**3GPP TSG-RAN WG2 Meeting #118-e R2-2206178**

**Electronic, 09 – 20 May 2022**

**Agenda item: 6.20.1**

**Source: Qualcomm Incorporated**

**Title: [AT118-e][211][71 GHz] Stage-2 corrections for 71 GHz (Qualcomm)**

**Document for: Discussion and decision**

# Introduction

This document will report the discussion and outcome of Stage-2 corrections for 71 Ghz per the following email discussion:

* [AT118-e][211][71 GHz] Stage-2 corrections for 71 GHz (Qualcomm)

 Scope: Discuss Stage-2 corrections for 71 GHz and provide proposals for resolution

      Scope: Finalize Stage-2 CR for RAN slicing based on meeting decisions.

 Intended outcome: Agreeable Stage-2 CR in [R2-2206178](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_118-e/Docs/R2-2206178.zip).

 Deadline: Deadline 5

The Chair Notes has the following regarding Deadline 5:

**Deadline 5 (discussions for 2nd week Thu/Fri online):**

* **Comment deadline:** Wednesday W2, 0400 UTC (for collecting views)
* **Rapporteur proposals:** Wednesday W2, 0800 UTC (proposed resolution of issues)
* **Document deadline:** Wednesday W2, 1600 UTC (report or agreed CRs)
	+ No extensions to this deadline for regular discussions. Discussions handling CRs may continue to short post-meeting email (based on chair decision).

Please provide your contact information in the table below.

|  |  |
| --- | --- |
| **Company** | **Contact Name, Email** |
| Qualcomm | Ozcan Ozturk, oozturk@qti.qualcomm.com |
| OPPO | shicong@oppo.com |
| Nokia | Jarkko Koskela (jarkko.t.koskela@nokia.com) |
| Ericsson | min.w.wang@ericsson.com |
| LG Electronics | Gyeong-Cheol LEE (gyeongcheol.lee@lge.com) |
| Huawei, HiSilicon | Tao Cai, tao.cai@huawei.com |
| Samsung | Taeseop Lee, taeseop.lee@samsung.com |

# Discussion

The following contributions were submitted for 38.300 corrections:

[R2-2204852](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_118-e/Docs/R2-2204852.zip) Correction of RACH preamble lengths for FR2-2 Qualcomm Incorporated CR Rel-17 38.300 17.0.0 0447 - F NR\_ext\_to\_71GHz-Core

[R2-2205195](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_118-e/Docs/R2-2205195.zip) Correction of 38.300 Ericsson draftCR Rel-17 38.300 17.0.0 F NR\_ext\_to\_71GHz-Core

*(moved from 6.20.3)*

[R2-2204869](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_118-e/Docs/R2-2204869.zip) Correction to Stage 2 spec for Ext71GHz Huawei, HiSilicon CR Rel-17 38.300 17.0.0 0448 - F NR\_ext\_to\_71GHz-Core

*(moved from 6.20.2)*

Both R2-2204852 and R2-2205195 have the exact same change, which corrects the preamble lengths for 480 kHz. Since the current specification is clearly wrong, it should be straight-forward to agree to this. It is expected that only one CR per TS will be generated for each WI in this meeting; therefore, it seems easier to agree to R2-2204852.

**Question 1: Can R2-2204852 be agreed? If not, please justify your response.**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| OPPO | Yes |  |
| Nokia | Yes |  |
| Ericsson | Yes |  |
| LGE | Yes |  |
| Huawei, HiSilicon | Yes |  |
| Intel | Yes |  |
| Samsung | Yes |  |

**Summary:**

**Proposal:**

[R2-2204869](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_118-e/Docs/R2-2204869.zip) suggests a change in the usage of “dynamic channel access”. It points out that this mode is not defined in 37.213. This is indeed correct. The change in the CR keeps this term for FR1 but not FR2-2. However, since the term “dynamic” is not defined in 37.213, keeping it for FR1 will also not be correct.

The rapporteur thinks that we can go one step further and make the change also applicable to Rel-16 to have a more comprehensive text. Then, the change in the CR can be modified as follows:

The gNB performs channel access mode procedures as described in TS 37.213 [37]. the gNB and the UE may apply Listen-Before-Talk (LBT) before performing a transmission on a cell configured with shared spectrum channel access. When LBT is applied, the transmitter listens to/senses the channel to determine whether the channel is free or busy and performs transmission only if the channel is sensed free.

**Question 2: Can we remove the usage of “dynamic” and “semi-static” access modes from 38.300 and refer simply to 37.213 instead as above?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| OPPO | Ok |  |
| Nokia | OK |  |
| Ericsson | ok |  |
| LGE | Yes |  |
| Huawei, HiSilicon | Yes |  |
| Intel | ok |  |
| Samsung | Yes |  |

**Summary:**

**Proposal:**

**Question 3: If the response to Q2 is “Yes”, can we also make the change applicable to Rel-16?**

|  |  |  |
| --- | --- | --- |
| **Company** | **Response** | **Comments** |
| OPPO |  | No strong view on appling for R-16 |
| Nokia | OK but nothing wrong to keep R16 text as well |  |
| LGE | Not sure | Keeping R16 text is ok as it is, but, no strong view, can follow the majority view. |
| Huawei, HiSilicon | Yes | Rel-16 should be changed as well for the same reason that “dynamic channel access mode” is not defined in 37.213 at least for sentence “The gNB operates in either dynamic or semi-static channel access mode as described in TS 37.213 [37].” |
| Intel | No strong view as the new text is generic to FR |  |
| Samsung | Yes | Fine with making the change also in R-16 for the consistency between 38.300 and 37.213. |

**Summary:**

**Proposal:**

# Conclusion

Based on the discussion and the feedback from companies above, the following are proposed for the corrections of Rel-17 Stage-2 corrections for 71 Ghz: