**3GPP TSG-RAN WG4 Meeting #** **107 R4-230xxxx**

**Incheon, KR, May 22 – May 26, 2023**

**Agenda Item: 2**

**Source: RAN4 Chair**

**Title:** **Agenda for RAN4 #107**

**Document for:** **Approval**

1. Opening of the meeting

**Intellectual Property Rights Declaration**

<https://www.3gpp.org/3gpp-calendar/89-call-for-ipr-meetings>

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| The attention of the delegates to the meeting of this Technical Specification Group is drawn to the fact that 3GPP Individual Members have the obligation under the IPR Policies of their respective Organizational Partners to inform their respective Organizational Partners of Essential IPRs they become aware of.  The delegates are asked to take note that they are thereby invited:  - to investigate whether their organization or any other organization owns IPRs which are, or are likely to become Essential in respect of the work of 3GPP.  - to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Statement and the Licensing declaration forms |

**Statement regarding competition law**

<https://www.3gpp.org/about-3gpp/legal-matters/21-3gpp-calendar/1616-statement-of-antitrust-compliance>

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| The attention of the delegates to the meeting is drawn to the fact that 3GPP activities are subject to all applicable antitrust and competition laws and that compliance with said laws is therefore required by any participant of the meeting, including the Chairman and Vice-Chairmen and are invited to seek any clarification needed with their legal counsel. The leadership would conduct the present meeting with impartiality and in the interests of 3GPP. Delegates are reminded that timely submission of work items in advance of TSG/WG meetings is important to allow for full and fair consideration of such matters. |

1. Approval of the meeting agenda and meeting report
2. Incoming LS
3. Up to Rel-16 maintenance for LTE and NR

\* For Rel-15/16 maintenance, please submit formal CRs. When you reserve the tdoc number, please use the correct WI code rather than simply using TEI and fill the column of “Related WIs” in your reservation spreadsheet. If you submit a CR with TEI as WI code, please inform session chair.

* 1. UE RF requirements [WI code]
  2. BS RF requirements and BS conformance testing [WI code]
  3. UE/BS EMC requirements [WI code]
  4. RRM requirements [WI code]
  5. Demodulation and CSI requirements [WI code]
  6. OTA and TRP/TRS test aspects [WI code]
  7. Moderator summary and conclusions [WI code]

1. Rel-17 maintenance for LTE and NR

\* For Rel-17 maintenance, at most two CRs per specification per company per lowest AI except for AI 5.1.1, AI 5.1.2, AI 5.2.10, and AI 5.3. Contributions shall be limited by existing open issues or critical issues. For AI 5.1.1, AI 5.1.2, AI 5.2.10 and AI 5.3, follow the approved guideline, i.e., maximum one discussion paper per WI/TEI topic per company/organization. If the similar changes are proposed for a number of specifications, those CRs will be counted as one CR for the quota. And Cat F and Cat A CRs for the same changes are counted as one CR for the quota. It is not expected to pack maintenance topics of multiple Rel-17 closed WIs into one CR or one discussion paper.

\* The contributions corresponding to incoming LS for Rel-17 are expected to be submitted in AI 11.1.

\* For Rel-17 maintenance, please submit formal CRs. When you reserve the tdoc number, please use the correct WI code rather than simply using TEI and fill the column of “Related WIs” in your reservation spreadsheet. If you submit a CR with TEI as WI code, please inform session chair.

* 1. Rel-17 spectrum related WI maintenance
     1. Bands introduced in Rel-17 and related requirements [WI code]
     2. NR/LTE/MR-DC basket WIs [WI code]
     3. Others [WI code]
  2. Rel-17 non-spectrum related WI maintenance

-------------------------------------- Items led by RAN4 ----------------------------------------------------------------------------------

* + 1. NR repeater [NR\_repeaters]
       1. RF core requirements [NR\_repeaters-Core]
       2. EMC core and performance requirements [NR\_repeaters-Core/Perf]
       3. RF Conformance testing [NR\_repeaters-Perf]
    2. MIMO OTA and FR1 TRP TRS requirements [WI code or TEI]

-------------------------------------- Items led by other working group ----------------------------------------------------------------------------------

* + 1. Further enhancements on MIMO for NR [NR\_feMIMO]
       1. RRM core requirements [NR\_feMIMO-Core]
       2. RRM performance requirements [NR\_feMIMO-Perf]
       3. UE Demodulation and CSI requirements [NR\_feMIMO-Perf]
    2. NR coverage enhancements [NR\_cov\_enh]
       1. UE RF requirements [NR\_cov\_enh-Core]
       2. BS demodulation requirements [NR\_cov\_enh-Perf]
    3. Support of reduced capability NR devices [NR\_redcap]
       1. UE RF requirements [NR\_redcap-Core]
       2. RRM core requirements [NR\_redcap-Core]
       3. RRM performance requirements [NR\_redcap-Perf]
       4. UE demodulation and CSI requirements [NR\_redcap-Perf]
    4. Enhanced IIoT and URLLC support [NR\_IIOT\_URLLC\_enh]
       1. RRM core requirements [NR\_IIOT\_URLLC\_enh-Core]
       2. RRM performance requirements [NR\_IIOT\_URLLC\_enh-Perf]
       3. Demodulation performance requirements [NR\_IIOT\_URLLC\_enh-Perf]
    5. NR small data transmissions in INACTIVE state [NR\_SmallData\_INACTIVE]
       1. RRM core requirements [NR\_SmallData\_INACTIVE-Core]
       2. RRM performance requirements [NR\_SmallData\_INACTIVE-Perf]
    6. Solutions for NR to support non-terrestrial networks (NTN) [NR\_NTN\_solutions]
       1. System parameters and SAN RF requirement maintenance [NR\_NTN\_solutions-Core]
       2. SAN RF conformance testing [NR\_NTN\_solutions-Perf]
          1. Conductive conformance Testing [NR\_NTN\_solutions-Perf]
          2. Radiated conformance Testing [NR\_NTN\_solutions-Perf]
       3. UE RF requirement maintenance [NR\_NTN\_solutions-Core]
       4. RRM core requirement maintenance [NR\_NTN\_solutions-Core]
       5. RRM performance requirements [NR\_NTN\_solutions-Perf]
       6. Demodulation requirements [NR\_NTN\_solutions-Perf]
          1. SAN demodulation requirements [NR\_NTN\_solutions-Perf]
          2. UE demodulation requirements [NR\_NTN\_solutions-Perf]
    7. Extending current NR operation to 71GHz [NR\_ext\_to\_71GHz]
       1. Operation bands, system parameter and UE RF maintenance [NR\_ext\_to\_71GHz-Core]
       2. BS RF requirements maintenance [NR\_ext\_to\_71GHz-Core]
       3. BS RF conformance testing [NR\_ext\_to\_71GHz-Perf]
          1. Transmitter characteristics [NR\_ext\_to\_71GHz-Perf]
          2. Receiver characteristics [NR\_ext\_to\_71GHz-Perf]
          3. MU budget [NR\_ext\_to\_71GHz-Perf]
       4. RRM core requirement maintenance [NR\_ext\_to\_71GHz-Core]
       5. RRM performance requirement maintenance [NR\_ext\_to\_71GHz-Perf]
       6. Demodulation and CSI requirements [NR\_ext\_to\_71GHz-Perf]
          1. UE Demodulation and CSI requirements [NR\_ext\_to\_71GHz-Perf]
          2. BS demodulation requirements [NR\_ext\_to\_71GHz-Perf]

-------------------------------------- All the items led by RAN4 or other WGs ----------------------------------------------------------------------------------

* + 1. Other NR/LTE WIs [WI code]
       1. BS RF requirements [WI code]
       2. UE RF requirements [WI code]
       3. RRM requirements [WI code]
       4. Demodulation and CSI requirements [WI code]
  1. Rel-17 TEI [TEI]

\* The tdoc submitted under this agenda is supposed not to be related to any other closed or existing WIs. It is expected for companies who proposed TEI to contact session Chairs first because the TEI topic is under monitoring in RAN.

