**3GPP TSG-RAN WG4 Meeting # 104-bis-e R4-22XXXXX**

**Electronic Meeting, 10– 19 October 2022**

**Agenda item:** 7.4.5

**Source:** Moderator (Nokia)

**Title:** Email discussion summary for [104-bis-e][315] LTE\_terr\_bcast\_bands\_BSRF

**Document for:** Information

# Introduction

This document summarizes the email discussion for the agenda item 7.4.4.

It is appreciated that the delegates for this topic put their contact information in the table below.

Contact information

|  |  |  |
| --- | --- | --- |
| **Company** | **Name** | **Email address** |
|  |  |  |

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)

# Topic #1: BS requirements

## Companies’ contributions summary

|  |  |  |
| --- | --- | --- |
| **T-doc number** | **Company** | **Proposals / Observations** |
| [**R4-2215342**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_104bis-e/Docs/R4-2215342.zip) | SWR | **Proposal 1:** Derive the required values for ACLR and ACS values by the outlined methodology based on ITU-R Recommendations or equivalent regulatory documentation. |
| [**R4-2216550**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_104bis-e/Docs/R4-2216550.zip) | ZTE Corporation | **Proposal 1:** to define the BS type 1-C for LTE based broadcast.  **Proposal 2:** to reuse the Wide area BS class for LPLT and define new BS class for HPHT and MPMT.  **Proposal 3:** to start the discussion on BS RF requirement as proposed in table 1 for LTE based broadcast  **Proposal 4:** to use the reference approach instead of explicitly list the regulatory requirement in the spec. |
| [**R4-2216735**](https://www.3gpp.org/ftp/TSG_RAN/WG4_Radio/TSGR4_104bis-e/Docs/R4-2216735.zip) | Nokia, Nokia Shanghai Bell | Document provides analysis on 36.104 BS Tx and relevant Rx requirements impact due to introduction of LTE based 5G terrestrial broadcast band(s). |

## Open issues summary

The email discussion will focus on the following open issues for LTE based broadcast:

* BS type
* BS classes
* BS RF requirements
* Regulatory requirements

### Sub-topic 1-1

*Sub-topic description: BS type*

*Open issues and candidate options before e-meeting:*

**Issue 1-1: BS type**

* Proposals
  + Option 1: Define the BS type 1-C for LTE based broadcast
  + Option 2: Other
* Recommended WF
  + TBA

### Sub-topic 1-2

*Sub-topic description: BS classes*

*Open issues and candidate options before e-meeting:*

**Issue 1-2: BS classes**

* Proposals
  + Option 1: Reuse the Wide area BS class for LPLT and define new BS class for HPHT and MPMT
  + Option 2: Other
* Recommended WF
  + TBA

### Sub-topic 1-3

*Sub-topic description: BS RF requirements (excluding ACLR)*

*Open issues and candidate options before e-meeting:*

**Issue 1-3: BS RF requirements (excluding ACLR)**

* Proposals
  + Option 1: According to R4-2216550
  + Option 2: According to R4-2216735
  + Option 3: Other
* Recommended WF
  + TBA

### Sub-topic 1-4

*Sub-topic description: BS ACLR requirement*

*Open issues and candidate options before e-meeting:*

**Issue 1-3: BS ACLR requirement**

* Proposals
  + Option 1: According to R4-2216550 (depends on the outcome of coexistence study)
  + Option 2: According to R4-2215342 (derive the required values for ACLR values by the outlined methodology based on ITU-R Recommendations or equivalent regulatory documentation)
  + Option 3: Other
* Recommended WF
  + TBA

### Sub-topic 1-5

*Sub-topic description: Regulatory requirements*

*Open issues and candidate options before e-meeting:*

**Issue 1-5: Regulatory requirements**

* Proposals
  + Option 1: Use the reference approach instead of explicitly list the regulatory requirement in the spec
  + Option 2: Other
* Recommended WF
  + TBA

## Companies views’ collection for 1st round

### Open issues

Sub topic 1-1

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

Sub topic 1-2

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

Sub topic 1-3

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

Sub topic 1-4

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

Sub topic 1-5

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

### CRs/TPs comments collection

*For close-to-finalize WIs and maintenance work, comments collections can be arranged for TPs and CRs. For ongoing WIs, suggest to focus on open issues discussion on 1st round.*

|  |  |
| --- | --- |
| **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 1-1** | *Tentative agreements:*  *Candidate options:*  *Recommendations for 2nd round:* |
| **Sub-topic 1-2** | *Tentative agreements:*  *Candidate options:*  *Recommendations for 2nd round:* |
| **Sub-topic 1-3** | *Tentative agreements:*  *Candidate options:*  *Recommendations for 2nd round:* |
| **Sub-topic 1-4** | *Tentative agreements:*  *Candidate options:*  *Recommendations for 2nd round:* |
| **Sub-topic 1-5** | *Tentative agreements:*  *Candidate options:*  *Recommendations for 2nd round:* |

### CRs/TPs

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

*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)

# Recommendations for Tdocs

## 1st round

**New tdocs**

|  |  |  |  |
| --- | --- | --- | --- |
| **New Tdoc number** | **Title** | **Source** | **Comments** |
|  | WF on … | YYY |  |
|  | LS on … | ZZZ | To: RAN\_X; Cc: RAN\_Y |
|  |  |  |  |

**Existing tdocs**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tdoc number** | **Revised to** | **Title** | **Source** | **Recommendation** | **Comments** |
| R4-22xxxxx |  | CR on … | XXX | Agreeable, Revised, Merged, Postponed, Not Pursued |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

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** | **Revised to** | **Title** | **Source** | **Recommendation** | **Comments** |
| R4-22xxxxx |  | CR on … | XXX | Agreeable, Revised, Merged, Postponed, Not Pursued |  |
| R4-22xxxxx |  | WF on … | YYY | Agreeable, Revised, Noted |  |
| R4-22xxxxx |  | LS on … | ZZZ | Agreeable, Revised, Noted |  |
|  |  |  |  |  |  |

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