3GPP TSG-RAN WG2 Meeting #107 R2-19xxxxx

Prague, Czech Republic,26th - 30th August 2019

Source: RAN2 Chairman (Intel)

Title: Proposed Agenda

# 1 Opening of the meeting (9 AM)

## 1.1 Call for IPR

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| The attention of the delegates of this Working 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 were asked to take note that they were hereby invited:* to investigate whether their organization or any other organization owns IPRs which were, or were 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 (https://www.etsi.org/images/files/IPR/etsi-ipr-form.doc)
 |

NOTE: IPRs may be declared to the Director-General or Chairman of the SDO, but not to the RAN WG2 Chairman.

## 1.2 Network usage conditions

The PCG has laid down the following network usage conditions

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| 1. **Users shall not use the network to engage in illegal activities. This includes activities such as copyright violation, hacking, espionage or any other activity that may be prohibited by local laws.**2. **Users shall not engage in non-work related activities that consume excessive bandwidth** or cause significant degradation of the performance of the network.Since the network is a shared resource, users should exercise some basic etiquette when using the 3GPP network at a meeting. It is understood that high bandwidth applications such as downloading large files or video streaming might be required for business purposes, but delegates should be strongly discouraged in performing these activities for personal use. Downloading a movie or doing something in an interactive environment for personal use essentially wastes bandwidth that others need to make the meeting effective. The meeting chairman should remind end users that the network is a shared resource; the more one user grabs, the less there is for another. Email and its attachments already take up significant bandwidth (certain email programs are not very bandwidth efficient). In case of need the chair can ask the delegates to restrict IT usage to things that are essential for the meeting itself.**1. DON’T place your WiFi device in ad-hoc mode** **2. DON’T set up a personal hotspot in the meeting room** **3. DO try 802.11a if your WiFi device supports it** **4. DON’T manually allocate an IP address** **5. DON’T be a bandwidth hog by streaming video, playing online games, or downloading huge files** **6. DON’T use packet probing software which clogs the local network (e.g., packet sniffers or port scanners)** |

## 1.3 Other

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| In accordance with the Working Procedures it is reaffirmed that: (i) compliance with all applicable antitrust and competition laws is required; (ii) timely submissions of work items in advance of TSG or WG meetings are important to allow for full and fair consideration of such matters; and (iii) the chairman will conduct the meeting with strict impartiality and in the interests of 3GPP |

Note on (i): In case of question please contact your legal counsel.

Note on (ii): WIDs don’t need to be submitted to the RAN2 meeting and will typically not be discussed here either.

# 2 General

THANK YOU to companies that request TDoc numbers and submit contributions early before deadline (really appreciated). Will start to refrain from treating late documents.

## 2.1 Approval of the agenda

A draft schedule for the week is provided as a separate document, distributed via the RAN2 email reflector and made available during the meeting week in the RAN2\Inbox\Chairmans\_Notes folder.

## 2.2 Approval of the report of the previous meeting

## 2.3 Reporting from other meetings

Please find below a summary of the RAN2 impacting items from the this week's RAN#83

## 2.4 Others

Rapporteur changes

Spec former rapporteur proposed new rapporteur

Isolated impact analysis

Note that an isolated impact analysis is required for Rel-8 to Rel-15 CRs from Q3 2018 onwards.

Only corrections where there is a proven problem are allowed for frozen releases (Rel-8 to Rel-15).

RAN2 WG Handbook

Latest version can always be found at ftp://ftp.3gpp.org/tsg\_ran/WG2\_RL2/Org/RAN2\_Handbook/

Drafting rules

Note that specification drafting rules in TR 21.801 must be followed when drafting a CR and draft TS/TR.

Latest version can always be found at http://www.3gpp.org/ftp/specs/archive/21\_series/21.801/

Time Budget

The time budget endorsed at RAN-84 is available in [RP-191609](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191609.zip)

Offline discussions during RAN2 meeting

Chairs will allocate a number for offline discussions during the meeting. Create a folder starting with this number within inbox/drafts and use this to share any documents relating to the offline discussion (please use format "[Offline-nnn] ....", i.e. a 3 digit number). Also use this number in the title of any reflector emails relating to this offline discussion. (please use format "[RAN2#107 Offline-nnn]....."). Do not share documents over the reflector during the meeting

Efficient handling of comebacks on Friday

1/ If you need a tdoc number(s) for the outcome of your offline discussion and one is not already allocated in the notes, you must request your number by **Thursday 23:59 local time**. Preferably request your tdoc number(s) as soon as the discussion has progressed enough to know what type of tdoc(s) you need.

2/ If you have been allocated a tdoc number for the outcome of your offline discussion but for some reason you do not intent to provide that tdoc please inform the chairman.

3/ Please double check in the Friday 08:30 version of the chair notes that your comebacks are marked with the comeback marker. If not then please inform the chairman at Friday morning coffee break. If it is not marked then it will not be treated until the very end of the day.

4/ Please do not use # in the filenames of word files - hyperlinks to filenames containing hash do not work.

5/ Document treatment order: At 08:25 I will synchronise my PC with the local meeting server (I will not keep my PC constantly synced with the server). At 08:30, I will start from the top of the agenda treating only documents that are available on my PC. Assuming you also sync to the local meeting server at or after this time, everyone will have the document being treated already available on their PC without having to go to the meeting server. Once I reach the bottom of the agenda I will again synchronise my PC and start from the top.

# 3 Incoming liaisons

Note: LSs are moved to the respective agenda items if any.

# 4 Void

# 5 Void

# 6 LTE: Rel-12 and earlier releases

Including corrections related to the following WIs:

(LTE-L23, leading WG: RAN2, REL-8, started: Sep. 06, closed: Dec. 08, WID: [RP-080747](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-080747%20Revised%20LTE%20WID.doc))

(LTE\_CA-Core, leading WG: RAN1, REL-10, started: Dec. 09, closed: June 11, WID: [RP-100661](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_48%5CDocs%5CRP-100661.zip))

(LTE\_UL\_MIMO-Core, leading WG: RAN1, REL-10, started: Dec.09, closed: June 11, WID: [RP-100959](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_49%5CDocs%5CRP-100959.zip))

(LTE\_eDL\_MIMO-Core, leading WG: RAN1, REL-10, started: Dec.09, closed: March 11, WID: [RP-100196](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_47%5CDocs%5CRP-100196.zip))

(LTE\_Relay-Core, leading WG: RAN1, REL-10, started: Dec. 09, closed: June 11, WID: [RP-110911](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_52%5CDocs%5CRP-110911.zip))

(MBMS\_LTE\_enh-Core, leading WG: RAN2, REL-10, started: June 10, closed: March 11, WID: [RP-101244](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_50%5CDocs%5CRP-101244.zip))

(MDT\_UMTSLTE-Core, leading WG: RAN2, REL-10, started: Dec. 09, closed: June 11, WID: [RP-100360](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-100360.doc))

(eICIC\_LTE-Core, leading WG: RAN1, REL-10, started: March 10, closed: June 11, WID: [RP-100383](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_47%5CDocs%5CRP-100383.zip))

(SONenh\_LTE-Core, leading WG: RAN3, REL-10, started: March 10, closed: June 11, WID: [RP-101004](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_49%5CDocs%5CRP-101004.zip))

(LTE\_CA\_enh-Core, leading WG: RAN1, REL-11, started: March 11, closed: Mar.13, WID: [RP-121999](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_58%5CDocs%5CRP-121999.zip))

(MBMS\_LTE\_SC-Core, leading WG: RAN2, REL-11, started: June 10, closed: Sep.12, WID: [RP-120258](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_55%5CDocs%5CRP-120258.zip))

(LTE\_eDDA-Core, leading WG: RAN2, REL-11, started: March 11, closed: Dec.12, WID: [RP-120256](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_55%5CDocs%5CRP-120256.zip))

(LCS\_LTE-NBPS-Core, leading WG: RAN2, REL-11, started: March 09, closed: June. 13, WID: [RP-131259](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_61%5CDocs%5CRP-131259.zip))

(eICIC\_enh\_LTE-Core, leading WG: RAN1, REL-11, started: March 11, closed: Dec. 12, WID: [RP-120860](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_56%5CDocs%5CRP-120860.zip))

(SPIA\_IDC\_LTE-Core, leading WG: RAN2, REL-11, started: Sep.11, closed: Dec. 12, WID: [RP-111355](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_53%5CDocs%5CRP-111355.zip))

(COMP\_LTE\_DL-Core, leading WG: RAN1, REL-11, started: Sep.11, closed: Dec.12, WID: [RP-111365](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_53%5CDocs%5CRP-111365.zip))

(COMP\_LTE\_UL-Core, leading WG: RAN1, REL-11, started: Sep.11, closed: Dec.12, WID: [RP-111365](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_53%5CDocs%5CRP-111365.zip))

(LTE\_TDD\_add\_subframe, leading WG: RAN1, REL-11, started: March 12; closed: Sep. 12, WID: [RP-120384](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_55%5CDocs%5CRP-120384.zip))