* 1. Moderator summary and conclusions (for Agenda 5)

1. Rel-18 maintenance for LTE and NR
   1. LTE intra-band contiguous CA for band 8 [LTE\_CA\_intra\_B8]
   2. Introduction of LTE TDD band in 1670-1675 MHz [LTE\_TDD\_1670\_1675MHz]
   3. APT 600 MHz NR band [NR\_600MHz\_APT]
      1. Band parameters and UE RF requirements [NR\_600MHz\_APT-Core]
      2. BS RF requirements and conformance testing [NR\_600MHz\_APT-Core/Perf]
      3. RRM requirements [NR\_600MHz\_APT-Core/Perf]
   4. Introduction of NR TDD band in 1670 – 1675 MHz [NR\_TDD\_n54]
      1. UE RF requirements [NR\_TDD\_n54-Core/Perf]
      2. BS RF requirements [NR\_TDD\_n54-Core/Perf]
      3. RRM requirements [NR\_TDD\_n54-Core]
   5. MPR for LTE Intra-band CA with CC gap larger than 35 MHz [LTE\_intra\_CA\_MPR\_35MHz\_gap]
      1. MPR requirements [LTE\_intra\_CA\_MPR\_35MHz\_gap-Core]
      2. Identify and specify capability signaling [LTE\_intra\_CA\_MPR\_35MHz\_gap-Core]
   6. Moderator summary and conclusions
2. Rel-18 on-going spectrum related WIs for NR

\* All the rapporteurs of basket WIs are expected to reserve tdoc numbers for big CR(s), draftTR (if needed), and revised WID before the meeting..

---------------------------------------- Baskets for new band combinations ----------------------------------------------------------------------------------------

* 1. Issues arising from basket WIs but not subject to block approval [WI code]
     1. UE RF requirements [WI code]
        1. band combinations with UL configurations including intra-band ULCA with IMD or triple beat issues [WI code]
        2. Others [WI code]
     2. Moderator summary and conclusions [WI code]
  2. Moderator summary and conclusions (for basket WI AI 7.3 to AI 7.26 ) [WI code]
  3. Rel-18 Dual Connectivity (DC) of 1 band LTE (1DL/1UL) and 1 NR band (1DL/1UL) [DC\_R18\_1BLTE\_1BNR\_2DL2UL]
     1. Rapporteur input (WID/TR/CR) [DC\_R18\_1BLTE\_1BNR\_2DL2UL-Core]
     2. UE RF requirements without FR2 band [DC\_R18\_1BLTE\_1BNR\_2DL2UL-Core]
     3. UE RF requirements with FR2 band [DC\_R18\_1BLTE\_1BNR\_2DL2UL-Core]
  4. Rel-18 Dual Connectivity (DC) of 2 bands LTE inter-band CA (2DL/1UL) and 1 NR band (1DL/1UL) [DC\_R18\_2BLTE\_1BNR\_3DL2UL]
     1. Rapporteur input (WID/TR/CR) [DC\_R18\_2BLTE\_1BNR\_3DL2UL-Core]
     2. UE RF requirements without FR2 band [DC\_R18\_2BLTE\_1BNR\_3DL2UL-Core]
     3. UE RF requirements with FR2 band [DC\_R18\_2BLTE\_1BNR\_3DL2UL-Core]
  5. Rel-18 WID on DC of x bands LTE inter-band CA (x=3,4,5) and 1 NR band [DC\_R18\_xBLTE\_1BNR\_yDL2UL]
     1. Rapporteur input (WID/TR/CR) [DC\_R18\_xBLTE\_1BNR\_yDL2UL-Core]
     2. UE RF requirements without FR2 band [DC\_R18\_xBLTE\_1BNR\_yDL2UL-Core]
     3. UE RF requirements with FR2 band [DC\_R18\_xBLTE\_1BNR\_yDL2UL-Core]
  6. Rel-18 WID: DC of x bands (x=1,2,3,4) LTE inter-band CA (xDL/1UL) and 2 bands NR inter-band CA (2DL/1UL) [DC\_R18\_xBLTE\_2BNR\_yDL2UL]
     1. Rapporteur input (WID/TR/CR) [DC\_R18\_xBLTE\_2BNR\_yDL2UL-Core]
     2. UE RF requirements without FR2 band [DC\_R18\_xBLTE\_2BNR\_yDL2UL-Core]
     3. UE RF requirements with FR2 band [DC\_R18\_xBLTE\_2BNR\_yDL2UL-Core]
  7. Rel-18 Dual Connectivity (DC) of x bands (x=1,2,3) LTE inter-band CA (xDL/1UL) and y bands NR inter-band CA (yDL/1UL) [DC\_R18\_xBLTE\_yBNR\_zDL2UL]
     1. Rapporteur input (WID/TR/CR) [DC\_R18\_xBLTE\_yBNR\_zDL2UL-Core]
     2. UE RF requirements without FR2 band [DC\_R18\_xBLTE\_yBNR\_zDL2UL-Core]
     3. UE RF requirements with FR2 band [DC\_R18\_xBLTE\_yBNR\_zDL2UL-Core]
  8. Rel-18 WID: DC of x LTE bands and y NR bands with z bands DL and 3 bands UL (x=1, 2, 3, 4, y=1, 2; 3<=z<=6) [DC\_R18\_xBLTE\_yBNR\_zDL3UL]
     1. Rapporteur input (WID/TR/CR) [DC\_R18\_xBLTE\_yBNR\_zDL3UL-Core]
     2. UE RF requirements without FR2 band [DC\_R18\_xBLTE\_yBNR\_zDL3UL-Core]
     3. UE RF requirements with FR2 band [DC\_R18\_xBLTE\_yBNR\_zDL3UL-Core]
  9. Rel-18 NR intra band Carrier Aggregation for xCC DL/yCC UL including contiguous and non-contiguous spectrum (x>=y) [NR\_CA\_R18\_intra]
     1. Rapporteur input (WID/TR/CR) [NR\_CA\_R18\_intra-Core]
     2. UE RF requirements for FR1 [NR\_CA\_R18\_intra-Core]
     3. UE RF requirements for FR2 [NR\_CA\_R18\_intra-Core]
  10. Rel-18 NR Inter-band Carrier Aggregation/Dual Connectivity for 2 bands DL with x bands UL (x=1,2) [NR\_CADC\_R18\_2BDL\_xBUL]
      1. Rapporteur input (WID/TR/CR) [NR\_CADC\_R18\_2BDL\_xBUL-Core]
      2. UE RF requirements without FR2 band [NR\_CADC\_R18\_2BDL\_xBUL-Core]
      3. UE RF requirements with FR2 band [NR\_CADC\_R18\_2BDL\_xBUL-Core]
  11. Rel-18 NR Inter-band Carrier Aggregation/Dual Connectivity for 3 bands DL with x bands UL (x=1,2) [NR\_CADC\_R18\_3BDL\_xBUL]
      1. Rapporteur input (WID/TR/CR) [NR\_CADC\_R18\_3BDL\_xBUL-Core]
      2. UE RF requirements without FR2 band [NR\_CADC\_R18\_3BDL\_xBUL-Core]
      3. UE RF requirements with FR2 band [NR\_CADC\_R18\_3BDL\_xBUL-Core]
  12. Rel-18 NR Inter-band Carrier Aggregation/Dual Connectivity for y bands DL with x bands UL (y=4,5,6, x=1,2) [NR\_CADC\_R18\_yBDL\_xBUL]
      1. Rapporteur input (WID/TR/CR) [NR\_CADC\_R18\_yBDL\_xBUL-Core]
      2. UE RF requirements without FR2 band [NR\_CADC\_R18\_yBDL\_xBUL-Core]
      3. UE RF requirements with FR2 band [NR\_CADC\_R18\_yBDL\_xBUL-Core]
  13. Rel-18 Band combinations for SA NR supplementary uplink (SUL), NSA NR SUL, NSA NR SUL with UL sharing from the UE perspective (ULSUP) [NR\_SUL\_combos\_R18]
      1. Rapporteur input (WID/TR/CR) [NR\_SUL\_combos\_R18-Core]
      2. UE RF requirements [NR\_SUL\_combos\_R18-Core]
  14. NR CA band combinations with two SUL cells in Rel-18 [NR\_2SUL\_cell\_combos\_R18]
      1. Rapporteur input (WID/TR/CR) [NR\_2SUL\_cell\_combos\_R18-Core]
      2. UE RF requirements [NR\_2SUL\_cell\_combos\_R18-Core]
  15. Rel-18 band combinations for concurrent operation of NR/LTE Uu bands/band combinations and one NR/LTE V2X PC5 band [NR\_LTE\_V2X\_PC5\_combos\_R18]
      1. Rapporteur input (WID/TR/CR) [NR\_LTE\_V2X\_PC5\_combos\_R18-Core]
      2. UE RF requirements [NR\_LTE\_V2X\_PC5\_combos\_R18-Core]

