**3GPP TSG-RAN WG3 Meeting #123R3-24xxxx**

**Athens, Greece, 26th Feb – 1st Mar 2024**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **1311** | **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 |  | Radio Access Network | **X** | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | Correct the ASN.1 errors for mobile IAB | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_mobile\_IAB-Core | | | | |  | ***Date:*** | | | 2024-01-10 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | |  |
|  | *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)* ***S*** *(adding to the sourcing companies’ CR statistics)*  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:*** | | Mobile TRP Location information is provided to the gNB-CU, then to LMF via multiple messages. The Assigned Criticality for *Mobile TRP Location information* IE is set to “ignore” in *Positioning Measurement Result* IE and *E-CID Measurement Result* IE, but it is set to “reject” in *TRP Information* IE. The Assigned Criticality should be consistent for same IE. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | * Change the Assign Critiality for *Mobile TRP Location information* IE in *TRP Information* IE to “ignore”. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Inconsisent behavior in the gNB-CU for the same IE. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2, 9.3.1.176, 9.3.1.309, 9.4.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 38.455 CR 0126 | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

*Start of Change*

#### 9.3.1.176 TRP Information

The *TRP Information* IE contains information for one TRP within a gNB-DU.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| TRP ID | M |  | 9.3.1.197 |  | - |  |
| **TRP Information Type Response List** |  | *1* |  |  | - |  |
| **>TRP Information Type Response Item** |  | *1 .. <maxnoofTRPInfoTypes>* |  |  | - |  |
| >>CHOICE *TRP Information Type Response Item* | M |  |  |  | - |  |
| *>>>NR PCI* |  |  |  |  |  |  |
| >>>>NR PCI | M |  | INTEGER (0..1007) | NR Physical Cell ID | - |  |
| *>>>NR CGI* |  |  |  |  |  |  |
| >>>>NR CGI |  |  | 9.3.1.12 |  | - |  |
| *>>>NR ARFCN* |  |  |  |  |  |  |
| >>>>NR ARFCN | M |  | INTEGER (0..3279165) |  | - |  |
| *>>>PRS Configuration* |  |  |  |  |  |  |
| >>>>PRS Configuration | M |  | 9.3.1.177 |  | - |  |
| *>>>SSB Information* |  |  |  |  |  |  |
| >>>>SSB Information | M |  | 9.3.1.202 |  | - |  |
| *>>>SFN Initialisation Time* |  |  |  |  |  |  |
| >>>>SFN Initialisation Time | M |  | Relative Time 1900  9.3.1.183 |  | - |  |
| *>>>Spatial Direction Information* |  |  |  |  |  |  |
| >>>>Spatial Direction Information | M |  | 9.3.1.179 |  | - |  |
| *>>>Geographical Coordinates* |  |  |  |  |  |  |
| >>>>Geographical Coordinates | M |  | 9.3.1.184 |  | - |  |
| *>>>TRP Type* |  |  |  |  | YES | reject |
| >>>>TRP Type | M |  | ENUMERATED (prs-only-tp, srs-only-rp, tp, rp, trp,…, mobile-trp) | TS 38.305 [42] | - |  |
| *>>>On-demand PRS TRP Information* |  |  |  |  | YES | reject |
| >>>>On-demand PRS TRP Information | M |  | 9.3.1.240 |  | - |  |
| *>>>TRP Tx TEG Association* |  |  |  |  | YES | reject |
| >>>>TRP Tx TEG Association | M |  | 9.3.1.252 |  | - |  |
| *>>>TRP Beam Antenna* |  |  |  |  | YES | reject |
| >>>>TRP Beam Antenna Information | M |  | 9.3.1.256 |  | - |  |
| *>>>Mobile TRP Location* |  |  |  |  |  |  |
| >>>>Mobile TRP Location Information | M |  | 9.3.1.304 |  | YES | ignore |
| Mobile IAB-MT UE ID | C-ifMobileTRP |  | OCTET STRING | The UE ID of the IAB-MT associated with the mobile TRP, includes GPSI as defined in TS 29.571 [50] | YES | reject |

| Range bound | Explanation |
| --- | --- |
| maxnoofTRPInfoTypes | Maximum no of TRP information types that can be requested and reported with one message. Value is 64. |

|  |  |
| --- | --- |
| Condition | Explanation |
| ifMobileTRP | This IE shall be present if the *TRP type* IE is set to the value 'mobile-trp' |

*Next Change*

### 9.4.5 Information Element Definitions

-- ASN1START

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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-- Information Element Definitions

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\*\* Unchanged text skipped \*\*

TRPInformationTypeResponseItem-ExtIEs F1AP-PROTOCOL-IES ::= {

{ ID id-TRPType CRITICALITY reject TYPE TRPType PRESENCE mandatory }|

{ ID id-OnDemandPRS CRITICALITY reject TYPE OnDemandPRS-Info PRESENCE mandatory}|

{ ID id-TRPTxTEGAssociation CRITICALITY reject TYPE TRPTxTEGAssociation PRESENCE mandatory}|

{ ID id-TRPBeamAntennaInformation CRITICALITY reject TYPE TRPBeamAntennaInformation PRESENCE mandatory }|

{ ID id-Mobile-TRP-LocationInformation CRITICALITY ignore TYPE Mobile-TRP-LocationInformation PRESENCE mandatory },

...

}

*End of Change*