(FS\_HetNet\_eMOB\_LTE, leading WG: RAN2, REL-11, started: March 11, closed: Sep. 12, WID: [RP-110709](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-110709.doc))

(LTE\_enh\_dl\_ctrl-Core, leading WG: RAN1, REL-11, started: Dec. 11, closed: Dec. 12, WID: [RP-120871](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_56%5CDocs%5CRP-120871.zip))

(LTE\_SC\_enh\_dualC-Core, leading WG: RAN2, REL-12, started: Dec.13, closed: Dec.14, WID: [RP-141797](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_66%5CDocs%5CRP-141797.zip))

(LTE\_SC\_enh\_L1-Core, leading WG: RAN1, REL-12, started: Dec.13, closed: Dec.14, WID: [RP-132073](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_62%5CDocs%5CRP-132073.zip))

(LTE\_D2D\_Prox-Core, leading WG: RAN1, REL-12, started: Mar.14, closed: Mar.15, WID: [RP-142043](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-142043%20LTE%20Device%20to%20Device%20Proximity%20Services%20-%20Work%20Item.doc))

(MBMS\_LTE\_OS-Core, leading WG: RAN2, REL-12, started: Sep.13, closed: Dec.14, WID: [RP-140282](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-140282_RevWID_MBMS_MDT.doc))

(LTE\_NAICS-Core, leading WG: RAN1, Rel-12, started: Mar 14, closed: Dec.14, WID: [RP-140519](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-140519.doc))

(LC\_MTC\_LTE-Core, leading WG: RAN1, REL-12, started: Jun 13, closed: Dec 14, WID: [RP-140522](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-140522.doc))

(GCSE\_LTE-MBMS\_CM-Core, leading WG: RAN3, started: Sep. 14, closed: Mar. 2015, WID: [RP-141035](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-141035.doc))

(LTE\_CA\_TDD\_FDD-Core, leading WG: RAN1, REL-12, started: Jun 13, closed: Jun 14, WID: [RP-140465](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-140465%20Revised%20WID%20TDD-FDD%20joint%20operation%20including%20CA.doc))

(LCS\_BDS-LTE-Core, leading WG: RAN2, REL-12, started: Mar 13, closed: Dec 13, WID: [RP-130416](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_59%5CDocs%5CRP-130416.zip))

(LTE\_eDL\_MIMO\_enh-Core, leading WG: RAN1, REL-12, started: Sep 12, closed: June 14, WID: [RP-121416](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_57%5CDocs%5CRP-121416.zip))

(HetNet\_eMOB\_LTE-Core, leading WG: RAN2, REL-12, started: Dec.12, , closed: Sep 14, WID: [RP-122007](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_58%5CDocs%5CRP-122007.zip))

(Cov\_Enh\_LTE-Core, leading WG: RAN1, REL-12, started: Jun.13, closed: Jun.14, WID: [RP-130833](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_60%5CDocs%5CRP-130833.zip))

(LTE\_TDD\_eIMTA-Core, leading WG: RAN1, REL-12, started: Dec 12, closed: Jun.14, WID: [RP-121772](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_58%5CDocs%5CRP-121772.zip))

(SCM\_LTE-Core, leading WG: RAN2, REL-12, started: Mar.14, closed: Sep.14, WID: [RP-140434](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-140434_SCM%20WID.doc))

Including any LTE corrections related to the following joint UMTS/LTE WIs:

(SIMTC-RAN\_OC-Core, leading WG: RAN2, REL-11, started: Sep.11, closed: Sep. 12, WID: [RP-111373](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_53%5CDocs%5CRP-111373.zip))

(eMDT\_UMTSLTE-Core, leading WG: RAN2, REL-11, started: Sep.11, closed: Dec.12, WID: [RP-121204](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_57%5CDocs%5CRP-121204.zip))

(SONenh2\_LTE\_UTRA-Core, leading WG: RAN3, REL-11, started: Sep.11, closed: Dec.12, WID: [RP-120314](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_55%5CDocs%5CRP-120314.zip))

(rSRVCC-GERAN, leading WG: GERAN2, REL-11, started: Sep.11, closed: Nov.13, WID: GP-111290)

(EHNB\_enh3-Core, leading WG: RAN3, REL-12, started: Sep.12, closed: Dec 13, WID: [RP-130741](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_60%5CDocs%5CRP-130741.zip))

(MTCe\_RAN-Core, leading WG: RAN2, REL-12, started: Dec.13, closed: Sep.14, WID: [RP-132053](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_62%5CDocs%5CRP-132053.zip))

(UTRA\_LTE\_WLAN\_interw-Core, leading WG: RAN2, REL-12, started: Dec.13, closed: Sep.14, WID: [RP-132101](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_62%5CDocs%5CRP-132101.zip))

(LTE\_UTRA\_IncMon-Core, leading: RAN4, REL-12, started: Dec.13, closed: Dec. 14, WID: [RP-132061](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_62%5CDocs%5CRP-132061.zip))

Documents in this agenda item will be handled in a break out session

# 7 LTE: Rel-13

## 7.1 WI: Further LTE Physical Layer Enhancements for MTC

(LTE\_MTCe2\_L1-Core, leading WG: RAN1, REL-13; started: Sep. 14, closed: Mar. 16, WID: [RP-150492](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-150492.doc))

Documents in this agenda item will be handled in a break out session

## 7.2 WI: Narrowband IOT

(NB\_IOT-Core; leading WG: RAN1; started: Sep. 15; target: Jun. 16; WID: [RP-152284](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-152284.docx))

Documents in this agenda item will be handled in a break out session

## 7.3 Other LTE Rel-13 WIs

Including corrections related to the following WIs:

(LTE\_LAA-Core, leading WG: RAN1, REL-13; started: June 15, closed: Dec. 15, WID: [RP-151045](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-151045.doc))

(LTE\_CA\_enh\_b5C-Core, leading WG: RAN1, REL-13; started: Dec. 14, closed: Dec. 15, WID: [RP-151984](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-151984.doc))

(LTE\_SC\_PTM-Core, leading WG: RAN2, REL-13; started: June 15, closed: Dec. 15, WID: [RP-151110](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-151110%20New%20WI%20proposal%20on%20SC-PTM%20v3.doc))

(LTE\_eD2D\_Prox-Core, leading WG: RAN2, REL-13; started: Dec. 14, closed: Mar. 16, WID: [RP-150441](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-150441%20Revised%20WID%20Enhanced%20LTE%20Device%20to%20Device%20Proximity%20Services.doc))

(LTE\_MC\_load-Core, leading WG: RAN2, started: Mar. 15, closed: Dec. 15, WID: [RP-152181](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-152181%20Revised%20WI%20Multicarrier%20Load%20Distribution%20of%20UEs%20in%20LTE.doc))

(LTE\_dualC\_enh-Core, leading WG: RAN2, started: Mar. 15, closed: Dec. 15, WID: [RP-151739](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_70%5CDocs%5CRP-151739.zip))

(LTE\_extDRX-Core; leading WG: RAN2; started: Mar. 15; closed: Mar. 16; WID: [RP-150493](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-150493-WID_Extended-DRX.doc))

(LTE\_EBF\_FDMIMO-Core; leading WG: RAN1; started: June. 15; closed: Dec. 15; WID: [RP-151085](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-151085%20WID_EBF_FD-MIMO.doc))

(LTE\_eMDT2-Core; leading WG: RAN2; started: Sep. 15; closed: Dec 15; WID: [RP-151611](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-151611.docx))

(UTRA\_LTE\_iPos\_enh-Core; leading WG: RAN2; started: Sep. 15; closed: Dec 15; WID: [RP-152251](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-152251%20%28revision%20of%20RP-152008%29%20Revised%20work%20item%20proposal%20Positioning%20enhancements%20for%20UTRA%20and%20LTE.doc))

(LTE\_WLAN\_radio-Core, leading WG: RAN2, started: Mar. 15, closed: Mar. 16, WID: [RP-152213](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-152213%20Revised-LTE-WIFI-WI-RAN-70-v2.doc))

(LTE\_WLAN\_radio\_legacy-Core; leading WG: RAN2; started: Sep. 15; closed: Mar 15; WID: [RP-151615](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_69%5CDocs%5CRP-151615.zip))

Including any LTE corrections related to the following joint UMTS/LTE WIs:

(ACDC-RAN-Core; leading WG: RAN2; REL-13; started: Mar. 15; closed: Dec. 15; [RP-150662](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-150662%20RAN%20ACDC%20WID%20Rev.doc))

Documents in this agenda item will be handled in a break out session

# 8 LTE Rel-14

## 8.1 WI: LTE based V2X

(LTE\_SL\_V2V-Core; leading WG: RAN1; started: Dec. 15; closed: Sept 16; WID: [RP-161603](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_73%5CDocs%5CRP-161603.zip))

