

**3GPP TSG RAN meeting #80**  
**La Jolla, USA, June 11 - 14, 2018**  
**Agenda item: 9.1.16**

**RP-180863**

# Summary of email discussion on NR data collection/SON/MDT

Moderator: CMCC



# Executive Summary



- Email discussion was assigned at RAN #79 meeting  
*Data collection/MDT/SON ([RP-180313](#), [RP-180462](#))*  
*Moderator: CMCC*
- Two-steps email discussion was organized, **starting from the draft merged from RP-180313 and RP-180462**
  - *Step 1: Discuss the scope and objectives in the merged SID (by 18th May)*  
*Moderator's update on 23th May*
  - *Step 2: Further comments on the updated version, discussion on the time plan and related WGs if any (by 25th May)*
- **Good progress:** 14 companies participated the discussion. In general, most of the companies show support of the activity. Some suggestions on interaction with other groups, SI organization and whether to include LTE were raised.
- Consolidated SID is provided in **RP-180865** by addressing the received comments as much as possible, brackets were put on the left issue “whether to explicitly include LTE enhancements in the SID”

# Step-1 discussion

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- **Duration:** April 20th ~ May 18th
- **Participant:** Deutsche Telekom, ZTE, Huawei, Telecom Italia, Xiaomi, CATT, Vodafone, AT&T, BT, CMCC
- Generally, companies show support of the new proposal. Some suggestions were raised on the following 3 points,
  - *P1: Interaction with other groups*
  - *P2: Objectives more focus to avoid a lengthy SI*
  - *P3: Detailed revisions on wordings*
- **Summary of step 1 discussion and updated version were provided on 23th May, whilst step-2 discussion was kicked-off**

# Step-1 discussion (cont.)



- **P1: Interaction with other groups**

Company	Views
Deutsche Telekom	Indicated the relevant relation with 5GC NFs (SA2) and the possible interrelation with Q&M (SA5) as part of the objectives
ZTE	In view that that NWDAF is a separate SI under ongoing in SA2, whether it has any impact on RAN depends on the output from SA2, so far no interaction identified, propose no need to mention this.
Huawei	Acknowledged some possible relation with the 5GC, but considering this SI is not a system design, HW prefer to use a classic sentence “The interaction with other group SA5, SA3 and SA2 may be considered during the study with regards to 5GC functionalities e.g. NetWorkData Analytics Function (NWDAF)”
CMCC	Prefer HW’s revision

***Moderator’s observation and proposed revision:***

- Interaction with other groups may be needed, this SI should let this discussion open but had better not point to any solution. In light of this, HW’s revision can cover the all concerns on this.

# Step-1 discussion (cont.)



- **P2: Objectives more focus to avoid a lengthy SI**

Company	Views
Deutsche Telekom	SON and MDT are the most important use case and the study on these use cases should be focused on identify the difference arising from NR compared to LTE. This would be beneficial to avoid a lengthy SI.
Vodafone	Shared similar view as DT to focus on difference from LTE on SON/MDT use cases
AT&T	Some concerns on Vodafone points “so not sure what we need to study there differently for NR” and expressed their willing to study the change due to NR feature, e.g., beam sweep in mmwave. Vodafone then clarified that the argument is on the collection procedure rather than the measurements.
CMCC	Clarified there are some misunderstanding on the original proposal. CMCC are also pursuing a quick SI first then transfer to WI is preferred. Moreover, they clarified also not want to invent the wheel again, for SON and MDT use cases, study is to go through each feature and identify the differences and enhancements compared with LTE. CMCC further expressed the willing not to prevent new use cases which leveraging NR features to enable more efficient network optimization
Telecom Italia	Shared similar view as DT and propose to get the low hanging fruits first

***Moderator’s observation and proposed revision:***

- It seems a common view not to have a lengthy SI and study on SON/MDT use cases will focus on identifying the difference from LTE arising from NR new features. This may be handled by adding a sentence “LTE solutions already defined for SON and MDT should be taken into account in this SI and study on SON and MDT use cases should focus on the difference arising from new scenarios or features of NR.”
- Considering 5G is a new generation of system, it is possible and good opportunity to consider new use cases.

# Step-1 discussion (cont.)



- **P3: Detailed revisions on wordings**

Company	Views
Huawei	Proposed to remove “gNb/en-gNB” in definition part, add “OAM” for utilization and propose to remove “openness to third party”
Xiaomi	Proposed to consider some NR new features, BFR, BWP etc
CATT	Proposed some improvement to make the wording more accurate
Deutsche Telekom	Add MDT and CCO in the use cases and include detailed MDT solutions to the study lists
CMCC	Clarify the meaning of “openness to third party” and try to find a more appropriate wording. CMCC has some concerns on whether a “full” list of MDT solutions as proposed by DT is needed in the objective.

***Moderator’s observation and proposed revision:***

- Most of these revisions seems acceptable. Regarding “Openness to third party”, “Radio network information exposure” can be used instead.

# Step-2 discussion

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- Duration: May 23<sup>th</sup> ~ 25<sup>th</sup> (In fact, last minutes of Tdoc submission)
- Participants: Samsung, MTI Group, KT, NTT Docomo, Deutsche Telekom, Vodafone, ZTE, BT, Telecom Italia, AT&T
- Further discussion on the following 3 points,
  - *P1: Length of SI*
  - *P2: Whether to explicitly include LTE in the scope*
  - *P3: Further amendments*

# Step-2 discussion (cont.)



- **P1: length of SI**

Company	Views
Deutsche Telekom	Re-iterated that do not see a need for a long SI, but should have a WI on the SON/MDT aspects pretty soon (e.g. latest in Sept).

## *Moderator's response and proposed revision:*

- Considered three potential time for starting WI, 2018-9, 2018-12 and 2019-3. Since only one available meeting per RAN2 and RAN3 before Sept., it is impossible to address all the study points through one meeting cycle. 2018-12 and 2019-3 are possible timing, per-request from DT, 2018-12 is put as the target date for SI in the TU request
- Anyway no matter how long the SI is, the WI should be completed in R16

# Step-2 discussion (cont.)



- **P2: Whether to include LTE in the scope**

Company	Views
Vodafone	Any studies that goes beyond analyzing the differences between LTE and NR for existing SON/MDT <b>should also be applicable for LTE networks</b> . V2X and URLLC are both applicable for LTE as well.
ZTE	Prefer LTE related enhancement, e.g., for V2X, or other measurements enhancement related to LTE only, to exclude those from current SI
Telecom Italia	Shares Vodafone view and believe it would be better to explicitly include LTE in the scope of the Study Item
BT	Similar view as Vodafone

### *Moderator's response and proposed revision:*

- Comments on explicitly including LTE into the SI was raised quite close to Tdoc submission deadline. Considering there is still some concerns on this, to be fair, these suggestions are captured in the SID with brackets. How to handle these brackets can be decided at RAN#80.

# Step-2 discussion (cont.)



- **P3: Further amendments**

Company	Views
Samsung	Further polish the text and proposed to remove “Accessibility measurements”, “QoS related measurements” bullets since they are duplicated with definition part
MTI Group	Although common view is not to have a lengthy SI, we think URLLC optimization should be in the scope of this study
NTT Docomo	Refinement on the justification and add “L1 measurement entities”
AT&T	Add more sensor related measurements in the objective, e.g., digital compass, gyroscope

***Moderator’s response and proposed revision:***

- These amendments are captured in the submitted SID

# Conclusion

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- As the output of the email discussion, a consolidated SID in RP-180865 is submitted to RAN #80 for approval



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# Thank You