**3GPP TSG RAN WG1 Meeting #105-e R1-21xxxxx**

**e-Meeting, May 10th – 27th, 2021**

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| *CR-Form-v12.0* | | | | | | | | |
| **DRAFT CHANGE REQUEST** | | | | | | | | |
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|  | **36.211** | **CR** | **xxxx** | **rev** | **-** | **Current version:** | **V15.13.0** |  |
|  | | | | | | | | |
| *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:*** | Clarification on NPUSCH postponement for NB-IoT | | | | | | | | | |
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| ***Source to WG:*** | […] | | | | | | | | | |
| ***Source to TSG:*** | R1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NB\_IOTenh2-Core | | | | |  | ***Date:*** | | | 2021-05-xx |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-15 |
|  | *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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In RAN1 #95 meeting, we had following agreements:  *For the new NPRACH resources introduced in Rel-15,*  *For non-EDT NPRACH resources, the UE postpones NPUSCH in those resources only if the UE indicates support for the corresponding feature(s).*  *For EDT NPRACH resources, the UE postpones NPUSCH in those resources only during an EDT procedure.*  However, in Clause 10.1.3.6 of TS36.211, the following triggering cases for NPUSCH postponement related to the first sub-bullet of above RAN1 #95 agreements are not captured in Rel-15 specification:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Case #** | **NPRACH preamble** | **Carrier** | **UE capability** | **RRC Configuration** | | 1 | Legacy(i.e. Format 0/1) | Non-anchor | *multiCarrier-NPRACH* and *mixedOperationMode* | *SystemInformationBlockType22 > ul-ConfigListMixed-r15* | | 2 | Format 2 | Non-anchor | *multiCarrier-NPRACH* and *nprach-Format2* | *SystemInformationBlockType23-NB-r15 > ul-ConfigList-v1530 > nprach-ParametersListFmt2-r15* | | 3 | Format 2 | Non-anchor | *multiCarrier-NPRACH*, *mixedOperationMode* and *nprach-Format2* | *SystemInformationBlockType23-NB-r15 > ul-ConfigListMixed-v1530 > nprach-ParametersListFmt2-r15* | | 4 | Format 2 | Anchor | *nprach-Format2* | *SIB2 > RadioResourceConfigCommonSIB-NB-r13 > nprach-ParametersListFmt2-r15* | | 5 | TDD | Anchor | *[NOTE1]* | *SIB2 > RadioResourceConfigCommonSIB-NB-r13 > nprach-ParametersListTDD-r15* | | 6 | TDD | Non-anchor | *multiCarrier-NPRACH*  *[NOTE1]* | *SystemInformationBlockType22 > ul-ConfigCommonListTDD-NB-r15>* *nprach-ParametersListTDD-r15* | | *NOTE1: No explicit capability for TDD NPRACH* | | | | | | | | | | | | | |
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| ***Summary of change:*** | | Adding the missing triggering cases for NPUSCH postponement according to RAN1 #95 agreement “*For non-EDT NPRACH resources, the UE postpones NPUSCH in those resources only if the UE indicates support for the corresponding feature(s)”*. | | | | | | | | |
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| ***Consequences if not approved:*** | | NPUSCH postponement rule is not clear for above 6 triggering cases. | | | | | | | | |
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| ***Clauses affected:*** | | 10.1.3.6 | | | | | | | | |
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|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

**10.1.3.6 Mapping to physical resources**

**<Unchanged parts are omitted>**

If a mapping to  slots or a repetition of the mapping contains a resource element which overlaps with

- any configured NPRACH resource according to *nprach-ParametersList* in *SystemInformationBlockType2-NB*, or- any configured NPRACH resource according to *nprach-ParametersList* given by *ul-ConfigList* in *SystemInformationBlockType22-NB* and if the UE indicates *multiCarrier-NPRACH* as supported, or

- any configured NPRACH resource according to *nprach-ParametersList* given by *ul-ConfigListMixed* in *SystemInformationBlockType22-NB* and if the UE indicates *multiCarrier-NPRACH* and *mixedOperationMode* as supported, or

- any configured NPRACH resource according to *nprach-ParametersListFmt2* in *SystemInformationBlockType2-NB* and if the UE indicates *nprach-Format2* as supported, or

- any configured NPRACH resource according to *nprach-ParametersListFmt2* given by *ul-ConfigList* in *SystemInformationBlockType23-NB* and if the UE indicates *multiCarrier-NPRACH* and *nprach-Format2* as supported, or

- any configured NPRACH resource according to *nprach-ParametersListFmt2* given by *ul-ConfigListMixed* in *SystemInformationBlockType23-NB* and if the UE indicates*multiCarrier-NPRACH, mixedOperationMode* and *nprach-Format2* as supported, or

- any configured NPRACH resource according to *nprach-ParametersListTDD* in *SystemInformationBlockType2-NB*, or

- any configured NPRACH resource according to *nprach-ParametersListTDD* in *SystemInformationBlockType22-NB* and if the UE indicates *multiCarrier-NPRACH* as supported, or

- any configured NPRACH resource configured for Early Data Transmissionand if the NPUSCH transmission is during an Early Data Transmission procedure [12, Clause 7.3b],

then,

- for  the NPUSCH transmission in overlapped slots is postponed until the next  slots not overlapping with any configured NPRACH resource.

- for  the NPUSCH transmission in overlapped  slots is postponed until the next  slots starting with the first slot satisfying and not overlapping with any configured NPRACH resource.

**<Unchanged parts are omitted>**