(LTE\_V2X-Core, leading WG: RAN1; REL-14; started: June 16; closed: Mar. 17; WID: [RP-162519](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_74%5CDocs%5CRP-162519.zip))

Documents in this agenda item will be handled in a break out session

## 8.2 WI: Enhancements of NB-IoT

(NB\_IOTenh-Core; leading WG: RAN1; REL-14; started: June 16; closed: Jun. 17; WID: [RP-171060](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-171060.doc))

Note: SC-PTM for eNB-IoT is handled under 8.12.1

Documents in this agenda item will be handled in a break out session

## 8.3 WI: Further Enhanced MTC for LTE

(LTE\_feMTC-Core; leading WG: RAN1; REL-14; started: June 16; closed: Jun. 17; WID: [RP-170532](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-170532%20Revised%20WID%20for%20Further%20Enhanced%20MTC.doc))

Documents in this agenda item will be handled in a break out session

## 8.4 Other LTE Rel-14 WIs

(LTE\_eLAA-Core; leading WG: RAN1; REL-14; started: Dec. 15; closed: Mar. 17; WID:[RP-162229](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_74%5CDocs%5CRP-162229.zip))

(LTE\_WLAN\_aggr-Core; leading WG: RAN2; REL-14; started: Mar. 16; closed: Mar. 17; WID: [RP-160923](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-160923%20eLWA-WID.doc))

(LTE\_eMob-Core; leading WG: RAN2; REL-14; started: Mar. 16; closed: Mar. 17; WID:[RP-162503](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-162503%20Revised%20WID%20Mobility%20enhancements%20for%20LTE.docx))

(UTRA\_LTE\_iPos\_enh2-Core; leading WG: RAN2; REL-14; started: Mar. 16; closed: Dec. 16; WID: [RP-162026](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-162026_Revised%20Work%20Item_Further%20Indoor%20Positioning%20enhancements.doc))

(LTE\_LATRED\_L2-Core; leading WG: RAN2; REL-14; started: Mar. 16; closed: Sep. 16; WID: [RP-160667](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-160667%20L2%20New%20WID%20for%20L2%20latency%20reduction%20techniques%20for%20LTE.doc))

(MBMS\_LTE\_enh2-Core; leading WG: RAN1; REL-14; started: Mar. 16; closed: Sep. 17; WID:[RP-162231](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-162231%20updated%20WID%20eMBMS%20enhancements%20for%20LTE.doc)) (LTE\_SRS\_switch; leading WG: RAN1; REL-14; started: Mar.16: closed: Dec. 16; WID: [RP-160935](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-160935%20WI%20on%20SRS%20carrier%20switching.doc))

(LTE\_meas\_gap\_enh-Core; leading WG: RAN4; REL-14; started: Mar. 16; closed: Jun. 17; WID: [RP-160912](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-160912.doc))

(LTE\_high\_speed-Core; leading WG: RAN4; REL-14; started: Dec. 15. 16; closed: Dec. 16; WID: [RP-160172](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_71%5CDocs%5CRP-160172.zip))

(LTE\_VoLTE\_ViLTE\_enh; leading WG: RAN2; REL-14; started: Sep. 16; closed: Mar. 17: WID: [RP-161856](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_73%5CDocs%5CRP-161856.zip))

(LTE\_UE\_cat\_1Rx-Core; leading WG: RAN4; REL-14; started: Sep. 16; closed: Jun. 17: WID: [RP-171149](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_76%5CDocs%5CRP-171149.zip))

(LTE\_UL\_CAP\_enh-Core; leading WG: RAN1; REL-14; started: Mar. 16; closed: Mar. 17: WID: [RP-162488](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-162488%20WID.doc))

(LTE\_eFDMIMO-Core; leading WG: RAN1; REL-14; started: Mar. 2016; closed: Mar. 17: WID: [RP-160623](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-160623%20WID_eFD-MIMO.doc))

(LTE\_MUST-Core; leading WG: RAN1; REL-14; started: Mar. 16; closed: Dec. 16: WID: [RP-161019](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_72%5CDocs%5CRP-161019.zip))

(eDECOR-UTRA\_LTE-Core; leading WG: RAN3; REL-14; started: Dec. 16; closed: Mar. 17: WID: [RP-162543](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_74%5CDocs%5CRP-162543.zip))

Documents in this agenda item will be handled in a break out session

# 9 LTE Rel-15

## 9.1 Void

## 9.2 WI: Shortened TTI and processing time for LTE

(LTE\_STTIandPT-core; leading WG: RAN1; REL-15; started: June 16; closed: Sep. 18; WID: [RP-171468](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_76%5CDocs%5CRP-171468.zip))

Documents in this agenda item will be handled in a break out session

## 9.3 Void

## 9.4 Void

## 9.5 Further video enhancements for LTE

(LTE\_ViLTE\_enh2-Core; leading WG: RAN2; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-181746](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_81%5CDocs%5CRP-181746.zip))

Documents in this agenda item will be handled in a break out session

## 9.6 QoE Measurement Collection for streaming services in E-UTRAN

(LTE\_QMC\_Streaming; leading WG: RAN2; REL-15; started: Mar. 17; closed: Sep 18: WID: [RP-181640](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_81%5CDocs%5CRP-181640.zip))

Documents in this agenda item will be handled in a break out session

## 9.7 LTE connectivity to 5G-CN

(LTE\_5GCN\_connect-Core; leading WG: RAN2; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-181680](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-181680%20Revision%20of%20WID%20LTE-5GC.doc))

Documents in this agenda item will be handled in a break out session

## 9.8 Positioning Accuracy Enhancements for LTE

(LCS\_LTE\_acc\_enh-Core; leading WG: RAN2; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-181298](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-181298%20Update%20of%20WI%20in%20RP-172313.doc))

Documents in this agenda item will be handled in a break out session

## 9.9 Enhancing CA Utilization

(LTE\_euCA-Core; leading WG: RAN2; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-180561](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_79%5CDocs%5CRP-180561.zip))

Documents in this agenda item will be handled in a break out session

## 9.10 Enhancements on LTE-based V2X Services

(LTE\_eV2X-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-171740](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-171740%20Revision%20of%20V2X%20phase%202%20WID.doc))

Documents in this agenda item will be handled in a break out session

## 9.11 High capacity stationary wireless and 1024 QAM

(LTE\_1024QAM\_DL-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Mar. 18: WID: [RP-181670](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-181670%20Revised%20WI%20-%20LTE_HCS_RAN%2381.doc))

Documents in this agenda item will be handled in a break out session

## 9.12 Enhancements to LTE operation in unlicensed spectrum

(LTE\_unlic-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Jun. 18: WID: [RP-180402](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_79%5CDocs%5CRP-180402.zip))

Documents in this agenda item will be handled in a break out session

## 9.13 Further NB-IoT enhancements

(NB\_IOTenh2-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-182114](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_81%5CDocs%5CRP-182114.zip))

Documents in this agenda item will be handled in a break out session

Early Data transmission for NB-IoT and MTC is treated jointly under AI 9.14.1.

## 9.14 Even further enhanced MTC for LTE

(LTE\_eMTC4-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Dec. 18: WID: [RP-172811](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-172811%20Revised%20WID%20on%20Even%20further%20enhanced%20MTC%20for%20LTE.doc))

Documents in this agenda item will be handled in a break out session

### 9.14.1 Early data transmission

Early Data transmission for NB-IoT and MTC is treated jointly under this AI.

### 9.14.2 Other

## 9.15 Highly Reliable Low Latency Communication for LTE

LTE\_HRLLC-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-181259](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_80%5CDocs%5CRP-181259.zip)

Documents in this agenda item will be handled in a break out session

## 9.16 UL data compression in LTE

(LTE\_UDC-Core; leading WG: RAN2; Rel-15; started Sep 17; closed: Sep 18; WID [RP-180914](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-180914-revised%20WID_on%20UDC.doc))

Documents in this agenda item will be handled in a break out session

## 9.17 Further enhancements to CoMP for LTE

(feCOMP\_LTE-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-182004](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_81%5CDocs%5CRP-182004.zip))

Documents in this agenda item will be handled in a break out session

## 9.18 Enhanced LTE Support for Aerial Vehicles

(LTE\_Aerial-Core;leading WG: RAN2; REL-15; started: Dec. 17; closed: Sep. 18: WID:[RP-181310](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_80%5CDocs%5CRP-181310.zip))

Documents in this agenda item will be handled in a break out session

## 9.19 Bluetooth/WLAN measurement collection in MDT

 (LTE\_MDT\_BT\_WLAN-Core; leading WG: RAN2; REL-15; started: Dec. 17; closed: Sep. 18: WID: [RP-181743](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_81%5CDocs%5CRP-181743.zip))

Documents in this agenda item will be handled in a break out session

## 9.20 Increased number of E-UTRAN data bearers

(INOBEARRAN-Core ; leading WG: RAN2; REL-15; started: Dec. 17; closed: Sep. 18: WID: [RP-182133](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-182133_INOBEARRAN_WID_v05.doc))

Documents in this agenda item will be handled in a break out session

## 9.21 Other LTE Rel-15 WIs

This agenda item may be corrections relating to Rel-15 WIs which had no allocated RAN2 time but which might have minor RAN2 impact (e.g. CT/SA WIs for which we have received an LS requesting RAN2 action)

Documents in this agenda item will be handled in a break out session

## 9.22 LTE TEI15 enhancements

Small Technical Enhancements affecting LTE Rel-15 that do not belong to any Rel-15 WI.

