CB: # 12_R17TEICR_Review - Version 0.0.1

RAN3

1 Introduction

This offline discussion covers TEI17 CRs that have been previously technically endorsed and are now up for review before approval. Below we take the CRs grouped by topic and request review comments. Since all of these have been previously endorsed, the assumption is that they will be approved in the absence of comments. If there are comments, then we will need further discussion to resolve these comments.

Unfortunately, we cannot avoid nine questions, but hope this is acceptable due to the special nature of this AI.

2 Main Section

2.1 Chapter 10

Table 1: Chapter 10 CRs

[1] R3-221611	Correction for Chapter 10 (Ericsson, Nokia, Nokia Shanghai-Bell, Huawei)	CR0558r4, TS 38.413 v16.8.0, Rel-17, Cat. F
[2] R3-221612	Correction for Chapter 10 (Ericsson, Nokia, Nokia Shanghai-Bell, Huawei)	CR1804r4, TS 36.413 v16.8.0, Rel-17, Cat. F

Feedback Form 1: Q1: Please provide comments, if any, on the above CRs.

1 – Qualcomm Technologies Int

Both CRs have the wrong meeting and date

In addition consider

- Impact analysis not needed
- Related CR numbers ?

2.2 CSI-RS over X2/Xn [CSIRSXn/CSIRSX2]

Table 2: CSI-RS over X2/Xn [CSIRSXn/CSIRSX2] CRs

[3] R3-221613	Signalling of Neighbour cell CSI-RS configuration information over Xn [CSIRSXn] (Ericsson, China Telecom)	CR0653r1, TS 38.423 v16.8.0, Rel-17, Cat. B
[4] R3-221614	Signalling of Neighbour cell CSI-RS configuration information over X2 [CSIRSX2] (Ericsson, China Telecom)	CR1614r1, TS 36.423 v16.8.0, Rel-17, Cat. B
[15] R3-221632	CSI-RS configuration request Indicator [CSIRSXn] (Ericsson, China telecom, Huawei, ZTE, Nokia, Nokia Shanghai Bell)	CR0700r2, TS 38.423 v16.8.0, Rel-17, Cat. B
[23] R3-221862	CSI-RS configuration request Indicator [CSIRSX2] (Ericsson, China telecom, Huawei, Nokia Shanghai Bell, ZTE)	CR1642r2, TS 36.423 v16.8.0, Rel-17, Cat. B

Feedback Form 2: Please provide comments, if any, on the above CRs.

2.3 Support of Enhancement of Redundant PDU Sessions [Paired_ID]

Table 3: Support of Enhancement of Redundant PDU Sessions [Paired_ID] CRs

[5] R3-221615	Support of Enhancement of Redundant PDU Sessions [Paired_ID] (Nokia, Nokia Shanghai Bell, Ericsson, Huawei, LG Electronics, CATT, Samsung)	CR0647r3, TS 38.413 v16.8.0, Rel-17, Cat. B
[6] R3-221616	Support of Enhancement of Redundant PDU Sessions [Paired_ID] (Nokia, Nokia Shanghai Bell, Ericsson, LG Electronics, Huawei, CATT, Samsung)	CR0656r3, TS 38.423 v16.8.0, Rel-17, Cat. B

[7] R3-221617	Support of Enhancement of Redundant PDU Sessions [Paired_ID] (Nokia, Nokia Shanghai Bell, Ericsson, Huawei, LG Electronics, CATT, Samsung)	CR0627r3, TS 38.463 v16.8.0, Rel-17, Cat. B

Feedback Form 3: Please provide comments, if any, on the above CRs.

2.4 Support for handling unknown length of gNB identifier [FLEX_gNB_Len]

Table 4: Support for handling unknown length of gNB identifier [FLEX_gNB_Len] CRs

[8] R3-221618	Support for handling unknown length of gNB identifier [FLEX_gNB_Len] (Qualcomm Incorporated, Huawei)	draftCR
[9] R3-221619	Support for handling unknown length of gNB identifier [FLEX_gNB_Len] (Qualcomm Incorporated, Huawei)	CR0571r3, TS 38.413 v16.8.0, Rel-17, Cat. B

Feedback Form 4: Please provide comments, if any, on the above CRs.

1 – Ericsson-LG Co.

