**3GPP TSG-RAN WG4 meeting RAN4#103-e R4-2210189**

**Electronic Meeting, 9st of May – 20th of May, 2022**

**Source: THALES**

**Title: Cover page TS 38.108 NR Satellite Access Node radio transmission and reception v0.2.0**

**Agenda item: 9.12.1, 9.12.3**

**Document for: Approval**

# Introduction

The current version incorporates the discussions from RAN4#101-bis-e meeting on [101-bis-e][306] NTN\_Solutions\_Part1 thread, see references [1] and [2] and the previous approved skeleton for TS 38.108 [3].

As a result of RAN4#102-e (21st of February – 3rd of March, 2022) and RAN4#103-e (9st of May – 20th of May, 2022) meetings, the current version also incorporates the following approved TPs to TS 38.108:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Meeting** | **TDoc** | **Subject/Comment** | **New version** |
| 2022-03 | RAN4#102-e | R4-2203955 | TP for 38.108: clause 7.1&7.2 on Rx refsens sensitivity | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2205057 | pCR to TS 38.108 -Radiated Tx general and transmit power | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207331 | TP for 38.108: clause 5.3&5.4 on system parameters | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207335 | TP for TS 38.108: General (5.1) and Operating Band (5.2) | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207336 | Draft text proposal for Clause 4.4 Satellite Access Node classes - TS 38.108 | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207337 | TP for 38.108: clause 4.3 requirement reference point | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207340 | TP to TR 38.108 on 4.5 Regional Requirement | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207354 | pCR to TS 38.108 - Scope and general | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207355 | TP to TS 38.108: section 4 | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207356 | TP to TS 38.108: section 3 | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207357 | TP for 38.108: clause 9.7 OTA unwanted emissions | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207359 | TP for TS 38.108 OTA output power dynamics(9.4) | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207361 | TP to TS 38.108: 9.5 (OTA Tx ON/OFF), 9.6 (OTA TX signal quality) and 9.8 (OTA Tx IMD) | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207362 | TP for 38.108: clause 9.3 OTA Satellite Access Node output power | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207363 | TP for TS 38.108 Annex B | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207364 | TP for 38.108: clause 10.5 OTA in-band selectivity and blocking | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207365 | pCR to TS 38.108 - Radiated Rx general and sensitivity | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207366 | TP for TS 38.108 OTA Rx requirements(10.3, 10.4,10.6 and 10.9) | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207368 | TP to TS 38.108: section 10.7 (OTA Rx spur) and 10.8 (OTA Rx IMD) | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207371 | TP to TS 38.108: section 10.7 (OTA Rx spur) and 10.8 (OTA Rx IMD) | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207372 | Draft text proposal for Clause 6.1 and 6.2 Satellite Access Node output power - TS 38.108 | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207373 | TP to TS 38.108: section 6.4 (Tx ON/OFF) and 6.5 (TX signal quality) | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207374 | TP to TS 38.108: section 6.7 (Tx IMD) | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207377 | pCR to TS 38.108 - In-band selectivity and blocking | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207378 | TP for TS 38.108 Dynamic range(7.3) and In channel selectivity(7.8) | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207380 | Draft text proposal for Clause 7.5 Out-of-band blocking - TS 38.108                   | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207382 | TP to TS 38.108: section 7.6 (Rx spur) and section 7.7 (Rx IMD) | 0.1.0 |
| 2022-03 | RAN4#102-e | R4-2207383 | TP to TS 38.108: annex A (FRC) | 0.1.0 |
|  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Meeting** | **TDoc** | **Subject/Comment** | **New version** |
| 2022-05 | RAN4#103-e | R4-2208663 | TP to TS 38.108 on Conducted receiver characteristics | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2210849 | pCR for Clause 4.3 Requirement reference points - TS 38.108 | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2210850 | pCR for Annex D - TS 38.108 | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2210854 | TP for 38.108: clause 7.3.2 Conducted transmission characteristics | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2210855 | pCR to TS 38.108 – Transmitter spurious | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2210856 | pCR to TS 38.108 – cleanup - alignment | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2210857 | TP to TS 38.108 on 6.0 Conducted transmitter characteristics | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2210861 | pCR for Clause 7.4 In-band selectivity and blocking - TS 38.108 | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2210862 | pCR for Clause 7.5 Out-of-band blocking - TS 38.108 | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2210863 | pCR for Clause 7.6 Receiver spurious emissions - TS 38.108 | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2210864 | pCR for Clause 10.6.2 Minimum requirement for SAN type 1-O - TS 38.108 | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2210873 | TP for TS 38.108, 6.6.4 Operating band unwanted emissions | 0.2.0 |
| 2022-05 | RAN4#103-e | R4-2211135 | TP to TS 38.108: TS corrections; RF requirements | 0.2.0 |
|  |  |  |  |  |

For other relevant discussions, please also refer to R4-2207438 (Email discussion summary for [102-e][308] NTN\_Solutions\_Part1), R4-2210510 (Email discussion summary for 103-e][307] NTN\_Solutions\_General), R4-2207440 (Email discussion summary for [102-e][310] NTN\_Solutions\_Part3), R4-2210511 (Email discussion summary for [103-e][308] NTN\_Solutions\_SANRF) and the respective Way Forwards [4][5][6] for RAN4#102-e meeting and Way Forwards [7][8] for RAN4#103-e meeting.

Some other updates have been also taken into account during **[Post 102-e][326] draftTS\_38108\_update** email discussions and **[Post 103-e][323] draftTS\_38108\_update** discussions.

# References

1. R4-2203111, Email discussion summary for [101-bis-e][306] NTN\_Solutions\_Part1, THALES.
2. R4-2203080, Way Forward on NTN\_solutions\_Part1, THALES.
3. R4-2203087, Skeleton for TS 38.108 NR Satellite Access Node radio transmission and reception v0.0.1, THALES.
4. R4-2207346, Way Forward on NTN\_solutions\_Part1, THALES.
5. R4-2207387, WF on open issue for SAN, CATT.
6. R4-2207456, WF on SAN SEM and spurious emission, THALES.
7. R4-2210632, Way Forward on NTN\_Solutions\_General.
8. R4-2210633, WF on remaining issue for SAN RF requirements, CATT.