**3GPP TSG-RAN WG2 Meeting #117-e *R2-220xxxx***

**Electronic meeting, 21 February – 3 March, 2022**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.306** | **CR** | **-** | **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 |  | Core Network |  |

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| ***Title:*** | Introduction of UE capabilities for Rel-17 eNPN | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Intel Corporation | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NG\_RAN\_PRN\_enh-Core | | | | |  | ***Date:*** | | | 2022-02-21 |
|  |  | | | |  | |  | | |  |
| ***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 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)*  *Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | This CR is to introduce the UE Capabilities for Rel-17 NPN related to IMS emergency services over SNPN based on the following RAN2#116bis-e & RAN2#117e agreements:    116bis-e   * [032] No UE AS capability signalling is needed for CH and onboarding. * [032] No CH and onboarding AS capabilities without capability signalling needs to be specified in TS38.306 * [032] There is no need to specify UE AS capability signalling for CGI reporting for CH and onboarding * [032] No UE AS capability signalling is needed for IMS emergency services. * [032] The existing conditional mandatory without capability signalling for IMS emergency call can be reused for IMS emergency call for UE in SNPN access mode. Add the following to the existing capability: “It is mandatory to support IMS emergency call over SNPN for UEs that are IMS voice capable over SNPNs”   **117e**   * Agreed to Implement Proposal 3 of R2-2202896 and Proposal 4 of R2-2203447 in the running CR for 38.306. * Confirm Proposal 4 of R2-2202896 (Add the following to the existing capability for IMS emergency call: “For SNPN capable UE, it is mandatory to support IMS emergency call over SNPN for UEs that are IMS voice capable over SNPNs”.) | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Update the Sections 4.2.13 and 6 to include a statement for IMS emergency services over SNPN in the existing conditional mandatory capability for IMS emergency call. | | | | | | | | |
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| ***Consequences if not approved:*** | | UE capabilities for Rel-17 NPN are not introduced. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.2.13, 6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

START OF CHANGE

### 4.2.13 IMS Parameters

| Definitions for parameters | Per | M | FDD-TDD  DIFF | FR1-FR2  DIFF |
| --- | --- | --- | --- | --- |
| ***voiceFallbackIndicationEPS-r16***  Indicates whether the UE supports *voiceFallbackIndication* in *RRCRelease* and *MobilityFromNRCommand*. If this field is included, the UE shall support IMS voice over NR and IMS voice over E-UTRA via EPC. | UE | No | No | No |
| ***voiceOverEUTRA-5GC***  Indicates whether the UE supports IMS voice over E-UTRA via 5GC. It is mandated to the UE if the UE is capable of IMS voice over E-UTRA via 5GC. Otherwise, the UE does not include this field. If this field is included and the UE is capable of E-UTRA with EPC, the UE shall support IMS voice over E-UTRA via EPC. | UE | No | No | No |
| ***voiceOverNR***  Indicates whether the UE supports IMS voice over NR. It is mandated to the UE if the UE is capable of IMS voice over NR (including SNPN if the UE is SNPN capable). Otherwise, the UE does not include this field. If this field is included and the UE is capable of E-UTRA with EPC, the UE shall support IMS voice over E-UTRA via EPC. | UE | No | No | Yes |
| ***voiceOverSCG-BearerEUTRA-5GC***  Indicates whether the UE supports IMS voice over SCG bearer of NE-DC. | UE | No | No | N/A |

NOTE: In this release of specification, IMS voice over split bearer is not supported for NR-DC and NE-DC.

END OF CHANGE

START OF CHANGE

# 6 Conditionally mandatory features without UE radio access capability parameters

| Features | Condition |
| --- | --- |
| Skipping UL configured grant if no data to transmit. | Either *configuredUL-GrantType1* or *configuredUL-GrantType2* is supported. |
| Downlink SDAP header | Either NAS reflective QoS or *as-ReflectiveQoS* is supported. |
| IMS emergency call | It is mandatory to support IMS emergency call over PLMN for UEs which are IMS voice capable in NR.  ~~For SNPN capable UE,~~It is mandatory to support IMS emergency call over SNPN for UEs that are SNPN capable and IMS voice capable over SNPNs. |
| MAC subheaders with one-octet eLCID field | It is mandatory to support MAC subheaders with one-octet eLCID field for UEs/IAB-MTs supporting MAC CEs using extended LCID values as specified in TS 38.321 [8]. |

END OF CHANGE

# Annex A: R2 feature list for this CR

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Features | Index | Feature group | Components | *Prerequisite feature groups* | *Field name in TS 38.331 [2]* | *Parent IE in TS 38.331 [2]* | Need of FDD/TDD differentiation | Need of FR1/FR2 differentiation | Note | Mandatory/Optional |
|  | xx-y3 | IMS emergency service over SNPN | For SNPN capable UE, it is mandatory to support IMS emergency call over SNPN for UEs that are IMS voice capable over SNPNs |  | *n/a* | *n/a* | n/a | n/a | *Include it in existing IMS emergency call* | Conditional mandatory without capability signalling |