We have pointed at issues with these endorsed CRs in R3-222096, where a network vendor and four network operators pointed at the following aspects:

- The solutions capturred in R3-221618 and R3-221619 rely on functionalities that are supported by the AMF. These solutions need to be first validated as feasible by groups such as SA2 and CT4 (in case inter node signalling wihtn the CN is needed). Until such validation takes place these solutions cannot be agreed
- The solutions capturred in R3-221618 and R3-221619 do not address the use cases of reference that

were highlighted during previous meetings. In particular:

- The solutions cannot resolve RAN sharing use cases
- The solutions impose a scheme of hierarchical gNB-ID allocation that does not fit into the already existing schemes of gNB-ID allocation used by operators

The proposals made in R3-222096 are the following:

- Trigger an LS towards SA2 and possibly CT4 to ask whether the solutions are feasible and what impact they have on the overall system
- Acknowledge the fact that the solution in R3-221618 and R3-221619 do not address all the use cases that were agreed as relevant, i.e. RAN sharing and unconstrained allocation of gNB-IDs
- Send an LS to RAN2 stating that the solutions endorsed by RAN3 do not adress all the agreed use cases and task RAN2 to discuss solutions that can address such use cases, e.g. based on broadcasting

2 – Verizon UK Ltd

Concur with Ericsson comments above.

Our preference is to have both solutions - network based solution in RAN3 and UE based solution specified in RAN2. Both solutions are feasible and can complement each other in different scenarios.

Use Case Coverage:

- This was the agreement from R3-112E regarding UE based solution: ”A solution based on inclusion of the gNB-ID length in the system information block is technically feasible and it addresses the identified issues of cases of ANR, RAN sharing, gNB-ID exhaustion; other solutions are not precluded; we should further work on the details”.
- **UE based solution covers all identified use cases**
- ***Such an agreement covering all use cases was never made for the network based solution***since no consensus could be achieved in that regard.
- Network based solution was agreed in R3-113E on the basis that other complementary solutions to UE based solution are not precluded and on good faith that UE based solution would not be blocked once network based solution was agreed.
- **Network based solution does not work with RAN sharing and also limits the flexibility for operator gNB-ID allocation in different scenarios.**

LS to RAN2 :

- Just because the CRs for network based solution was agreed in RAN3 first, we do not want to preclude UE based solution. Since such an argument is currently being used to block UE based solution, it is necessary for RAN3 to re-emphasize agreement in R3-112E and send LS to RAN2

- LS to RAN2 should highlight the following facts: i) the R3-112E agreement that UE-based solution covers al use cases, ii) that no consensus cold be achieved on network based solution covering all use cases, iii) asl RAN2 to specify UE based solution for flexible gNB ID

LS to SA2: Since network based solution depends on new AMF functionality (ability to disambiguate gNB ID lengths), it is necessary to get SA2 confirmation regarding the workability of network based solution. At the minimum SA2 must be informed about the network based solution and asked feedback if it goes against SA2 understandings.

Flexibility of gNB ID allocation: This was only discussed previously in the context of different solution options for the network based solution in R3-113E.

- During that discussion, our understanding was that both network and UE solutions are on the table and that we can use the UE based solution when more flexibility is needed or if we have use cases that are not covered by a network based solution.
- We felt that extra flexibility in gNB ID allocation using network based solution was not worth the additional complexity for a certain network based solution option because that would complicate the network based solution and hence implementations

3 – BEIJING SAMSUNG TELECOM R&D

The network based solutions impose a scheme of hierarchical gNB-ID allocation that does not fit into the already existing schemes of gNB-ID allocation used by operators. RAN sharing scenario need to be addressed. We share the same view as VZ on the history of RAN3 discussion. Just because network based solution CR was agreed firstly, now companies use this as an arugment to object Uu based solution. So LS to RAN2 is needed. As network based solution has the impact on AMF functionality, it is better to send an LS to SA2 as well to check whether the AMF can deal with the different gNB ID lengths.

4 – Qualcomm Technologies Int

Message from the moderator: thank you to the companies for the views above. Please as requested on the reflector on Wednesday, check if possible to address also the issues in the SoD (i.e. word doc in folder not NWM).

2.5 Removal of ETWS/CMAS restriction in SNPN

Table 5: Removal of ETWS/CMAS restriction in SNPN

[10] R3-221620	Removal of ETWS/CMAS restriction in SNPN (Qualcomm Incorporated, Ericsson, Nokia, Nokia Shanghai Bell)	draftCR

Feedback Form 5: Please provide comments, if any, on the above CRs.

