TSG-RAN WG1 #112b-e R1-23xxxxx

e-meeting, April 17 – 26, 2023

Source: Ericsson

Title: Draft CR 38.211 – TEI18

Agenda Item: 9.18

Document for: Discussion and Decision

# Introduction

This thread will discuss the draft CR to 38.211 forTEI18.

The draft CR is available in R1-2302743

First checkpoint: April 20, UTC 17.00

# Discussion – first round

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| Company | Comments |
| ZTE | **Comment 1:**According to the TEI guidance as follows, a unique TEI identifier should be used across the WGs. Since our RAN2/3 colleagues will use [1symbol\_PRS] as the identifier. Can I suggest to use the same one in RAN1 spec?

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| **E.2 Each TEI cat.B/C CR and each TEI cat.F/A CR that corrects functionality related to an earlier TEI cat.B/C CR shall have a unique TEI identifier in square brackets [ ] at the end of the CR title on the CR cover sheet. TEI cat.B/C CRs without such a unique TEI identifier cannot be approved at RAN.**This principle was endorsed in RP-202867 [7] and further guidance for this approach is provided here:- The TEI identifier should be short (4 to 18 characters using letters and/or digits or using \_ or - but avoiding blanks or other special characters which will complicate searches) and characterize the CR.- The originating company takes care that related CRs in other WGs use the same TEI identifier.- Unique identifiers are not added retroactively: Cat.F/A CRs for TEIs which did not have a unique identifier by RAN #91e will not get a unique identifier.- Apart from plain TEI CRs, the unique TEI identifiers shall also be applied to NR\_newRAT-Core, TEIxx CRs because NR\_newRAT-Core was the huge WI for 5G.- As the unique idendifiers are part of the CR title, they will be automatically stored in the CR database. Therefore CR authors have to make sure that the complete CR title in 3GU is in line with the title on the CR cover.- For cases where it is not 100% clear whether a linked CR was agreed in another WG, it is the task of the CR author to double-check the situation in the week after the WG meeting and to inform MCC in case any updates of CR titles are required otherwise they risk that not properly linked CRs are rejected at RAN level. |

**Comment 2:** since this is a new feature, should it be Category B rather than F?**Comment 3:** The symbol offset 13 is naturally being supported for 1-symbol PRS. Based on the current ASN.1, the existing higher layer parameters can be extended to support the number of PRS symbols = 1 because the existing parameters in 37.355 and 38.331 are extendable. However, for the symbol offset parameters, the existing parameters are not extendable, so new parameters should be introduced. The following change is additiotnally suggested on top of R1-2302743. - $l\_{start}^{PRS}$ is the first symbol of the downlink PRS within a slot and given by the higher-layer parameter *dl-PRS-ResourceSymbolOffset [or dl-PRS-ResourceSymbolOffset-r18]*; |
| Huawei, HiSilicon | The cover sheet should be updated. It should be PRS, instead of SRS. |
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**Editor proposal:**

The cover page will be corrected and the identifier [1symbol\_PRS] added.

On comment 3 from ZTE, I respectfully disagree. As far as I understand, RAN2 preferably omits the release number when referring to field names in from within the field description tables or from procedural text. The name ‘*dl-PRS-ResourceSymbolOffset’* is generic and may refer to the variable *dl-PRS-ResourceSymbolOffset* or *dl-PRS-ResourceSymbolOffset-r18*. The RRC specification captures when to use the field with/without -r18.

