3GPP TSG-RAN WG2 Meeting #109bis-e R2-200xyzw

**Electronic, 20 April – 30 April 2020**

Source: RAN2 Chairman (Mediatek)

Title: Draft Agenda

# Opening of the meeting

**This e-Meeting**

- This e-Meeting will follow 3GPP principles for e-Meetings, e.g. an e-Meeting is an ad-hoc meeting that do not count towards a company’s voting rights.

- RAN2 109bis electronic has full decision power, i.e. full decision power to make agreements and approvals according to RAN WG2 terms of reference, without any need to ratify decisions at a later RAN2 or other meeting.

- There will be some more leeway than usual to re-discuss or post-change agreements made at R2 109bis electronic.

- Descriptions on how this meeting is conducted can be found in tdoc on RAN2 109bis-e Methods and Guidance under agenda item 2.4 below

## 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

Not applicable

## 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.

## 1.4 Statement Regarding Engagement with Companies Added to the U.S. Export Administration Regulations (EAR) Entity List in 3GPP Activities

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| *Updated 2019-10-10*  **1. Public Information is Not Subject to EAR**  3GPP is an open platform where all contributions (including technology protected or not by patent) made by the different Individual Members under the membership of each respective Organizational Partner are publicly available. Indeed, contributions by all and any Individual Members are uploaded to a public file server when received and then the documents are effectively in the public domain.  In addition, since membership of email distribution lists is open to all, documents and emails distributed by that means are considered to be publicly available.  As a result, information contained in 3GPP contributions, documents, and emails distributed at 3GPP meetings or by 3GPP email distribution lists, because it is made available to the public without restrictions upon its further dissemination, is not subject to the export restrictions of the EAR.  Meeting minutes are maintained for 3GPP meetings. Such meeting minutes for 3GPP meetings are made available to the public without restrictions upon its further dissemination. As a result, information, including information conveyed orally, contained in 3GPP meetings is not subject to the export restriction of the EAR; this would include information conveyed during side meetings that may occur during the main meetings, if these meetings are open to any participants and the results of all said meetings are publicly available without restrictions upon their further dissemination.  **2. Non-Public Information**  Non-public information refers to the information not contained or not intended to be contained in 3GPP contributions, documents or emails. Such non-public information may be disclosed during informal meetings, exchanges, discussions or any form of other communication outside the 3GPP meetings and email distribution lists, and may be subject to the EAR.  **3. Other Information**  Certain encryption software controlled under the International Traffic in Arms Regulations (ITAR), even if publicly available, may still be subject to US export controls other than the EAR.  **4. Conduct of Meetings**  The situation should be considered as "business as usual" during all the meetings called by 3GPP.  **5. Responsibility of Individual Members**  It should be remembered that contributions, meetings, exchanges, discussions or any form of other communication in or outside the 3GPP meetings are of the accountability, integrity and the responsibility of each Individual Member. In addition, Individual Members remain responsible for ensuring their compliance with all applicable export control regulations, including but not limited to EAR.  Individual Members with questions regarding the impact of laws and regulations on their participation in 3GPP should contact their companies’ legal counsels. |

# 2 General

**Instructions - General**

Priority: In such cases that prioritization is needed, essential maintenance corrections has highest priority, followed by R16 Closing of WI Open Issues, followed by R16 Corrections / Stage-3 review solutions.

Incoming LS’es are handled. As usual it is up to session chair which ones to treat (and related tdocs).

R15 and earlier: For R15 and earlier releases, documents on important and urgent issues shall be submitted and treated. No text enhancements without behavioural or functional change.

R16 Open Issues, Stage-3 review: R16 Input to R2#109bis-e to focus on issues: WI open issues and Stage-3 review issues. It is important that you work with WI rapporteurs and WI CR rapporteurs on Open issues.

R16 Email Discussions to R2#109bis-e: No tdocs except email discussions will be treated on topics that are treated in email discussion. You need to participate in email discussions and contribute your views there. An unresolved issue that seems to require discussion and separate treatment can be assigned to a company, and this company can then submit one tdoc on this issue that do not count against tdoc limitation. Other companies are encouraged to cooperate with the assigned company rather than submitting own input. This is applicable both to e.g. ASN.1 review category 2 or 3 issues and/or issues relating to other specifications.

R16 Small Corrections, non-RRC: For small non-controversial corrections, please if possible contact the CR Rapporteur directly to include the correction. The CR Rapporteur can list the contributing company name within brackets on the explanatory parts of the CR cover sheet, for proper credit (however for changes commented by multiple companies the rapporteur may choose to not do this). If required due to US EAR, such communication can use the official R2 email discussion [Post109e#53]. For RRC Small Corrections, please for RRC rapporteurs ASN.1 category 0/1 instructions.

R16 CRs: No company specific CRs. For all R16 WIs, “big” CRs similar to running CRs per WI and TS are maintained by current/previous running CR rapporteurs. Companies may input TPs or draft CRs, to be merged into the big CRs if agreed. R16 CRs do not need an impact analysis.

R16 TEI: Low priority for new proposals. Most likely no new proposal will be treated.

R16 UE capabilities: On L1 and Radio features, RAN2 waits for feature list input from RAN1 and RAN4. Can anyway evolve running CRs to the extent possible/reasonable, e.g. on R2 feature scope.

R17: Will not be treated

**Instructions - Summary of tdocs**

In particular for R16, for AIs where tdoc submission is expected, the Intention is to treat summaries that summarize contents of submitted tdocs rather than submitted tdocs. Tdocs that are covered by a summary are to be noted if the summary is treated.

Where indicated in the agenda or later in chair notes, the tdocs submitted to a sub-agenda item or on a specific sub-topic, are summarized in a summary tdoc by an appointed rapporteur. It is the task of the rapporteur to reflect submitted proposals in a neutral way, group, merge and structure to facilitate easy treatment. There may be email discussion checking for each summary that may start as soon as there is a first summary draft, e.g. before submission. When such email discussion takes place during the tdoc review week it is considered a) the purpose is mainly to check correctness and get immediate comments/suggestions b) ambition level is best effort.

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| **Guidance on RAN2 RRC Activities before, during and after April meeting**  NR and EUTRA follows the same principal planning for RRC CRs and ASN.1 review. R2-2001709 contains an endorsed high level overview plan. Some more details are provided here. Even further details will be provided by the RRC TS Rapporteurs.   1. **General principles** 2. Until April meeting, we will run both ASN.1 Review and WI-specific email discussions in parallel. 3. The ASN.1 Review will be kicked-off as soon as Rel-16 spec is available. Detailed guidance for the ASN.1 review process will be provided by the RRC specification Rapporteurs 4. **UE capabilities** are discussed as covered by specific WI discussions. It is not planned to include UE capabilities for ASN.1 review for April. RIL issues can still be considered best effort for the WIs that included some UE capability contents in the March specifications. 5. **After April meeting**, RAN2 expects to have the following RRC CRs:    1. The ASN.1 Review file, with RILs (as usual after ASN.1 review). This is a “mega-CR”, covering the complete Rel-16 RRC specification.    2. One RRC CR per WI (assumption), including contents for closing WI open issues, and Category 3 issues, which are WI specific (see below) . RIL items/comments are added in the ASN.1 Review file to refer to the tdoc number of the WI specific CRs. The intention is that RIL issues of the ASN.1 review file shall indicate all RRC changes, also the ones done in WI-specific CRs. 6. **Issue classification**   For reference, below there is an Issue Classification (similar to what RAN2 has used earlier in ASN.1 reviews), but now with **guidance** on during which April meeting sessions to handle each issue during RAN2 April 2020 meeting:   1. **Trivial** e.g. editorials, commas, colon, misspelling, missing/ double spaces, italics etc. 2. **Minor** e.g. quite straightforward changes e.g. correction/ addition of specification references or sub-clauses 3. **ASN.1 session** **issue** e.g. ASN.1 issue e.g. related to need codes, extensibility, alternative encoding, ASN.1/ guidelines, general protocol (consistency) issue or issue affecting more than one WI 4. **WI session issue i**.e. an issue that is not purely ASN.1 but has some impact on functionality but only affecting a single WI.   Issues of class 0 and 1 are provided to ASN.1 review moderator, who captures changes within ASN.1 review file with best effort i.e. not highest priority in accordance with guidance provided at ASN.1 review kick-off. This is applicable also to issues found in WI-specific discussions.   1. **WI specific email discussions before April meeting** 2. Each WI RRC Rapporteur is expected to progress known RRC open issues (FFSs, Editor’s Notes etc) in WI-specific RAN2 email discussions until RAN2 April meeting. 3. The result is submitted in WI-specific RRC draft CRs to RAN2 April meeting. 4. Main focus is to resolve the already known open issues, but if discovered, companies may also raise new major functional issues. 5. The open issues managed in these discussions are managed by WI RRC rapporteur. No ASN.1 review RIL handling are used in these email discussions. Note that it is still important to take note of such open issues in the ASN.1 review work to avoid double work. Open issues lists should be made available. Note that Class 0, 1, and 2 issues, if discussed, shall be forwarded to RRC TS rapporteurs / ASN.1 session, for capture in the ASN.1 review file. 6. If a Class 3 issue cannot be resolved during the email discussion, it may be left open or one company can be assigned to address the issue in the meeting by tdoc (without counting towards tdoc limitation) 7. **ASN.1 Review until April meeting** 8. ASN.1 review on the full RRC March specifications will be kicked off when RRC specifications are published. 9. The details on the ASN1 Review process (entering RILs, formats, macros, reporting Class 0/Class 1 issues etc) will be provided before the ASN.1 Review is kicked-off. 10. Companies are asked to provide Class 2 issues and Class 3 issues discussed in the ASN.1 review email discussion via RILs, in the same way as usual.     1. For WIs without RRC email discussion, class 3 issues are raised during ASN.1 review e-mail (for WIs with RRC email discussion, such issues are preferably handled within concerned e-mail as open issue without RIL) 11. If an ASN.1 review issue Class 2 or 3 is not resolved during the email discussion, it may be left open or one company can be assigned to address the issue in the meeting by tdoc (without counting towards tdoc limitation) 12. **Sessions in RAN2 April meeting** 13. **WI-specific sessions**     1. WI-specific RRC draft CRs and Class 3 issues will be handled at WI-specific sessions.     2. As a result of the session, the **session minutes** indicates per RRC issue/change whether        1. the RRC change is to be inserted into the ASN.1 Review file (following the process for inserting into the ASN.1 review file, i.e. with a RIL comment) or        2. the RRC change remains in the (WI-specific) CR A RIL item/comment is added to the ASN.1 Review, to refer to the tdoc number of the (WI-specific) CR. Note that RIL issues from WI specific discussions that are decided in WI specific session may be added to the ASN.1 review file after agreement.     3. WI RRC Rapporteur is responsible for and coordinates the insertion of RILs related to WI specific CR into the ASN.1 Review file with the ASN.1 Review Moderator. 14. **ASN.1 Review sessions (separate for NR and LTE)**     1. The ASN.1 Review sessions (for NR and LTE) will handle Class 2 issues (according to ASN.1 review process). 15. **Actions expected by companies before April meeting** 16. Contribute WI specific open issues to the WI specific email discussions. Note that these emails aim to handle class 3 type of issues. 17. Contribute to the ASN.1 Review (focus should be on issues **essential to freeze the ASN.1** i.e. ensure that signaling is complete, extensible, releasable, and that associated handling seems clear and complete.)     1. Enter RIL issues for Class 2 issues and, for WIs without RRC e-mail discussion, Class 3 issues.     2. For class 3 issues specific to single WI, avoid double work (e.g. coordinate with WI-specific RRC Rapporteur). (WI/functional open issues and their resolutions are only referred to in ASN.1 review file after agreement.) 18. Report Class 0 and Class 1 issues, to be included in ASN.1 Review File (ASN.1 Review Moderator is responsible). The actual update of the ASN.1 Review file might be postponed until after April RAN2 meeting (not critical activity) |

