**3GPP TSG-RAN Meeting # 91-e RP-21xxxx**

**Electronic Meeting, 22 – 26 March, 2021**

**Agenda item:** 9.1.4

**Source:** RAN4 chair (Apple)

**Title:** Email discussion summary of [91E][12][Spectrum\_WIs]

**Document for:** Information

# Introduction

In RAN#91-e, an email thread [91E][12][Spectrum\_WIs] is assigned to discuss the following tdocs: RP-210352, RP-210356, RP-210357, RP-210360, RP-210362, RP-210380, RP-210381, RP-210382, RP-210383, RP-210384, RP-210385, RP-210524, RP-210525, RP-210543, RP-210544, RP-210545, RP-210546, RP-210359.

RP-210543, RP-210544, and RP-210546 are all basket WIs so it is proposed to move them to thread [91E][06][Basket\_WI].

RP-210359 is not exactly a spectrum related WI, but since there is no other email thread, we can have discussions in this thread.

# Discussions and comments

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| **Company** | **Topic #1: Rail Mobile Radio spectrum, i.e. 900MHz and 1900MHz (RP-210352, RP-210356, RP-210357)** |
| Company name | Comments… |
| ZTE | One clarification question for RP-210356/357): are the proposed bands intended for operation up to 500km/h as claimed in RP-210352? If so, it is seemly not covered by defining a spectrum-related WI, but maybe extend the ongoing HST WI instead. More clarifications/discussions may be needed before approval.  |
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| **Company** | **Topic #2: Introduction of FR2 FWA UE with maximum TRP of 23dBm for band n259 (RP-210362, RP-210360)** |
| Company name | Comments… |
| ZTE | We are fine with the proposal. |
| KDDI | We support the proposal and fine with the draft WID.  |
| Qualcomm | We support this proposal |

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| **Company** | **Topic #3: High power UE (power class 1.5) for NR band n79 (RP-210380, RP-210381)** |
| Company name | Comments… |
| ZTE | We support the proposed WI to meet market demands. |
| Qualcomm | No concern with this work, but instead of a separate work item, it may be more efficient to include this within the ongoing work item for PC1.5 in Band n77/n78. Is this for FWA, handset, or both? Is there a priority? |

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| **Company** | **Topic #4: High power UE (power class 2) for NR band n34 and n39 (RP-210382, RP-210383, RP-210384, RP-210385)** |
| Company name | Comments… |
| ZTE | We support the proposed WI-s to meet market demands |
| Qualcomm | No concern with this work, but from organizational perspective should a basket WI be created? |

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| **Company** | **Topic #5: LTE/NR downlink and uplink spectrum sharing from UE perspective in Band 1/n1 (RP-210524, RP-210525)** |
| Company name | Comments… |
| ZTE | We support the proposed WI. |
| Apple | This looks to be a new feature. Is there any implication or specifications impact to other working groups? |
| China Telecom | Thanks for the question from Apple. We have checked that the only impact to other WG is the additional UE capability signaling in RAN2. |
| Qualcomm | This seems to be DL and UL sharing from the UE perspective in the same channel. This was discussed before but is not currently supported. This cannot be handled as a spectrum item, should be handled as a separate WID and discussed. |

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| **Company** | **Topic #6: addition of PC5 to Band n261 and n262 (RP-210545)** |
| Company name | Comments… |
| ZTE | One clarification question: is the proposed PC5 to n261 and n262 used only for FWA purpose? |
| T-Mobile USA | We also added PC5 to the revised with for n262 in RP-210705. It should not be in both WIDs. If PC5 for n262 is toing to be NR\_FR2\_PC5\_NewBand then we will need to revise RP-210705.  |
| Apple | n261 is US only band and PC1 for FWA has been defined. Not sure why we need another power class for FWA in the same band. Is there any operator’s request on PC5 for this band? |
| Qualcomm | Before agree to this objective it would be useful to know if there is demand from carriers with n261 and n262 spectrum for this type of product. PC1 can be used in these bands, in our understanding |

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| **Company** | **Topic #7: supporting non-colocated scenarios for band 42 and n77/n78 (RP-210359)** |
| Company name | Comments… |
| ZTE | For MRTD, perhaps it should be treated in FeRRM WI, not in a Demod WI. |
| Apple | We have concern on the support of non-collocated scenarios for band 42 and n77/n78 as this would be considered as intra-band EN-DC where the time alignment between B42 and n77/n78 needs to be tightly controlled to avoid simultaneous Rx/Tx and the impact to UE AGC and APC performance. |
| KDDI | We support the proposal of Softbank and are agreeable with the relevant part of the revised WI for NR\_demod\_enh2-Perf. |
| Qualcomm | We have concerns on the implementation feasibility of this proposal. This is also proposed for baseband, we expressed the same view there. There will be a big performance degradation with larger MRTD because of shared LNA and characterization of performance degradation will be very difficult. |

# Final proposals/recommendations