**3GPP TSG-RAN WG4 Meeting # 96-e-Bis R4-200XXXX**

**Electronic Meeting, 17 – 28 August, 2020**

**Agenda item:**  4.4, 7.19.4

**Source:** Moderator (Ericsson)

**Title:** Email discussion summary for [96e][302] NR\_maintenance\_RF\_BS

**Document for:** Information

# Introduction

The BS RF core spec TS 38.104 is stable in Rel-15 and Rel-16 and there are few contributions in this area. Contributions were submitted within the following Topics:

1. EESS protection
2. Introduction of new BS capability set in AAS specs
3. Other maintenance
4. CEPT/ECC recommendation for receiver parameters

Topic #1 to #3 include CRs for corrections, while topic #4 is only for discussion.

# Topic #1: EESS protection (23.6 – 24 GHz)

## Companies’ contributions summary (CRs)

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Title / Proposal** |
| R4-2010762R4-2010763 | NEC | **CR to TS 38.104: OTA receiver spurious requirements for EESS protection**Summary of change: It is made clear that additional OTA receiver spurious requirements may be applied. |
| R4-2010764R4-2010765 | NEC | **CR to 38.141-2: Additional requirements for EESS protection (rel-15)**Summary of change: It is made clear that additional OTA receiver spurious requirements may be applied.Deleted the TT values for OTA OBUE and OTA TX spurious for EESS protection in the table for FR1, and added them in the table for FR2. |

## Companies views’ collection for 1st round

### CRs/TPs comments collection

|  |  |
| --- | --- |
| **CR/TP number** | **Comments collection** |
| R4-2010763R4-2010765 | **Moderator:** These two are Cat A CRs and should not have been submitted in advance of the meeting. We will at this time only take comments on the two Cat F CRs. |
| YYY | Company A |
| Company B |
|  |

## Summary for 1st round

### Open issues

*Moderator tries to summarize discussion status for 1st round, list all the identified open issues and tentative agreements or candidate options and suggestion for 2nd round i.e. WF assignment.*

|  |  |
| --- | --- |
|  | **Status summary**  |
| **Sub-topic#1** | *Tentative agreements:**Candidate options:**Recommendations for 2nd round:* |

*Recommendations on WF/LS assignment*

|  |  |  |
| --- | --- | --- |
|  | **WF/LS t-doc Title**  | **Assigned Company,****WF or LS lead** |
| #1 |  |  |

### CRs/TPs

*Moderator tries to summarize discussion status for 1st round and provides recommendation on CRs/TPs Status update*

|  |  |
| --- | --- |
| **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)

## Summary on 2nd round (if applicable)

*Moderator tries to summarize discussion status for 2nd round and provided recommendation on CRs/TPs/WFs/LSs Status update suggestion*

|  |  |
| --- | --- |
| **CR/TP/LS/WF number** | **T-doc Status update recommendation**  |
| XXX | *Based on 2nd round of comments collection, moderator can recommend the next steps such as “agreeable”, “to be revised”* |

# Topic #2: Introduction of new BS capability set in AAS specs

Three CRs are submitted, proposing how to add new BS capability set in the AAS core and conformance specifications. This was not done in the Rel-16 Work Item MSR\_GSM\_UTRA\_LTE\_NR-Core (now closed).

The issue is quite complex and was therefore put as its own topic here.

