**3GPP TSG RAN WG1 Meeting #106-e R1-210xxxx**

**e-Meeting, August 16th – 27th, 2021**

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| *CR-Form-v12.0* |
| **DRAFT CHANGE REQUEST** |
|  |
|  | **36.211** | **CR** | **xxxx** | **rev** | **-** | **Current version:** | **V16.6.0** |  |
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| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_blank)*** *on using this form: comprehensive instructions can be found at <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:*** | Moderator (ZTE), Sanechips |
| ***Source to TSG:*** | R1 |
|  |  |
| ***Work item code:*** | NB\_IOTenh3-Core |  | ***Date:*** | 2021-08-25 |
|  |  |  |  |  |
| ***Category:*** | **A** |  | ***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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
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| ***Reason for change:*** | In RAN1#95 meeting the following was agreed. *Agreement:* *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 are not included:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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 1~6 for NPUSCH postponement. |
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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:*** |  |
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| ***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 $n\_{s}mod 2=0$ $n\_{s}mod 2=0$and not overlapping with any configured NPRACH resource.

**<Unchanged parts are omitted>**