---------------------------------------- Baskets for high power UE ----------------------------------------------------------------------------------------

* 1. High-power UE operation for fixed-wireless/vehicle-mounted use cases in LTE bands and NR bands [LTE\_NR\_HPUE\_FWVM\_R18]
     1. Rapporteur input (WID/TR/CR) [LTE\_NR\_HPUE\_FWVM\_R18-Core]
     2. UE RF requirements [LTE\_NR\_HPUE\_FWVM\_R18-Core]
  2. High power for FR1 for DC\_R18\_xBLTE\_yBNR\_zDLnUL with power class PC2 and PC1.5 [HPUE\_FR1\_DC\_LTE\_NR\_R18]
     1. Rapporteur input (WID/TR/CR) [HPUE\_FR1\_DC\_LTE\_NR\_R18-Core]
     2. UE RF requirements [HPUE\_FR1\_DC\_LTE\_NR\_R18- Core]
  3. High power UE for FR1 for NR\_CA\_R18\_intra with power class 2 and 1.5 on TDD band(s) [HPUE\_NR\_FR1\_TDD\_intra\_CA\_R18]
     1. Rapporteur input (WID/TR/CR) [HPUE\_NR\_FR1\_TDD\_intra\_CA\_R18]
     2. UE RF requirements with PC2 and PC1.5 [HPUE\_NR\_FR1\_TDD\_intra\_CA\_R18]
  4. High power UE (power class 1.5) for NR TDD bands [HPUE\_NR\_FR1\_TDD\_R18]
     1. Rapporteur input (WID/TR/CR) [HPUE\_NR\_FR1\_TDD\_R18]
     2. UE RF requirements [HPUE\_NR\_FR1\_TDD\_R18]
  5. High power UE for FR1 NR inter-band CA/DC or SUL band combination with y DL-x UL and PCm (m<3) and high power on TDD [HPUE\_FR1\_TDD\_NR\_CADC\_SUL\_R18]
     1. Rapporteur input (WID/TR/CR) [HPUE\_FR1\_TDD\_NR\_CADC\_SUL\_R18]
     2. UE RF requirements with PC2 and PC1.5 [HPUE\_FR1\_TDD\_NR\_CADC\_SUL\_R18]
  6. High power UE for FR1 for inter-band NR\_CADC\_R18\_yBDL\_xBUL with power class 2 on single carrier uplink on FDD band [HPUE\_FR1\_FDD\_NR\_CADC\_R18]
     1. Rapporteur input (WID/TR/CR) [HPUE\_FR1\_FDD\_NR\_CADC\_R18]
     2. UE RF requirements [HPUE\_FR1\_FDD\_NR\_CADC\_R18]
  7. High power UE for FR1 for FDD single band(s) with PC2 [HPUE\_NR\_FR1\_FDD\_R18]
     1. Rapporteur input (WID/TR/CR) [HPUE\_NR\_FR1\_FDD\_R18]
     2. UE RF requirements [HPUE\_NR\_FR1\_FDD\_R18]

---------------------------------------- Baskets for other aspects ----------------------------------------------------------------------------------------

* 1. Rel-18 downlink interruption for NR and EN-DC band combinations at dynamic Tx switching [DL\_intrpt\_combos\_TxSW\_R18]
     1. Rapporteur input (WID/TR/CR) [DL\_intrpt\_combos\_TxSW\_R18-Core]
     2. UE RF requirements [DL\_intrpt\_combos\_TxSW\_R18-Core]
  2. Additional NR bands for UL-MIMO in Rel-18 [NR\_bands\_UL\_MIMO\_R18]
     1. Rapporteur Input (WID/TR/CR) [NR\_bands\_UL\_MIMO\_R18-Core]
     2. UE RF requirements [NR\_bands\_UL\_MIMO\_R18-Core]
  3. Adding new NR FDD bands for RedCap in Rel-18 [NR\_FDD\_bands\_R18\_redcap]
     1. Rapporteur input [NR\_FDD\_bands\_R18\_redcap-Core]
     2. UE RF requirements [NR\_FDD\_bands\_R18\_redcap-Core]
  4. Adding new channel bandwidth(s) support to existing NR bands [NR\_bands\_R18\_BWs]
     1. Rapporteur input (WID/TR/CR) [NR\_bands\_R18\_BWs-Core]
     2. UE RF requirements [NR\_bands\_R18\_BWs-Core]
        1. Single band requirements [NR\_bands\_R18\_BWs-Core]
        2. Necessary MSD requirements for BCS4/BCS5 for CA band combinations [NR\_bands\_R18\_BWs-Core]
     3. BS RF requirements [NR\_bands\_R18\_BWs-Core]
  5. Simultaneous Rx/Tx inter-band combinations for NR CA/DC, NR SUL and LTE/NR DC in Rel-18 [LTE\_NR\_Simult\_RxTx\_R18]
     1. Rapporteur input (WID/TR/CR) [LTE\_NR\_Simult\_RxTx\_R18-Core]
     2. Identification of simultaneous Rx/Tx capability for band combinations and UE RF requirements [LTE\_NR\_Simult\_RxTx\_R18-Core]
  6. 4Rx support for NR FR1 bands (<2.6GHz) in Rel-18 [4Rx\_NR\_bands\_R18]
     1. Rapporteur input (WID/TR/CR) [4Rx\_NR\_bands\_R18-Core]
     2. UE RF requirements [4Rx\_NR\_bands\_R18-Core]
  7. Low NR band 4Rx for handheld UE and 3Tx for inter-band UL CA and EN-DC [4Rx\_low\_NR\_band\_handheld\_3Tx\_NR\_CA\_ENDC]
     1. General and work plan [4Rx\_low\_NR\_band\_handheld\_3Tx\_NR\_CA\_ENDC-Core]
     2. Enhancements for 4Rx at low frequency band (<1GHz) [4Rx\_low\_NR\_band\_handheld\_3Tx\_NR\_CA\_ENDC-Core]
     3. Enhancements of 3Tx for band combinations with two bands [4Rx\_low\_NR\_band\_handheld\_3Tx\_NR\_CA\_ENDC-Core]
        1. Tx requirements for band combinations with 3Tx [4Rx\_low\_NR\_band\_handheld\_3Tx\_NR\_CA\_ENDC-Core]
        2. Rx requirements for band combinations with 3Tx [4Rx\_low\_NR\_band\_handheld\_3Tx\_NR\_CA\_ENDC-Core]
     4. Moderator summary and conclusions [4Rx\_low\_NR\_band\_handheld\_3Tx\_NR\_CA\_ENDC]
  8. Enhancement for 700/800/900MHz band combinations [NR\_700800900\_combo\_enh]
     1. General and work plan [NR\_700800900\_combo\_enh-Core]
     2. UE RF requirements and related transmission schemes [NR\_700800900\_combo\_enh-Core]
        1. CA configuration of CA\_n5-n8 [NR\_700800900\_combo\_enh-Core]
        2. CA configuration of CA\_n5-n28 [NR\_700800900\_combo\_enh-Core]
        3. CA configuration of CA\_n8-n20-n28 [NR\_700800900\_combo\_enh-Core]
     3. Moderator summary and conclusions [NR\_700800900\_combo\_enh-Core]

