**3GPP TSG-RAN WG3 #117-e R3-22xxxx**

**Online, 15th - 24th August 2022**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.455** | **CR** | **0084** | **rev** | **1** | **Current version:** | **17.1.1** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network | **X** | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Correction to the PRS Measurement configuration procedures | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | RAN3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_pos\_enh-Core | | | | |  | ***Date:*** | | | 2022-08-15 |
|  |  | | | |  | |  | | |  |
| ***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 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:*** | | When PPW is preconfigured, but UE instead sends a request for Measurement gap, the gNB can release the PPW resources. The gNB can inform the LMF that neither of the requested PPW/MG can be pre-configured using the MEASUREMENT PRECONFIGURATION REFUSE message and indicate the reason of failure that another Measurement gap is in use by the UE. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | * Add a new cause value “another MG being in use for the UE” to 9.2.1   Impact Analysis:  Impact assessment towards the previous version of the specification (same release):  This CR has isolated impact with the previous version of the specification (same release).  The impact can be considered isolated because the change only affects the Measurement Reconfiguration procedures and the cause values | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The LMF cannot know the reason why the Measurement preconfiguration failed. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 9.2.1, 9.3.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Rev#1: Adding a new cause value instead of Result Cause IE | | | | | | | | |

**<Start of changes>**

9.2.1 Cause

The purpose of the cause information element is to indicate the reason for a particular event for the whole protocol.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IE/Group Name** | **Presence** | **Range** | **IE Type and Reference** | **Semantics Description** |
| CHOICE *Cause Group* | M |  |  |  |
| *>Radio Network Layer* |  |  |  |  |
| >>Radio Network Layer Cause | M |  | ENUMERATED  (Unspecified, Requested Item not Supported, Requested Item Temporarily not Available,  ..., Serving NG-RAN node changed, Requested Item not Supported on Time, other MG being in use  ) |  |
| >*Protocol* |  |  |  |  |
| >>Protocol Cause | M |  | ENUMERATED (Transfer Syntax Error, Abstract Syntax Error (Reject), Abstract Syntax Error (Ignore and Notify), Message not Compatible with Receiver State,  Semantic Error, Unspecified,  Abstract Syntax Error (Falsely Constructed Message),  ...) |  |
| *>Misc* |  |  |  |  |
| >>Miscellaneous Cause | M |  | ENUMERATED (Unspecified,  ...) |  |

The meaning of the different cause values is described in the following table. In general, "not supported" cause values indicate that the concerned capability is missing. On the other hand, "not available" cause values indicate that the concerned capability is present, but insufficient resources were available to perform the requested action.

|  |  |
| --- | --- |
| **Radio Network Layer cause** | **Meaning** |
| Unspecified | Sent when none of the above cause values applies but still the cause is Radio Network Layer related |
| Requested Item not Supported | The NG-RAN node does not support the requested measurement object, or cannot provide the requested information item. |
| Requested Item Temporarily not Available | The NG-RAN node can temporarily not provide the requested measurement object or information item. |
| Serving NG-RAN node changed | The UE has moved to another serving NG-RAN node. |
| Requested Item not Supported on Time | The NG-RAN node is unable to provide the measurement results on time. |
| other MG being in use | Another Measurement Gap is being in use for the UE |

**<Next change>**

9.3.5 Information Element definitions

-- ASN1START

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-- Information Element Definitions

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**<unchaged text omitted>**

CauseRadioNetwork ::= ENUMERATED {

unspecified,

requested-item-not-supported,

requested-item-temporarily-not-available,

...,

serving-NG-RAN-node-changed,

requested-item-not-supported-on-time,

other-MG-being-in-use

}

**<unchaged text omitted>**