This AI is for corrections to items introduced under TEI15. New proposals should be submitted to TEI16.

Documents in this agenda item will be handled in a break out session

# 10 WI: New Radio (NR) Access Technology

(NR\_newRAT-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Jun. 19: WID: [RP-191033](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191033.zip))

## 10.1 Organisational

Incoming LSs, etc.

## 10.2 Stage 2

### 10.2.1 Stage 2 corrections for TS 38.300

CRs to correct errors in stage 2 are still appropriate, but CRs to tidy up the specifications or add additional cases covered by stage 3 but not stage 2 are no longer appropriate for Rel-15. As at previous meetings you should discuss your stage 2 CRs with the specification rapporteurs before submission.

### 10.2.2 Stage 2 corrections for TS 37.340

CRs to correct errors in stage 2 are still appropriate, but CRs to tidy up the specifications or add additional cases covered by stage 3 but not stage 2 are no longer appropriate for Rel-15. As at previous meetings you should discuss your stage 2 CRs with the specification rapporteurs before submission.

### 10.2.3 Positioning

Corrections to both the stage 2 and stage 3 aspects related to positioning.

## 10.3 Stage 3 user plane

Documents in this agenda item will be handled in the NR user plane break out session

Essential functional corrections.

### 10.3.1 MAC

### 10.3.2 RLC

### 10.3.3 PDCP

### 10.3.4 SDAP

## 10.4 Stage 3 control plane

### 10.4.1 NR RRC

#### 10.4.1.3 Connection control procedures

No documents should be submitted to 10.4.1.3. Please submit to 10.4.1.3.x.

##### 10.4.1.3.1 Corrections to L1 Parameters

Including any output from the continued email discussion [106#28][NR] LS on supported BW for initial BWP (Nokia)

##### 10.4.1.3.2 Corrections to L2 Parameters

##### 10.4.1.3.3 Connection establishment procedure

Access control and establishment cause are discussed in the access control agenda item 10.4.1.3.10

##### 10.4.1.3.4 Connection reconfiguration procedure

Including corrections related to handover (i.e. reconfig with sync)

##### 10.4.1.3.5 Connection re-establishment procedure

##### 10.4.1.3.6 Connection resume procedure and RRC\_INACTIVE state

##### 10.4.1.3.7 Connection release procedure

Including release from connected to inactive and connected to idle.

##### 10.4.1.3.8 Security procedures

Including initial security activation and counter check procedure.

##### 10.4.1.3.10 Access control

##### 10.4.1.3.11 Other

Including RRC processing delay requirements

#### 10.4.1.4 RRM

#### 10.4.1.6 System information

#### 10.4.1.9 Inter-Node RRC messages

### 10.4.2 LTE changes related to NR

### 10.4.4 UE capabilities

### 10.4.5 Idle/inactive mode procedures

This AI addresses the idle and inactive behaviour specified in 38.304 or 36.304. Other aspects related to inactive (e.g. state transitions or other behaviour triggered by cell reselection, out of coverage, etc) are covered under RRC agenda items (10.4.1.x)

Documents in this agenda item will be handled in a break out session

#### 10.4.5.1 Cell selection/reselection

#### 10.4.5.2 Idle/inactive paging

## 10.5 Late Drop

Corrections that only impact the late drop architecture options (NE-DC, NGEN-DC and NR-DC) should be submitted to 10.5.x. If a correction also impacts EN-DC and/or SA then it should be submitted to an earlier AI.

### 10.5.1 Stage 2 CRs

### 10.5.2 UE capabilities and capability coordination

Including output of email discussion [106#33][NR/late drop] Inter-node signalling related to selectedBandEntriesMN (Huawei)

### 10.5.3 Measurements and measurement coordination

### 10.5.4 Other

# 11 Rel-16 NR Work Items

## 11.1 Integrated Access and Backhaul for NR

(NR\_IAB-Core; leading WG: RAN2; REL-16; started: Dec 18; target; Mar 20; WID: [RP-191558](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191558.zip))

Time budget: 3 TU

Documents in this agenda item will be handled in a break out session

### 11.1.1 Organisational

Including incoming LSs, draft TS, rapporteur inputs, etc

### 11.1.2 Stage-2 and general

Including higher level aspects not specific to BAP, e.g. that involve both user plane and control plane.

### 11.1.3 BAP functionality

Including Stage-2 Stage-3 and Control, Modelling, User plane aspects of adapt layer, Control principles, routing, bearer mapping

Including output of email discussion [106#47][IAB] Bearer Mapping (LG)

Including output of email discussion [106#48][IAB] BAP Modelling (Intel)

### 11.1.4 User plane aspects

User plane aspects not covered above, e.g. support for Lossless, scheduler, QoS, flow control, Other MAC RLC PDCP impacts etc

Including output of email discussion [106#44][IAB] Flow Control (ZTE)

Including output of email discussion [106#45][IAB] Lossless behaviour (Huawei)

Including output of email discussion [106#46][IAB] Low-latency scheduling (Samsung)

### 11.1.5 Control plane aspects

Including CP transport, control principles and control plane procedures not covered above e.g. Configuration, RLF detection and recovery, RRC modifications etc.

Including output of email discussion [106#43][IAB] Backhaul RLF (CATT)

### 11.1.6 Other

## 11.2 NR-based Access to Unlicensed Spectrum

(NR\_unlic-Core; leading WG: RAN1; REL-16; started: Dec 18; target; Mar 20; WID: [RP-191575](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-191575%20Revised%20WID%20NR-U.doc); Further prioritization guidance in RP-191581)

Time budget: 2 TU

Documents in this agenda item will be handled in a break out session

### 11.2.1 User plane

#### 11.2.1.2 MAC

MAC impacts other than RACH. Note RP-191581: DRX has lower priority.

Including output of email discussion [106#49][NR-U] Consistent LBT Failures (Qualcomm)

Including output of email discussion [106#51][NR-U] Configured Grant (LG)

#### 11.2.1.1 RACH

Aspects of 4 step RACH specific to unlicensed operation. Generic discussion of 2 step RACH will take place under the 2 step RACH WI. Discussion of aspects of 2 step RACH specific to unlicensed will be deferred until that WI has made some progress. Note RP-191581: Multiple Opportunities for MSG3 has lower priority.

#### 11.2.1.3 Other

User plane impacts other than MAC

### 11.2.2 Control plane

#### 11.2.2.1 Inactive and Idle mode

Impacts to 38.304: mobility, paging in idle and inactive modes, system information. Note RP-191581: Enhancements for System Information has lower priority.

#### 11.2.2.2 Connected mode and RRC

General Mobility Aspects: How to find and identify NR-U target cell(s).

Impact to 38.331: RLM/RLF, mobility in connected mode (note that mobility solutions to be covered by the NR Mobility Enh WI are not to be discussed). Note RP-191581: RRM Measurements beyond currently agreed ones have lower priority.

#### 11.2.2.3 Other

E.g. system topics for Stand Alone, if any.

### 11.2.3 Other

Including CAPC, general topics covering both CP and UP, organisational

Including output of email discussion [106#50][NR-U] CAPC (Nokia)

## 11.3 Void

## 11.4 NR V2X

(5G\_V2X\_NRSL-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Mar 20; WID: [RP-190984](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-190984.zip))

Time budget: 2 TU

Documents in this agenda item will be handled in a break out session

### 11.4.1 General

Including incoming LSs, rapporteur inputs, etc.

### 11.4.2 L2/3 protocols common to mode 1 and mode 2 resource allocation

Including output of email discussion [106#77][NR/V2X] Prioritisation (OPPO), output of email discussion [106#78][NR/V2X] Cell reselection (CATT), output of email discussion [106#79][NR/V2X] Exceptional TX resource pool (MediaTek), output of email discussion [106#82][NR/V2X] RLC (Ericsson), output of email discussion [106#83][NR/V2X] PDCP (Vivo), L2/L3 functionalities and procedures that are applied to both mode-1 and mode-2 or independent of resource allocation modes. Note that functionalities specific to QoS support are discussed in 11.4.6.

### 11.4.3 L2/3 protocols for mode 1 resource allocation

Including output of email discussion [106#80][NR/V2X] BSR and SR (Huawei), control and user plane aspects in order to support mode 1 (e.g. RRC procedures, information to be sent to NW/UE, UE behaviours in CP and/or UP, etc.). Note cross-RAT mode 1 resource scheduling is discussed in 11.4.7.