---------------------------------------- New bands -------------------------------------------------------------------------------------------

* 1. Introduction of evolved shared spectrum bands [NR\_unlic\_enh]
     1. General and work plan [NR\_unlic\_enh-Core]
     2. Common requirements (channel raster, A-MPR for 100MHz CBW) [NR\_unlic\_enh-Core]
     3. UE RF requirements for SP and LPI [NR\_unlic\_enh-Core]
     4. UE RF requirements for VLP [NR\_unlic\_enh-Core]
     5. BS conformance testing and UE release independency [NR\_unlic\_enh-Perf]
     6. Moderator summary and conclusions [NR\_unlic\_enh]
  2. Introduction of the satellite L-/S-band [NR\_NTN\_LSband]
     1. General and work plan [NR\_NTN\_LSband-Core]
     2. Band definition and system parameters [NR\_NTN\_LSband-Core]
     3. UE RF requirements [NR\_NTN\_LSband-Core]
     4. SAN RF requirements [NR\_NTN\_LSband-Core]
     5. RRM requirements [NR\_NTN\_LSband-Core]
     6. Moderator summary and conclusions [NR\_NTN\_LSband]
  3. New FDD Bands using the uplink from n28 and the downlink of n75 and n76 [NR\_FDD\_ULn28\_DLn75\_n76]
     1. General and work plan [NR\_FDD\_ULn28\_DLn75\_n76-Core]
     2. Band definition and system parameters [NR\_FDD\_ULn28\_DLn75\_n76-Core]
     3. UE RF requirements [NR\_FDD\_ULn28\_DLn75\_n76-Core]
     4. BS RF requirements [NR\_FDD\_ULn28\_DLn75\_n76-Core]
     5. RRM requirements [NR\_FDD\_ULn28\_DLn75\_n76-Core]
     6. Moderator summary and conclusions [NR\_FDD\_ULn28\_DLn75\_n76-Core]

1. Rel-18 on-going non-spectrum related work items and study items for NR

-------------------------------------- Items led by RAN4 ----------------------------------------------------------------------------------