Note: Time Budget Comments remain in this document only for reference. They are not applicable for R2 109bis-e.

## 2.1 Approval of the agenda

## 2.2 Approval of the report of the previous meeting

## 2.3 Reporting from other meetings

Report from RP 87e

1. 3GPP release timeline on RP-200493 was endorsed.
2. The following R16 WIs declared 100% for Core part: eURLLC, SRVCC 5G to 3G, LTE DL MIMO, LTE based 5G terrestrial Broadcast, LTE NAVIC. In addition RACS has no remaining open issues in R2.
3. Mandatory support for full rate integrity protection was discussed. No Conclusions. This issue will be revisited in the June RP. Until then, this topic do not need to be treated in in WGs.
4. DC CA fallbacks for FR2 was discussed briefly. Progress expected in R2 in the next quarter.
5. Feedback from FEB e-Meetings is collected in RP-200490 (for information).
6. UE capabilities was discussed and is summarized in RP-200502 (for information).
7. IAB: Task to work on which mandatory R15 features can be optional for IAB, RP-200501

## 2.4 Others

# 3 Incoming liaisons

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

# 4 EUTRA corrections Rel-15 and earlier

See Appendix A for reference to Work items, work item codes and WIDs.

No documents should be submitted to 4. Please submit to 4.x

NOTE For R2 109e for R15 and earlier releases, only documents on important and urgent issues shall be submitted and treated. No text enhancements without behavioural or functional change.

## 4.1 NB-IoT corrections Rel-15 and earlier

Documents in this agenda item will be handled in a break out session. Common NB-IoT/eMTC parts treated jointly with 4.2.

This agenda item may not be treated during the e-meeting. No web conference is planned for this agenda item

## 4.2 eMTC corrections Rel-15 and earlier

Documents in this agenda item will be handled in a break out session. Common NB-IoT/eMTC parts treated jointly with 4.1.

This agenda item may not be treated during the e-meeting. No web conference is planned for this agenda item

## 4.3 V2X and Sidelink corrections Rel-15 and earlier

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

## 4.4 Positioning corrections Rel-15 and earlier

Documents in this agenda item will be handled by email. No web conference is planned for this agenda item.

## 4.5 Other LTE corrections Rel-15 and earlier

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

A web conference may be used for handling some of the discussions in this WI, and a summary document may be provided by the session chair.

# 5 WI: New Radio (NR) Access Technology

(NR\_newRAT-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Jun. 19: WID: RP-191971)

NOTE For R2 109bis-e for R15 and earlier releases, only documents on important and urgent issues shall be submitted and treated. No text enhancements without behavioural or functional change.

## 5.1 Organisational

Incoming LSs, etc.

## 5.2 Stage 2

### 5.2.1 Stage 2 corrections for TS 38.300

You should discuss your stage 2 CRs with the specification rapporteurs before submission.

### 5.2.2 Stage 2 corrections for TS 37.340

You should discuss your stage 2 CRs with the specification rapporteurs before submission.

### 5.2.3 Positioning

Corrections to both the stage 2 and stage 3 aspects related to positioning. Stage 2 CRs should be discussed with the specification rapporteur before submission.

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

## 5.3 Stage 3 user plane

Essential functional corrections.

### 5.3.1 MAC

### 5.3.2 RLC

### 5.3.3 PDCP

### 5.3.4 SDAP

## 5.4 Stage 3 control plane

Essential functional corrections.

### 5.4.1 NR RRC

Including all architecures

#### 5.4.1.1 Connection control

Including L1 Parameters, L2 Parameters, Connection establishment and release, Connection reconfiguration (also reconfig with sync, Handover), Connection resume and release with RRC\_INACTIVE state, Security procedures, re-establishment, RRC processing delay requirements etc.

#### 5.4.1.2 RRM and Measurements and Measurement Coordination

Including late drop.

Including outcome of the email discussion [Post109e#49][NR15] SN MN Measurement Coordination (Huawei)

#### 5.4.1.3 System information

#### 5.4.1.4 Inter-Node RRC messages

#### 5.4.1.5 Other

### 5.4.2 LTE changes related to NR

### 5.4.3 UE capabilities and Capability Coordination

Including Late Drop

Including outcome of the email discussion [Post109e#24][NR15] Clarification of capabilities with NR-DC and NE-DC (Ericsson). Including outcome of the email discussion [Post109e#25][NR15] SRS Capability report for SRS only Scell (Huawei).

### 5.4.4 Idle/inactive mode procedures

This agenda item addresses the idle and inactive behaviour specified in 38.304 or 36.304. Other aspects related to inactive (e.g. state transitions, out of coverage, etc) are covered under RRC agenda items (5.4.1.x)

## 5.5 Void

# 6 Rel-16 NR Work Items

## 6.0 Rel-16 General

### 6.0.1 RRC ASN.1 review

Including outcome of the email discussion [Post109e#51][ASN.1] RRC ASN.1 review NR and NRLTE common issues (Ericsson/Samsung)

### 6.0.2 Feature List and UE capabilities

Only rapporteurs input (TS rapporteur or running CR editor) is expected.

### 6.0.3 Other

Other Cross WI issues, e.g. MAC issues. Only rapporteurs input (TS rapporteur or running CR editor) is expected.

## 6.1 Integrated Access and Backhaul for NR

(NR\_IAB-Core; leading WG: RAN2; REL-16; started: Dec 18; target; June 20; WID: RP-200084, SR: RP-200083)

Time budget: 3 TU

Tdoc Limitation: 8 tdocs

### 6.1.1 Organisational

Including incoming LSs, draft TS, rapporteur inputs

### 6.1.2 Stage-2 Corrections

### 6.1.3 BAP Open Issues and Corrections

Open issue: Configuration of DL mapping at IAB-donor DU (dependent on RAN3 work). Corrections to BAP: Routing, Bearer Mapping, BAP based Flow Control, Other

### 6.1.4 User plane Open Issues and Corrections

Open Issue: Clarification of the implication of the MAC-CE to signal number of guard symbols. Corrections to User plane not covered by BAP

### 6.1.5 RRC Open Issues and corrections

Including outcome of the email discussion [Post109e#35][IAB] RRC Open Issues (Ericsson),

On Open issues, only the email discussion is planned to be treated. Open Issues: Establishment of F1-C-over-LTE/X2AP path, Behaviour of IAB-node when going to NR RRC\_IDLE, Reestablishment at former descendant nodes (SA only).