### 11.4.4 L2/3 protocols for mode 2 resource allocation

Including control and user plane aspects in order to support mode 2 (e.g. RRC procedures, information to be sent to NW/UE, UE behaviours in CP and/or UP, etc.). Note cross-RAT mode 2 resource configuration is discussed in 11.4.7.

### 11.4.5 PC5 RRC procedures and information

Including identification of the required PC5 RRC procedures, information to be sent to peer UE, and UE behaviours, relation with the PC5-S procedures, PC5 RRC security aspects, AS level RLM/RLF for unicast, etc.

### 11.4.6 L2/3 protocols for QoS support

Including output of email discussion [106#81][NR/V2X] SLRB (ZTE), identification of the required L2/3 procedures, information to be sent NW/UE or peer UE, and UE behaviours, etc.

### 11.4.7 L2/3 protocols for cross-RAT resource allocation

Including L2/3 aspects for i) NR sidelink mode 1 scheduling by LTE Uu, ii) NR sidelink mode 2 resource allocation by LTE Uu, iii) LTE sidelink mode 4 resource allocation by NR Uu, and iv) LTE sidelink mode 3 resource allocation by NR Uu

### 11.4.8 Others

Support of simultaneous configuration of mode1 and mode2 (we may need to wait for the complete design of mode1 and mode2), other working group procedures which require RAN2 discussion, etc.

## 11.5 Optimisations on UE radio capability signalling

(RACS-RAN-Core; leading WG: RAN2; REL-16; started: Mar 19; target; Mar 20; WID: [RP-191088](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191088.zip))

Time budget: 0.5 TU

### 11.5.1 Organisational

Including incoming LSs, rapporteur inputs, running CRs, etc

### 11.5.2 UE radio capability signalling using UE capability identity

Including output of email discussion [106#34][NR/RACS] UE capability ID in relation to filters (MediaTek)

### 11.5.3 Segmentation of UE radio capabilities

Including confirmation of the working assumption from RAN2#106 on the interleaving between segments of UECapabilityInformation message and other messages.

### 11.5.4 Other

Simple delta signalling proposals are to be discussed only after progress is made on the UE capability identity mechanism

## 11.6 Study on NR non-terrestrial network

(FS\_NR\_NTN\_solutions; leading WG: RAN3; REL-16; started: Jun 18; target; Dec 19; SID: [RP-190710](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-190710_SID%20NR-NTN%20solutions_v61.doc))

Time budget: 0.5 TU

Documents in this agenda item will be handled in a break out session

### 11.6.1 General

Rapporteur input

### 11.6.2 Requirements and Scenarios

Contributions on overall requirements and scenario prioritization. Key issues and requirement related to one of the areas identified below should be submitted in those AIs.

### 11.6.3 User Plane

#### 11.6.3.1 MAC Enhancements

Contributions related to MAC enhancements (e.g. DRX, HARQ, RA enhancements) and any other identified issues

Additional timers can be treated in later phases of the work

Impact of HARQ on other procedures and impact of propagation delay to user plane procedures (e.g. RA)

Including output of email discussion [106#70][NR/NTN] RACH capacity/procedures ( ZTE )

Including output of email discussion [106#71][NR/NTN] HARQ (Nomor)

#### 11.6.3.2 RLC Enhancements

Contributions on this topic related to RLC reordering (e.g. timers and SN space) and any other identified issues.

Contributions on this topics will not be treated in RAN2#106 until RAN1 has done some progress

#### 11.6.3.3 PDCP Enhancements

Contributions related to RLC reordering (e.g. timers and SN space) and any other identified issues

Contributions on this topics will not be treated in RAN2#106 until RAN1 has done some progress

### 11.6.4 Control Plane

Including output of email discussion [106#72][NR/NTN] TP on NTN-TN service continuity (Nokia)

#### 11.6.4.1 Mobility

Including output of email discussion [106#73][NR/NTN ] Mobility issues and solutions (InterDigital )

##### 11.6.4.1.1 Mobility Aspects for GEO

Solutions addressing mobility issues for GEO based systems, including CHO specific aspects related to NTN, and positioning

##### 11.6.4.1.2 Mobility Aspects for LEO

Solutions addressing mobility issues for LEO based systems, including CHO specific aspects related to NTN, and positioning

#### 11.6.4.2 Idle mode

Identify RAN2 specific issues/aspects to address related to tracking area management

Paging capacity analysis and solutions.

Impacts to cell selection reselection.

Contributions should address aspects of LEO and GEO separately (i.e. different sections/proposal within each contribution)

Including output of email discussion [106#74][NR/NTN ] Cell Selection/reselection (LG)

#### 11.6.4.3 Other

## 11.7 NR Industrial Internet of Things (IoT)

(NR\_IIOT-Core; leading WG: RAN2; REL-16; started: Mar 19; target; Mar 20; WID: [RP-191561](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191561.zip))

Time budget: 2 TU

Documents in this agenda item will be handled in a break out session

### 11.7.1 General

Rapporteur input etc.

### 11.7.2 TSC

#### 11.7.2.1 Accurate reference timing

Accurate reference timing delivery from gNB to UE using broadcast and unicast RRC signalling (with EUTRA Rel-15 signalling solution as baseline) for synchronization requirements defined in TS 22.104)

#### 11.7.2.2 Scheduling Enhancements

Enhancements to satisfy QoS for wireless Ethernet when using TSC traffic patterns and support for TSC message periodicities with non-integer multiple of NR supported CG/SPS periodicities.

#### 11.7.2.3 Ethernet Header Compression

Specify Ethernet header compression based on structure-aware algorithm.

### 11.7.3 Intra-UE prioritization and multiplexing

Intra-UE prioritization and multiplexing. Resource conflicts between dynamic grant (DG) and configured grant (CG) PUSCH and conflicts involving multiple CGs. UL data/control and control/control resource collision according to WID.

Specific: Work split R1 R2 and the options for how to capture in TSes.

Including output of email discussion [106#53][IIOT] Handling of overlapping PUSCH grant prioritization (Docomo)

Including output of email discussion [106#56][IIOT] SR vs PUSCH prioritization (QC)

### 11.7.4 PDCP duplication enhancements

PDCP duplication with up to 4 RLC entities configured by RRC. Mechanisms or enhancements relating to dynamic control of how a set or subset of configured RLC entities or legs are used for PDCP duplication, duplication activation/deactivation, selective duplication. Impacts of higher-layer multi-connectivity based on SA2 progress and request.

Including output of email discussion [106#54][IIOT] Need for and details of UE-based mechanisms for PDCP duplication (CMCC)

Including output of email discussion [106#55][IIOT] Network control of PDCP duplication enhancements (Ericsson)

## 11.8 NR Positioning Support

(NR\_pos-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Mar 20; WID: [RP-191156](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191156.zip))

Time budget: 1 TU

### 11.8.1 Organisational

Including incoming LSs, rapporteur inputs, etc

### 11.8.2 Architecture and protocol aspects

#### 11.8.2.1 Support of NR RAT-dependent positioning

#### 11.8.2.2 Support of SSR phase 2 (PPP-RTK)

Including output of email discussion [106#76][NR/Positioning] SSR grid definition (u-blox)

#### 11.8.2.3 Broadcast assistance data

Note, documents on on-demand system information in connected mode should be submitted to 11.21. Documents on positioning related SI content should be submitted here.

#### 11.8.2.4 UE-based positioning

### 11.8.3 Other

## 11.9 NR mobility enhancements

(NR\_Mob\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; target; Mar 20; WID: [RP-190489](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_83%5CDocs%5CRP-190489.zip))

Time budget: 2 TU

### 11.9.1 Organisational

*Including incoming LSs, running CRs, rapporteur inputs, etc*

### 11.9.2 Reduction in user data interruption during handover or SCG change

No documents should be submitted to 11.9.2. Please submit to 11.9.2.x

#### 11.9.2.1 Comparison of DC and non-DC based solutions

Comparison of DC and non-DC based solutions that require simultaneous connectivity with source cell and target cell. The aim for this meeting is to make a decision on the key characteristics of the solution for reducing user data interruption during HO. As agreed at RAN2#106, RAN2 targets a single solution. A decision is required at this meeting to give sufficient time (3 meetings) to finalise the details. Companies are encouraged to work together to bring multi-company sourced contributions.

#### 11.9.2.2 Specifics of DC-based solutions

Including further details of DC based solutions (e.g. user plane stack, bearer handling, security key handling, data forwarding, RLM, etc.). Note that documents comparing DC and non-DC, identifying commonalities and differences, etc, should be submitted to AI 11.9.2.1.

#### 11.9.2.3 Specifics of Non-DC-based solutions

Including further details of Non-DC based solutions that require simultaneous connectivity with source cell and target cell (e.g. user plane stack, bearer handling, security key handling, data forwarding, RLM, etc.). Note that documents comparing DC and non-DC, identifying commonalities and differences, etc, should be submitted to AI 11.9.2.1.

