

3GPP TSG RAN meeting #92e

RP-211565

E-Meeting, June 14 - 18, 2021

Agenda Item: 9.7.1.5

Source: China Telecom

Title: Moderator's summary for email discussion [92-e-12-CovEnh-WI]

Document for: Discussion

1 Introduction

This contribution is a summary of email discussion on scope of Rel-17 NR coverage enhancements WI.

2 Email discussion (1st round)

RP-211127 has the following proposed update on the objectives.

Specify mechanism(s) to support Type A PUSCH repetitions for Msg3 [RAN1, RAN2]

– Specify enhancements to RACH procedure for UE request of Type A PUSCH repetitions for Msg3 [RAN1, RAN2]

RP-211435 has the following proposed update on the objectives.

Specify mechanism(s) to support Type A PUSCH repetitions for Msg3 [RAN1, RAN2]

– Specify enhancements to RACH procedure for Type A PUSCH repetitions for Msg3 [RAN1, RAN2]

Companies are encouraged to provide views on the above proposed updates.

Feedback Form 1: Comments on the proposed update on the objectives

1 – vivo Communication Technology
ok
2 – Samsung Electronics Co.
1) Adding 'RAN2' is fine.

2) Newly added subbullet ("Specify enhancement to RACH procedure ...") can be beyond the intended scope.

Above 1) should be enough without adding 2).

3 – Nokia Corporation

We agree with Samsung that it is enough to simply add RAN2 to the main bullet, no need for a new sub-bullet.

4 – Intel Deutschland GmbH

We share similar view as Samsung and Nokia that we can simply add RAN2 in the main bullet. The sub-bullet is not needed.

5 – Ericsson LM

We agree with Intel, Nokia and Samsung.

6 – Apple France

Similar to majority views above, we think adding RAN2 should be enough. No need to add additional sub-bullet

7 – Guangdong OPPO Mobile Telecom.

[OPPO] We think the proposing companies' intention can be captured by adding 'RAN2' in the bracket. Further subbullet could expanding the scope.

8 – SHARP Corporation

Adding "RAN2" in the main-bullet should be fine.

9 – CATT

We share the same view as Samsung.

10 – LG Electronics Inc.

We have similar view. We think it is enough to add 'RAN2' simply to the main bullet, it is not necessary to add sub-bullet.

11 – MediaTek Inc.

adding "RAN2" into the main bullet w/o any new sub-bullet is enough

12 – Qualcomm Incorporated

Between the two alternatives for the added sub-bullet, we would prefer the first.

13 – ZTE Corporation

Adding a sub-bullet could provide better clarity for RAN2 work, and therefore is preferred. We are fine with either proposed alternative for the sub-bullet, or any further refinements to make it more concrete if needed.

14 – MediaTek Inc.

RAN2 Chairman: It is good to add RAN2 in the WID. From next meeting there will be a RAN2 common agenda item for R17 changes for the UE to indicate something with MSG1. I have assumed that this would be required for the MSG3 coverage enhancement, but maybe that is for RAN1 to decide, I guess MSG2 may be impacted as well .. when should RAN2 start work on this? from August meeting? or later? any opinions? is LS from RAN1 required to start work in RAN2? (LS would IMHO be appreciated).

15 – NTT DOCOMO INC.

We are fine with adding "RAN2" into the main bullet without additional sub-bullet.

16 – HUAWEI TECHNOLOGIES Co. Ltd.

Adding 'RAN2' is fine. If we really want to make it clearer to RAN2 on the potential RAN2 impact, we are fine with the new added subbullet in RP-211127 which is aligned with RAN1 agreement. We think the proposed new added subbullet in RP-211435 is beyond the intended scope thus it is not appropriate to be added.

17 – VODAFONE Group Plc

Agree with the proposal, no preference between the two sub-bullets

RP-211127 has the following proposed editorial updates

Table 1:

38.306	NR; User Equipment (UE) radio access capabilities	RAN#95	Core part
38.322	NR; Radio Link Control (RLC) protocol specification	RAN#95	Core Part

Companies are encouraged to provide views on the above proposed updates.

Feedback Form 2: Comments on the editorial updates

1 – vivo Communication Technology

ok

2 – Ericsson LM

Agree

3 – Guangdong OPPO Mobile Telecom.

[OPPO] Agree.

4 – SHARP Corporation OK.
5 – CATT OK
6 – LG Electronics Inc. We are fine with the proposal.
7 – MediaTek Inc. OK
8 – Nokia Corporation OK
9 – ZTE Corporation Agree
10 – HUAWEI TECHNOLOGIES Co. Ltd. ok
11 – VODAFONE Group Plc OK with the proposal

3 Email discussion (2nd round)

It seems the majority companies are fine with the following update on the objectives.