* 1. Study on simplification of band combination specification for NR and LTE [FS\_SimBC]
     1. General and work plan [FS\_SimBC]
     2. Simplification of working procedure [FS\_SimBC]
     3. Simplification of specification and reduction of test burden [FS\_SimBC]
     4. Others [FS\_SimBC]
     5. Moderator summary and conclusions [FS\_SimBC]
  2. Study on NR BS RF requirement evolution [FS\_NR\_BS\_RF\_evo]
     1. General and work plan [FS\_NR\_BS\_RF\_evo]
     2. Investigation of mmWave multi-band BS [FS\_NR\_BS\_RF\_evo]
     3. Moderator summary and conclusions [FS\_NR\_BS\_RF\_evo]
  3. Study on NR FR2 OTA testing enhancements [FS\_NR\_FR2\_OTA\_enh]
     1. General and work plan [FS\_NR\_FR2\_OTA\_enh]
     2. Test methods for RF requirements [FS\_NR\_FR2\_OTA\_enh]
     3. Test methods for RRM requirements [FS\_NR\_FR2\_OTA\_enh]
     4. Test methods for Demodulation requirements [FS\_NR\_FR2\_OTA\_enh]
     5. Test uncertainty assessments [FS\_NR\_FR2\_OTA\_enh]
     6. Moderator summary and conclusions [FS\_NR\_FR2\_OTA\_enh]
  4. Study on enhancement for sub-1GHz NR band combinations [FS\_NR\_sub1GHz\_combo\_enh]
     1. General and work plan [FS\_NR\_sub1GHz\_combo\_enh]
     2. Investigation of the feasibility and solutions to enable simultaneous transmission and reception [FS\_NR\_sub1GHz\_combo\_enh]
        1. CA configuration of CA\_n5A-n105A [FS\_NR\_sub1GHz\_combo\_enh]
        2. CA configuration of CA\_n28A-n105A [FS\_NR\_sub1GHz\_combo\_enh]
        3. CA configuration of CA\_n26A-n28A [FS\_NR\_sub1GHz\_combo\_enh]
     3. Moderator summary and conclusions [FS\_NR\_sub1GHz\_combo\_enh]
  5. Further RF requirements enhancement for NR and EN-DC in FR1 [NR\_ENDC\_RF\_FR1\_enh2]
     1. UE RF requirements [NR\_ENDC\_RF\_FR1\_enh2-Core]
        1. 4Tx UE RF requirements [NR\_ENDC\_RF\_FR1\_enh2-Core]
        2. 8Rx UE RF requirements [NR\_ENDC\_RF\_FR1\_enh2-Core]
        3. Lower MSD for inter-band CA/EN-DC/DC combinations [NR\_ENDC\_RF\_FR1\_enh2-Core]
           1. Study of approach for UE indication and signaling design [NR\_ENDC\_RF\_FR1\_enh2-Core]
           2. UE RF requirements for lower MSD [NR\_ENDC\_RF\_FR1\_enh2-Core]
     2. RRM performance requirements [NR\_ENDC\_RF\_FR1\_enh2-Perf]
        1. RLM test cases to support 8Rx [NR\_ENDC\_RF\_FR1\_enh2-Perf]
     3. Demodulation and CSI requirements [NR\_ENDC\_RF\_FR1\_enh2-Perf]
        1. 8Rx UE demodulation and CSI [NR\_ENDC\_RF\_FR1\_enh2-Perf]
           1. General [NR\_ENDC\_RF\_FR1\_enh2-Perf]
           2. PDSCH requirements [NR\_ENDC\_RF\_FR1\_enh2-Perf]
           3. SDR requirements [NR\_ENDC\_RF\_FR1\_enh2-Perf]
           4. CQI reporting requirements [NR\_ENDC\_RF\_FR1\_enh2-Perf]
        2. 4Tx BS demodulation [NR\_ENDC\_RF\_FR1\_enh2-Perf]
     4. Moderator summary and conclusions [NR\_ENDC\_RF\_FR1\_enh2]
  6. NR Channel raster enhancement [NR\_channel\_raster\_enh]
     1. General and work plan [NR\_channel\_raster\_enh-Core]
     2. UE and BS channel raster [NR\_channel\_raster\_enh-Core]
     3. UE capability [NR\_channel\_raster\_enh-Core]
     4. Moderator summary and conclusions [NR\_channel\_raster\_enh-Core]
  7. NR RF requirements enhancement for FR2, Phase 3 [NR\_RF\_FR2\_req\_Ph3]
     1. General and work plan [NR\_RF\_FR2\_req\_Ph3-Core]
     2. UL 256QAM [NR\_RF\_FR2\_req\_Ph3-Core]
     3. Beam correspondence requirements for RRC\_INACTIVE and initial access [NR\_RF\_FR2\_req\_Ph3-Core]
        1. Beam correspondence requirement applicability [NR\_RF\_FR2\_req\_Ph3-Core]
        2. UE beam type and DRX implications [NR\_RF\_FR2\_req\_Ph3-Core]
        3. Beam correspondence test issues [NR\_RF\_FR2\_req\_Ph3-Core]
     4. Moderator summary and conclusions [NR\_RF\_FR2\_req\_Ph3-Core]
  8. Requirement for NR FR2 multi-Rx chain DL reception [NR\_FR2\_multiRX\_DL]
     1. General and work plan [NR\_FR2\_multiRX\_DL-Core]
     2. UE RF requirements for simultaneous DL reception with up to 4 layer MIMO [NR\_FR2\_multiRX\_DL-Core]
        1. System parameter assumption, UE architecture and conditions of UE RF requirements [NR\_FR2\_multiRX\_DL-Core]
        2. UE RF requirements [NR\_FR2\_multiRX\_DL-Core]
     3. RRM core requirements for simultaneous DL reception from different directions [NR\_FR2\_multiRX\_DL-Core]
        1. General aspects [NR\_FR2\_multiRX\_DL-Core]
        2. L1-RSRP measurement delay [NR\_FR2\_multiRX\_DL-Core]
        3. RLM and BFD/CBD requirements [NR\_FR2\_multiRX\_DL-Core]
        4. Scheduling/measurement restrictions [NR\_FR2\_multiRX\_DL-Core]
        5. TCI state switching delay with dual TCI [NR\_FR2\_multiRX\_DL-Core]
        6. Receive timing difference between different directions [NR\_FR2\_multiRX\_DL-Core]
     4. Demodulation performance and CSI requirements [NR\_FR2\_multiRX\_DL-Perf]
        1. General aspects [NR\_FR2\_multiRX\_DL-Perf]
        2. PDSCH requirements [NR\_FR2\_multiRX\_DL-Perf]
        3. PMI reporting requirements [NR\_FR2\_multiRX\_DL-Perf]
     5. Moderator summary and conclusions [NR\_FR2\_multiRX\_DL]
  9. Even Further RRM enhancement for NR and MR-DC [NR\_RRM\_enh3]
     1. General and work plan [NR\_RRM\_enh3-Core]
     2. RRM core requirements for FR2 SCell activation delay reduction [NR\_RRM\_enh3-Core]
        1. L3 part enhancement for FR2 SCell activation [NR\_RRM\_enh3-Core]
        2. L1 part enhancement for FR2 SCell activation [NR\_RRM\_enh3-Core]
        3. Other enhancements for FR2 SCell activation [NR\_RRM\_enh3-Core]
     3. RRM core requirements for FR1-FR1 NR-DC [NR\_RRM\_enh3-Core]
     4. Moderator summary and conclusions [NR\_RRM\_enh3-Core]
  10. Further enhancements on NR and MR-DC measurement gaps and measurements without gaps [NR\_MG\_enh2]
      1. General and work plan [NR\_MG\_enh2-Core]
      2. RRM core requirements for pre-configured MGs, multiple concurrent MGs and NCSG [NR\_MG\_enh2-Core]
         1. Scope and general issues [NR\_MG\_enh2-Core]
         2. Case 1 requirements (Pre-configured MG and concurrent MG) [NR\_MG\_enh2-Core]
         3. Case 2 requirements (NCSG and concurrent MG) [NR\_MG\_enh2-Core]
      3. RRM core requirements for measurements without gaps [NR\_MG\_enh2-Core]
         1. Measurement without gaps for UEs reporting NeedForGapsInfoNR [NR\_MG\_enh2-Core]
         2. Inter-RAT measurement without gap [NR\_MG\_enh2-Core]
      4. Moderator summary and conclusions [NR\_MG\_enh2-Core]
  11. Completion of specification support for bandwidth part operation without restriction in NR [NR\_BWP\_wor]
      1. General and work plan [NR\_BWP\_wor-Core]
      2. RRM core requirements [NR\_BWP\_wor-Core]
         1. Impact of Option A [NR\_BWP\_wor-Core]
         2. Impact of Option B-1-1 [NR\_BWP\_wor-Core]
         3. Impact of Option C [NR\_BWP\_wor-Core]
         4. Impact of Option B-1-2 [NR\_BWP\_wor-Core]
      3. Moderator summary and conclusions [NR\_BWP\_wor-Core]
  12. Support of intra-band non-collocated EN-DC/NR-CA deployment [NonCol\_intraB\_ENDC\_NR\_CA]
      1. General and work plan [NonCol\_intraB\_ENDC\_NR\_CA-Core]
      2. UE RF architecture and RF requirements [NonCol\_intraB\_ENDC\_NR\_CA-Core]
      3. RRM Core requirements [NonCol\_intraB\_ENDC\_NR\_CA-Core]
      4. Demodulation performance requirements [NonCol\_intraB\_ENDC\_NR\_CA-Perf]
      5. Moderator summary and conclusions [NonCol\_intraB\_ENDC\_NR\_CA]
  13. Enhanced NR support for high speed train scenario in frequency range 2 [NR\_HST\_FR2\_enh]
      1. General and work plan [NR\_HST\_FR2\_enh-Core]
      2. RF requirements for intra-band carrier aggregation (CA) scenario [NR\_HST\_FR2\_enh-Core]
      3. RF requirement for simultaneous multi-panel operation for train roof-mounted FR2 high power devices [NR\_HST\_FR2\_enh-Core]
      4. RRM core requirements [NR\_HST\_FR2\_enh-Core]
         1. Simultaneous multi-panel operation for train roof-mounted FR2 high power devices [NR\_HST\_FR2\_enh-Core]
         2. Intra-band carrier aggregation (CA) scenario [NR\_HST\_FR2\_enh-Core]
         3. UL timing adjustment solutions [NR\_HST\_FR2\_enh-Core]
         4. RRM aspects for tunnel deployment scenario [NR\_HST\_FR2\_enh-Core]
         5. Others [NR\_HST\_FR2\_enh-Core]
      5. Demodulation performance requirements [NR\_HST\_FR2\_enh-Perf]
         1. General and channel modelling [NR\_HST\_FR2\_enh-Perf]
         2. PDSCH requirements with CA [NR\_HST\_FR2\_enh-Perf]
         3. PDSCH requirements with multi-Rx Chain DL reception [NR\_HST\_FR2\_enh-Perf]
         4. Demodulation aspects for tunnel deployment scenario [NR\_HST\_FR2\_enh-Perf]
      6. Moderator summary and conclusions [NR\_HST\_FR2\_enh]
  14. Air-to-ground network for NR [NR\_ATG]
      1. FR1 co-existence evaluation for ATG network [NR\_ATG-Core]
         1. General aspects [NR\_ATG-Core]
         2. Co-existence scenario and network layout [NR\_ATG-Core]
         3. Co-existence system parameters and modeling [NR\_ATG-Core]
         4. Co-existence simulation results [NR\_ATG-Core]
      2. UE RF requirements [NR\_ATG-Core]
         1. General aspects [NR\_ATG-Core]
         2. Tx requirements [NR\_ATG-Core]
         3. Rx requirements [NR\_ATG-Core]
      3. BS RF requirements [NR\_ATG-Core]
      4. RRM core requirements [NR\_ATG-Core]
         1. General aspects [NR\_ATG-Core]

\* R2-2304565 Reply LS on applicability of SIB19 for NR ATG

* + - 1. Mobility requirements [NR\_ATG-Core]
      2. Timing adjustments [NR\_ATG-Core]
      3. Signaling characteristics [NR\_ATG-Core]
      4. Measurement requirements [NR\_ATG-Core]
      5. Others [NR\_ATG-Core]
    1. Demodulation performance requirements [NR\_ATG-Perf]
       1. General aspects [NR\_ATG-Perf]

\* T-docs related to deployment scenarios, channel modelling and UE assumption on time/frequency offset compensation can be submitted into this AI.