#### 11.9.2.4 Other

Including solutions for user data interruption reduction that do not require simultaneous connectivity with source cell and target cell, e.g. RACH-less handover, Rel-14 LTE like MBB, etc

### 11.9.3 Handover robustness improvements

No documents should be submitted to 11.9.3. Please submit to 11.9.3.x

#### 11.9.3.1 Conditional handover - beam specific aspects

Including output of email discussion [106#40][NR/Mob enh] Beam specific aspects of CHO (Qualcomm)

Companies should provide their views to the email discussion and contributions submitted to this agenda items should focus on aspects that were not covered by the email.

#### 11.9.3.2 Conditional handover - executions details

This AI jointly addresses NR and LTE.

Including output of email discussion [106#41][NR/LTE/mob enh] CHO execution details (Vivo)

Including confirmation, or otherwise, of the working assumption from last meeting on handling of RLF and HO failure.

Companies should provide their views to the email discussion and contributions submitted to this agenda items should focus on aspects that were not covered by the email.

#### 11.9.3.3 Conditional handover - configuration

This AI jointly addresses NR and LTE.

Including output of email discussion [106#42][NR/LTE/mob enh] CHO configuration (OPPO)

Companies should provide their views to the email discussion and contributions submitted to this agenda items should focus on aspects that were not covered by the email.

#### 11.9.3.4 Conditional handover - other aspects

This AI jointly addresses NR and LTE.

Aspects not addressed by the 3 previous agenda items.

#### 11.9.3.5 Fast handover failure recovery

#### 11.9.3.6 Other

### 11.9.4 Other

## 11.10 DC and CA enhancements

(LTE\_NR\_DC\_CA\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; target; Mar 20; WID: [RP-191600](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191600.zip))

Time budget: 2 TU

### 11.10.1 Organisational

Including incoming LSs, running CRs, rapporteur inputs, etc

### 11.10.2 NR-NR Dual Connectivity

RAN2 aspects related to NR-NR Dual Connectivity, to be discussed after RAN1 has made some progress.

### 11.10.3 Early measurement reporting

Early measurement reporting for MR-DC, NR-DC, and CA in IDLE, INACTIVE.

Including output of email discussion [106#35][NR/DCCA] Validity area (Vivo)

Including output of email discussion [106#36][NR/DCCA] Measurement and reporting configuration (Qualcomm)

Including output of email discussion [106#37][NR/DCCA] UE behaviour regarding idle measurement configurations and measurement results (Ericsson)

### 11.10.4 Efficient and low latency configuration signalling

Minimizing signalling overhead and latency needed for initial cell setup, additional cell setup and additional cell activation for data transmission. Contributions related to early measurement reporting should not be submitted in this AI.

No documents should be submitted to 11.10.4. Please submit to 11.10.4.x

#### 11.10.4.1 Direct SCell activation

Further details related to direct SCell activation by RRC upon SCell addition or after a handover. Support of MCG SCell and SCG Configuration with RRC Resume (AI 11.10.4.3) should be concluded before discussing whether direct SCell activation by RRC is applicable to RRC Resume (outstanding FFS from RAN2#105).

#### 11.10.4.2 Fast SCell activation

Solutions for fast SCell activation including 'dormancy' like behaviour, provision of temporary RS resources at SCell activation, etc. This topic will be discussed again by RAN2 after receiving input from RAN1/4 on the feasibility and benefit of the potential solutions in response to LS [R2-1908483](file:///C%3A%5CData%5C3GPP%5CExtracts%5CR2-1908483%20-%20LS%20on%20NR%20fast%20SCell%20activation.docx) sent from RAN2#106.

#### 11.10.4.3 MCG SCell and SCG Configuration with RRC Resume

Support of CA/DC configuration with RRC resume.

Including output of email discussion [106#38][NR/DCCA] SCG and MCG SCell Configuration with RRC Resume (Ericsson)

#### 11.10.4.4 Other

Other enhancements not addressed in the AIs above

### 11.10.5 Fast MCG link Recovery

Further details of fast recovery of MCG link by utilizing the SCG link for recovery during MCG failure while operating under MR-DC.

### 11.10.6 Cross-Carrier scheduling with different numerologies

RAN2 aspects related to cross-carrier scheduling, to be discussed after RAN1 has made some progress.

### 11.10.7 Other

Including any RAN2 aspects related to the objectives 6, 7 and 8 (for which the WID did not identify RAN2 impact)

## 11.11 UE Power Saving in NR

(NR\_UE\_pow\_sav-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Mar 20; WID: [RP-191607](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191607.zip))

Time budget: 1 TU

Documents in this agenda item will be handled in a break out session

NOTE: "SCell dormancy" like behaviour will be discussed in MR-DC WI. Power saving techniques to reduce PDCCH monitoring on activated SCells and Enhancements to Rel-15 DRX procedures are out of scope of the WI until RAN#85.

### 11.11.1 Organisational

Including incoming LSs, running TS, rapporteur inputs, etc

### 11.11.2 PDCCH-based power saving signals/channel

Procedure triggering a MAC entity to “wake up” to monitor PDCCH at reception of the PDCCH-based power saving signal/channel for the next occurrence(s) of the drx-onDurationTimer

### 11.11.3 Efficient transition from RRC\_CONNECTED to RRC\_IDLE/RRC\_INACTIVE

Mechanism for a UE to indicate its preference of transitioning out of RRC\_CONNECTED state

### MIMO layer adaptation

Contributions focus on specifying configuration of a different MIMO layer configuration of the initial/default BWP compared with other BWPs of a Serving Cell. Discuss whether to also extend this to define per-BWP MIMO layer configuration

### UE assistance

Select amongst the following UE assistance information for RAN2 by RAN2#107 (power preferred information (baseline LTE PPI in a well-defined manner) and UE's preference on C-DRX, BWP and SCell configuration)

Companies are highly encouraged to bring co-sourced contributions with converged solution.

###  RRM measurement relaxation

Network-configured mechanism to relax intra and inter-frequency RRM measurement for neighbour cells for RRC\_IDLE/INACTIVE with minimal mobility performance impacts.

Contributions should focus on defining triggering criteria for the UE to move between relaxed and normal RRM measurements, that considers at least if UE is not at cell edge, or if UE is stationary or with low mobility.

Discuss type of RRM measurement relaxation by allowing measurements with longer intervals, and/or by reducing the number of cells/carriers to be measured

## 11.12 SON/MDT support for NR

(NR\_SON\_MDT-Core; leading WG: RAN3; REL-16; started: Jun 19; target; Mar 20; WID: [RP-191594](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191594.zip))

Time budget: 1 TU

Documents in this agenda item will be handled in a break out session

### 11.12.1 General

Including LSs, work plan, rapporteur inputs, running TS

### 11.12.2 MDT

The procedure, signaling and corresponding measurement quantities for MDT

### 11.12.3 L2 measurements

Definition of L2 measurements in TS 38.314

### 11.12.4 SON

UE reporting necessary to enhance the network configuration for MRO, MLB and RACH optimization

### 11.12.5 Others

## 11.13 2-step RACH for NR

(NR\_2step\_RACH-Core; leading WG: RAN1; REL-16; started: Dec 18; target; Mar 20; WID: [RP-190711](file:///C%3A%5CData%5C3GPP%5CExtracts%5CRP-190711%20Revised%20work%20item%20proposal%202%20step%20RACH%20for%20NR.docx))

Time budget: 1 TU

Documents in this agenda item will be handled in a break out session

### 11.13.1 General

Running CRs

Incoming LSs

Including output of email discussion [106#75][NR/2 step RACH] 38.300 Running CR (ZTE)

### 11.13.2 Overall procedure for successful case

Stage-2 open aspects of successful case

General content of successRAR and whether successRAR is split into more than one message

### 11.13.3 Overall procedure for fallback case

Stage-2 open aspects of fallback case

General content of fallbackRAR and whether legacy msg2 can be used as fallbackRAR

### 11.13.4 RA resource configuration and selection

Some aspects depend on RAN1 progress.  Focus should be on RAN2 related aspects.

