CB: # SONMDT6_MDT_RAN3_117bis_e v2
Variant of CB: # SONMDT6_MDT_RAN3_117bis_e Version 0.0.1
RAN3
https://nwm-trial.etsi.org/#/documents/8203

3GPP TSG-RAN WG3 Meeting #117bis-e R3-22xxxx

E-Meeting: Oct. 10th – Oct. 18th, 2022

Agenda item: 10.2.6

Source: CATT

Title: Summary of Offline Discussion on CB: # SONMDT6_MDT

Document for: Discussion and Decision

1 Introduction

This contribution is to kick off the following discussion.

CB: # SONMDT6_MDT

- In NR-DC scenario, for signalling based immediate MDT, OAM includes an indicator requesting reports from MN or SN or from both MN and SN? E///

- From the perspective of function, supporting both inter-system and intra-system S-based MDT protection is more reasonable? LS to RAN2? CATT

- Capture agreements if any

(CATT - moderator)

[NWM] Summary of offline disc

For the first round, we focus on the issue for MDT about new indicator and the logged MDT override protection The deadline is Thursday, October, 13th, 13:00 UTC.

For the second round, we focus on the left issues in the first round and check the CR or LS if needed. The deadline is Monday, October, 17th, 08:00 UTC.

2 For the Chairman's Notes

Proposal 1: Send an LS to SA5 to check for S-based immediate MDT in NR-DC, whether OAM want to configure the measurements should be collected from the MN only (option 1), from both MN and SN

(option 3).

Proposal 2: Send an LS to RAN2 to check which option is align with their understanding for signaling based logged MDT override protection

Proposal 3: No need to send LS to RAN2 for supporting the reverse use case.

3 Discussion - Second Round

<TBD>

4 Discussion - First Round

4.1 Issue 1: Whether OAM shall be enabled to request report from MN or SN independently

In [1], it is pointed out that according to TS37.320

"For immediate MDT configuration, MN and SN can independently configure and receive measurement from the UE."

Thus, it is proposed that in NR-DC scenario, for signaling based immediate MDT, OAM includes an indicator requesting reports from either MN or SN or from both MN and SN.

Question 1: What's your opinion on whether enable OAM to select which node(s) should configure MDT and report the measurement results?

Feedback Form 1:

1 – Ericsson-LG Co. We believe that allowing the OAM to configure whether MDT measurements shold be collected from the MN only, from the SN only, or from both, would greatly improve MDT because it would allow an operator to select the right MDT measurements depending on the observability that wants to be achieved. For example, if the operator wants to observe the coverage of the SCG layer, then SN only can be selected. While if the operator wants to observe the coverage of the mcg layer, than MN only can be configured. Selecting both MN and SN provides full visibility on both mcg and scg layers
2 – Qualcomm Incorporated OK to allow this flexibility at the OAM

3 – HuaWei Technologies Co.

we are fine with the proposal.

4 – CATT

we can see there are some advantage to give OAM more flexibility, whether we need to check whether have such demands?

5 – Samsung R&D Institute UK

No. Question 1 is specific to signalling based MDT, right? For signalling based MDT, it is used to trace a specific UE. The UE or RAN will report the status for all bearers for the request MDT measurement. In addtion, DC status for a UE will be dynamic changed. Even for one bearer, sometimes it is in MN, sometimes it is in SN.

6 – ZTE Corporation.

Seems belong to SA5's scope, may send LS to confirm such requrirement is needed in SA5.

7 – Nokia France

No. Agree with Samsung, s-based MDT is used to trace the UE, so reports are performed as per measurement configuration.

Question 1: If yes, which status should be supposed?

- Option 1: MN+SN,
- Option 2: SN only,
- Option 3: MN only.

Feedback Form 2:

1 – Ericsson-LG Co.

We propose to support all options. As mentioned above, this enables an operator full granularity on mcg and scg coverage layer observability. This enables also to chech network performance on the mcg and scg layer. This is beneficial because if, for example performance reveals to be poor on the scg layer, the operator may decide not to configure DC in a specific network area, as the cost in terms of scg resources does not provide comparable benefits

2 – Qualcomm Incorporated

OK for all options

3 – HuaWei Technologies Co.

Is option 2 a valid use case? maybe a simple indication is sufficient to indicate whether the MDT configuration should forward to SN or not.

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4 – CATT agree with HW□ OAM not know whether IE is in DC, case 2 needs further check
5 – Nokia France in particular option 2 seems not easy to handle, and also assumes gNBs deployed for SN operation only. However the proponent so far considered standards support for gNBs that could support both MN and SN role (no specific standards support for ”SN-only gNB”).

Moderator’s summary:

For Q1:

3 companies support to enable OAM to select which node to MDT configuration; 2 companies think no need to enable OAM select; 2 companies think it seems belong SA’5 scopa and need to confirm with SA5.

For Q2:

2 companies agreed to support all the three options; 3 companies think option 2 is not valid.