* + - 1. UE demodulation performance and CSI requirements [NR\_ATG-Perf]
      2. BS demodulation performance requirements [NR\_ATG-Perf]
    1. Moderator summary and conclusions [NR\_ATG-Core]
  1. NR support for dedicated spectrum less than 5MHz for FR1 [NR\_FR1\_lessthan\_5MHz\_BW]
     1. General and work plan [NR\_FR1\_lessthan\_5MHz\_BW-Core]
     2. System parameters [NR\_FR1\_lessthan\_5MHz\_BW-Core]
     3. UE RF requirements [NR\_FR1\_lessthan\_5MHz\_BW-Core]
     4. BS RF requirements [NR\_FR1\_lessthan\_5MHz\_BW-Core]
     5. RRM requirements [NR\_FR1\_lessthan\_5MHz\_BW-Core]
     6. Moderator summary and conclusions [NR\_FR1\_lessthan\_5MHz\_BW-Core]
  2. Enhancement of TRP and TRS requirements and test methodologies [NR\_FR1\_TRP\_TRS\_Enh]
     1. General and work plan [NR\_FR1\_TRP\_TRS\_enh-Core]
     2. Enhancement of test methodology [NR\_FR1\_TRP\_TRS\_enh-Core]
        1. Anechoic chamber test methodology [NR\_FR1\_TRP\_TRS\_enh-Core]
        2. Reverberation chamber test methodology [NR\_FR1\_TRP\_TRS\_enh-Core]
        3. MU assessment [NR\_FR1\_TRP\_TRS\_enh-Core]
        4. Testing time reduction [NR\_FR1\_TRP\_TRS\_enh-Core]
     3. Performance requirements [NR\_FR1\_TRP\_TRS\_enh-Perf]
     4. Moderator summary and conclusions [NR\_FR1\_TRP\_TRS\_enh]
  3. Enhancement of Multiple Input Multiple Output Over-the-Air test methodology and requirements for NR UEs [NR\_MIMO\_OTA\_enh]
     1. General and work plan [NR\_MIMO\_OTA\_enh-Core]
     2. FR2 MIMO OTA test methodology enhancement [NR\_MIMO\_OTA\_enh-Core]
     3. FR1 MIMO OTA test methodology enhancement [NR\_MIMO\_OTA\_enh-Core]
     4. MU assessment [NR\_MIMO\_OTA\_enh-Core]
     5. Performance requirements [NR\_MIMO\_OTA\_enh-Perf]
     6. Moderator summary and conclusions [NR\_MIMO\_OTA\_enh]
  4. BS and UE EMC enhancements [NR\_LTE\_EMC\_enh]
     1. General and work plan [NR\_LTE\_EMC\_enh-Core]
     2. BS EMC enhancements [NR\_LTE\_EMC\_enh-Core/Perf]
     3. UE EMC enhancements [NR\_LTE\_EMC\_enh-Core]
     4. Moderator summary and conclusions [NR\_LTE\_EMC\_enh
  5. NR demodulation performance evolution [NR\_demod\_enh3-Perf]
     1. Advanced receiver to cancel inter-user interference for MU-MIMO [NR\_demod\_enh3-Perf]
        1. Receiver assumption and NWA signaling [NR\_demod\_enh3-Perf]
        2. Test parameters and simulation results [NR\_demod\_enh3-Perf]
     2. Absolute physical layer throughput requirements with link adaptation [NR\_demod\_enh3-Perf]
     3. Moderator summary and conclusions [NR\_demod\_enh3-Perf]

---------------------------------------- Items led by other WGs ----------------------------------------------------------------------------------------

* 1. Study on evolution of NR duplex operation [FS\_NR\_duplex\_evo]
     1. General and work plan [FS\_NR\_duplex\_evo]
     2. Study the feasibility of and impact on RF requirements [FS\_NR\_duplex\_evo]
        1. Adjacent channel co-existence evaluation [FS\_NR\_duplex\_evo]
        2. Implementation feasibility of SBFD [FS\_NR\_duplex\_evo]
           1. Feasibility of FR1 BS aspects [FS\_NR\_duplex\_evo]
           2. Feasibility of FR2 BS aspects [FS\_NR\_duplex\_evo]
           3. Feasibility of FR1 UE aspects [FS\_NR\_duplex\_evo]
           4. Feasibility of FR2 UE aspects [FS\_NR\_duplex\_evo]
        3. Impacts on BS RF requirements [FS\_NR\_duplex\_evo]

\* R1-2304183 LS on BS noise figure model for duplex evolution

* + - 1. Impacts on UE RF requirements [FS\_NR\_duplex\_evo]
    1. Summary of regulatory aspects [FS\_NR\_duplex\_evo]
    2. Moderator summary and conclusions [FS\_NR\_duplex\_evo]
  1. Study on low-power wake-up signal and receiver for NR [FS\_NR\_LPWUS]
     1. General and work plan [FS\_NR\_LPWUS]

\* R1- 2304251 Reply LS to RAN4 on LP WUR architectures

* + 1. Evaluation of Low power wake-up receiver architectures [FS\_NR\_LPWUS]
    2. Evaluation of wake-up signal designs [FS\_NR\_LPWUS]
    3. Moderator summary and conclusions [FS\_NR\_LPWUS]
  1. Study on Artificial Intelligence (AI)/Machine Learning (ML) for NR air interface [FS\_NR\_AIML\_air]
     1. General and work plan [FS\_NR\_AIML\_air]
     2. Specific issues related to use case for AI/ML [FS\_NR\_AIML\_air]

\* Use cases identified by RAN1

* + 1. Interoperability and testability aspect [FS\_NR\_AIML\_air]
    2. Moderator summary and conclusions [FS\_NR\_AIML\_air]
  1. Expanded and improved NR positioning [NR\_pos\_enh2]
     1. General and work plan [NR\_pos\_enh2-Core]
     2. RF requirements [NR\_pos\_enh2-Core]
     3. RRM core requirements [NR\_pos\_enh2-Core]
        1. General [NR\_pos\_enh2-Core]

\*R1-2304082 LS on measurement definitions for positioning with bandwidth aggregation

* + - 1. SL Positioning [NR\_pos\_enh2-Core]
      2. LPHAP use case [NR\_pos\_enh2-Core]
      3. RedCap Positioning [NR\_pos\_enh2-Core]
      4. PRS/SRS bandwidth aggregation [NR\_pos\_enh2-Core]
      5. Carrier Phase Positioning [NR\_pos\_enh2-Core]
    1. Moderator summary and conclusions [NR\_pos\_enh2
  1. Multi-carrier enhancements for NR [NR\_MC\_enh]
     1. General and work plan [NR\_MC\_enh-Core]

\* R1-2304219 Reply LS on Rel-18 Multi-carrier enhancement for NR

\* R2-2304567 LS on report of switching periods in Rel-18 UL Tx switching

* + 1. Switching time and other RF aspects up to 3 or 4 bands [NR\_MC\_enh-Core]
       1. UL Tx switching with single TAG [NR\_MC\_enh-Core]
       2. UL Tx switching with multiple TAGs [NR\_MC\_enh-Core]
    2. RRM core requirements [NR\_MC\_enh-Core]
       1. DL interruption for Tx switching across 3/4 bands [NR\_MC\_enh-Core]
    3. Moderator summary and conclusions [NR\_MC\_enh]
  1. Further NR mobility enhancements [NR\_Mob\_enh2]
     1. General and work plan [NR\_Mob\_enh2-Core]

\* R1-2304276 LS on beam indication of target cell(s) and time gap between a PDCCH order and the corresponding PRACH transmission for LTM