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Title / Proposals** |
| R4-2011261 | Huawei | **CR to TS 37.105: Introduction of new BS capability set for NR+EUTRA+UTRA, Rel-16**Summary of change:- 6.6.5.2.2, 6.6.5.2.3: conducted OBUE applicability table introduced for Band Category 1, 2, 3; table headers updated- 7.4.2.1: conducted general blocking table updated - 7.7.2.1: conducted Tx IMD table updated- 10.5.2.1: OTA general blocking table updated- 10.8.2.1: OTA Tx IMD table updated |
| R4-2011262 | Huawei | **CR to TS 37.145-1: Introduction of new BS capability set for NR+EUTRA+UTRA, Rel-16**Summary of changes:- 4.9: introduction of CSA3B for UTRA, EUTRA, NR multi-RAT case.- 4.11.2.8.1.2 (ATC5a): applicabiltiy table updated with new CS- 4.11.2.8.2 (ATC5b): MSR changes reflected. Applicabiltiy table updated with new CS- 4.11.2.9, 4.11.2.10 (ATC6, ANTC6): MSR changes reflected. Power allocation section updated. - 4.11.2.13, 4.11.2.14 (ATC8, ANTC8): new section for UTRA, E-UTRA and NR multi-RAT operation- 5.2: Test configuration applicability table updated with nes CSA3B test case - 6.6.5.5.2, 6.6.5.5.3: conducted OBUE applicability table introduced for Band Category 1, 2, 3; table headers updated- 7.4.5.1.1: general blocking table updated - 7.7.5.1.1: Tx IMD table updated |
| R4-2011263 | Huawei | **CR to TS 37.145-2: Introduction of new BS capability set for NR+EUTRA+UTRA, Rel-16**Summary of changes:- 4.9: introduction of RCSA3B for UTRA, EUTRA, NR multi-RAT case.- 4.11.2.8.1.2 (ATCR5): applicability table updated with new CS- 4.11.2.8.2 (ATCR5b): MSR changes reflected. Applicabiltiy table updated with new CS- 4.11.2.9, 4.11.2.10 (ATCR7, ANTCR7): MSR changes reflected. Power allocation section updated. - 4.11.2.13, 4.11.2.14 (ATCR9, ANTCR9): new section for UTRA, E-UTRA and NR multi-RAT operation- 5.2: Test configuration applicability table updated with nes RCSA3B test case - 6.6.5.5.2, 6.6.5.5.3: conducted OBUE applicability table introduced for Band Category 1, 2, 3; table headers updated- 7.8.5.1.1: Tx IMD table updated |

## Companies views’ collection for 1st round

### CRs/TPs comments collection

|  |  |
| --- | --- |
| **CR/TP number** | **Comments collection** |
| R4-2011261R4-2011262R4-2011263 | **Moderator:**Corrections needed on the CR cover pages:* The related work items must all be for the same release, in this case Rel-16.
* This is maintenance CR for closed Rel-16 Work items and cannot be Category B.

CR body:* There should be no overlapping change marks. Please make sure to clean up any updated versions and only have single changes.
 |
| XXX | Company A |
| Company B |
|  |
| YYY | Company A |
| Company B |
|  |

## Summary for 1st round

### Open issues

*Moderator tries to summarize discussion status for 1st round, list all the identified open issues and tentative agreements or candidate options and suggestion for 2nd round i.e. WF assignment.*

|  |  |
| --- | --- |
|  | **Status summary**  |
| **Sub-topic#1** | *Tentative agreements:**Candidate options:**Recommendations for 2nd round:* |

*Suggestion on WF/LS assignment*

|  |  |  |
| --- | --- | --- |
|  | **WF/LS t-doc Title**  | **Assigned Company,****WF or LS lead** |
| #1 |  |  |

### CRs/TPs

*Moderator tries to summarize discussion status for 1st round and provided recommendation on CRs/TPs Status update suggestion*

|  |  |
| --- | --- |
| **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)

## Summary on 2nd round (if applicable)

*Moderator tries to summarize discussion status for 2nd round and provided recommendation on CRs/TPs/WFs/LSs Status update suggestion*

|  |  |
| --- | --- |
| **CR/TP/LS/WF number** | **T-doc Status update recommendation**  |
| XXX | *Based on 2nd round of comments collection, moderator can recommend the next steps such as “agreeable”, “to be revised”* |

# Topic #3: Other maintenance (CRs)

Topics covered by submitted CRs related to maintenance:

* Clarification on calculation pf step frequencies in TR 38.817-02
* Correction of co-location requirement (core + conformance)

