**3GPP TSG-RAN Meeting #93-e RP-21xxxx**

**Electronic Meeting, September 13-17, 2021**

**Agenda item:** 9.3.4.3

**Source:** Moderator (China Telecom)

**Title:** Moderator's summary for email discussion [93e-25-CRSIntfHandling]

**Document for:** Discussion

# Introduction

This document is the summary of email discussion [93e-25-CRSIntfHandling] on CRS interference handling for NR PDSCH in scenarios with overlapping spectrum for LTE and NR, and the discussion outcome (if any) will be reflected in the revised WID on “Rel-17 Further enhancement on NR demodulation performance”.

All the following 5 tdocs recommend to define NR PDSCH demodulation requirements for neighbouring cell LTE CRS-IM in Rel-17, and the main discussion point is whether network assistance signalling for CRS-IM is needed or not.

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| Tdoc | Title | Source |
| [RP‑211835](file:///D:\0_Work\Standardization\RAN\RAN%2093%20(Sep%202021)\Tdoc%20list\docs\RP-211835.zip) | Revised WID: Further enhancement on NR demodulation performance | China Telecom |
| [RP‑211950](file:///D:\0_Work\Standardization\RAN\RAN%2093%20(Sep%202021)\Tdoc%20list\docs\RP-211950.zip) | CRS interference handling in NR | Apple, MediaTek |
| [RP‑212199](file:///D:\0_Work\Standardization\RAN\RAN%2093%20(Sep%202021)\Tdoc%20list\docs\RP-212199.zip) | Views on LTE CRS interference handling for NR UE | Nokia, Nokia Shanghai Bell |
| [RP‑212226](file:///D:\0_Work\Standardization\RAN\RAN%2093%20(Sep%202021)\Tdoc%20list\docs\RP-212226.zip) | Views on Rel-17 CRS-IM requirements in scenarios with overlapping spectrum for LTE and NR | Intel Corporation |
| [RP‑212490](file:///D:\0_Work\Standardization\RAN\RAN%2093%20(Sep%202021)\Tdoc%20list\docs\RP-212490.zip) | LS on RAN4 evaluation for LTE CRS interference handling for NR UE (R4-2115741; to: RAN; cc: -; contact: China Telecom) | RAN4 |

# Initial round

## Open issues and companies views’ collection

**Issue #1**: Except the network assistance signalling part (which is discussed separately in Issue #2), any comments on the other parts of RAN4 recommendations in LS RP-212490?

*RAN4 recommends to define NR PDSCH demodulation requirements for neighbouring cell LTE CRS-IM in scenarios with overlapping spectrum for LTE and NR in Rel-17:*

*• Use LLR weighting as baseline reference receiver, and further discuss the feasibility of CRS-IC receiver taking into account the UE complexity and PDSCH processing time.*

*• Synchronous network scenario is prioritized. The asynchronous network scenario will be discussed after RAN #93e meeting.*

*• 15 kHz SCS for NR is prioritized. The 30 kHz SCS scenario will be discussed after RAN #93e meeting.*

*• RAN4 will further discuss the necessity of ~~network assistance signaling and~~ UE capability signaling during requirements definition phase.*

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**Issue #2:** Whether to assume network assistance information for PDSCH CRS-IM?

* Option 1: Yes (Apple, MediaTek)
* Option 2: No (Nokia - for Rel-17)
* Option 3: Task RAN4 to further discuss the necessity of network assistance signaling during requirements definition phase. (Intel, China Telecom)

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## Initial round summary

# Intermediate round

## Open issues and companies views’ collection

## Intermediate round summary

# Final round

## Open issues and companies views’ collection

## Final round summary

# Final conclusions

# Annex: Contacts

Please provide a company contact that the email discussion moderator can contact if required.

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| **Company** | **Contact name and email** |
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