* + 1. L1/L2 based inter-cell mobility [NR\_Mob\_enh2-Core]
       1. General aspects and scenarios [NR\_Mob\_enh2-Core]
       2. L1-RSRP measurement requirements [NR\_Mob\_enh2-Core]
       3. L1/L2 inter-cell mobility delay requirements [NR\_Mob\_enh2-Core]
       4. Others [NR\_Mob\_enh2-Core]
    2. NR-DC with selective activation of cell groups via L3 enhancements [NR\_Mob\_enh2-Core]
    3. Improvement on SCell/SCG setup delay [NR\_Mob\_enh2-Core]
    4. Enhanced CHO configurations [NR\_Mob\_enh2-Core]
    5. Moderator summary and conclusions [NR\_Mob\_enh2]
  1. Dual Tx/Rx Multi-SIM for NR [NR\_DualTxRx\_MUSIM]
     1. General and work plan [NR\_DualTxRx\_MUSIM-Core]
     2. RRM requirements for Rel-17 MUSIM gaps [NR\_DualTxRx\_MUSIM-Core]
        1. General aspects [NR\_DualTxRx\_MUSIM-Core]
        2. Collisions between gaps and priority rules [NR\_DualTxRx\_MUSIM-Core]
        3. On network A requirements [NR\_DualTxRx\_MUSIM-Core]
        4. On network B requirements [NR\_DualTxRx\_MUSIM-Core]
     3. Moderator summary and conclusions [NR\_DualTxRx\_MUSIM]
  2. NR NTN enhancement [NR\_NTN\_enh]
     1. General and work plan [NR\_NTN\_enh-Core]
        1. System parameters [NR\_NTN\_enh-Core]

\* Include band definition

* + - 1. Regulatory information [NR\_NTN\_enh-Core]
      2. Others [NR\_NTN\_enh-Core]

\* R1-2304094 LS on PUSCH DMRS bundling for NR NTN coverage enhancement

* + 1. Co-existence study for above 10GHz bands [NR\_NTN\_enh-Core]
    2. SAN RF requirements [NR\_NTN\_enh-Core]
    3. UE RF requirements [NR\_NTN\_enh-Core]
    4. RRM core requirements [NR\_NTN\_enh-Core]
    5. Moderator summary and conclusions [NR\_NTN\_enh]
  1. Further NR coverage enhancements [NR\_cov\_enh2]
     1. Enhancement of increasing UE power high limit for CA and DC [NR\_cov\_enh2-Core]
     2. Enhancement to reduce MPR/PAR [NR\_cov\_enh2-Core]
        1. General and work plan for Enhancement to reduce MPR/PAR [NR\_cov\_enh2-Core]
        2. RF simulation parameters [NR\_cov\_enh2-Core]
        3. RF simulation results for transparent schemes [NR\_cov\_enh2-Core]
        4. RF simulation results for non-transparent schemes [NR\_cov\_enh2-Core]
        5. RF specification impact [NR\_cov\_enh2-Core]
     3. Moderator summary and conclusions [NR\_cov\_enh2]
  2. NR Network-controlled Repeaters [NR\_netcon\_repeater]
     1. General and work plan [NR\_netcon\_repeater-Core]
        1. System parameters [NR\_netcon\_repeater-Core]
        2. Others [NR\_netcon\_repeater-Core]
     2. RF core requirements [NR\_netcon\_repeater-Core]
        1. RF requirements for NCR-Fwd [NR\_netcon\_repeater-Core]
        2. RF requirements for NCR-MT [NR\_netcon\_repeater-Core]
     3. EMC core requirements [NR\_netcon\_repeater-Core]
     4. RF conformance testing [NR\_netcon\_repeater-Perf]
     5. RRM core requirements [NR\_netcon\_repeater-Core]
     6. Demodulation performance requirements [NR\_netcon\_repeater-Perf]
     7. Moderator summary and conclusions [NR\_netcon\_repeater]
  3. NR MIMO evolution for downlink and uplink [NR\_MIMO\_evo\_DL\_UL]
     1. General and work plan [NR\_MIMO\_evo\_DL\_UL-Core]
     2. UE RF requirements [NR\_MIMO\_evo\_DL\_UL-Core]
        1. Simultaneous transmission with multi-panel (STxMP) [NR\_MIMO\_evo\_DL\_UL-Core]
        2. Other UE RF impacts [NR\_MIMO\_evo\_DL\_UL-Core]
     3. RRM core requirements [NR\_MIMO\_evo\_DL\_UL-Core]
        1. RRM requirements impacts [NR\_MIMO\_evo\_DL\_UL-Core]

\* Except aspects covered in AI 9.30.3.2 and AI 9.30.3.3

* + - 1. Timing requirements for UL multi-DCI multi-TRP with two TAs [NR\_MIMO\_evo\_DL\_UL-Core]
      2. Unified TCI framework [NR\_MIMO\_evo\_DL\_UL-Core]
    1. Moderator summary and conclusions [NR\_MIMO\_evo\_DL\_UL]
  1. NR sidelink evolution [NR\_SL\_enh2]
     1. General and work plan [NR\_SL\_enh2-Core]

\* R1-2304218 LS on PSFCH and S-SSB transmissions over non-contiguous RB sets

* + 1. UE RF requirements [NR\_SL\_enh2-Core]
       1. Sidelink on a single unlicensed spectrum [NR\_SL\_enh2-Core]
          1. System parameters (channel bandwidth, channel arrangement) [NR\_SL\_enh2-Core]
          2. Tx requirements [NR\_SL\_enh2-Core]
          3. Rx requirements [NR\_SL\_enh2-Core]
       2. Con-current operation on Uu and sidelink [NR\_SL\_enh2-Core]
       3. Sidelink CA [NR\_SL\_enh2-Core]
       4. Co-channel coexistence for LTE sidelink and NR sidelink [NR\_SL\_enh2-Core]
    2. RRM core requirements [NR\_SL\_enh2-Core]
       1. Sidelink CA [NR\_SL\_enh2-Core]
       2. SL unlicensed operation [NR\_SL\_enh2-Core]
       3. Co-channel coexistence for LTE SL and NR SL [NR\_SL\_enh2-Core]
    3. Moderator summary and conclusions [NR\_SL\_enh2]
  1. Enhanced support of reduced capability NR devices [NR\_redcap\_enh]
     1. General and work plan [NR\_redcap\_enh-Core]
     2. UE RF requirements [NR\_redcap\_enh-Core]
     3. RRM core requirements [NR\_redcap\_enh-Core]
     4. Moderator summary and conclusions [NR\_redcap\_enh]
  2. Enhanced NR Sidelink Relay [NR\_SL\_relay\_enh]
     1. General and work plan [NR\_SL\_relay\_enh-Core]
     2. RRM core requirements [NR\_SL\_relay\_enh-Core]
     3. Moderator summary and conclusions [NR\_SL\_relay\_enh]
  3. Mobile IAB (Integrated Access and Backhaul) for NR [NR\_mobile\_IAB]
     1. General and work plan [NR\_mobile\_IAB-Core]
     2. Co-existence study [NR\_mobile\_IAB-Core]
     3. RF core requirements [NR\_mobile\_IAB-Core]
     4. RRM core requirements [NR\_mobile\_IAB-Core]
     5. Moderator summary and conclusions [NR\_mobile\_IAB]
  4. Network energy saving for NR [Netw\_Energy\_NR]
     1. General and work plan [Netw\_Energy\_NR-Core]
     2. UE RF requirements [Netw\_Energy\_NR-Core]
     3. BS RF requirements [Netw\_Energy\_NR-Core]
     4. RRM core requirements [Netw\_Energy\_NR-Core]
     5. Moderator summary and conclusions [Netw\_Energy\_NR]
  5. NR Support for UAV [NR\_UAV]
     1. General and work plan [NR\_UAV-Core]
     2. Necessary UE types and additional OOBE requirements for aerial UEs [NR\_UAV-Core]
     3. Moderator summary and conclusions [NR\_UAV]
  6. In-Device Co-existence (IDC) enhancements for NR and MR-DC [NR\_IDC\_enh-Core]
     1. General and work plan [NR\_IDC\_enh-Core]
     2. RRM core requirements [NR\_IDC\_enh-Core]
     3. Moderator summary and conclusions [NR\_IDC\_enh-Core]