### 6.1.6 RLF Handling Open Issues

Including outcome of the email discussion [Post109e#36][IAB] RLF Handling Open Issues (Qualcomm)

Open Issues: Behaviour of SA IAB-DU after BH RLF has been declared and RLF notification has been sent, RLF notification for IAB-node in ENDC. Note only the email discussion document is planned to be treated for this AI.

### 6.1.7 IP address allocation Open Issues

Including outcome of the email discussion [Post109e#26][IAB] IP address allocation (Samsung). Please take into account also incoming LS in R3-201420. Note only the email discussion document is planned to be treated for this AI.

### 6.1.8 UE capabilities

Optionality of Rel-15 UE Features for IAB-MT: From RP 87e: RAN WGs to investigate which of the mandatory Rel-15 UE features (as defined in TR 38.822) can be optional for basic operation of [the IAB-MT] (and if found useful, for different classes of IAB-MTs as defined by RAN4). RAN WGs should strive to minimize specification impact. A summary might be used for this AI.

### 6.1.9 Other Corrections

## 6.2 NR-based Access to Unlicensed Spectrum

(NR\_unlic-Core; leading WG: RAN1; REL-16; started: Dec 18; target; June 20; WID: [RP-192](file:///C:\Data\3GPP\Extracts\RP-191575%20Revised%20WID%20NR-U.doc)926; SR; RP-200459, Further prioritization guidance in RP-191581). Documents in this agenda item will be handled in a break out session.

Time budget: 3 TU

Tdoc Limitation: 3

### 6.2.1   General

Including incoming LSs, rapporteur inputs, etc.  
Contributions in this AI are reserved for WI rapporteur inputs and/or spec rapporteur inputs and do not count towards the tdoc limits. All comments related to 38.300, 38.304 should be given to Ozcan, spec rapporteur. Qualcomm will produce a document with the received issues and update the CR directly

Including [Post109e#40][NR-U] UE capabilities (Qualcomm, Vivo)

No contributions are expected for UE capabilities. Please provide your input to the email discussion. Vivo is expected to produce first draft of 38.304

### 6.2.2 User plane

*Including [Post109e#39][NR-U] MAC open issues (Ericsson)*

*Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.*

*All identified critical open issues should be provided to the rapporteur via email discussion Post109e#39 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated issued.*

*No individual company CRs should be submitted*

### 6.2.3   Control plane

*Including [Post109e#38][NR-U] RRC open issues (Qualcomm)*

*Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.*

*All identified critical open issues should be provided to the rapporteur via email discussion Post109e#38 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated issued.*

*No individual company CRs should be submitted*

*Contributions on ASN.1 review Class 3 level issues for WI session are not limited by the tdoc limitation.*

## 6.4 NR V2X

(5G\_V2X\_NRSL-Core; leading WG: RAN1; REL-16; started: Mar 19; target; June 20; WID: [RP-](file:///C:\Data\3GPP\TSGR\TSGR_84\docs\RP-190984.zip)200129; SR: RP-200431). Documents in this agenda item will be handled in a break out session

Time budget: 3 TU

Tdoc Limitation: Besides 6.4.2.3, 1 tdoc for discussion and if needed 1 tdoc for TP/draft CR in each agenda item. Note we aim to have single big CR due to e-meeting restrictions and the big CR (by CR rapporteur) will include all agreed proposals. Also note more than 1 TP/draft CRs can be submitted if discussion document includes changes cross multiple specifications, e.g. in agenda item 6.4.3.2 if 1 discussion document includes changes of RLC and PDCP specifications, you can submit both RLC TP/draft CR and PDCP TP/draft CR. Note it is not allowed to submit multiple TPs/draft CRs for the same specification, e.g. in agenda item 6.4.3.1, you cannot submit multiple MAC TPs/draft CRs for multiple MAC issues, i.e. 1 TP/draft CR per specification regardless of the number of issues. For simple corrections/clarifications, please coordinate with CR rapporteurs rather than submitting individual contribution.

### 6.4.1 General

Including incoming LSs, rapporteur inputs, etc.

### 6.4.2 Control plane

#### 6.4.2.1 RRC

Including remaining Uu and PC5 RRC issues. Note capability related issues are handled in 6.4.2.2 and class 3 ASN.1 issues are handled in 6.4.2.3. This agenda item will utilize a summary document to facilitate treatment of topics during the e-meeting. Summary document is provided by RRC CR rapporteur (Huawei).

#### 6.4.2.2 Others

Including email discussion [Post109e#20] and remaining control plane issues other than RRC, e.g. capability, idle/inactive UE procedures, etc. This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting. Summary documents are provided by the corresponding CR rapporteurs (capability: OPPO, idle/inactive: ZTE).

#### 6.4.2.3 ASN.1 issues

*Including documents related to class 3 ASN.1 review issues that require WI-specific discussion. This agenda item will utilize a summary document to facilitate treatment of topics during the e-meeting. Summary document is provided by RRC CR rapporteur (Huawei).*

### 6.4.3 User plane

#### 6.4.3.1 MAC

Including email discussion [Post109e#21], [Post109e#22], and remaining MAC issues. This agenda item will utilize a summary document to facilitate treatment of topics during the e-meeting. Summary document is provided by MAC CR rapporteur (LG).

#### 6.4.3.2 Others

Including email discussion [Post109e#19], [Post109e#23], and remaining user plane issues other than MAC, e.g. RLC, PDCP, SDAP, etc. This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting. Summary documents are provided by the corresponding CR rapporteurs (RLC: Ericsson, PDCP: CATT, SDAP: Vivo).

## 6.5 Optimisations on UE radio capability signalling

(RACS-RAN-Core; leading WG: RAN2; REL-16; started: Mar 19; target; Jun 20; WID: [RP-191088](file:///C:\Data\3GPP\archive\RAN\RAN%2384\Tdocs\RP-191088.zip), SR: RP-200163). Documents in this agenda item will be handled in a break out session.

R2 part is 100%. Only corrections.

Tdoc limitation: 1 per company

### 6.5.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

Contributions in this AI are reserved for WI rapporteur inputs and do not count towards the tdoc limits.

### 6.5.2 Corrections

Including contributions/TPs/DraftCRs on RACS-specific Class 3 ASN.1 review aspects, if any. For these, no individual company CRs should be submitted: please consult with the RRC CR rapporteurs first ([Nathan.Tenny@mediatek.com](mailto:Nathan.Tenny@mediatek.com) for 36.331 and [Gao.Yuan66@zte.com.cn](mailto:Gao.Yuan66@zte.com.cn) for 38.331).

## 6.6 Void

## 6.7 NR Industrial Internet of Things (IoT)

(NR\_IIOT-Core; leading WG: RAN2; REL-16; started: Mar 19; target; Jun 20; WID: [RP-192324](file:///C:\Data\3GPP\TSGR\TSGR_84\docs\RP-191561.zip) SR: RP-200165)

Time budget: 3 TU

Tdoc Limitation: 8 tdocs

### 6.7.1 General

Rapporteur input. Incoming LS etc.

### 6.7.2 RRC Open Issues and Corrections

#### 6.7.2.1 Accurate reference timing

#### 6.7.2.2 Scheduling Enhancements

#### 6.7.2.3 Other

### 6.7.3 MAC Open Issues and Corrections

#### 6.7.3.1 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.

Including outcome of the email discussion [Post109e#50][IIOT] Remaining issues intra-UE prioritization (Nokia). On intra-UE prioritization open issues only the email discussion in planned to be treated.

#### 6.7.3.2 Other

### 6.7.4 PDCP Open Issues and Corrections

#### 6.7.4.1 PDCP Duplication

### 6.7.4.2 Ethernet Header Compression

### 6.7.5 Stage-2 Corrections

### 6.7.6 UE capabilities

## 6.8 NR Positioning Support

(NR\_pos-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Jun 20; WID: [RP-](file:///C:\Data\3GPP\TSGR\TSGR_84\docs\RP-191156.zip)200218, SR: RP-200217). Documents in this agenda item will be handled in a break out session

Time budget: 1 TU

### 6.8.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

### 6.8.2 Architecture and protocol aspects

No documents should be submitted to 6.8.2. Please submit to 6.8.2.x.

#### 6.8.2.1 Stage 2

Including impact to 36.305 and 38.305. This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on submitted tdocs).

Including outcome of email discussion [Post109e#30][NR/Pos] Non-periodic SRS for positioning (Huawei)

Including outcome of email discussion [Post109e#31][NR/Pos] Details of spatial relation for positioning (Huawei)

Contributions on issues already resolved in email discussions [Post109e#30] and [Post109e#31] are discouraged.

Tdoc limitation: 1 tdoc

#### 6.8.2.2 RRC

Including impact to 36.331 and 38.331. This agenda item will utilize a summary document to facilitate treatment of topics during the e-meeting.

