**3GPP TSG-RAN WG2 Meeting # 113bis-e**  ***R2-2104636***

**E-Meeting, April 12th - 20th** **2021**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
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|  | **36.306** | **CR** | **1804** | **rev** | **2** | **Current version:** | **16.4.0** |  |
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| *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 | **X** | Core Network |  |

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| ***Title:***  | Redirection with MPS Indication |
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| ***Source to WG:*** | Perspecta Labs, CISA ECD, T-Mobile US, Ericsson, Qualcomm, NTT DoCoMo  |
| ***Source to TSG:*** | R2 |
|  |  |
| ***Work item code:*** | NR\_newRAT-Core, TEI16 |  | ***Date:*** | 2021-03-31 |
|  |  |  |  |  |
| ***Category:*** | **C** |  | ***Release:*** | Rel-16 |
|  | *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 canbe 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)* |
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| ***Reason for change:*** | Multimedia Priority Service (MPS) provides priority treatment to increase the probability of an authorized Service User’s Voice, Video, and Data communication. It is important that a UE involved in an MPS session continues the MPS session with priority upon successfully reconnected in 5GS or EPS following an RRC release with redirect. A UE can be in an MPS session in one of the following three ways: 1. An authorized Service User using a UE with an MPS subscription can initiate MPS when it originates a session (See TS 22.153 clause 5.1). In the case of 5GS, the UE is assigned Access Identity 1 (AI1) and is entitled to the special Establishment Cause (mps-PriorityAccess) and priority treatment when it originates a session.
2. An authorized Service User using a UE that does not have an MPS subscription can initiate MPS for an originating session but priority treatment is only obtained after MPS is established for the session (See TS 22.153 clause 5.1). In this case the priority treatment is based on network control of the priority session as opposed to the UE subscription to MPS.
3. A terminating UE receives priority treatment for an incoming MPS session independent of whether the terminating UE has a subscription for MPS (See TS 22.153 clause 5.4). In this case the terminating UE receives priority treatment as for the above originating cases.

 This CR addresses the 2nd and 3rd cases: When the originating/terminating UE of an MPS session has to redirect (to another cell in NR or to E-UTRA), it is entitled to maintain MPS priority treatment on the ongoing MPS session. The redirection decision is performed by the gNB/eNB/ng-eNB. The UE that needs to redirect to another cell, another RAT or another core network to receive service, should be able to connect to the target network at the RRC layer with MPS priority following the release with redirection. Currently, the RRC layer at the UE without an MPS subscription is not aware of an MPS priority session in the network and does not connect to the network with MPS priority at the RRC layer following a release with redirection.This MPS redirection procedure is applicable to an ongoing MPS session for which the gNB forces the UE to release with redirection. It is assumed that the gNB is aware of the MPS session via the ARP and/or QoS characteristics of the MPS session. The mpsPriorityIndicator change is added as an optional feature in Rel-16. |
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| ***Summary of change:*** | When the network performs a release with redirection, for UEs with MPS priority session(s), the network includes an MPS priority indication in the RRCRelease message. When connecting to the target network and the connection establishment is the result of release with redirect with *mpsPriorityIndication*, the UE sets the RRC Establishment Cause to *mps-PriorityAccess* if the target RAN is NR and to *highPriorityAccess* if the target is E-UTRA. First change:It is optional for the UE to support the MPS priority indication in the RRCRelease message.**Impact Analysis**:Impacted 5G architecture option:NR-SAImpacted functionality:Redirection from NR to: NR, LTE/EPC, LTE/5GC.Redirection from LTE/5GC to NR or LTE/5GC/EPC, and LTE/EPC to NR.Inter-operability:* If the network is implemented according to the CR and the UE is not; There is no inter-operability issue. The UE will ignore the *mpsPriorityIndication* and its redirection will occur without receiving MPS priority treatment in its new RRC connection.
* If the UE is implemented according to the CR and the network is not;

There is no inter-operability issue. The UE will not receive an indication from the network at the time of redirection; the UE will execute a normal redirection per standard. |
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| ***Consequences if not approved:*** | A user authorized to receive MPS priority service when using a UE that has no MPS subscription will not have MPS priority following a release with redirection.  |
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| ***Clauses affected:*** | 6.7.x |
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|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 36.331 CR 4579TS 38.331 CR 2413TS 38.306 CR 0526 |
| ***affected:*** |  | **X** |  Test specifications | TS/TR … CR … |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
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| ***Other comments:*** | Rev 2 includes editorial fixes in cover page and correction in Section number; Rev 1 points to new TS 36.306 v16.4.0 |
|  |  |
| ***This CR's revision history:*** | R2-2102234, R2-2103044 |

#### \*\*\*\*\* First change \*\*\*\*\*

## 6.7 RRC Connection

### 6.7.1 RRC Connection Reject with deprioritisation

It is optional for UE to support *RRCConnectionReject with deprioritisationReq* as specified in TS 36.331 [5].

### 6.7.2 RRC Connection Establishment Failure Temporary Qoffset

It is optional for UE to support RRC Connection Establishment failure temporary Qoffset as specified in TS 36.331 [5].

### 6.7.3 *mo-VoiceCall* establishment cause for mobile originating MMTEL video

It is optional for UE to support *mo-VoiceCall* establishment cause for mobile originating MMTEL video as specified in TS 36.331 [5].

### 6.7.4 *mo-VoiceCall* establishment cause for mobile originating MMTEL voice

It is optional for UE to support mo-VoiceCall establishment cause for mobile originating MMTEL voice as specified in TS 36.331 [5].

### 6.7.5 RRC Connection Re-establishment for the Control Plane CIoT EPS Optimization

It is optional for UE to support *RRCConnectionReestablishment* for the Control Plane CIoT EPS Optimization as specified in TS 36.331 [5]. This feature is only applicable if the UE supports any *ue-Category-NB*.

### 6.7.6 Void

### 6.7.x RRC Connection Release with MPS Priority Indication

It is optional for UE to support *RRCConnectionRelease with mpsPriorityIndication* as specified in TS 36.331 [5].

#### \*\*\*\*\* End of changes \*\*\*\*\*