**3GPP TSG-CT WG1 Meeting #131-eC1-214330**

**E-meeting, 19-27 August 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.501** | **CR** | **3428** | **rev** | **-** | **Current version:** | **17.3.1** |  |
|  | | | | | | | | |
| *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 | **X** |

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| ***Title:*** | Update to general subclause on support for satellite access to 5GS | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Qualcomm Incorporated | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GSAT\_ARCH-CT | | | | |  | ***Date:*** | | | 2021-08-11 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **C** |  | | | | | ***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 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | There is a need to describe general aspects of the support for satellite access to 5GS. | | | | | | | | |
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| ***Summary of change:*** | | Add general aspects of the support for satellite access to 5GS. | | | | | | | | |
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| ***Consequences if not approved:*** | | Incomplete specification | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.X (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \*\*\*

## 4.23 NAS over Satellite Access Network

### 4.23.1 General

5GS can support satellite radio access. Satellite access is expected to be deployed using separate tracking areas from the terrestrial access, which allows the core network to determine that the UE is using satellite access. Tracking areas over satellite access are fixed geographic areas. The boundaries of the tracking areas do not necessarily overlap with the boundaries of the radio cells.

### 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 operating in satellite access mode.

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 proeedures described in 3GPP TS 23.122 [5].

If an indication of country of UE location is provided to the UE, that indication will be valid until the next successful initial registration to a PLMN through satellite access or when updated by the network.

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 if and how the HPLMN can influence the validity and use of the indication of country of UE location in the UE.

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.

\*\*\* no more changes \*\*\*