Tdoc limitation: 1 tdoc

#### 6.8.2.3 LPP

This agenda item will utilize a summary document to facilitate treatment of topics during the e-meeting. Note that documents on specific ASN.1 issues should be submitted to AI 6.8.2.4.

Tdoc limitation: 1 tdoc

#### 6.8.2.4 LPP ASN.1 issues

Any issues related only to the details of ASN.1 in 37.355. CRs should not be submitted to this agenda item except by the specification rapporteur.

The ASN.1 review process for LPP will proceed from company contributions in this meeting. Issues should be submitted under this agenda item and will be collected by the specification rapporteur. The review process will proceed by email after this meeting with issues to be concluded at RAN2#110-e.

#### 6.8.2.5 MAC

Including impact to 38.321.

Tdoc limitation: 1 tdoc

#### 6.8.2.6 Broadcast assistance data

This agenda item will utilize a summary document to facilitate treatment of topics during the e-meeting.

Tdoc limitation: 1 tdoc

#### 6.8.2.7 UE-based positioning

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on submitted tdocs).

Tdoc limitation: 1 tdoc

### 6.8.3 Other

Tdoc limitation: 1 tdoc

6.9 NR mobility enhancements

*(NR\_Mob\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; target; Mar 20; WID: RP-192277). Documents in this agenda item will be handled in a break out session*

*No documents should be submitted to 6.9.*

*Treated together with 7.3,*

*A web conference may be used for handling some of the discussions in this WI, and summary document may be provided for some agenda items under 6.9.*

6.9.1 Organisational

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

6.9.2 Reduction in user data interruption during DAPS handover

*Contributions on DAPS handovers for LTE and NR are treated jointly in under 7.3.2. Do not use this AI for any item that can be discussed jointly - This AI shall only address NR-specific topics.*

*Including remaining details (if any) on SDAP handling during DAPS handover.*

*Tdoc Limitation per company: 1 tdoc (only for NR-specific topics like SDAP that do NOT affect LTE).*

6.9.3 Conditional handover and fast handover failure recovery

*Contributions on conditional handover for LTE and NR are treated jointly under 6.9.3 except where otherwise noted.*

*No documents should be submitted to 6.9.3. Please submit to 6.9.3.x*

6.9.3.1 Open issues and corrections for conditional handover

*This AI jointly addresses NR and LTE.*

*Including outcome of email discussion [Post109e#12][MOB] Resolving open issues for CHO (Nokia)*

*Tdoc Limitation per company: 1 tdoc.*

*Contributions on issues already resolved by the email discussion [Post109e#1*2*][MOB] are discouraged.*

6.9.3.2 Open issues and corrections for fast handover failure recovery

*This AI only addresses NR.*

*Including* corrections for *T312 support.*

*Tdoc Limitation per company: 1 tdoc*

6.9.3.3 UE capabilities for conditional handover and fast handover failure recovery

*This AI jointly addresses NR and LTE.*

*Including any remaining UE capability aspects triggered by RAN1/4 or related to existing RAN2 UE capability discussions of CHO (for both LTE and NR WIs) and T312 support (for NR WI).*

*The documents in this agenda item may be deprioritized in this meeting or used as input to post-meeting email discussion(s).*

*Tdoc Limitation per company: 1 tdoc*

6.9.4 Conditional PSCell addition/change

*No documents should be submitted to 6.9.4. Please submit to 6.9.4.x*

6.9.4.1 Open issues and corrections for Conditional PSCell change for intra-SN

*Including outcome of email discussion [Post109e#13][MOB] Resolving open issues for CPC (CATT).*

*Including remaining details, resolution of open issues and corrections CPC for Rel-16.*

*Contributions on issues already resolved by the email discussion [Post109e#13][MOB] are discouraged.*

*Tdoc Limitation per company: 1 tdoc*

6.9.4.2 UE capabilities for Conditional PSCell change for intra-SN

*Including any remaining UE capability aspects of Conditional PSCell change for intra-SN (for NR WI).*

*The documents in this agenda item may be deprioritized in this meeting or used as input to post-meeting email discussion(s).*

*Tdoc Limitation per company: 1 tdoc*

6.9.5 ASN.1 review of mobility WIs for NR RRC

*Including documents related to Class 3 ASN.1 review issues that require WI-specific discussion.*

*This agenda item focuses on* ***NR RRC*** *aspects of both LTE and NR mobility WIs – LTE RRC aspects of both LTE and NR mobility WIs should be submitted to 7.3.4. Do not submit contributions on WI-specific open issues that are not captured in the current NR RRC to this agenda item.*

## 6.10 DC and CA enhancements

(LTE\_NR\_DC\_CA\_enh-Core; leading WG: RAN2; REL-16; started: Jun 18; target; Jun 20; WID: [RP-192336](file:///C:\Data\3GPP\TSGR\TSGR_84\docs\RP-191600.zip), SR: RP-200319, see also guidance in RP 192326)

Time budget: 2 TU

Tdoc Limitation: 6 tdocs

### 6.10.1 General

Including incoming LSsrapporteur inputs, etc

Including outcome of the email discussion [Post109e#37][DCCA] RRC open Issues (Ericsson). Topics treated in this email discussion are not planned to be further treated with other tdocs.

### 6.10.2 UE capabilities

Please see general instructions

### 6.10.3 NR-NR Dual Connectivity

### 6.10.4 Early measurement reporting

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

### 6.10.5 Fast SCell activation

Solutions for fast SCell activation including 'dormancy' like behaviour, provision of temporary RS resources at SCell activation, etc.

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

Support of CA/DC configuration with RRC resume.

### 6.10.7 Fast MCG link Recovery

. Including outcome of the email discussion [Post109e#27][DCCA] Fast MCG recovery (Ericsson). Only the email discussion is planned to be treated under this AI.

### 6.10.8 Other

## 6.11 UE Power Saving in NR

(NR\_UE\_pow\_sav-Core; leading WG: RAN1; REL-16; started: Mar 19; target; Jun 20; WID: [RP-200494](file:///C:\Data\3GPP\TSGR\TSGR_84\docs\RP-191607.zip); SR: RP-200237, See also guidence in RP-192326). 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.

Time budget: 1 TU

Tdoc Limitation: 2

### 6.11.1 Organisational

Including incoming LSs, running TS, rapporteur inputs, etc

NOTE: any stage 3 identified issues with MIMO configurations should be provided to 38.331 rapporteur (Mediatek)

Contributions in this AI are reserved for WI rapporteur inputs and/or spec rapporteur inputs and do not count towards the tdoc limits.

Including outcome of email [Post109e#42][PowSav] UE capabilities (Intel)

No contributions expected for UE capabilities. Please provide your input to the email discussion. Intel is expected to produce first draft of 38.304

### 6.11.2 PDCCH-based power saving signals/channel Additional stage-3 RAN2 aspects

Including out of [Post109e#41][PowSav] DCP open issues (InterDigital, Huawei)

*Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.*

*All identified critical open issues should be provided to the rapporteur via email discussion Post109e#41 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated and critical issues.*

*No individual company CRs should be submitted*

### 6.11.3 UE assistance and RRC

Including outcome of [Post109e#43][PowSav] UE Assistance and RRC open issues (Mediatek)

*Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.*

*All identified critical open issues should be provided to the rapporteur via email discussion Post109e#43 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated.*

*No individual company CRs should be submitted*

### 6.11.6 RRM measurement relaxation

*Including out of [Post109e#44][PowSav] RRM open issues (CATT, Vivo)*

*Contributions related to issues addressed by the email discussions should be avoided and are discouraged for this AI.*

*All identified critical open issues should be provided to the rapporteur via email discussion Post109e#44 and new contributions on those topics are discouraged. Contributions should be reserved for more complicated issued.*

*No individual company CRs should be submitted*

## SON/MDT support for NR

(NR\_SON\_MDT-Core; leading WG: RAN3; REL-16; started: Jun 19; target; Jun 20; WID: [RP-191](file:///C:\Data\3GPP\TSGR\TSGR_84\docs\RP-191594.zip)776; SR: RP-200489). Documents in this agenda item will be handled in a break out session

Time budget: 1 TU

Tdoc Limitation: 3 tdocs

### 6.12.1 General

Including LSs, work plan, rapporteur inputs, running TS

### 6.12.2 MDT

The procedure, signaling and corresponding measurement quantities for MDT. Only Open issues and Corrections

### 6.12.3 L2 measurements

Definition of L2 measurements in TS 38.314.

No new measureemnts will be introduced to TS38.314 this meeting. Only Open issues and Corrections

### 6.12.4 SON

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

### Only Open issues and Corrections 6.12.5 Others

## 6.13 2-step RACH for NR

(NR\_2step\_RACH-Core; leading WG: RAN1; REL-16; started: Dec 18; target; Mar 20; WID: [RP-](file:///C:\Data\3GPP\Extracts\RP-190711%20Revised%20work%20item%20proposal%202%20step%20RACH%20for%20NR.docx)200085; SR: RP-200488). Documents in this agenda item will be handled in a break out session

Time budget: 1 TU

Tdoc Limitation: 1

### 6.13.1 General

Running CRs, Incoming LSs, Contributions in this AI are restricted for WI rapporteur inputs and/or spec rapporteur inputs and do not count towards the tdoc limits.