* Specify mechanism(s) to support Type A PUSCH repetitions for Msg3 [RAN1, RAN2]

Proposal:

Update the CovEnh WID as follows:

* Specify mechanism(s) to support Type A PUSCH repetitions for Msg3 [RAN1, RAN2]

Companies are encouraged to provide views on the above proposal.

Feedback Form 3: Comments on the proposal

<p>1 – Ericsson LM</p> <p>Yes, the update of the WI as per above seems fine</p>
<p>2 – Nokia Corporation</p> <p>We agree with the proposal.</p>
<p>3 – Intel Deutschland GmbH</p> <p>We are fine with the proposal</p>
<p>4 – vivo Communication Technology</p> <p>fine with the proposal</p>
<p>5 – Samsung Electronics Co.</p> <p>We are fine with the proposal.</p>
<p>6 – ZTE Corporation</p> <p>We are fine with the proposal, though we feel better to make RAN2 work clearer with a sub-bullet.</p>
<p>7 – Qualcomm Incorporated</p> <p>We are ok with the proposal; We would be ok with no WID update as well.</p>
<p>8 – HUAWEI TECHNOLOGIES Co. Ltd.</p> <p>Ok with the proposal.</p>
<p>9 – CATT</p> <p>We are fine with the proposal.</p>
<p>10 – Apple France</p> <p>We are OK with the proposal.</p>
<p>11 – SHARP Corporation</p> <p>We support the proposal.</p>
<p>12 – MediaTek Inc.</p> <p>We are OK with the proposal.</p>
<p>13 – Rakuten Mobile</p> <p>We agree with the proposal</p>

14 – VODAFONE Group Plc

We agree with the proposal

15 – LG Electronics Inc.

We are fine with the proposal.

Regarding the comments from RAN2 Chairman, from moderator’s understanding, RAN2 can start the discussion from August meeting and RAN1 LS may not be necessary since companies can prepare RAN2 contributions based on the achieved agreements in RAN1. The detailed RAN2 impact can be discussed in RAN2 based on companies’ contributions.

Question: When does RAN2 work start? From August meeting or triggered by RAN1 LS?

Companies are encouraged to provide views on the above question.

Feedback Form 4: Comments on the question

1 – Ericsson LM

We think the work can start already in August. If RAN1 makes agreements which justifies an LS, they will send one, but that is business as usual.

2 – Intel Deutschland GmbH

We think RAN2 can start the work from August meeting. This does not need to be triggered by RAN1 LS, otherwise it would delay the progress.

3 – Nokia Corporation

We agree with the views above that the work in RAN2 can start from August meeting. In case RAN1 has more information to add beyond what can be found in meeting minutes available so far, those can be shared by LS as usual, but there is no need to wait for such LS to kick off the work.

4 – vivo Communication Technology

In our view, RAN2 can start working in August meeting based on RAN1 agreements.

5 – ZTE Corporation

We agree with above companies that RAN2 can start the work in August meeting based on the progress made in RAN1.

6 – Qualcomm Incorporated

Either way would be acceptable to us.

7 – HUAWEI TECHNOLOGIES Co. Ltd.

RAN2 can start the work in August based on what agreed in RAN1 so far.

<p>8 – CATT</p> <p>We agree with moderator’s views that RAN2 can start the work in August without the LS from RAN1.</p>
<p>9 – SHARP Corporation</p> <p>RAN2 work will start at August meeting.</p>
<p>10 – MediaTek Inc.</p> <p>RAN2 can start in August meeting based on the existing RAN1 agreements. If anything unclear, RAN2 can ask RAN1 by LS.</p>
<p>11 – Rakuten Mobile</p> <p>We agree with other companies, RAN2 can start work and ask RAN1 guidance by LS (if required).</p>
<p>12 – VODAFONE Group Plc</p> <p>Agree with moderator’s proposal</p>
<p>13 – LG Electronics Inc.</p> <p>Either way is fine with us.</p>

4 Conclusions

Stable proposal:

Update the CovEnh WID as follows:

* Specify mechanism(s) to support Type A PUSCH repetitions for Msg3 [RAN1, RAN2]

Table 2:

38.306	NR; User Equipment (UE) radio access capabilities	RAN#95	Core part
38.322	NR; Radio Link Control (RLC) protocol specification	RAN#95	Core Part

Stable conclusion:

For CovEnh WI, RAN2 work starts from August meeting.

5 Reference

[1] 3GPP RP-211127, “Revised WID on NR coverage enhancements”, China Telecom, RAN#92e, June 14 - 18, 2021.

[2] 3GPP RP-211435, “On WI scope of Rel-17 NR coverage enhancements”, ZTE, Sanechips, RAN#92e, June 14 - 18, 2021.