**3GPP TSG-RAN5 Meeting #105 *R5-24XXXX***

**Orlando, United States, 18th Nov 2024 - 22nd Nov 2024**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **36.523-2** | **CR** | **XXXX** | **rev** | **-** | **Current version:** | **18.6.0** |  |
|  | | | | | | | | |
| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)*** *on using this form: comprehensive instructions can be found at  <http://www.3gpp.org/Change-Requests>.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | Addition of applicability for IoT NTN enhancement TC 22.4.31 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | CMCC | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | IoT\_NTN\_enh\_plus\_CT1-UEConTest | | | | |  | ***Date:*** | | | 2024-11-14 |
|  |  | | | |  | |  | | |  |
| ***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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The applicability of IoT NTN enh TC 22.4.31 is missing in TS 36.523-2. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The applicability of newly added IoT NTN enh TC 22.4.31 has been added. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The applicability of newly added IoT NTN enh TC 22.4.31 will be missing in the spec. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS 36.523-1 CR 5375 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | Cxxx and XXX highlighted in yellow shall be assigned with hard numbers by MCC. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

<<< START OF CHANGES >>>

Table 4-1: Applicability of tests and additional information for testing

| Clause | TC Title | Release | Applicability Condition | Applicability Comment | Specific ICS | Specific IXIT | Number of TC Executions | Release other RAT |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **6** | **Idle mode operations** |  |  |  |  |  |  |  |
| 6.1.1.1 | PLMN selection of RPLMN, HPLMN/EHPLMN, UPLMN and OPLMN / Automatic mode | Rel-8 | R | UEs supporting E-UTRA | pc\_eFDD |  | Either TC 6.1.1.1 or TC 6.1.1.1b shall be executed. (Note 4) |  |
| **<Unchanged Parts Skipped>** | | | | | | | | |
| 22.4.28 | NB-IoT / Wake-up Signal / DRX | Rel-15 | C390 | UEs supporting NB-IoT FDD and WUS | pc\_NB\_FDD |  | 22.4.28 | NB-IoT / Wake-up Signal / DRX |
| 22.4.29 | NB-IoT / Wake-up Signal / eDRX | Rel-15 | C391 | UEs supporting NB-IoT FDD and Extended DRX and WUS | pc\_NB\_FDD |  | 22.4.29 | NB-IoT / Wake-up Signal / eDRX |
| 22.4.30 | NB-IoT / NTN / Ephemeris information update / T317 Expiry / T318 Expiry | Rel-17 | C412 | UEs supporting NB-IoT and NTN access in NB-IoT | pc\_NB\_FDD  pc\_NB\_ntn\_GSO\_ScenarioSupport  pc\_NB\_ntn\_NGSO\_ScenarioSupport |  | 22.4.30 | NB-IoT / NTN / Ephemeris information update / T317 Expiry / T318 Expiry |
| 22.4.31 | NB-IoT / NTN / discontinuous coverage | Rel-18 | Cxxx | UEs supporting NB-IoT and NTN access and discontinuous coverage | pc\_NB\_FDD  pc\_NB\_ntn\_GSO\_ScenarioSupport  pc\_NB\_ntn\_NGSO\_ScenarioSupport  pc\_NB\_ntn\_DiscontinuousCoverage |  | Note 22 |  |
| 22.5.1 | NB-IoT / Authentication not accepted by the network, GUTI used / Authentication not accepted by the UE, SQN failure / Authentication not accepted by the UE, non-EPS authentication unacceptable / Network failing the authentication check | Rel-13 | C266 | UEs supporting NB-IoT | pc\_NB\_FDD  pc\_NB\_ntn\_only\_Connectivity\_EPC |  | 22.5.1 | NB-IoT / Authentication not accepted by the network, GUTI used / Authentication not accepted by the UE, SQN failure / Authentication not accepted by the UE, non-EPS authentication unacceptable / Network failing the authentication check |

<< Unchanged contents omitted >>

Table 4-1a: Applicability of tests Conditions

|  |  |
| --- | --- |
| C01 IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.1-1/6 AND NOT A.4.3.2-2A/1 THEN R ELSE N/A | |
| C01a IF (A.4.1-1/1 OR A.4.1-1/2) AND [8]A.1/1 AND (A.4.5-2/3 OR A.4.5-2/4) AND NOT A.4.3.2-2A/1 THEN R ELSE N/A | |
| C01b IF (A.4.1-1/1 OR A.4.1-1/2) AND [8]A.1/1 AND A.4.5-2/4 AND NOT A.4.3.2-2A/1 THEN R ELSE N/A | |
| C02 IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.4-2/2 THEN R ELSE N/A | |
| C02a IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.4-2/2 AND NOT A.4.3.2-2A/1 THEN R ELSE N/A | |
| C03 IF (A.4.1-1/1 OR A.4.1-1/2) AND A.4.4-1/1 THEN R ELSE N/A | |
| << Unchanged contents omitted >> | |
| C434 IF [45]A.3A/50 AND [45]A.18/4 AND [45]A.12/66 THEN R ELSE N/A |
| C435 IF (A.4.4-1/230 OR A.4.4-1/240) AND A.4.4-1/167 AND (A.4.4-1/253 OR A.4.4-1/254) THEN R ELSE N/A |
| C436 IF A.4.1-1/8 AND A4.4-1/230 AND A.4.4-1/255 THEN R ELSE N/A |
| C437 IF A.4.1-1/8 AND A4.4-1/230 AND A.4.4-1/256 THEN R ELSE N/A |
| Cxxx IF (A.4.4-1/230 OR A.4.4-1/240) AND A.4.4-1/XXX THEN R ELSE N/A |

<< Unchanged sections omitted >>

## A.4.4 Additional information

Table A.4.4-1: Additional information

| Item | Additional information | Ref. | Release | Mnemonic | Comments |
| --- | --- | --- | --- | --- | --- |
| 1 | Support of USIM removal without power down |  | Rel-8 | pc\_USIM\_Removal |  |
| 2 | Support of Allowed CSG list | 36.331 Annex B.2 | Rel-8 | pc\_Allowed\_CSG\_list | For Rel-8: CSG autonomous search is optional.  For Rel-9 or later releases: CSG autonomous search is mandatory for UEs supporting CSG full functionality. |
| 3 | Support of Short Message Service (SMS) MT over SGs | 23.272, 8.2.4, 8.2.5 | Rel-8 | pc\_SMS\_SGs\_MT |  |
| 4 | Support of Short Message Service (SMS) MO over SGs | 23.272, 8.2.2, 8.2.3 | Rel-8 | pc\_SMS\_SGs\_MO |  |
| << Unchanged contents omitted >> | | | | | |
| 254 | Support of uplink HARQ mode B for a single TB per HARQ process | 36.306, 4.3.38.29 | Rel-18 | pc\_NB\_ntn\_UL\_HARQ\_MODE\_B\_singleTB |  |
| 255 | Support of Control Plane CIoT Optimization Early Data Transmission over NB-IoT | 36.306, 6.8.4 | Rel-15 | pc\_NB\_Control\_Plane\_CIoT\_Optimisation\_EDT |  |
| 256 | Support of User Plane CIoT Optimization Early Data Transmission over NB-IoT | 36.306, 4.3.8.7 | Rel-15 | pc\_NB\_User\_Plane\_CIoT\_Optimisation\_EDT |  |
| XXX | Support of Discontinuous coverage | 36.306, 6.19.2 | Rel-18 | pc\_NB\_ntn\_DiscontinuousCoverage |  |

<< END OF CHANGES >>