All comments related to 38.300 should be given directly to Eswar rapporteur. ZTE will update CRs according to received comments offline

### 6.13.2 User plan aspects

*A single CR will be produced by Rapporteur. No individual company CRs are expected. Comments should be given directly to rapporteur preferable. Contribution should be reserved for more complicated issued, but they should be critical issues*

### 6.13.3 RRC stage-3 related aspects

*A single CR will be produced by Rapporteur. No individual company CRs are expected. Comments should be given directly to rapporteur preferable. Contribution should be reserved for more complicated issued, but they should be critical issues*

## 6.14 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:\Data\3GPP\archive\RAN\RAN%2383\Tdocs\RP-190713.zip); SR: RP-200436) Documents in this agenda item will be handled in a break out session

Tdoc Limitation: 1 tdoc

The Core part of this WI is 100% Only corrections.

### 6.14.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

Contributions in this AI are reserved for WI rapporteur inputs and do not count towards the tdoc limits.

### 6.14.2 Corrections

Including contributions/TPs/DraftCRs on SRVCC-specific Class 3 ASN.1 review aspects, if any. For these, no individual company CRs should be submitted: please consult with the RRC CR rapporteur first ([tangxun@huawei.com](mailto:tangxun@huawei.com)).

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

(NR\_CLI\_RIM; leading WG: RAN1; REL-16; started: Dec 18; target; Jun 20; WID: [RP-191997](file:///C:\Data\3GPP\archive\RAN\RAN%2385\Tdocs\RP-191997.zip); SR: RP-200453) Documents in this agenda item will be handled in a break out session.

Tdoc Limitation: 1 tdoc

Apart from corrections, it's possible to contribute to sub agenda item 6.15.2 for the remaining open issues requiring feedback from other groups.

### 6.15.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

Contributions in this AI are reserved for WI rapporteur inputs and do not count towards the tdoc limits.

### 6.15.2 Remaining open issues

Including the open issues for which feedback has been requested to other groups.

Including contributions/TPs/DraftCRs on corrections and CLI-specific Class 3 ASN.1 review aspects, if any. For the latter (ASN.1 aspects), no individual company CRs should be submitted: please consult with the RRC CR rapporteur first ([sangwon7.kim@lge.com](mailto:sangwon7.kim@lge.com)).

## 6.16 Enhancements on MIMO for NR

(NR\_eMIMO-Core; leading WG: RAN1; REL-16; started: Jun 18; target; June 20; WID: [RP-200474](file:///C:\Data\3GPP\archive\RAN\RAN%2385\Tdocs\RP-192271.zip); SR: RP-200473). Documents in this agenda item will be handled in a break out session.

Tdoc Limitation: 2 tdocs

It's possible to contribute to all sub agenda items, to address the remaining open issues.

### 6.16.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

Contributions in this AI are reserved for WI rapporteur inputs and do not count towards the tdoc limits.

### 6.16.2 RRC open issues

Including output of email discussion [Post109e#34][eMIMO] RRC Open issues (Ericsson). Contributions related to issues addressed by this email discussions should be avoided and are discouraged for this AI.

Including contributions/TPs/DraftCRs on eMIMO-specific Class 3 ASN.1 review aspects, if any. For these, no individual company CRs should be submitted: please consult with the RRC CR rapporteur first (helka-liina.maattanen@ericsson.com).

### 6.16.3 Other open issues

Including output of email discussion [Post109e#17][eMIMO] BFR MAC CE for BFR on SpCell (Apple). Contributions related to issues addressed by this email discussions should be avoided and are discouraged for this AI.

If needed, a summary document may also be utilized to treat this agenda item.

## 6.18 Private Network Support for NG-RAN

(NG\_RAN\_PRN-Core; leading WG: RAN3; REL-16; started: Mar 19; target; June 20; WID: [RP-](file:///C:\Data\3GPP\archive\RAN\RAN%2384\Tdocs\RP-191563.zip)200122 SR; RP-200441) Documents in this agenda item will be handled in a break out session.

Tdoc Limitation: 2 tdocs

It's possible to contribute to all sub agenda items, to address the remaining open issues.

### 6.18.1 Organisational

Including incoming LSs, rapporteur inputs, etc.

Contributions in this AI are reserved for WI rapporteur inputs and do not count towards the tdoc limits.

### 6.18.2 RRC open issues

Including output of email discussion [Post109e#18][PRN] Remaining open issues (Nokia). Contributions related to issues addressed by this email discussions should be avoided and are discouraged for this AI.

Including contributions/TPs/DraftCRs on PRN-specific Class 3 ASN.1 review aspects, if any. For these, no individual company CRs should be submitted: please consult with the RRC CR rapporteur first (gyorgy.wolfner@nokia.com).

### 6.18.3 Other open issues

Including non-RRC issues not addressed in [Post109e#18].

If needed, a summary document may also be utilized to treat this agenda item.

## 6.19 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

Including outcome of the email discussion [Post109e#33][R16 Other] UL TX Switching – NR-FR1 (China Telecom)

## 6.20 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:\Data\3GPP\TSGR\TSGR_84\docs\RP-191602.zip) endorsed at RAN#84. Please submit to 6.20.x.

NOTE that proponent companies are responsible to ensure that correct CRs are provided in all groups for proposals that have impact in >1 working group.

Time budget: 1 TU

Tdoc Limitation: 2 tdocs. NOTE for TEI, the tdoc limitation applies to new proposals, not to open proposals since previous meeting(s)

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

#### 6.20.1.1 Open / ongoing proposals

#### 6.20.1.3 New proposals

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

#### 6.20.2.1 Open / ongoing proposals

#### 6.20.2.3 New proposals

### 6.20.3 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. Tdoc limitation does not apply.

#### 6.20.3.1 Open / ongoing proposals

## 6.21 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.

Tdoc Limitation: 1 tdoc

Including outcome of the email discussion [Post109e#29][OdSIBconn] Open Issues (Ericsson)

## 6.22 Physical layer enhancements for NR ultra-reliable and low latency case (URLLC)

(NR\_L1enh\_URLLC-Core; leading WG: RAN1; REL-16; target; June 20; WID: [RP-1915](file:///C:\Data\3GPP\TSGR\TSGR_84\docs\RP-191563.zip)84; SR: RP-200090). Treated together with IIOT, AI 6.7. UL intra-UE prioritization and enhanced UL CG transmission should be discussed and addressed under RAN2 IIOT WI (do not submit under this AI), while the other objectives should be discussed under RAN2 eURLLC WI. This AI.

Time budget: 1 TU, will be treated together with IIOT.

Tdoc Limitation: 2 tdocs (for AI 6.22, or for 6.7 in addition to the tdoc limitation listed for 6.7)

### 6.22.1 Organizational

Running CRs etc

### 6.22.2 Control Plane

### 6.22.3 User Plane

# 7 Rel-16 LTE Work Items

Documents in these agenda items will be handled in break out sessions

## 7.0 LTE Rel-16 General

### 7.0.1 ASN.1 review

Including outcome of the email discussion [Post109e#52][ASN.1] RRC ASN.1 review LTE specific (Samsung)

### 7.0.2 Features and UE capabilities

## 7.1 Additional MTC enhancements for LTE

(LTE\_eMTC5-Core; leading WG: RAN1; REL-16; started: Jun 18; target; June 20; WID: [RP-191356](file:///C:\Data\3GPP\TSGR\TSGR_84\docs\RP-191356.zip); SR: RP-200309)

Time budget: 2.5 TU

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

Some sub-items in 7.1 and 7.2 may be treated jointly.

One CR per specification will be provided by the corresponding rapporteur. No individual company CRs are expected. Companies should provide TPs when needed.

### 7.1.1 Organisational

Including incoming LSs, rapporteur inputs, running CRs.

A web conference may be used for handling some of the discussions in this AI.

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

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

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on the submitted tdocs). A web conference may be used for handling the discussions in this AI.

### 7.1.3 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.

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on the submitted tdocs). A web conference may be used for handling the discussions in this AI.

### 7.1.4 Quality report in Msg3

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on the submitted tdocs). A web conference may be used for handling the discussions in this AI.

### 7.1.5 MPDCCH performance improvement using CRS

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on the submitted tdocs). A web conference may be used for handling the discussions in this AI.

### 7.1.6 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”

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on submitted tdocs). A web conference may be used for handling the discussions in this AI.

### 7.1.7 Stand-alone deployment

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

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on the submitted tdocs). A web conference may be used for handling the discussions in this AI.

### 7.1.8 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

Including the outcome of [Post109e#05][eMTC R16] TP for RSS (Ericsson). A web conference may be used for handling the discussions in this AI. No contributions are expected for this AI. Please provide your input to the email discussion.

### 7.1.9 Coexistence with NR

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

Coexistence with NR for MTC and NB-IoT is treated jointly under this AI. This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting. A web conference may be used for handling some of the discussions in this AI.