Including criteria for selection of 2-step RACH vs 4-step RACH etc

### 11.13.5 Stage-3 aspects

Stage-3 details, including MAC PDU formats (based on agreements in 11.13.2 and 11.13.3) and structure of success response (with and without RRC message) and of fallback response

### 11.13.6 Other

## 11.14 Single Radio Voice Call Continuity from 5G to 3G

(SRVCC\_NR\_to\_UMTS-Core; leading WG: RAN2; REL-16; started: Dec 18; target; Mar 20; WID: [RP-190713](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_83%5CDocs%5CRP-190713.zip))

Time budget: 0.5 TU

### 11.14.1 Organisational

Including incoming LSs, running CRs, rapporteur inputs, etc

### 11.14.2 Inter RAT UTRA measurements

### 11.14.3 Inter-RAT handover to UTRAN for SRVCC

### 11.14.4 Other

## 11.15 Cross Link Interference (CLI) handling and Remote Interference Management (RIM) for NR

(NR\_CLI\_RIM; leading WG: RAN1; REL-16; started: Dec 18; target; Dec 19; WID: [RP-191546](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191546.zip))

Time budget: 0.5 TU

Including output of email discussion [106#39][NR/CLI] Measurement object and event triggers (LG)

## 11.16 Enhancements on MIMO for NR

(NR\_eMIMO-Core; leading WG: RAN1; REL-16; started: Jun 18; target; Mar 20; WID: [RP-182863](file:///C%3A%5CData%5C3GPP%5Carchive%5CTSGR%5CTSGR_82%5CDocs%5CRP-182863.zip))

Time budget: 0.5 TU

## 11.17 Physical Layer Enhancements for NR Ultra-Reliable and Low Latency Communication (URLLC)

(NR\_L1enh\_URLLC-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Mar 20; WID: [RP-191584](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191584.zip))

Time budget: 0.5 TU

User plane related aspects for which there is overlap with topics discussed under the IIOT WI should be submitted to the appropriate IIOT agenda item.

## 11.18 Private Network Support for NG-RAN

(NG\_RAN\_PRN-Core; leading WG: RAN3; REL-16; started: Mar 19; target; Mar 20; WID: [RP-191563](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191563.zip))

Time budget: 0.5 TU

## 11.19 Other NR Rel-16 WIs/SIs

This agenda item is to be used for LSs and documents relating to Rel-16 NR but for which there is no existing RAN WI/SI (e.g. LSs from CT/SA requesting RAN2 action) or for which there is no allocated RAN2 time (e.g. some RAN4 led WIs with no RAN2 time but might require introduction of UE capability signalling).

Time budget: 0.5 TU

## 11.20 NR TEI16 enhancements

Small Technical Enhancements to NR. TEI should be predominantly within a single WG and fully completed within the same quarter in all affected WGs. RAN2 impact of RAN1/4-led TEI shall be limited to RRC signalling of configuration parameters and UE capabilities (no MAC impact, no RRC procedural impact, etc). Please also see [RP-191602](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191602.zip) endorsed at RAN#84.

No documents should be submitted to 11.20. Please submit to 11.20.x.

Time budget: 1 TU

### 11.20.1 RAN2 led TEI16 enhancements - Control plane related

### 11.20.2 RAN2 led TEI16 enhancements - User plane related

### 11.20.3 TEI16 enhancements led by other WGs

Documents submitted to this agenda item will only be treated after a decision on the TEI has been made by another group and an LS informing RAN2 of their decision has been received.

## 11.21 On demand SI in connected

On demand SI reception in RRC\_CONNECTED may be relevant to several Rel-16 WIs (e.g. V2X, positioning, IIoT, etc). This agenda item is for the discussion of the generic procedure for on demand SI in RRC\_CONNECTED; WI specific details of the SI content should be discussed within the appropriate AI for that WI.

# 12 Rel-16 LTE Work Items

## 12.1 Additional MTC enhancements for LTE

(LTE\_eMTC5-Core; leading WG: RAN1; REL-16; started: Jun 18; target; Mar 20; WID: [RP-191356](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191356.zip))

Time budget: 2.5 TU

Documents in this agenda item will be handled in a break out session

Some sub-items in 12.1 and 12.2 may be treated jointly.

### 12.1.1 Organisational

Including incoming LSs, rapporteur inputs, running CRs

Including output of email discussion [106#68][R16 eMTC] Running CR on 36.300 (Intel)

Including output of email discussion [106#69][R16 eMTC] Running CR on 36.331 (Qualcomm)

### 12.1.2 Mobile-terminated (MT) early data transmission (EDT)

MT Early Data transmission for MTC and NB-IoT is treated jointly under this AI.

Including output of email discussion [106#64][R16 NB-IoT/eMTC] UP MT-EDT (Ericsson)

Including output of email discussion [106#65][R16 NB-IoT/eMTC] CP MT-EDT (Intel)

### 12.1.3 UE-group wake-up signal (WUS)

UE-group wake-up signal (WUS) for MTC is treated jointly with NB-IoT under AI 12.2.3. Do not use this AI for any item that can be discussed jointly.

### 12.1.4 Transmission in preconfigured resources

Transmission in preconfigured resources for MTC is treated jointly with NB-IoT under AI 12.2.4. Do not use this AI for any item that can be discussed jointly.

### 12.1.5 Scheduling multiple DL/UL transport blocks

Scheduling multiple DL/UL transport blocks with or without DCI for SC-PTM and unicast

Scheduling multiple DL/UL transport blocks for MTC and NB-IoT is treated jointly under this AI.

### 12.1.6 Quality report in Msg3

Including output of email discussion [106#66][R16 eMTC] Quality report in Msg3 (Huawei)

### 12.1.7 MPDCCH performance improvement using CRS

### 12.1.8 Improvements for non-BL UEs

CE mode A and B improvements for non-BL UEs among “enhancements to idle mode mobility”, “UE demodulation performance requirements for 2 RX antennas and full duplex FDD”, “Dual layer DL reception”, “Feedback based on CSI-RS”, “ETWS/CMAS in connected mode”

Including output of email discussion [106#67][R16 eMTC] How to acquire ETWS/CMAS information (LG)

### 12.1.9 Stand-alone deployment

Enable the use of LTE control channel region for DL transmission (MPDCCH/PDSCH) to BL/CE UEs

### 12.1.10 Mobility Enhancements

Improving the DL RSRP and, RSRQ measurement accuracy, through use of RSS, relaxation of RRM measurements for serving cell for UEs using WUS for at least low mobility UEs

### 12.1.11 Coexistence with NR

Study NR and LTE specifications to identify possible issues related to coexistence of MTC with NR

### 12.1.12 Connection to 5GC

#### 12.1.12.1 Support of eDRX in CM-IDLE and EDT

Support of extended DRX in CM-IDLE

Support of EDT for Data over NAS and UP solution (if concluded to be supported based on outcome of LS exchange with SA2)

Support of eDRX in CM-IDLE and EDT for MTC and NB-IoT are treated jointly under this AI.

#### 12.1.12.2 Support of RRC\_INACTIVE and eDRX in CM-CONNECTED

Support of RRC\_INACTIVE and extended DRX in CM-CONNECTED with RRC\_INACTIVE (support of sleep cycles up to the NAS and SMS retransmission timers)

Support of RRC\_INACTIVE and eDRX in CM-CONNECTED for MTC and NB-IoT are treated jointly under this AI.

#### 12.1.12.3 Other

MTC specific aspects

### 12.1.13 Other

## 12.2 Additional enhancements for NB-IoT

(NB\_IOTenh3-Core; leading WG: RAN1; REL-16; started: Jun 18; target; Mar 20; WID: [RP-191576](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191576.zip))

Time budget: 2.5 TU

Documents in this agenda item will be handled in a break out session

Some sub-items in 12.1 and 12.2 may be treated jointly.

### 12.2.1 Organisational

Including incoming LSs, draft TS, rapporteur inputs, etc

Including output of email discussion [106#57][NB-IoT] Running CR on 36.300 (Huawei)

Including output of email discussion [106#58][NB-IoT] Running CR on 36.331 (Huawei)

### 12.2.2 Mobile-terminated (MT) early data transmission (EDT)

Mobile-terminated Early Data transmission for NB-IoT is treated jointly with MTC under AI 12.1.2. Do not use this AI for any item that can be discussed jointly.

### 12.2.3 UE-group wake-up signal (WUS)

UE group wake Up signal for MTC and NB-IoT is treated jointly under this Agenda Item.

### 12.2.4 Transmission in preconfigured resources

Including support for transmission in preconfigured resources in idle and/or connected mode based on SC-FDMA waveform for UEs with a valid timing advance.

Transmission in preconfigured resources for MTC and NB-IoT is treated jointly under this Agenda Item.

Including output of email discussion [106#59][R16 NB-IoT/eMTC] D-PUR Procedural steps (Huawei)

Including output of email discussion [106#60][R16 NB-IoT/eMTC] D-PUR TA validation criteria (Ericsson)

Including output of email discussion [106#61][R16 NB-IoT/eMTC] D-PUR Request, (re)configuration and release mechanism (Qualcomm)

### 12.2.5 Scheduling multiple DL/UL transport blocks

Including scheduling multiple DL/UL transport blocks with or without DCI for SC-PTM and unicast

Scheduling multiple DL/UL transport blocks for NB-IoT is treated jointly with MTC under AI 12.1.5. Do not use this AI for any item that can be discussed jointly.

### 12.2.6 Network management tool enhancement

Including SON support for ANR, Random access performance and RLF report

Including output of email discussion [106#62][R16 NB-IoT] ANR procedure, configuration and report details (Huawei)

### 12.2.7 Improved multi-carrier operation

Including support of Msg3 quality reporting for non-anchor access.