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Title / Proposals** |
| R4-2011186 | Nokia, Nokia Shanghai Bell | **CR to TS 38.817-02: Clarification on calculation of step frequencies for defining the Category B radiated Tx spurious emission limits in FR2**Summary of change:Clearly explain how to calculate the step frequencies for defining the Category B radiated Tx spurious emission limits in FR2 for future reference when the limits are applicable to other bands. |
| R4-2010178R4-2010179 | Ericsson | **CR to TS 38.104: Correction of co-location requirement table in subclause 7.5.3**Summary of change:The table heading for wanted power signal leval is corected to apply for WA, MR and LA BS. |

## Companies views’ collection for 1st round

### CRs/TPs comments collection

|  |  |
| --- | --- |
| **CR/TP number** | **Comments collection** |
| XXX | Company A |
| Company B |
|  |
| YYY | Company A |
| Company B |
|  |

## Summary for 1st round

### Open issues

*Moderator tries to summarize discussion status for 1st round, list all the identified open issues and tentative agreements or candidate options and suggestion for 2nd round i.e. WF assignment.*

|  |  |
| --- | --- |
|  | **Status summary**  |
| **Sub-topic#1** | *Tentative agreements:**Candidate options:**Recommendations for 2nd round:* |

*Suggestion on WF/LS assignment*

|  |  |  |
| --- | --- | --- |
|  | **WF/LS t-doc Title**  | **Assigned Company,****WF or LS lead** |
| #1 |  |  |

### CRs/TPs

*Moderator tries to summarize discussion status for 1st round and provided recommendation on CRs/TPs Status update suggestion*

|  |  |
| --- | --- |
| **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)

## Summary on 2nd round (if applicable)

*Moderator tries to summarize discussion status for 2nd round and provided recommendation on CRs/TPs/WFs/LSs Status update suggestion*

|  |  |
| --- | --- |
| **CR/TP/LS/WF number** | **T-doc Status update recommendation**  |
| XXX | *Based on 2nd round of comments collection, moderator can recommend the next steps such as “agreeable”, “to be revised”* |

# Topic #4: CEPT/ECC recommendation for receiver parameters

This concerns work ongoing in CEPT/ECC that may have future impact on 3GPP work.

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Title/ Summary** |
| R4-2010326 | Ericsson | CEPT/ECC work on recommendation for receiver parametersSummary:The paper summarizes the ongoing work on receiver parameters in CEPT/ECC for European regulation, where presently a new recommendation is being drafted. |

## Companies views’ collection for 1st round

### CRs/TPs comments collection

|  |  |
| --- | --- |
| **Tdoc number** | **Comments collection** |
| XXX | Company A |
| Company B |
|  |
| YYY | Company A |
| Company B |
|  |

## Summary for 1st round

### Open issues

*Moderator tries to summarize discussion status for 1st round, list all the identified open issues and tentative agreements or candidate options and suggestion for 2nd round i.e. WF assignment.*

|  |  |
| --- | --- |
|  | **Status summary**  |
| **Sub-topic#1** | *Tentative agreements:**Candidate options:**Recommendations for 2nd round:* |

*Suggestion on WF/LS assignment*

|  |  |  |
| --- | --- | --- |
|  | **WF/LS t-doc Title**  | **Assigned Company,****WF or LS lead** |
| #1 |  |  |

### CRs/TPs

*Moderator tries to summarize discussion status for 1st round and provided recommendation on CRs/TPs Status update suggestion*

|  |  |
| --- | --- |
| **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)

## Summary on 2nd round (if applicable)

*Moderator tries to summarize discussion status for 2nd round and provided recommendation on CRs/TPs/WFs/LSs Status update suggestion*

|  |  |
| --- | --- |
| **CR/TP/LS/WF number** | **T-doc Status update recommendation**  |
| XXX | *Based on 2nd round of comments collection, moderator can recommend the next steps such as “agreeable”, “to be revised”* |