3GPP TSG-RAN #90e RP-20xxxx

Electronic Meeting, 7 - 11 December 2020

**Agenda item:**

**Source:**

**Title: Email discussion on Improving TEI visibility/traceability**

**Document for: Discussion**

# 1 Introduction

At RAN#88e [1] and RAN#89e [2] email discussions were held on TEI issues.

In [3], MCC brought up problems of (in particular) cross-RAN WG TEI CRs. In general, many companies felt that RAN WGs and their Chairmen are well able to cope pragmatically with TEI issues on the basis of [4]. Also, TEI is seen as an important tool and RAN WG s need to have the flexibility to continue using TEI in a pragmatic way, without too many artificial restrictions.

Nevertheless, it was identified that there is scope for improvement on TEI visibility/traceability.

It was decided to have an email discussion on this between RAN#89e and RAN#90e, to allow the involvement of RAN WG Chairs (and MCC).

The target of this discussion is then to **identify pragmatic, workable ways to improve visibility/traceability of TEI**.

# 2 Structuring of the discussion

The first step will be to collect practical ideas/proposals on improving the visibility/traceability. To this end, proponents should provide the following information, structured in a table format (see template in section 3).

Although a fully-fleshed out proposal will be the most useful for later review, it is also allowed to provide a rough idea that may need further refinement.

The template requires information on the following 6 points.

(1) Proponent. *E.g. Company A, RAN WGx Chairman, TSG RAN Vice-Chairman, MCC, ...*

(2) Short identifier of the idea/proposal. *E.g. "TEI unique ID"*

(3) One-sentence abstract of the idea/proposal that gives an immediate indication of what is intended. *E.g. "Each different TEI topic gets a unique ID number allocated by <tbd> that allows tracing of that particular TEI on the cover sheets of CRs in all (RAN) WGs"*.

(4) Full description of the idea/proposal and how it is foreseen to work in a practical manner. Please be as precise as possible, identify which formal documents would be affected (*e.g. CR cover sheet, Status Report, RAN WG Chairman report, MCC minutes, new formal document required, ...*) and how (*e.g. the box xyz, a new tick box, standardized wording in RAN WG Chairman's report, ...*).

(5) Foreseen advantages/what problems does it solve.

(6) Foreseen disadvantages/problems and other issues that may require fine-tuning.

At a later stage, RAN WG officials, MCC and companies may review and comment on the proposals. It will also be possible to come with improved or new proposals, which may result from the discussion and exchange of views.

# 3 Proposals

For each proposal/idea, please fill out a separate table according to the following template

## 3.1 [CR cover] WG impact analysis via CR cover

|  |  |  |
| --- | --- | --- |
| (1) | Proponent | MCC |
| (2) | Short identifier | [WG impact analysis via CR cover] |
| (3) | One-sentence abstract | TEI cat.B/C CRs will have to indicate on the CR cover sheet: impacts on other WGs: yes/no? if yes: which WGs are impacted: ....? |
| (4) | Full description | Currently, a missing information on the CR cover sheet about "other specs affected" can mean a. there is really no impact or b. the impact on other specs is not clear or not indicated. This makes it problematic/impossible to identify cross-WG/TSG TEI cat.B/C CRs. If such an indication is introduced, it will be mandatory for cat.B/C TEI CRs and if it is missing, then the CR will not be approved. If it is present, it is possible to crosscheck with the "other specs affected" field and corresponding linked CRs can be identified. If this identification is not possible, it will be a trigger to discuss this CR at the RAN meeting. |
| (5) | Foreseen advantages | - Easy way to separate single WG CRs from problematic cross-WG/TSG CRs. - Easy to implement (can be 2 lines in the summary of change, no CR cover template revision needed). - Better checking possible for other WGs. - Avoiding approval of just partly completed TEI features. - Possibility to check whether the 1 quarter rule is really fulfilled. |
| (6) | Foreseen problems/ disadvantages/ open issues to be resolved | - It is still possible to cheat and declare that a TEI CR has no impact on other WGs although it has some impact (but CR authors and the resp. WG have an increased responsibility to check the impacts and there is a way to cross-check with other specs affected) - In case of any doubt regarding the impact on another WG, you better list this WG than hiding it. |