Including signalling to indicate on a non-anchor carrier for paging a set of subframes which will contain NRS even when no paging NPDCCH is transmitted.

### 12.2.8 Inter-RAT cell selection

Including power efficient NB-IoT mechanism which would assist idle mode inter-RAT cell selection for NB-IoT to and from LTE, LTE-MTC and GERAN

Including output of email discussion [106#63][R16 NB-IoT] Discussion of signalling aspects for inter-RAT cell selection assistance. (Nokia)

### 12.2.9 Coexistence with NR

Study NR and LTE specifications to identify possible issues related to coexistence of NB-IoT with NR

### 12.2.10 Connection to 5GC

#### 12.2.10.1 Indication of supported CIoT features and other common aspects

Additional information in SIB to indicate supported CIoT features; indication of CIoT features supported by the UE in RRC, and other common aspects for NB-IoT and MTC including UAB, Support of restriction of use of Enhanced Coverage and Delivery of Expected UE Behaviour information to the RAN.

Indication of supported CIoT features and other common aspects for MTC and NB-IoT are treated jointly under this AI.

#### 12.2.10.2 Other

Including support of Inter-UE QoS for data over NAS (resource prioritization between different NB-IoT UEs), signalling to support 5GC in NB-IoT, e.g. RRC establishment, SIBs, and other NB-IoT specific aspects

### 12.2.11 Other

Others

## 12.3 Even further mobility enhancement in E-UTRAN

(LTE\_feMob-Core; leading WG: RAN2; REL-16; started: Jun 18; target; Mar 20; WID: [RP-190921](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-190921.zip))

Time budget: 1 TU

Documents in this agenda item will be handled in a break out session

### 12.3.1 Organizational

Including incoming LSs, running CR proposals and rapporteur inputs (if any)

Including output of email discussion [106#84][LTE/feMOB] Stage-2 CR for LTE mobility enhancements (China Telecom)

### 12.3.2 Reduction in user data interruption (RUDI) during handover for dual active protocol stack (DAPS)

No documents should be submitted to 12.3.2. Please submit to 12.3.2.x.

#### 12.3.2.1 UL handling for DAPS-RUDI

Including UL handling during RUDI handover: when does UE stop using PUSCH/PUCCH towards source? Is there any UL power control implication from this? How is RACH done towards the target cell?

#### 12.3.2.2 PDCP aspects of DAPS-RUDI

Including PDCP aspects: How to model the DAPS in PDCP? How does RoHC work with DAPS? How is the ciphering modelling changed with two security keys? Is reordering affected in some way?

#### 12.3.2.3 Capability coordination for DAPS-RUDI

Including capability coordination aspects: what kind of capability coordination is needed? How is the capability coordination conveyed: Can the existing LTE DC capability coordination be used? What happens if the capability coordination is not done: Can the network assume something about UE capabilities in such a case?

#### 12.3.2.4 Security handling for DAPS-RUDI

Including security key handling: When does UE do the security key switch? Is UE required to handle tow parallel security keys and if it is, how long does it retain the source cell security key? Is there some end-marker packet that is sent in UL/DL for UP?

#### 12.3.2.5 RLM for DAPS-RUDI

Including RLM aspects of RUDI: How long does UE maintain RLM towards source cell? Does UE have to maintain RLM towards both source and target cells at any point? If the target cell fails, does UE report RLF report towards source cell?

#### 12.3.2.6 Bearer handling for DAPS-RUDI

Including bearer configuration aspects: How is the radio bearer configuration done for DAPS? Are they considered similarly as RLC bearers for LTE DC or EN-DC? At which point does UE release the parts of the bearers towards the source cell?

#### 12.3.2.7 Other aspects of DAPS-RUDI

Including any other open aspects of DAPS-RUDI

### 12.3.3 Conditional Handover

No documents should be submitted to 12.3.3. Please submit to 12.3.3.x.

#### 12.3.3.1 Execution Details of CHO

Including details on CHO execution and any LTE-specific parts of email discussion [106#41][NR/LTE/mob enh] CHO execution details (Vivo) that are not treated in NR mobility session. Contributions that only duplicate the email discussion(s) may be deprioritized.

#### 12.3.3.2 Failure handling of CHO

Including failure handling of CHO: Does UE retain stored CHO commands upon CHO failure? When is CHO deemed as failed?

#### 12.3.3.3 Configuration of CHO

Including any LTE-specific parts of email discussion [106#42][NR/LTE/mob enh] CHO configuration (OPPO) that are not treated in NR mobility session. Contributions that only duplicate the email discussion(s) may be deprioritized.

#### 12.3.3.4 Other aspects of CHO

Including any other CHO details not covered in other AIs.

### 12.3.4 Other solutions

Including solutions for user data interruption other than DAPS and mobility robustness solutions other than CHO. Depending on progress with 12.3.2.x and 12.3.3.x, this agenda item may be deprioritized

## 12.4 Further performance enhancement for LTE in high speed scenario

(LTE\_high\_speed\_enh2-Core; leading WG: RAN4; REL-16; started: Jun 18; target; Sep 19; WID: [RP-181482](file:///C%3A%5C%5CData%5C%5C3GPP%5C%5Carchive%5C%5CTSGR%5C%5CTSGR_80%5C%5CDocs%5C%5CRP-181482.zip%22%20%5Co%20%22C%3AData3GPParchiveTSGRTSGR_80DocsRP-181482.zip))

Time budget: 0.25 TU

Documents in this agenda item will be handled in a break out session

## 12.5 Other LTE Rel-16 WIs

This agenda item is to be used for LSs and documents relating to Rel-16 LTE but for which there is no existing RAN WI/SI (e.g. LSs from CT/SA requesting RAN2 action) or for which there is no allocated RAN2 time.

Documents in this agenda item will be handled in a break out session

## 12.6 LTE TEI16 enhancements

Small Technical Enhancements to LTE. TEI should be predominantly within a single WG and fully completed within the same quarter in all affected WGs. RAN2 impact of RAN1/4-led TEI shall be limited to RRC signalling of configuration parameters and UE capabilities (no MAC impact, no RRC procedural impact, etc). Please also see [RP-191602](file:///C%3A%5CData%5C3GPP%5CTSGR%5CTSGR_84%5Cdocs%5CRP-191602.zip) endorsed at RAN#84.

Time budget: 0.5 TU

Documents in this agenda item will be handled in a break out session

# 13 Comebacks

This agenda item will be used during the meeting. No documents are supposed to be submitted by delegates.

## 13.1 Breakout sessions

### 13.1.1 Report from Break-Out session

Report from sessions on NR idle/inactive mobility, NR SON/MDT, LTE TEI16

* CBF: Report from Break-Out Session, Vice-Chair (CMCC)

R2-19xxxxx Report from Break-Out Session, Vice-Chair (CMCC)

### 13.1.2 Report from Break-Out session

Report from sessions on NR UP, IAB, NR-U, NR IIoT

* CBF: Report from Break-Out Session, Vice-Chair (MediaTek)

R2-19xxxxx Report from Break-Out Session, Vice-Chair (MediaTek)

### 13.1.3 Report from Break-Out session

Report from session on NB-IoT

* CBF: Report from Break-Out Session, Session Chair (Huawei)

R2-19xxxxx Report from Break-Out Session, Session Chair (Huawei)

### 13.1.4 Report from Break-Out session

Report from session on MTC

* CBF: Report from Break-Out Session, Session Chair (Ericsson)

R2-19xxxxx Report from Break-Out Session, Session Chair (Ericsson)

### 13.1.5 Report from Break-Out session

Report from session on Legacy LTE, Rel-15 LTE, NR NTN SI, NR power saving SI, NR 2 step RACH

* CBF: Report from Break-Out Session, Session Chair (InterDigital)

R2-19xxxxx Report from Break-Out Session, Session Chair (InterDigital)

### 13.1.6 Report from Break-Out session

Report from session on Rel-15 LTE Positioning, Rel-15 and 16 NR Positioning

* CBF: Report from Break-Out Session, Session Chair (MediaTek)

R2-19xxxxx Report from Break-Out Session, Session Chair (MediaTek)

### 13.1.7 Report from Break-Out session

Report from session on LTE V2X and NR V2X

* CBF: Report from Break-Out Session, Session Chair (Intel)

R2-19xxxxx Report from Break-Out Session, Session Chair (Intel)

### 13.1.8 Report from Break-Out session

Report from session on Rel-16 LTE Mobility Enhancements WI

* CBF: Report from Break-Out Session, Session Chair (Nokia)

R2-19xxxxx Report from Break-Out Session, Session Chair (Nokia)

## 13.2 Main session

This section contains a temporary list of comebacks (press F9 to update while the cursor is inside the list).

# 14 Outgoing LSs

Draft LSs should be submitted to their corresponding agenda item if there is one. If there is no appropriate agenda item, draft LSs, and any association discussion documents, may be submitted to this agenda item.

# 15 Any other business

# 16 Closing of the meeting (17:00)