of decreasing priority, with the first PLMN being the highest priority PLMN; and

b) a disaster roaming wait range consisting of a minimum wait time and a maximum wait time.

The network may provide the "list of PLMN(s) to be used in disaster condition", the disaster roaming wait range and the disaster return wait range to the UE during a successful registration procedure or a generic UE configuration update procedure.

The "list of PLMN(s) to be used in disaster condition" and the disaster roaming wait range provisioned by the network are stored in the non-volatile memory of the ME, as specified in 3GPP TS 24.501 [64] annex C.

In addition, the MS can also be pre-configured with a "list of PLMN(s) to be used in disaster condition" and a disaster roaming wait range stored in the USIM (see 3GPP TS 31.102 [40]).

Editor's note (WI MINT, CR#0742): The encoding of the "list of PLMN(s) to be used in disaster condition" and of the disaster roaming wait range in the USIM needs to be specified by CT6.

3GPP TS 24.501 [64] annex C specifies the conditions under which the "list of PLMN(s) to be used in disaster condition" and the disaster roaming wait range stored in the ME are deleted. Additionally:

a) when a USIM is inserted:

1) if:

i) no "list of PLMN(s) to be used in disaster condition" is stored in the non-volatile memory of the ME; or

ii) the SUPI from the USIM does not match the SUPI stored together with the "list of PLMN(s) to be used in disaster condition" in the non-volatile memory of the ME;

 and the MS has a "list of PLMN(s) to be used in disaster condition" stored in the USIM (see 3GPP TS 31.102 [22]), the MS shall store the "list of PLMN(s) to be used in disaster condition" from the USIM into the ME, as specified in 3GPP TS 24.501 [64] annex C; and

2) if:

i) no disaster roaming wait range is stored in the non-volatile memory of the ME; or

ii) the SUPI from the USIM does not match the SUPI stored together with the disaster roaming wait range in the non-volatile memory of the ME;

 and the MS has a disaster roaming wait range stored in the USIM (see 3GPP TS 31.102 [22]), the MS shall store the disaster roaming wait range from the USIM into the ME, as specified in 3GPP TS 24.501 [64] annex C; and

b) when the ME receives a USAT REFRESH command indicating that:

1) the "list of PLMN(s) to be used in disaster condition" stored in the USIM has been updated, the MS shall store the "list of PLMN(s) to be used in disaster condition" from the USIM into the ME, as specified in 3GPP TS 24.501 [64] annex C; or

2) the disaster roaming wait range stored in the USIM has been updated, the MS shall store the disaster roaming wait range from the USIM into the ME, as specified in 3GPP TS 24.501 [64] annex C.

NOTE 1: The MS ignores the "list of PLMN(s) to be used in disaster condition" stored in the USIM except when the USIM is inserted or when the ME receives a USAT REFRESH command indicating that the "list of PLMN(s) to be used in disaster condition" stored in the USIM has been updated.

NOTE 2: The MS ignores the disaster roaming waitn range stored in the USIM except when the USIM is inserted or when the ME receives a USAT REFRESH command indicating that the disaster roaming wait range stored in the USIM has been updated.

If the MS has neither stored a "list of PLMN(s) to be used in disaster condition" from the USIM with at least one entry into the ME, nor been provisioned by the HPLMN or EHPLMN with a list of PLMN(s) to be used in disaster condition" with at least one entry, disaster roaming is disabled at the MS. In this case, the MS shall not perform disaster roaming and the MS shall ignore any "list of PLMN(s) to be used in disaster condition" received from a PLMN other than the HPLMN or EHPLMN.

Upon:

a) selecting a PLMN for disaster roaming; or

b) determining that a disaster condition has ended and selecting the PLMN previously with disaster condition,

if there is a disaster roaming wait range stored in the ME, the MS shall generate a random number within the disaster roaming wait range and start a timer set to the generated random number. While the timer is running, the MS shall not initiate registration. Upon expiration of the timer, the MS shall initiate registration on the selected PLMN.

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

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

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

\* \* \* End of Change \* \* \* \*