**3GPP TSG- Meeting #157 *S5-246069***

**Hyderabad, India, 14 – 18 October 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **0612** | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *For* [***HELP***](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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | New performance measurements for eDRX negotiation registration requests and accepts | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Apple, Deutsche Telekom | | | | | | | | | |
| ***Source to TSG:*** | SA5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | | 2024-10-16 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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)*  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:*** | | There is currently no performance measure defined in TS 28.552 quantifying the number of eDRX negotation registration requests and accepts. In this CR, it is proposed to define new measurments that capture the number of eDRX negotiation registration requests as well as the number of eDRX negotiation registration accepts. One usage of this performance measurements is to help calculate the eDRX negotiation succes rate for devices that request to use the eDRX feature. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding new performance measures capturing the number of eDRX negotiation registration requests and accepts. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Without these performance measurements, it is impossible to know how often devices that request the usage of the eDRX feature succed in doing so. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2.2.x (new), 5.2.2.y (new), A.z (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:*** | | S5-246069 is a revision of S5-245689 | | | | | | | | |

***Start of First change***

#### 5.2.2.x Number of eDRX negotiation registration requests

a) This measurement provides the number of registration requests, containing extended DRX parameters IE (see clause 8.2.6.22 of TS 24.501 [7]). received by the AMF.

b) CC

c) On receipt by the AMF from the UE of Registration Request containing extended DRX parameters IE (see clause 8.2.6.22 of TS 24.501 [7]).

d) A single integer value.

e) RM.RegEdrxReq

f) AMFFunction

g) Valid for packet switched traffic

h) 5GS

i) One usage of this performance measurements is help assess the number of users negotiating eDRX configuration with AMF, an assessment needed for proper resource dimensioning and planning on the AMF side for performance assurance purposes.

***Start of next change***

#### 5.2.2.y Number of eDRX negotiation registration accepts

a) This measurement provides the number of registration accepts, containing Negotiated extended DRX parameters IE (see clause 8.2.7.27 of TS 24.501 [7]). sent by the AMF.

b) CC

c) On the transmission by the AMF of Registration Accept containing Negotiated extended DRX parameters IE (see clause 8.2.7.27 of TS 24.501 [7]).

d) A single integer value.

e) RM.RegEdrxAccept

f) AMFFunction

g) Valid for packet switched traffic

h) 5GS

i) One usage of this performance measurements is help assess the number of users negotiating eDRX configuration with AMF versus the number users that the AMF successfully allocate the requested eDRX configuration to, an assessment needed for proper resource dimensioning and planning on the AMF side for performance assurance purposes.

***Start of next change***

# A.122 Use case for UE assistance with release preference information related measurements

The above newly proposed performance measurements in clauses 5.1.1.42 (RRC.OtherConfig.UAI.releasePreferenceConfig) and 5.1.1.43 (RRC.UAI.releasePreference.) are needed for the assessment of the usefulness of the 3GPP defined connection mode power saving mechanisms (UE Assistance with release preference specifically). If implemented, these will measure the impact of the applying these mechanisms on the UE’s daily battery consumption.

# A.z Use case for the number of eDRX negotiation registration requests and accepts.

The number of for eDRX negotiation registration requests and accepts help assess the number of users negotiating eDRX configuration with AMF versus the number users that the AMF successfully allocate the requested eDRX configuration to, an assessment needed for proper resource dimensioning and planning on the AMF side for performance assurance purposes.

***End of change***