1. Rel-18 on-going work Items for LTE

-------------------------------------- Spectrum related ----------------------------------------------------------------------------------

* 1. Rel-18 LTE-Advanced Carrier Aggregation for x bands (2<=x<= 6) DL with y bands (y=1, 2) UL [LTE\_CA\_R18\_xBDL\_yBUL]
     1. Rapporteur input (WID/TR/CR) [LTE\_CA\_R18\_xBDL\_yBUL-Core]
     2. UE RF requirements for 1 UL [LTE\_CA\_R18\_xBDL\_yBUL-Core]
        1. Requirements with specific issues [LTE\_CA\_R18\_xBDL\_yBUL-Core]
        2. Requirements without specific issues [LTE\_CA\_R18\_xBDL\_yBUL-Core]
     3. UE RF requirements for 2UL [LTE\_CA\_R18\_xBDL\_yBUL-Core]
        1. Requirements with specific issues [LTE\_CA\_R18\_xBDL\_yBUL-Core]
        2. Requirements without specific issues [LTE\_CA\_R18\_xBDL\_yBUL-Core]
     4. Moderator summary and conclusions [LTE\_CA\_R18\_xBDL\_yBUL]
  2. Additional LTE bands for UE categories M1/M2/NB1/NB2 in Rel-18 [LTE\_bands\_R18\_M1\_M2\_NB1\_NB2]
     1. Rapporteur input (WID/TR/CR) [LTE\_bands\_R18\_M1\_M2\_NB1\_NB2-Core]
     2. UE RF requirements [LTE\_bands\_R18\_M1\_M2\_NB1\_NB2-Core]
     3. BS RF and MSR requirements [LTE\_bands\_R18\_M1\_M2\_NB1\_NB2-Core/Perf]
     4. Moderator summary and conclusions [LTE\_bands\_R18\_M1\_M2\_NB1\_NB2-Core/Perf]
  3. New bands and BW allocation for 5G terrestrial broadcast - part 2 [LTE\_terr\_bcast\_bands\_part2]
     1. General and work plan [LTE\_terr\_bcast\_bands\_part2-Core]
     2. Band definition and system parameters [LTE\_terr\_bcast\_bands\_part2-Core]
     3. UE RF requirements [LTE\_terr\_bcast\_bands\_part2-Core]
     4. BS RF requirements [LTE\_terr\_bcast\_bands\_part2-Core]
     5. Moderator summary and conclusions [LTE\_terr\_bcast\_bands\_part2]
  4. Introduction of 900 MHz LTE Band in the US [LTE\_900MHz\_US]
     1. General and work plan [LTE\_900MHz\_US-Core]
     2. Band definition and co-existence requirements [LTE\_900MHz\_US-Core]
     3. UE RF requirements [LTE\_900MHz\_US-Core]
     4. BS RF requirements [LTE\_900MHz\_US-Core]
     5. Moderator summary and conclusions [LTE\_900MHz\_US]
  5. Introduction of the Extended L-band (UL 1668-1675, DL 1518-1525) for IoT NTN [IoT\_NTN\_extLband]
     1. General and work plan [IoT\_NTN\_extLband-Core]
     2. Band definition and system parameters [IoT\_NTN\_extLband-Core]
     3. UE RF requirements [IoT\_NTN\_extLband-Core]
     4. SAN RF requirements [IoT\_NTN\_extLband-Core]
     5. RRM core requirements [IoT\_NTN\_extLband-Core]
     6. Moderator summary and conclusions [IoT\_NTN\_extLband-Core]
  6. Introduction of a new FDD band (L+S band) for IoT NTN operation [IoT\_NTN\_FDD\_LS\_band]
     1. General and work plan [IoT\_NTN\_FDD\_LS\_band-Core]
     2. Band definition and system parameters [IoT\_NTN\_FDD\_LS\_band-Core]
     3. UE RF requirements [IoT\_NTN\_FDD\_LS\_band-Core]
     4. SAN RF requirements [IoT\_NTN\_FDD\_LS\_band-Core]
     5. RRM core requirements [IoT\_NTN\_FDD\_LS\_band-Core]
     6. Moderator summary and conclusions [IoT\_NTN\_FDD\_LS\_band]

-------------------------------------- Non-spectrum related Items ----------------------------------------------------------------------------------

* 1. NB-IoT/eMTC core & perf. requirements for NTN [LTE\_NBIOT\_eMTC\_NTN\_req]
     1. General [LTE\_NBIOT\_eMTC\_NTN\_req-Core/Perf]

\* Work plan for performance part, release independency

* + 1. SAN RF requirement maintenance [LTE\_NBIOT\_eMTC\_NTN\_req-Core]
    2. SAN RF conformance testing [LTE\_NBIOT\_eMTC\_NTN\_req-Perf]
       1. General and work split [LTE\_NBIOT\_eMTC\_NTN\_req-Perf]t
       2. MU and TT [LTE\_NBIOT\_eMTC\_NTN\_req-Perf]
       3. Tx SAN test requirements [LTE\_NBIOT\_eMTC\_NTN\_req-Perf]
       4. Rx SAN test requirements [LTE\_NBIOT\_eMTC\_NTN\_req-Perf]
       5. TPs to draft TS 36.181 [LTE\_NBIOT\_eMTC\_NTN\_req-Perf]
    3. UE RF requirement maintenance [LTE\_NBIOT\_eMTC\_NTN\_req-Core]
    4. RRM core requirement maintenance [LTE\_NBIOT\_eMTC\_NTN\_req-Core]
    5. RRM performance requirements [LTE\_NBIOT\_eMTC\_NTN\_req-Perf]
    6. Demodulation requirements [LTE\_NBIOT\_eMTC\_NTN\_req-Perf]
       1. UE demodulation [LTE\_NBIOT\_eMTC\_NTN\_req-Perf]
       2. SAN demodulation [LTE\_NBIOT\_eMTC\_NTN\_req-Perf]
    7. Moderator summary and conclusions [LTE\_NBIOT\_eMTC\_NTN\_req]
  1. IoT (Internet of Things) NTN (non-terrestrial network) enhancements [IoT\_NTN\_enh]
     1. General and work plan [IoT\_NTN\_enh-Core]
     2. UE RF requirements [IoT\_NTN\_enh-Core]
     3. SAN RF requirements [IoT\_NTN\_enh-Core]
     4. RRM core requirements [IoT\_NTN\_enh-Core]
     5. Moderator summary and conclusions [IoT\_NTN\_enh]
  2. Enhanced LTE Support for UAV [LTE\_UAV\_enh]
     1. General and work plan [LTE\_UAV\_enh]
     2. Necessary UE types and additional OOBE requirements for aerial UEs [LTE\_UAV\_enh]
     3. Moderator summary and conclusions [LTE\_UAV\_enh]

1. Liaison and output to other groups
   1. R17 related
      1. Update the feature list for R17
      2. On monitoring of paging occasions for CG-SDT with HD-FDD Redcap UEs (R2-2304562) [NR\_SmallData\_INACTIVE-Core]
      3. Others
   2. R15, R16 related
      1. On Rel-16 UL Tx switching period (R1-2302198) [NR\_RF\_FR1-Core]
      2. On PSFCH configured power with multiple resource pools (R1- 2302231) [5G\_V2X\_NRSL-Core]
      3. LS on intraBandENDC-Support (R2-2304431) [TEI16]
      4. Others
   3. Moderator summary and conclusions
2. RAN task
   1. RedCap HPUE
   2. RAN4 specification impact and UE implementation impact for a UE configured with two serving cells, each with SUL
   3. Moderator summary and conclusions
3. Revision of the Work Plan
4. Any other business
5. Close of the meeting