### 7.1.10 Connection to 5GC

Connection to 5GC for MTC and NB-IoT is treated jointly under this AI. This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on the submitted tdocs). A web conference of an offline discussion may be used for handling the discussions in this AI.

Includes [Post109e#47][NBIOT/EMTC] Connection to 5GC open issues (Qualcomm)

### 7.1.11 MTC UE capabilities

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting (decision to be made based on the submitted tdocs). A web conference may be used for handling the discussions in this AI.

Includes [Post109e#16] [eMTC R16] 36.306 CR (Huawei)

### 7.1.12 ASN.1 review - MTC

*Including documents related to class 2/3 ASN.1 review issues that require WI-specific discussion. A web conference may be used for handling the discussions in this AI.*

### 7.1.13 Other

MTC specific issues. This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting. A web conference may be used for handling some of the discussions in this AI.

## 7.2 Additional enhancements for NB-IoT

(NB\_IOTenh3-Core; leading WG: RAN1; REL-16; started: Jun 18; target; June 20; WID: RP-200293; SR: RP-200440)

Time budget: 2.5 TU

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

Some sub-items in 7.1 and 7.2 may be treated jointly.

### 7.2.1 Organisational

Including incoming LSs, draft TS, rapporteur inputs, etc

A web conference will be used for handling some of the discussions in this AI.

One CR per specification will be provided by the corresponding rapporteur. No individual company CRs are expected. Companies should provide TPs when needed.

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

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

A web conference will be used for handling some of the discussions in this AI.

Includes [Post109e#32][NBIOT/EMTC] Finalise the 36.304 Text for WUS (Nokia)

Includes [Post109e#45][NBIOT/EMTC] WUS open issues (Ericsson)

All identified critical open issues should be provided to the rapporteur via email discussion Post109e#45 and new contributions on those topics are discouraged.

### 7.2.3 Transmission in preconfigured resources

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

A web conference will be used for handling some of the discussions in this AI.

Includes [Post109e#46][NBIOT/EMTC] PUR open issues (Huawei)

All identified critical open issues should be provided to the rapporteur via email discussions Post109e#46 and new contributions on those topics are discouraged.

### 7.2.4 NB-IoT Specific

NB-IoT specific topics

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting.

A web conference will be used for handling some of the discussions in this AI.

Includes [Post109e#15][NBIOT] UE specific DRX: DRX cycle values (Sequans)

### 7.2.5 NB-IoT UE capabilities

This agenda item may utilize a summary document to facilitate treatment of topics during the e-meeting.

A web conference will be used for handling some of the discussions in this AI.

Includes [Post109e#14][NBIOT] 36.306 CR (Blackberry)

### 7.2.6 ASN.1 review of NB-IoT

*Including documents related to Class 2/3 ASN.1 review issues that require WI-specific discussion.*

A web conference will be used for handling some of the discussions in this AI.

## 7.3 Even further mobility enhancement in E-UTRAN

(LTE\_feMob-Core; leading WG: RAN2; REL-16; started: Jun 18; target; Mar 20; WID: RP-190921)

No documents should be submitted to 7.3.

Treated together with 6.9,

A web conference may be used for handling some of the discussions in this WI, and summary document may be provided for some agenda items under 7.3.

### 7.3.1 Organizational

Including incoming LSs and rapporteur inputs (if any).

### 7.3.2 Reduction in user data interruption for dual active protocol stack (DAPS) handover

DAPS handovers for LTE and NR are treated jointly in under this AI.

No documents should be submitted to 7.3.2. Please submit to 7.3.2.x.

#### 7.3.2.1 Open issues and corrections for user plane aspects of DAPS HO

Including document on user plane-related open issues and corrections for DAPS HO.

*Including UP-related outcome of email discussion [Post109e#11][MOB] Resolving open issues for DAPS (Intel)*

Contributions on issues already resolved by the email discussion Post109e#11][MOB] are discouraged.

Tdoc Limitation per company: 1 tdoc

#### 7.3.2.2 Open issues and corrections for control plane aspects of DAPS HO

Including document on control plane-related open issues and corrections for DAPS HO other than UE capabilities.

*Including CP-related outcome of email discussion [Post109e#11][MOB] Resolving open issues for DAPS (Intel).*

Contributions on issues already resolved by the email discussion Post109e#11][MOB] are discouraged.

Tdoc Limitation per company: 1 tdoc

#### 7.3.2.3 UE capabilities for DAPS HO

*Including any UE capability aspects triggered by RAN1/4 or related to existing RAN2 UE capability discussions of DAPS (for both LTE and NR).*

*The documents in this agenda item may be deprioritized in this meeting or used as input to post-meeting email discussion(s).*

Tdoc Limitation per company: 1 tdoc

### 7.3.3 Conditional handover

*Contributions on conditional handover for LTE and NR are treated jointly in under 6.9.3. Do not use this AI for any item that can be discussed jointly.*

Tdoc Limitation per company: 0 tdoc.

### 7.3.4 ASN.1 review of mobility WIs for LTE RRC

*Including documents related to Class 3 ASN.1 review issues that require WI-specific discussion.*

*This agenda item focuses on* ***LTE RRC*** *aspects of both LTE and NR mobility WIs – NR RRC aspects of both LTE and NR mobility WIs should be submitted to 6.9.5. Do not submit contributions on WI-specific open issues that are not captured in the current LTE RRC to this agenda item.*

## 7.4 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)

Time budget: 0 TU.

This item is 100%

*Only documents related to Class 3 ASN.1 review issues that require WI-specific discussion should be submitted.*

This agenda item will be treated fuily over email - No web conference is planned for this agenda item.

## 7.5 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.

*Including documents related to Class 3 ASN.1 review issues that require WI-specific discussion.*

A joint summary document of 7.5 and 7.6 may be provided by session chair.

## 7.6 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 endorsed at RAN#84.

Time budget: 1 TU

*Including documents related to Class 3 ASN.1 review issues that require TEI16 topic-specific discussion. New TEI16 proposals are discouraged and may be deprioritized in this meeting.*

A joint summary document of 7.5 and 7.6 may be provided by session chair.

## 7.7 Support of Indian Navigation Satellite System (NavIC)

(LCS\_NAVIC; leading WG: RAN2; REL-16; started: Sept 19; target; March-20; WID: RP-192350)

Time budget: 0 TU Final agreement of CRs is expected

This item is 100%

## 7.8 DL MIMO efficiency enhancements for LTE

(LTE\_DL\_MIMO\_EE-Core; leading WG: RAN1; REL-16;target; March-20; WID: RP-182901)

Time budget: 0.5 TU

This item is 100%

This agenda item will be treated fuily over email - No web conference is planned for this agenda item.

*Only documents related to Class 3 ASN.1 review issues that require WI-specific discussion should be submitted.*

## 7.9 LTE-based 5G Terrestrial Broadcast

(LTE\_terr\_bcast-Core; leading WG: RAN1; REL-16; target; March-20; WID: RP-182924)

Time budget: 0.5 TU.

This item is 100%

This agenda item will be treated fuily over email - No web conference is planned for this agenda item.

*Only documents related to Class 3 ASN.1 review issues that require WI-specific discussion should be submitted.*

# Breakout session reports

No documents shall be submitted to this AI or its sub-AIs. It is only for at-meeting-generated contents.

Breakout session reports will be approved by email.

### 8.8.1 Session on LTE legacy, LTE TEI16 and NR/LTE Rel-16 Mobility

### 8.8.2 Session on SRVCC, CLI, PRN, eMIMO, RACS

### 8.8.3 Session on eMTC

### 8.8.4 Session on NR-U, Power Savings, NTN and 2-step RACH

### 8.8.5 Session on Rel-15 and 16 LTE and NR positioning

### 8.8.6 Session on SON/MDT

### 8.8.7 Session on NB-IoT

### 8.8.8 Session on LTE V2X and NR V2X

# Appendix - Guidance on WI information

This subclause is not an Agenda Item. Including WI codes for Agenda Items with multiple WIs.

