3GPP TSG RAN WG1 #117 R1-240xxxx

Fukuoka, Japan, 20 – 24 May, 2024

**Agenda item: 7**

**Source: Moderator (Nokia)**

**Title: Discussion on updating references to capture Rel-17 NR over NTN, second round**

**WI code: NR\_NTN\_solutions-Core**

**Release: Rel-17**

**Document for: Discussion and Decision**

# Introduction

In the drafts folder there are 3 draft CRs for capturing the correct references for RAN4 specifications (TS 38.101-5) such that NR over NTN will be possible to implement.

**Location of files:**

[http://10.10.10.10/ftp/RAN/RAN1/Inbox/drafts/7(NR\_uptoR17\_Maint)/NR\_NRN\_references/draft\_CR](http://10.10.10.10/ftp/RAN/RAN1/Inbox/drafts/7%28NR_uptoR17_Maint%29/NR_NRN_references/draft_CR)

**Note:** The intention is that the draft CRs will be incorporated to the alignment CRs for the respective specifications.

Update based on the Wednesday online session: Companies are encouraged to continue commenting on the draft CRs. Views are encouraged until 2 hours before the session where AI 7 will be treated on Thursday.

# Discussion

Please provide input with respect to the draft CR for TS 38.211 ([R1-240abcd 38211CRdraft R17\_rev1.docx](http://10.10.10.10/ftp/RAN/RAN1/Inbox/drafts/7%28NR_uptoR17_Maint%29/NR_NRN_references/draft_CR/R1-240abcd%2038211CRdraft%20R17_rev1.docx)) here:

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| **Companies** | **Correct/Not correct** | **Comments and Views** |
| Ericsson |  | The draft CR was made available during the meeting week and thus we need more time to review it. |
| Ericsson v011 | Not correct | * Clause 2: The title of 38.101-5 should be "NR; User Equipment (UE) radio transmission and reception; Part 5: Satellite access Radio Frequency (RF) and performance requirements ~~NR~~"
* Clause 5.4: Reference number should be added, e.g., [15, 38.101-5].

In addition (not related to NTN but could be fixed “while we are at it”)* Clause 2: 38.101-1 and 38.101-2 are missing in the reference list.
* Clause 5.4: Reference numbers should be added for the references to [XX, 38.101-1] and [YY, 38.101-2].
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Please provide input with respect to the draft CR for TS 38.213 ([R1-240abcd 38213CRdraft R17\_rev1.docx](http://10.10.10.10/ftp/RAN/RAN1/Inbox/drafts/7%28NR_uptoR17_Maint%29/NR_NRN_references/draft_CR/R1-240abcd%2038213CRdraft%20R17_rev1.docx)) here:

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| **Companies** | **Correct/Not correct** | **Comments and Views** |
| Ericsson |  | The draft CR was made available during the meeting week and thus we need more time to review it. |
| Ericsson v011 | Not correct | * Clause 2: The title of 38.101-5 should be "NR; User Equipment (UE) radio transmission and reception; Part 5: Satellite access Radio Frequency (RF) and performance requirements ~~NR~~"
* Clause 4.1: One reference to 38.101-5 seems to be missing at the position marked \* below

From the above cases, if the SCS of SS/PBCH blocks is not provided by *ssbSubcarrierSpacing*, the applicable cases for a cell depend on a respective frequency band, as provided in [8-1, TS 38.101-1], [8-2, TS 38.101-2], and [8-5, TS 38.101-5]. A same case applies for all SS/PBCH blocks on the cell. If a 30 kHz SS/PBCH block SCS is indicated by *ssbSubcarrierSpacing*, Case B applies for frequency bands with only 15 kHz SS/PBCH block SCS as specified in [8-1, TS 38.101-1]\*, and the case specified for 30 kHz SS/PBCH block SCS in [8-1, TS 38.101-1] applies for frequency and [8-5, TS 38.101-5]bands with 30 kHz SS/PBCH block SCS or both 15 kHz and 30 kHz SS/PBCH block SCS as specified in [8-1, TS 38.101-1] and [8-5, TS 38.101-5]. For a UE configured to operate with carrier aggregation over a set of cells in a frequency band of FR2 or with frequency-contiguous carrier aggregation over a set of cells in a frequency band of FR1, if the UE is provided SCS values by *ssbSubcarrierSpacing* for receptions of SS/PBCH blocks on any cells from the set of cells, the UE expects the SCS values to be same. * Clause 13: If shared spectrum channel access is not supported for NTN, the changes in this clause are not needed.
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Please provide input with respect to the draft CR for TS 38.214 ([R1-240abcd 38214CRdraft R17\_rev1.docx](http://10.10.10.10/ftp/RAN/RAN1/Inbox/drafts/7%28NR_uptoR17_Maint%29/NR_NRN_references/draft_CR/R1-240abcd%2038214CRdraft%20R17_rev1.docx)) here:

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| **Companies** | **Correct/Not correct** | **Comments and Views** |
| Ericsson |  | The draft CR was made available during the meeting week and thus we need more time to review it. |
| Ericsson v011 |  | We agree with the offline comment mentioned in the Summary below that the draft CR is not needed. |
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# Summary

Only limited input has been received:

* Ericsson requested more time to review the draft CRs.
* Offline a comment was received that the draft CR for TS 38.214 is not needed, as this specific part of the specification is related to access to shared spectrum, so if the intention is to explicitly exclude shared spectrum access, the draft CR for TS 38.214 is not needed.
* Additionally, it has been pointed out during Wednesday online session that TS 38.211 does not in general carry a reference to TS 38.101, and hence the update on the section 2 would not be needed.

**Recommendation**

Revisit this topic at RAN1#118.