**3GPP TSG-CT WG1 Meeting #132-eC1-21xxxx**

**E-meeting, 11-15 October 2021 Revision of C1-215805**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
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|  | **24.501** | **CR** |  | **rev** | **1** | **Current version:** |  |  |
|  |
| *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:***  | Update the handling of the indication of the country of UE location |
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| ***Source to WG:*** | China Mobile |
| ***Source to TSG:*** | C1 |
|  |  |
| ***Work item code:*** | 5GSAT\_ARCH-CT |  | ***Date:*** | 2021-09-30 |
|  |  |  |  |  |
| ***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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | TS 23.502 specifies that if the AMF can determine the PLMN is not allowed to operate at the present UE location in Registration procedure, Network-initiated Deregistration procedure and Service Request procedure, it should indicate to the UE with a suitable cause and the country of the UE location. The requirement shows the country of the UE location is only relevant to the present UE location. It is helpful in the subsequent PLMN selection but may be incorrect as the UE location changing; especially in the case the selected PLMNs in the following PLMN selections still reject the registration requests due to the same cause#78.In addtion, the conclusion for KI#2 in TR 24.821 agreed at CT1#131e (see CT1-215029) points out:“ if NW has provided an indication of the country of UE location in the form of one or more MCCs, and the HPLMN has configured the UE to take the network indicated information into account, then the UE should consider PLMN of the same country – as defined in 3GPP TS 23.122 [3] - as the indicated MCCs, or PLMNs with a shared MCC as defined in ITU-T E.212 [6] clause F.6, as candidates for satellite NG-RAN access for PLMN selection.”Therefore, it is suggested to update the condition to consider the indication provided by the network. |
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| ***Summary of change:*** | Update the condition to consider the indication provided by the network. |
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| ***Consequences if not approved:*** | The current condition to consider the indication provided by the network is not complete. |
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| ***Clauses affected:*** | 4.23.2 |
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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:*** |  |
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| ***This CR's revision history:*** | Remove the description of the HPLMN part and the validity of the indication. |

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### 4.23.2 Handling of network's indication of country of UE location

The network provided indication of country of UE location is only applicable for a UE accessing a PLMN using satellite NG-RAN.

The UE may receive an indication of country of UE location from the network in REGISTRATION REJECT, DEREGISTRATION REQUEST or SERVICE REJECT. If provided, the contents of the indication of country of UE location may be applied in procedures described in 3GPP TS 23.122 [5].

NOTE: The indication is not long-term accurate as the UE location changes, whether the indication is stored in the UE is up to UE implementation.

If the UE receives an indication of country of UE location from a network not accessed through satellite access, the UE shall ignore the received indication.

Editor's note [5GSAT\_ARCH-CT, CR#3219]: It is FFS how the HPLMN configures the UE to take into account the use of the indication of country of UE location.

Editor's note [5GSAT\_ARCH-CT, CR#3219]: The name and the encoding of the information element providing the country of the UE location is FFS.

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