# EUTRA corrections Rel-15 and earlier

## NB-IoT corrections Rel-15 and earlier

Includes NB-IoT corrections, related to the following WIs:

(NB\_IOT-Core; leading WG: RAN1; REL-13; started: Sep. 15; target: Jun. 16; WID: [RP-152284](file:///C:\Data\3GPP\Extracts\RP-152284.docx))

(NB\_IOTenh-Core; leading WG: RAN1; REL-14; started: June 16; closed: Jun. 17; WID: [RP-171060](file:///C:\Data\3GPP\Extracts\RP-171060.doc))

(NB\_IOTenh2-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-182114](file:///C:\Data\3GPP\archive\TSGR\TSGR_81\Docs\RP-182114.zip))

## eMTC corrections Rel-15 and earlier

Includes MTC, eMTC and Coverage Enhancement corrections, related to the following WIs:

(LC\_MTC\_LTE-Core, leading WG: RAN1, REL-12, started: Jun 13, closed: Dec 14, WID: [RP-140522](file:///C:\Data\3GPP\Extracts\RP-140522.doc))

(Cov\_Enh\_LTE-Core, leading WG: RAN1, REL-12, started: Jun.13, closed: Jun.14, WID: [RP-130833](file:///C:\Data\3GPP\archive\TSGR\TSGR_60\Docs\RP-130833.zip))

(MTCe\_RAN-Core, leading WG: RAN2, REL-12, started: Dec.13, closed: Sep.14, WID: [RP-132053](file:///C:\Data\3GPP\archive\TSGR\TSGR_62\Docs\RP-132053.zip))

(LTE\_MTCe2\_L1-Core, leading WG: RAN1, REL-13; started: Sep. 14, closed: Mar. 16, WID: [RP-150492](file:///C:\Data\3GPP\Extracts\RP-150492.doc))

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

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

## V2X and Sidelink corrections Rel-15 and earlier

Includes V2X, D2D and Sidelink corrections, related to the following WIs:

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

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

(LTE\_SL\_V2V-Core; leading WG: RAN1; started: Dec. 15; closed: Sept 16; WID: [RP-161603](file:///C:\Data\3GPP\archive\TSGR\TSGR_73\Docs\RP-161603.zip))

(LTE\_V2X-Core, leading WG: RAN1; REL-14; started: June 16; closed: Mar. 17; WID: [RP-162519](file:///C:\Data\3GPP\archive\TSGR\TSGR_74\Docs\RP-162519.zip))

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

## Positioning corrections Rel-15 and earlier

Includes positioning corrections, e.g. related to the following WIs:

(UTRA\_LTE\_iPos\_enh-Core; leading WG: RAN2; REL-13; started: Sep. 15; closed: Dec 15; WID: [RP-152251](file:///C:\Data\3GPP\Extracts\RP-152251%20(revision%20of%20RP-152008)%20Revised%20work%20item%20proposal%20Positioning%20enhancements%20for%20UTRA%20and%20LTE.doc))

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

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

## Other LTE corrections Rel-15 and earlier

Includes corrections to the following WIs:

LTE WIs Rel-14 and earlier:

(LTE-L23, leading WG: RAN2, REL-8, started: Sep. 06, closed: Dec. 08, WID: [RP-080747](file:///C:\Data\3GPP\Extracts\RP-080747%20Revised%20LTE%20WID.doc))

(LTE\_CA-Core, leading WG: RAN1, REL-10, started: Dec. 09, closed: June 11, WID: [RP-100661](file:///C:\Data\3GPP\archive\TSGR\TSGR_48\Docs\RP-100661.zip))

(LTE\_UL\_MIMO-Core, leading WG: RAN1, REL-10, started: Dec.09, closed: June 11, WID: [RP-100959](file:///C:\Data\3GPP\archive\TSGR\TSGR_49\Docs\RP-100959.zip))

(LTE\_eDL\_MIMO-Core, leading WG: RAN1, REL-10, started: Dec.09, closed: March 11, WID: [RP-100196](file:///C:\Data\3GPP\archive\TSGR\TSGR_47\Docs\RP-100196.zip))

(LTE\_Relay-Core, leading WG: RAN1, REL-10, started: Dec. 09, closed: June 11, WID: [RP-110911](file:///C:\Data\3GPP\archive\TSGR\TSGR_52\Docs\RP-110911.zip))

(MBMS\_LTE\_enh-Core, leading WG: RAN2, REL-10, started: June 10, closed: March 11, WID: [RP-101244](file:///C:\Data\3GPP\archive\TSGR\TSGR_50\Docs\RP-101244.zip))

(MDT\_UMTSLTE-Core, leading WG: RAN2, REL-10, started: Dec. 09, closed: June 11, WID: [RP-100360](file:///C:\Data\3GPP\Extracts\RP-100360.doc))

(eICIC\_LTE-Core, leading WG: RAN1, REL-10, started: March 10, closed: June 11, WID: [RP-100383](file:///C:\Data\3GPP\archive\TSGR\TSGR_47\Docs\RP-100383.zip))

(SONenh\_LTE-Core, leading WG: RAN3, REL-10, started: March 10, closed: June 11, WID: [RP-101004](file:///C:\Data\3GPP\archive\TSGR\TSGR_49\Docs\RP-101004.zip))

(LTE\_CA\_enh-Core, leading WG: RAN1, REL-11, started: March 11, closed: Mar.13, WID: [RP-121999](file:///C:\Data\3GPP\archive\TSGR\TSGR_58\Docs\RP-121999.zip))

(MBMS\_LTE\_SC-Core, leading WG: RAN2, REL-11, started: June 10, closed: Sep.12, WID: [RP-120258](file:///C:\Data\3GPP\archive\TSGR\TSGR_55\Docs\RP-120258.zip))

(LTE\_eDDA-Core, leading WG: RAN2, REL-11, started: March 11, closed: Dec.12, WID: [RP-120256](file:///C:\Data\3GPP\archive\TSGR\TSGR_55\Docs\RP-120256.zip))

(LCS\_LTE-NBPS-Core, leading WG: RAN2, REL-11, started: March 09, closed: June. 13, WID: [RP-131259](file:///C:\Data\3GPP\archive\TSGR\TSGR_61\Docs\RP-131259.zip))

(eICIC\_enh\_LTE-Core, leading WG: RAN1, REL-11, started: March 11, closed: Dec. 12, WID: [RP-120860](file:///C:\Data\3GPP\archive\TSGR\TSGR_56\Docs\RP-120860.zip))

(SPIA\_IDC\_LTE-Core, leading WG: RAN2, REL-11, started: Sep.11, closed: Dec. 12, WID: [RP-111355](file:///C:\Data\3GPP\archive\TSGR\TSGR_53\Docs\RP-111355.zip))

(COMP\_LTE\_DL-Core, leading WG: RAN1, REL-11, started: Sep.11, closed: Dec.12, WID: [RP-111365](file:///C:\Data\3GPP\archive\TSGR\TSGR_53\Docs\RP-111365.zip))

(COMP\_LTE\_UL-Core, leading WG: RAN1, REL-11, started: Sep.11, closed: Dec.12, WID: [RP-111365](file:///C:\Data\3GPP\archive\TSGR\TSGR_53\Docs\RP-111365.zip))

(LTE\_TDD\_add\_subframe, leading WG: RAN1, REL-11, started: March 12; closed: Sep. 12, WID: [RP-120384](file:///C:\Data\3GPP\archive\TSGR\TSGR_55\Docs\RP-120384.zip))

(FS\_HetNet\_eMOB\_LTE, leading WG: RAN2, REL-11, started: March 11, closed: Sep. 12, WID: [RP-110709](file:///C:\Data\3GPP\Extracts\RP-110709.doc))

(LTE\_enh\_dl\_ctrl-Core, leading WG: RAN1, REL-11, started: Dec. 11, closed: Dec. 12, WID: [RP-120871](file:///C:\Data\3GPP\archive\TSGR\TSGR_56\Docs\RP-120871.zip))

(LTE\_SC\_enh\_dualC-Core, leading WG: RAN2, REL-12, started: Dec.13, closed: Dec.14, WID: [RP-141797](file:///C:\Data\3GPP\archive\TSGR\TSGR_66\Docs\RP-141797.zip))

(LTE\_SC\_enh\_L1-Core, leading WG: RAN1, REL-12, started: Dec.13, closed: Dec.14, WID: [RP-132073](file:///C:\Data\3GPP\archive\TSGR\TSGR_62\Docs\RP-132073.zip))

(MBMS\_LTE\_OS-Core, leading WG: RAN2, REL-12, started: Sep.13, closed: Dec.14, WID: [RP-140282](file:///C:\Data\3GPP\Extracts\RP-140282_RevWID_MBMS_MDT.doc))

(LTE\_NAICS-Core, leading WG: RAN1, Rel-12, started: Mar 14, closed: Dec.14, WID: [RP-140519](file:///C:\Data\3GPP\Extracts\RP-140519.doc))

(GCSE\_LTE-MBMS\_CM-Core, leading WG: RAN3, started: Sep. 14, closed: Mar. 2015, WID: [RP-141035](file:///C:\Data\3GPP\Extracts\RP-141035.doc))

(LTE\_CA\_TDD\_FDD-Core, leading WG: RAN1, REL-12, started: Jun 13, closed: Jun 14, WID: [RP-140465](file:///C:\Data\3GPP\Extracts\RP-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:\Data\3GPP\archive\TSGR\TSGR_59\Docs\RP-130416.zip))

(LTE\_eDL\_MIMO\_enh-Core, leading WG: RAN1, REL-12, started: Sep 12, closed: June 14, WID: [RP-121416](file:///C:\Data\3GPP\archive\TSGR\TSGR_57\Docs\RP-121416.zip))

(HetNet\_eMOB\_LTE-Core, leading WG: RAN2, REL-12, started: Dec.12, , closed: Sep 14, WID: [RP-122007](file:///C:\Data\3GPP\archive\TSGR\TSGR_58\Docs\RP-122007.zip))