## 3.2 [WG Chair report] WG chairman's report of Cat.B/C TEI CRs to RAN

|  |  |  |
| --- | --- | --- |
| (1) | Proponent | MCC |
| (2) | Short identifier | [WG chairman's report of cat.B/C TEI CRs to RAN] |
| (3) | One-sentence abstract | Listing in WG chairman's report to RAN of TEI16 cat.B/C CRs and NR\_newRAT-Core, TEI16 cat.B/CRs CRs that a. have no impact at all on other WGs b. have impact on other WGs |
| (4) | Full description | This could be one slide in the RAN1/2/3/4 chairman's report to RAN: TEI16 cat.B/C CRs and NR\_newRAT-Core, TEI16 cat.B/CRs CRs: a. without impact on other WGs: Rx-20..., Rx, 20... b. with impact on other WGs: - Rx-20...: title: impact on RANn - Rx-20...: title: impact on RANn, RANm Note: MCC could provide WG chairmen with a list of these CRs and WG chairmen can then quickly sort them. Main target would be cross-RAN WG related CRs. But also impacts in other TSGs could be indicated (if any). |
| (5) | Foreseen advantages | - Easy to generate overview and easy for other WGs to cross-check (in combination with "WG impact analysis via CR cover" this will be easy to generate) - Better visibility of this sort of CRs at RAN (than just block approving them) and better checking of cross-WG/TSG impacts |
| (6) | Foreseen problems/ disadvantages/ open issues to be resolved | - a little effort for WG chairmen (in theory, we should not have too many of this sort of CRs) but much better visibility and transparency |

## 3.3 [Named TEIs] Named TEIs

|  |  |  |
| --- | --- | --- |
| (1) | Proponent | Nokia |
| (2) | Short identifier | Named TEIs |
| (3) | One-sentence abstract | Whenever TEI CR is agreed, it is given a "name" that will then be recorded and used in all subsequent CRs in Tdoc name. |
| (4) | Full description | This is simply enhancing the cover page with additional rules: A TEI CR must have unique name. In particular:   * **First Cat B/C CR introducing the TEI feature:** The Tdoc title indicates the "name" of the feature in square brackets. The name will be used in any subsequent CR Tdoc titles (e.g. "Introduction of Feature [BEST-TEI-EVER]") * **Naming rules for the TEI:** A simple naming could be using a running number, e.g. "TEI16\_1" for the first TEI and so on, but as long as the names are shortm, unique and simple, any scheme is possible. * **Recording the TEI names:** These "names" can be recorded in RANP reports, or alternatively in a TR (e.g. 38.8xx) that collect the information together (from all WGs). * **Subsequent corrections to the TEI feature, i.e. Cat F CR:** The Tdoc title shall use the TEI name from the original Cat B/C CR (e.g. "Correction to Feature [BEST-TEI-EVER]"). The cover page should also refer to the original approved Tdoc and CR numbers.   Any CR for a TEI not matching the above rules for the cover page can be flagged for immediate rejection unless proponents correct the cover page to comply with the rules. |
| (5) | Foreseen advantages | This proposal doesn't create a lot of overhead, but still allows quick parsing of the CR names per TEI feature. They can even be parsed from the existing CR databases (based on CR name and TEI WI code). It also doesn't create a huge process to follow - companies only have to use the right "TEI name" in the cover page and refer to the right CR number - all of which is normal practice anyway. |
| (6) | Foreseen problems/ disadvantages/ open issues to be resolved | This doesn't provide any traceability benefits for already-agreed TEI CRs unless the "TEI names" for those are assigned afterwards. |

## 3.4 New ideas/proposals

If you want to propose another idea, please use this template

|  |  |  |
| --- | --- | --- |
| (1) | Proponent |  |
| (2) | Short identifier |  |
| (3) | One-sentence abstract |  |
| (4) | Full description |  |
| (5) | Foreseen advantages |  |
| (6) | Foreseen problems/ disadvantages/ open issues to be resolved |  |

