**3GPP TSG-RAN WG2 Meeting #116bis-e *R2-22xxxx***

**Electronic, 17 – 25 Jan, 2022**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **36.306** | **CR** | **CRNum** | **rev** | **-** | **Current version:** | **16.7.0** |  |
|  |
| *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)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network | **X** | Core Network |  |

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|  |
| ***Title:***  | Introduction of MINT |
|  |  |
| ***Source to WG:*** | Ericsson, Lenovo, Motorola Mobility |
| ***Source to TSG:*** | R2 |
|  |  |
| ***Work item code:*** | TEI17 [MINT] |  | ***Date:*** | 2022-01-20 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***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 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)* |
|  |  |
| ***Reason for change:*** | CT1 is specifying a feature referred to as MINT. This feature is about PLMNs which experiencing outage during disasters. This feature allows UEs of PLMN which is experiencing so called "disaster conditions" to roam in other networks. Such type of roaming is called disaster roaming.Two aspects of this feature impacts RAN2 specifications. Namely:1. **Provision of disaster roaming information**: A network should be able to indicate which PLMNs' UEs are allowed to do disaster roaming.
2. **UAC for disaster roaming UEs**: A network should be able to bar UEs doing disaster roaming more aggresively than non-disaster roaming UEs. A UE that is doing disaster roaming will be applying Access Identity 3.

These aspects are optional features and do no need a AS capability indication.  |
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| ***Summary of change:*** | Captured MINT as an optional feature without AS capability indications. |
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| ***Consequences if not approved:*** | MINT is not supported in 36.306. |
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| ***Clauses affected:*** | 6.18.x (new) |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **N** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **N** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

# 6 Optional features without UE radio access capability parameters

The following clauses list the optional UE features not having UE radio access capability.

NOTE: This clause does not yet contain complete analysis of all features of this release of specification.

## Omitted unchanged parts

## 6.18 E-UTRA/5GC features

### 6.18.1 Void

### 6.18.2 Void

### 6.18.3 RRC Connection Re-establishment for the Control Plane CIoT 5GS Optimisation

It is optional for UE to support *RRCConnectionReestablishment* for the Control Plane CIoT 5GS Optimisation as specified in TS 36.331 [5]. A UE supporting *RRCConnectionReestablishment* for the Control Plane CIoT 5GS Optimisation shall also support NB-IoT/5GC. This feature is only applicable if the UE supports any *ue-Category-NB*.

### 6.18.4 NB-IoT/5GC

It is optional for UE to support NB-IoT when connected to 5GC. This feature is only applicable if the UE supports any *ue-Category-NB*.

### 6.18.5 MO-EDT for Control Plane CIoT 5GS Optimisation

It is optional for UE to support MO-EDT for Control Plane CIoT 5GS optimisations as specified in TS 24.501 [39]. A UE supporting MO-EDT for the Control Plane CIoT 5GS Optimisation shall also support NB-IoT/5GC or indicate support of *ce-EUTRA-5GC-r16*. This feature is only applicable if the UE supports *ce-ModeA-r13*, or for FDD if the UE supports any *ue-Category-NB*.

### 6.18.6 AS RAI

It is optional for UE to support AS Release Assistance Indication (AS RAI) in Downlink Channel Quality Report and AS RAI MAC Control Element as specified in TS 36.321 [4] when connected to 5GC. A UE supporting AS RAI shall also support NB-IoT/5GC or indicate support of *ce-EUTRA-5GC-r16*. This feature is only applicable if the UE supports *ce-ModeA-r13* or if the UE supports any *ue-Category-NB*.

### 6.18.x Minimization of service interruption

It is optional for UE to support minimization of service interruption including reporting to NAS of disaster roaming information for available PLMNs and Access Barring check for Access Identity 3, as specified in TS 36.331 [5].