**3GPP TSG-RAN WG4 Meeting # 100-e R4-2115389**

**Electronic Meeting, 16th – 27th August, 2021**

**Agenda item:** 7, 8, 11

**Source:** Moderator (Ericsson)

**Title:** Email discussion summary for [100-e][214] Spectrum\_RRM

**Document for:** Information

# Introduction

The document contains discussion related to the RRM core and performance requirements for spectrum related WIs.

The document contains the following main topic:

* Topic #1: NR\_FR2\_FWA\_Bn259 (FWA band n262) (Agenda item: 8.40.2)

# Topic #1: NR\_FR2\_FWA\_Bn259

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| [**R4-2114465**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_100-e/Docs/R4-2114465.zip) | Ericsson | RRM requirements for FR2 FWA for band n259:* Band group and
* RRM performance requirements defining the conditions for band n259 for UE PC5
 |
| [**R4-2114466**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_100-e/Docs/R4-2114466.zip) | Ericsson | Draft CR on RRM core and performance requirements for FR2 FWA for band n259 in 38.133 |
|  |  |  |

## Open issues summary

### Sub-topic 1-1: RRM core requirements for FR2 FWA for band n259 in 38.133

* Proposal for band group:
	+ Option 1: Ericsson (R4-2114465/R4-2114466)
		- Proposed band group Q for UE power class 5 for band n259 in Table 3: NR frequency band groups for FR2, TS 38.133
	+ Other option: None
* Recommended WF
	+ Wait for agreements in RF group on UE RF requirements before agreement on RRM band grouping for FR2 FWA for band n259

### Sub-topic 1-2: RRM performance requirements for FR2 FWA for band n259 in 38.133

* Proposal for minimum SSB\_RP and minimum CSI-RS\_RP levels for conditions in annex B, TS 38.133:
	+ Option 1: Ericsson (R4-2114465/R4-2114466)
		- Minimum SSB\_RP and minimum CSI-RS\_RP levels for conditions are derived based on following observations:
			* REFSENS of n259 for PC5 is 2.3 dB higher than that of n258 for PC5.
			* EIS spherical coverage of n259 for PC5 is 2.3 dB higher than that of n258 for PC5.
	+ Other option: None
* Recommended WF
	+ Wait for agreements in RF group on UE RF requirements before agreement on RRM performance requirements (conditions in annex B, 38.133) for FR2 FWA for band n259.

## Companies views’ collection for 1st round

### Open issues

**Sub-topic 1-1: RRM core requirements for FR2 FWA for band n259 in 38.133**

|  |  |
| --- | --- |
| **Company** | **Comments** |
| SoftBank | Support Option 1 and we are fine with the recommended WF.  |
| apple | OK with the WF. |
| Qualcomm | Support the WF |
| Huawei | OK with the recommended WF to wait for RF agreements. |
| E/// | UE RF requirements impacting RRM core are being discussed in RF group ([100-e][126] NR\_FR2\_FWA\_Bn259\_Bn257\_Bn258). We can continue follow the RF progress in the 2nd round. |

**Sub-topic 1-2: RRM performance requirements for FR2 FWA for band n259 in 38.133**

|  |  |
| --- | --- |
| **Company** | **Comments** |
| SoftBank | Support Option 1 and we are fine with the recommended WF.  |
| apple | Option 1 makes sense. OK with the WF. |
| Qualcomm | Support the WF |
| Huawei | OK with the recommended WF to wait for RF agreements. |
| E/// | UE RF requirements impacting RRM performance are being discussed in RF group ([100-e][126] NR\_FR2\_FWA\_Bn259\_Bn257\_Bn258). We can continue follow the RF progress in the 2nd round. |

### CRs/TPs comments collection

|  |  |
| --- | --- |
| **CR/TP number** | **Comments collection** |
| [**R4-2114466**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_100-e/Docs/R4-2114466.zip)(draftCR, Ericsson) |  |
|  |
|  |
|  |
|  |  |
|  |
|  |

## Summary for 1st round

### Open issues

|  |  |
| --- | --- |
|  | **Status summary**  |
| **Sub-topic 1-1** | **RRM core requirements for FR2 FWA for band n259 in 38.133***Tentative agreements:** Wait for agreements in RF group on UE RF requirements before agreement on RRM band grouping for FR2 FWA for band n259.