(LTE\_TDD\_eIMTA-Core, leading WG: RAN1, REL-12, started: Dec 12, closed: Jun.14, WID: [RP-121772](file:///C:\Data\3GPP\archive\TSGR\TSGR_58\Docs\RP-121772.zip))

(SCM\_LTE-Core, leading WG: RAN2, REL-12, started: Mar.14, closed: Sep.14, WID: [RP-140434](file:///C:\Data\3GPP\Extracts\RP-140434_SCM%20WID.doc))

(LTE\_LAA-Core, leading WG: RAN1, REL-13; started: June 15, closed: Dec. 15, WID: [RP-151045](file:///C:\Data\3GPP\Extracts\RP-151045.doc))

(LTE\_CA\_enh\_b5C-Core, leading WG: RAN1, REL-13; started: Dec. 14, closed: Dec. 15, WID: [RP-151984](file:///C:\Data\3GPP\Extracts\RP-151984.doc))

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

(LTE\_MC\_load-Core, leading WG: RAN2, started: Mar. 15, closed: Dec. 15, WID: [RP-152181](file:///C:\Data\3GPP\Extracts\RP-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:\Data\3GPP\archive\TSGR\TSGR_70\Docs\RP-151739.zip))

(LTE\_extDRX-Core; leading WG: RAN2; started: Mar. 15; closed: Mar. 16; WID: [RP-150493](file:///C:\Data\3GPP\Extracts\RP-150493-WID_Extended-DRX.doc))

(LTE\_EBF\_FDMIMO-Core; leading WG: RAN1; started: June. 15; closed: Dec. 15; WID: [RP-151085](file:///C:\Data\3GPP\Extracts\RP-151085%20WID_EBF_FD-MIMO.doc))

(LTE\_eMDT2-Core; leading WG: RAN2; started: Sep. 15; closed: Dec 15; WID: [RP-151611](file:///C:\Data\3GPP\Extracts\RP-151611.docx))

(LTE\_WLAN\_radio-Core, leading WG: RAN2, started: Mar. 15, closed: Mar. 16, WID: [RP-152213](file:///C:\Data\3GPP\Extracts\RP-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:\Data\3GPP\archive\TSGR\TSGR_69\Docs\RP-151615.zip))

(LTE\_eLAA-Core; leading WG: RAN1; REL-14; started: Dec. 15; closed: Mar. 17; WID:[RP-162229](file:///C:\Data\3GPP\archive\TSGR\TSGR_74\Docs\RP-162229.zip))

(LTE\_WLAN\_aggr-Core; leading WG: RAN2; REL-14; started: Mar. 16; closed: Mar. 17; WID: [RP-160923](file:///C:\Data\3GPP\Extracts\RP-160923%20eLWA-WID.doc))

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

(LTE\_LATRED\_L2-Core; leading WG: RAN2; REL-14; started: Mar. 16; closed: Sep. 16; WID: [RP-160667](file:///C:\Data\3GPP\Extracts\RP-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:\Data\3GPP\Extracts\RP-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:\Data\3GPP\Extracts\RP-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:\Data\3GPP\Extracts\RP-160912.doc))

(LTE\_high\_speed-Core; leading WG: RAN4; REL-14; started: Dec. 15. 16; closed: Dec. 16; WID: [RP-160172](file:///C:\Data\3GPP\archive\TSGR\TSGR_71\Docs\RP-160172.zip))

(LTE\_VoLTE\_ViLTE\_enh; leading WG: RAN2; REL-14; started: Sep. 16; closed: Mar. 17: WID: [RP-161856](file:///C:\Data\3GPP\archive\TSGR\TSGR_73\Docs\RP-161856.zip))

(LTE\_UE\_cat\_1Rx-Core; leading WG: RAN4; REL-14; started: Sep. 16; closed: Jun. 17: WID: [RP-171149](file:///C:\Data\3GPP\archive\TSGR\TSGR_76\Docs\RP-171149.zip))

(LTE\_UL\_CAP\_enh-Core; leading WG: RAN1; REL-14; started: Mar. 16; closed: Mar. 17: WID: [RP-162488](file:///C:\Data\3GPP\Extracts\RP-162488%20WID.doc))

(LTE\_eFDMIMO-Core; leading WG: RAN1; REL-14; started: Mar. 2016; closed: Mar. 17: WID: [RP-160623](file:///C:\Data\3GPP\Extracts\RP-160623%20WID_eFD-MIMO.doc))

(LTE\_MUST-Core; leading WG: RAN1; REL-14; started: Mar. 16; closed: Dec. 16: WID: [RP-161019](file:///C:\Data\3GPP\archive\TSGR\TSGR_72\Docs\RP-161019.zip))

(eDECOR-UTRA\_LTE-Core; leading WG: RAN3; REL-14; started: Dec. 16; closed: Mar. 17: WID: [RP-162543](file:///C:\Data\3GPP\archive\TSGR\TSGR_74\Docs\RP-162543.zip))

Joint UMTS/LTE WIs Rel-14 and earlier:

(SIMTC-RAN\_OC-Core, leading WG: RAN2, REL-11, started: Sep.11, closed: Sep. 12, WID: [RP-111373](file:///C:\Data\3GPP\archive\TSGR\TSGR_53\Docs\RP-111373.zip))

(eMDT\_UMTSLTE-Core, leading WG: RAN2, REL-11, started: Sep.11, closed: Dec.12, WID: [RP-121204](file:///C:\Data\3GPP\archive\TSGR\TSGR_57\Docs\RP-121204.zip))

(SONenh2\_LTE\_UTRA-Core, leading WG: RAN3, REL-11, started: Sep.11, closed: Dec.12, WID: [RP-120314](file:///C:\Data\3GPP\archive\TSGR\TSGR_55\Docs\RP-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:\Data\3GPP\archive\TSGR\TSGR_60\Docs\RP-130741.zip))

(UTRA\_LTE\_WLAN\_interw-Core, leading WG: RAN2, REL-12, started: Dec.13, closed: Sep.14, WID: [RP-132101](file:///C:\Data\3GPP\archive\TSGR\TSGR_62\Docs\RP-132101.zip))

(LTE\_UTRA\_IncMon-Core, leading: RAN4, REL-12, started: Dec.13, closed: Dec. 14, WID: [RP-132061](file:///C:\Data\3GPP\archive\TSGR\TSGR_62\Docs\RP-132061.zip))

(ACDC-RAN-Core; leading WG: RAN2; REL-13; started: Mar. 15; closed: Dec. 15; [RP-150662](file:///C:\Data\3GPP\Extracts\RP-150662%20RAN%20ACDC%20WID%20Rev.doc))

LTE Rel-15:

(LTE\_STTIandPT-core; leading WG: RAN1; REL-15; started: June 16; closed: Sep. 18; WID: [RP-171468](file:///C:\Data\3GPP\archive\TSGR\TSGR_76\Docs\RP-171468.zip))

(LTE\_ViLTE\_enh2-Core; leading WG: RAN2; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-181746](file:///C:\Data\3GPP\archive\TSGR\TSGR_81\Docs\RP-181746.zip))

(LTE\_QMC\_Streaming; leading WG: RAN2; REL-15; started: Mar. 17; closed: Sep 18: WID: [RP-181640](file:///C:\Data\3GPP\archive\TSGR\TSGR_81\Docs\RP-181640.zip))

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

(LTE\_euCA-Core; leading WG: RAN2; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-180561](file:///C:\Data\3GPP\archive\TSGR\TSGR_79\Docs\RP-180561.zip))

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

(LTE\_unlic-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Jun. 18: WID: [RP-180402](file:///C:\Data\3GPP\archive\TSGR\TSGR_79\Docs\RP-180402.zip))

(LTE\_HRLLC-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-181259](file:///C:\Data\3GPP\archive\TSGR\TSGR_80\Docs\RP-181259.zip))

(LTE\_UDC-Core; leading WG: RAN2; Rel-15; started Sep 17; closed: Sep 18; WID [RP-180914](file:///C:\Data\3GPP\Extracts\RP-180914-revised%20WID_on%20UDC.doc))

(feCOMP\_LTE-Core; leading WG: RAN1; REL-15; started: Mar. 17; closed: Sep. 18: WID: [RP-182004](file:///C:\Data\3GPP\archive\TSGR\TSGR_81\Docs\RP-182004.zip))

(LTE\_Aerial-Core;leading WG: RAN2; REL-15; started: Dec. 17; closed: Sep. 18: WID:[RP-181310](file:///C:\Data\3GPP\archive\TSGR\TSGR_80\Docs\RP-181310.zip))

(LTE\_MDT\_BT\_WLAN-Core; leading WG: RAN2; REL-15; started: Dec. 17; closed: Sep. 18: WID: [RP-181743](file:///C:\Data\3GPP\archive\TSGR\TSGR_81\Docs\RP-181743.zip))

(INOBEARRAN-Core ; leading WG: RAN2; REL-15; started: Dec. 17; closed: Sep. 18: WID: [RP-182133](file:///C:\Data\3GPP\Extracts\RP-182133_INOBEARRAN_WID_v05.doc))