From the above discussion, companies have no consensus on whether enable OAM to select which node(s) should configure MDT and report the measurement results. To promote the process, the moderator would like to propose:

Proposal 1: Send an LS to SA5 to check for S-based immediate MDT in NR-DC, whether OAM want to configure the measurements should be collected from the MN only (option 1), from both MN and SN (option 3).

4.2 Issue 2: Scenario of Signaling based logged MDT override protection

RAN3 have no coincided about which scenario is supported, there are mainly two understandings:

Option 1: Only include inter-system inter-RAT scenario, i.e., from **eNB to gNB.**

Option 2: Also include the intra-system inter-RAT scenario, i.e., **both eNB to gNB and ng-eNB to gNB.**

In last meeting, we agreed this issue should be discussed in RAN2. But in RAN2, they only notice the UE is configured in LTE and reselect to NR, not need to identify whether the UE is connected to an ng-eNB or a eNB. So, it seems RAN2 will not touch such issue without requirements from RAN3 since RAN2 does not care about the difference between E-UTRAN and E-UTRA.

In [2], it is proposed to support both inter-system and intra-system case, and send LS to RAN2 to confirm the scenario

Question 3: Which option do you support for the scenario of signaling based logged MDT override protection?

Feedback Form 3:

1 – Ericsson-LG Co. Option 1
2 – Qualcomm Incorporated No strong view (Option 2 seems logical to support). We discussed this last meeting. But companies seemed to be interested only in inter-system scenario (i.e., Option 1) and said that was also the intention of the WID. Regardless, we feel that the RAN2 solution might work for intra-system and inter-system without any extra efforts; so perhaps no clarification/LS is needed
3 – HuaWei Technologies Co. No strong view. but if we want to extend the scope if WID, then probably revising the WID in RAN plenary is needed.
4 – CATT Option 2 is more reasonable, and agree with QC mentioned that RAN2 solution can be used for both inter and intra case, we also shouldn't preclude intra-system case in RAN3. And if this is turly a typo in WI, we should inform other groups as soon sa possible to avoide further potential mis-understanding.
5 – Samsung R&D Institute UK Option 2 seems a reasonable scenario to support. Sharing the same view as Qualcomm, maybe the solution defined to inter-system works also for intra-system.
6 – ZTE Corporation. No strong view, but based on current WID, only focus on option 1.
7 – Nokia France Need to follow the WID, which reflects clear discussion outcome at RAN plenary.

Question 4: Whether an LS should be sent to RAN2 to confirm the scenario of signaling based logged MDT override protection

Feedback Form 4:

1 – Ericsson-LG Co. Teh WID currently describes the case where the UE is configured in E-UTRAN (namely an eNB in EPS) and reselect in NR (namely to a gNB in NG-RAN). We support sending an LS to RAN2 stating that RAN3 believes that the reverse use case should also be supported, namely a UE is configured in NR (NG-RAN) and it reselects in E-UTRAN.
2 – Qualcomm Incorporated

Reverse use case is definitely not in the WID, we should not add that now.
3 – HuaWei Technologies Co. LS should be OK. but the conclusion of last meeting is to follow the scope of WID. Or we may also rely on contributions in RAN2 directly.
4 – CATT LS is needed to show our RAN3's understaing about E-UTRA and E-UTRAN. For reverse use case, RAN2 has started the discussion, we can wait for their information.
5 – Samsung R&D Institute UK No strong view. but if RAN2 doesn't identify whether the UE is connected to an ng-eNB or a eNB. LS to RAN2 will not have particular action to RAN2.
6 – ZTE Corporation. No strong view for LS out. Regarding the reverse user case, this user case is not in the WID.
7 – Nokia France It is not clear to us what RAN3 should write in the LS to RAN2. Considering the WID is followed, we can't agree with the draft LS annexed to 5616.

Moderator's summary:

For Q3:

2 company support option 1; 2 companies think option 2 is more reasonable; 3 companies have no strong view.

For Q4:

2 companies agree to send LS to RAN2 to align the understanding about scenario for signaling based logged MDT override protection; 2 companies have no strong views; 1 company is not clearly about what should write in the LS.

1 company suggest send an LS for supporting the reverse case, however, 3 companies think reverse case is not in the WI scope.

From the above discussion, we can see companies agree that according to current WI, signaling based logged MDT override protection should only supported in inter-RAT case. The moderator wants to clarify that the intention of the LS is not to change the WI, but to check whether RAN2 and RAN3 have the same understanding.

for the scenario in WI(only support inter-RAT). And if we have different understanding, further action is needed.

Proposal 2: Send an LS to RAN2 to check which option is align with their understanding for signaling based logged MDT override protection.

Proposal 3: No need to send LS to RAN2 for supporting the reverse use case.

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4.3 Issue 3: Any other aspect

Question 5: Please add any further aspects that are in scope and were not included in the above:

Moderator's summary:

<TBD>

5 Conclusion, Recommendations [if needed]

If needed

6 References

1. R3-225555 Signalling based immediate MDT in NR-DC Ericsson
2. R3-225616 Discussion on the scenario of Signalling based logged MDT override protection CATT