*Recommendations for 2nd round: Follow progress in RF group under thread ([100-e][126] NR\_FR2\_FWA\_Bn259\_Bn257\_Bn258).* |
| **Sub-topic 1-2** | **RRM performance requirements for FR2 FWA for band n259 in 38.133***Tentative agreements:** Wait for agreements in RF group on UE RF requirements before agreement on RRM performance requirements (conditions in annex B, 38.133) for FR2 FWA for band n259.

*Recommendations for 2nd round: Follow progress in RF group under thread ([100-e][126] NR\_FR2\_FWA\_Bn259\_Bn257\_Bn258).* |
|  |  |

### CRs/TPs

*Note: The tdoc decisions shall be provided in Section 3 and this table is optional in case moderators would like to provide additional information.*

|  |  |
| --- | --- |
| **CR/TP number** | **CRs/TPs Status update recommendation**  |
| XXX | *Based on 1st round of comments collection, moderator can recommend the next steps such as “agreeable”, “to be revised”* |

## Discussion on 2nd round (if applicable)

### Open issues

**Sub-topic 1-1: RRM core requirements for FR2 FWA for band n259 in 38.133**

* Follow progress in RF group under thread ([100-e][126] NR\_FR2\_FWA\_Bn259\_Bn257\_Bn258). Band grouping is based on UE RF agreements on REFSENS.

**Comments on Sub-topic 1-1: RRM core requirements for FR2 FWA for band n259 in 38.133**

|  |  |
| --- | --- |
| **Company** | **Comments** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**Sub-topic 1-2: RRM performance requirements for FR2 FWA for band n259 in 38.133**

Follow progress in RF group under thread ([100-e][126] NR\_FR2\_FWA\_Bn259\_Bn257\_Bn258). Performance requirements are based on UE RF agreements on REFSENS and EIS at spherical coverage.

**Comments on Sub-topic 1-2: RRM performance requirements for FR2 FWA for band n259 in 38.133**

|  |  |
| --- | --- |
| **Company** | **Comments** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

### CRs/TPs comments collection

|  |  |
| --- | --- |
| **CR/TP number** | **Comments collection** |
| R4-2115330 (Rev of [**R4-2114466**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_100-e/Docs/R4-2114466.zip)**)** (Ericsson) |  |
|  |
|  |
|  |
|  |  |
|  |
|  |

# Recommendations for Tdocs

## 1st round

**New tdocs**

|  |  |  |
| --- | --- | --- |
| **Title** | **Source** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |

**Existing tdocs**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tdoc number** | **Title** | **Source** | **Recommendation**  | **Comments** |
| [**R4-2114465**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_100-e/Docs/R4-2114465.zip) | Analysis of RRM requirements for FR2 FWA for band n259 | Ericsson | Noted |  |
| [**R4-2114466**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_100-e/Docs/R4-2114466.zip) | RRM requirements for FR2 FWA for band n259 in 38.133 | Ericsson | Revised |  |
|  |  |  |  |  |
|  |  |  |  |  |

Notes:

1. Please include the summary of recommendations for all tdocs across all sub-topics incl. existing and new tdocs.
2. For the Recommendation column please include one of the following:
	1. CRs/TPs: Agreeable, Revised, Merged, Postponed, Not Pursued
	2. Other documents: Agreeable, Revised, Noted
3. For new LS documents, please include information on To/Cc WGs in the comments column
4. Do not include hyper-links in the documents

## 2nd round

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tdoc number** | **Title** | **Source** | **Recommendation**  | **Comments** |
| R4-2115330 (Rev of [**R4-2114466**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_100-e/Docs/R4-2114466.zip)**)** | RRM requirements for FR2 FWA for band n259 in 38.133 | Ericsson |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Notes:

1. Please include the summary of recommendations for all tdocs across all sub-topics.
2. For the Recommendation column please include one of the following:
	1. CRs/TPs: Agreeable, Revised, Merged, Postponed, Not Pursued
	2. Other documents: Agreeable, Revised, Noted
3. Do not include hyper-links in the documents

# Annex

Contact information

|  |  |  |
| --- | --- | --- |
| **Company** | **Name** | **Email address** |
| Apple | Yang Tang | yang.tang@apple.com |
| Qualcomm | Valentin Gheorghiu | vgheorgh@qti.qualcomm.com |
| Ericsson | Muhammad Kazmi | Muhammad.kazmi@ericsson.com |

Note:

1. Please add your contact information in above table once you make comments on this email thread.
2. If multiple delegates from the same company make comments on single email thread, please add you name as suffix after company name when make comments i.e. Company A (XX, XX)