# 4 Review and discussion

Please answer the following questions for each method/idea you would like to comment on:

*(R1) How "workable" is the proposed TEI improvement method/idea in your view? Please choose from:*

*(RA1) Workable as proposed. This could be adopted without need for additional changes.*

*(RA2) May be workable, but some changes would be needed,. Changes needed: xxx*

*(RA3) Not workable as proposed. What needs to be addressed to make it workable? xxx*

*(R2) The proponent listed some possible drawbacks of its TEI improvement method/idea under point (6). Do you have any proposal how to solve/mitigate these drawbacks?*

*(R3) Do you have any other suggestions how we could improve this proposal (even further)? If you think it is "good enough" you can write "Good enough".*

Note: If you get a new idea, please provide it under 3.4 above, using the same template as for earlier proposals.

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## 4.1 Review of [CR cover] WG impact analysis via CR cover

|  |  |  |
| --- | --- | --- |
| Company1 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company2 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company3 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company4 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company5 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company6 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| etc. |  |  |

## 4.2 Review of [WG Chair report] WG chairman's report of Cat.B/C TEI CRs to RAN

|  |  |  |
| --- | --- | --- |
| Company1 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company2 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company3 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company4 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company5 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company6 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| etc. |  |  |

## 4.3 Review of [Named TEIs] Named TEIs

|  |  |  |
| --- | --- | --- |
| MCC | *Comments to the proposal:               (R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | positive aspect: identifier in Tdoc title is simple (e.g. no impacts on WI code) and if followed by all WGs it allows easy detection of dependencies of CRs at TSG level; also handling of missing identifier cases is easy  open issues: - how does WGx know about identifiers used on CRs of WGy? via LSs? - a numbered identifier would even complicate this as it would require a numbering system among all WGs (if not even TSGs) - we can only easily spot if a title has no identifier, if the WG uses its own identifier instead of reusing the identifier of the other WG, then we cannot detect any relation - recording in a TR maybe a bit too much; but we could have a RAN Tdoc as outcome of each RAN meeting in which we append a list of all TEI cat.B/C CRs (with their status) handled at the current RAN meeting (once a REL is frozen, the next REL would get a new Tdoc)  (RA2) May be workable, but some changes would be needed. Changes needed: clarification how other WGs are informed about the identifiers to be used and under which condition can a WG pick its own identifier  see comments above   Running RAN Tdoc for tracking TEI cat.B/C CRs updated after each RAN meeting for tracking purposes; linked TEI cat.B/C CRs may be packed together if they have same identifier |
| Company2 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company3 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company4 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company5 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company6 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| etc. |  |  |

## 4.4 Review of <new proposals>

<identifier for new proposal, which was not yet available at the beginning of the review discussion>

|  |  |  |
| --- | --- | --- |
| Company1 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company2 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company3 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company4 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company5 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| Company6 | *(R1) Workable?*  *(R2) Solving/mitigating identified drawbacks*  *(R3) Other proposals for improvement* | Answer: <(RA1)>  or <(RA2) plus changes that are needed>  or <(RA3) plus what needs to be addressed to make it workable?>  Answer: <your proposals>  Answer: <Good enough> or <your proposals> |
| etc. |  |  |

# 5 Summary

To be provided later.

# 6 References

[1] RP-201330 Summary of email discussion [TEI\_Handling] on TEI Handling (NEC (Moderator))

[2] RP-202074 Moderator's summary for email discussion [89E][05][RAN\_TEI] Intermediate round (NEC)

[3] RP-201123 Problems of cross-WG TEI CRs (MCC)

[4] RP-191602 Handling of TEI & Contribution Submission in RAN WGs for NR & LTE (3GPP RAN TSG and WG1/2/3/4 Chairmen)

# Annex Template

If you want to propose another idea, please use this template

|  |  |  |
| --- | --- | --- |
| (1) | Proponent |  |
| (2) | Short identifier |  |
| (3) | One-sentence abstract |  |
| (4) | Full description |  |
| (5) | Foreseen advantages |  |
| (6) | Foreseen problems/ disadvantages/ open issues to be resolved |  |