2.6 Addition of NR Timing Advance reporting for NR UL E-CID [NRTADV]

Table 6: Addition of NR Timing Advance reporting for NR UL E-CID [NRTADV]

[11] R3-221627	Addition of NR Timing Advance reporting for NR UL E-CID [NRTADV-F1] (Ericsson, CATT, NTT Docomo, Polaris Wireless, Verizon, China Telecom, FirstNet, Deutsche Telekom, Intel Corporation, Nokia, Nokia Shanghai Bell, Huawei, ZTE)	CR0817r2, TS 38.473 v16.8.0, Rel-17, Cat. B
[12] R3-221628	Addition of NR Timing Advance reporting for NR UL E-CID [NRTADV] (Ericsson, NTT Docomo, Polaris Wireless, Verizon, China Telecom, FirstNet, Deutsche Telekom, Intel Corporation, CATT, Nokia, Nokia Shanghai Bell, Huawei, ZTE)	CR0042r2, TS 38.455 v16.6.0, Rel-17, Cat. B

Feedback Form 6: Please provide comments, if any, on the above CRs.

1 – Qualcomm Technologies Int

Aligment of TEI codes is needed, and understand that R3-221627 is revised in **R3-222536 (CR rev. no.: 3)**

Title: Addition of NR Timing Advance reporting for NR UL E-CID [NRTADV]

2 – Ericsson LM

The issue was corrected by MCC by updating the CR title in the 3GU website. No need for revision since the CR cover page is correct.

2.7 Local NG-RAN Node IDs for RRC_INACTIVE [RRCInactive]

Table 7: Local NG-RAN Node IDs for RRC_INACTIVE [RRCInactive] CRs

[13] R3-221629	Introduction of Local NG-RAN Node IDs for RRC_INACTIVE [RRCInactive] (Ericsson, ZTE, Radisys, Reliance JIO, China Telecom, Huawei, Nokia, Nokia Shanghai Bell, Deutsche Telekom)	draftCR
[14] R3-221631	Support flexible I-RNTI partitioning [RRCInactive] (ZTE, Radisys, Reliance JIO, China Telecom, Ericsson, Nokia, Nokia Shanghai Bell, Deutsche Telekom, Huawei)	CR0674r3, TS 38.423 v16.8.0, Rel-17, Cat. B

Feedback Form 7: Please provide comments, if any, on the above CRs.

1 – Ericsson LM
As discussed online today, these two docs would be updated and agreed in CB#13. Suggest moderator removing them from this CB.
2 – Qualcomm Technologies Int
Thank you Ericsson, indeed these docs can now be ignored, and no comments are requested

2.8 Inter MN resume without SN change [InterMNResume]

Table 8: Inter MN resume without SN change [InterMNResume] CRs

[16] R3-221633	Inter MN resume without SN change [InterMNResume] (Qualcomm Incorporated, Huawei, Ericsson, China Telecom, T-Mobile USA, ZTE, Intel Corporation, Nokia, Nokia Shanghai Bell, Samsung, Radisys, Reliance JIO)	CR0596r6, TS 38.423 v16.8.0, Rel-17, Cat. B

[17] R3-221634	Addition of the Retrieve UE Context Confirm procedure [InterMN-Resume] (Nokia, Nokia Shanghai Bell, Qualcomm Incorporated, Huawei, Ericsson, China Telecom, T-Mobile USA, ZTE, Intel Corporation, Samsung)	CR0025r1, TS 38.420 v16.0.0, Rel-17, Cat. B
[18] R3-221635	Inter-MN RRC Resume without SN change [InterMNResume] (Ericsson, Qualcomm Incorporated, Huawei, Intel Corporation, China Telecom, T-Mobile USA, ZTE, Nokia, Nokia Shanghai Bell, Samsung, RadiSys, Reliance JIO, Google Inc.)	draftCR

Feedback Form 8: Please provide comments, if any, on the above CRs.

2.9 E1 specification aspects

Table 9: E1 specification aspects CRs

[19] R3-221636	E1 TS 38.460 specification transfer to TS 37.480 (Nokia, Nokia Shanghai Bell)	CR0054r2, TS 38.460 v16.4.0, Rel-17, Cat. F
[20] R3-221637	Transfer of E1 interface specification from 38-series to 37-series (Huawei)	CR0018r2, TS 38.462 v16.1.0, Rel-17, Cat. F
[21] R3-221638	Transfer of Rel-17 E1 interface specification from 38.46x series to 37.48x series (Intel Corporation)	CR0003r2, TS 38.461 v16.0.0, Rel-17, Cat. F
[22] R3-221639	E1AP specification transfer to TS 37.483 (Ericsson)	CR0665r2, TS 38.463 v16.8.0, Rel-17, Cat. F

Feedback Form 9: Please provide comments, if any, on the above CRs.

1 – Ericsson LM

R3-221636/R3-221637: Minor comment on the cover pages: *Other specs Y* should be ticked

R3-221638: Minor comment on the cover page: *Other specs Y* should be ticked and other 38.46x CRs should be mentioned