# Discussion – second round

An updated draft CR is uploaded here: [https://www.3gpp.org/ftp/TSG\_RAN/WG1\_RL1/TSGR1\_112b-e/Inbox/drafts/9.18(Other)/%5B112bis-e-R18-38.211-TEI18%5D/R1-23xxxxx%20draft%20CR%2038.211%20TEI%20v2.docx](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_112b-e/Inbox/drafts/9.18%28Other%29/%5B112bis-e-R18-38.211-TEI18%5D/R1-23xxxxx%20draft%20CR%2038.211%20TEI%20v2.docx)

Second checkpoint: April 25, UTC 17.00

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| Company | Comments |
| ZTE | Thanks for editor’s effort. Regarding the comment 3, as long as the RRC parameter is unique between different Releases, I agree with editor. However, if a parameter in a new Release is introduced even with the same parameter name but different suffixes, RAN1 specs should explicitly list it to avoid confusion especially they refer to different values. Here is an example in the current 38.211are given by the higher-layer parameters *nrofRBs*, and *startingRB* in the *TRS-ResourceSet* IE, where *startingRB* is relative to common resource block 0 and the density $ρ=3$.The UE shall assume that a CSI-RS is transmitted using antenna ports  numbered according to where  is the sequence index provided by Tables 7.4.1.5.3-2 to 7.4.1.5.3-5,  is the CDM group size, and  is the number of CSI-RS ports. The CDM group index  given in Table 7.4.1.5.3-1 corresponds to the time/frequency locations  for a given row of the table. The CDM groups are numbered in order of increasing frequency domain allocation first and then increasing time domain allocation. For a CSI-RS resource configured as periodic or semi-persistent by the higher-layer parameter *resourceType*, configured by the higher-layer parameter *CSI-RS-CellMobility* or configured by the higher-layer parameter *TRS-ResourceSet-r17*, the UE shall assume that the CSI-RS is transmitted in slots satisfyingJust for information, the CR has been agreed in RAN2 in principle, a part of change is as follows dl-PRS-ResourceSlotOffset-r16 INTEGER (0..nrMaxResourceOffsetValue-1-r16), dl-PRS-ResourceSymbolOffset-r16 INTEGER (0..12), dl-PRS-QCL-Info-r16 DL-PRS-QCL-Info-r16 OPTIONAL, --Need ON ..., [[ dl-PRS-ResourcePrioritySubset-r17 DL-PRS-ResourcePrioritySubset-r17 OPTIONAL -- Need ON ]],[[dl-PRS-ResourceSymbolOffset-r18 INTEGER (0..13) OPTIONAL -- Need ON]]} |
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**Editor proposal:**

I will keep the way of referring to the RRC parameters used in the past in 38.211 as well as by RAN2, namely that parameters names without -r*nn* suffix refers to the whole “family” (-r16, -r17, -r18, etc). With that I suggest the chairman to endorse the latest draft CR in [https://www.3gpp.org/ftp/TSG\_RAN/WG1\_RL1/TSGR1\_112b-e/Inbox/drafts/9.18(Other)/%5B112bis-e-R18-38.211-TEI18%5D/R1-23xxxxx%20draft%20CR%2038.211%20TEI%20v2.docx](https://www.3gpp.org/ftp/TSG_RAN/WG1_RL1/TSGR1_112b-e/Inbox/drafts/9.18%28Other%29/%5B112bis-e-R18-38.211-TEI18%5D/R1-23xxxxx%20draft%20CR%2038.211%20TEI%20v2.docx)

Guidance from a former RAN2 chairman:

**RAN2 preferably omits the release number** when referring to field names in from within the field description tables or from procedural text. We add the number only if it is necessary to understand how to set and read the values. E.g.: We have cases where the legacy field (e.g. myInitialTimerValue) is mandatory present and has a certain value range (e.g. INTEGER(1..10). In a later release we want to increase the value range to 20. Then we have to introduce a new field (myInitialTimerValue-r18 INTEGER(11..20) OPTIONAL”. But since the legacy field was mandatory in ASN.1 the gNB must anyway set it to some value. Then we usually write in the field description something like:

“*The shall UE initialize and start the timer with myInitialTimerValue. When myInitialTimerValue-r18 is present the UE shall ignore myInitialTimerValue.*”

So, the first mentioning of “myInitialTimerValue” is generic and could refer to the legacy or to the new field. The second sentence clarifies how to ignore the legacy field.