3GPP TSG-RAN WG3 Meeting #117-e R3-224987

E-meeting, 15 – 24 August, 2022

**Agenda item: 9.2.1**

**Source: Nokia - moderator**

**Title: Summary of discussions on CB: # 4\_UserConsent**

**Document for: Approval**

# 1 Introduction

This paper provides summary of discussions at RAN#117-e on:

**CB: # 4\_UserConsent**

**- Try to converge on the WF:**

**RAN3 replies to SA3 (cc RAN2, SA5) along the lines that RLF/CEF reports are sent as MDT information to external entities (TCE) only if the user has provided his consent?**

**Sending a reply LS to SA3 and to ask SA3 whether it is feasible and beneficial to agree to a user consent mechanism based on operators´ configurations of user consent information?**

**Indicating lack of agreement in RAN3 and stop the discussion?**

**-LS reply to SA3**

(Nok - moderator)

Please provide feedback for first round by Friday, Aug. 19, EOB.

# 2 For the Chairman’s Notes

[To be completed]

# 3 Discussion

## 3.1 Determine principle to follow in WF

Based on the submitted papers and chair's guidance above, the moderator observes that 3 main options can be identified by the submitted papers:

* Option 1: Reply to SA3 along the lines that current specification already ensures user privacy, e.g. because selection of UE for MDT requires user consent and hence RLF/CEF reports are sent as MDT information to external entities (TCE) only if the user has provided his consent. (See 4242)
* Option 2: Reply to SA3 asking whether it is feasible and beneficial to agree to a user consent mechanism based on operators´ configurations of user consent information. (See 4573)
* Option 3: Update RAN3 specifications and inform SA3 about the changes. (See 4400, 4679)

In order to converge on a principle to follow in way forward, we therefore ask companies to provide comments on each of these 3 options (Q1-Q3). Also, some of the options are not mutually exclusive, and we therefore ask companies to provide comments on any combination of these options that could be the basis for RAN3 agreement (in Q4).

**Q1: Please provide your view on option 1.**

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| --- | --- |
| Company | Comment |
| Nokia | All companies seem to agree that the current user consent applies to selection of UEs for MDT, but some companies believe that RAN3 specification changes are needed to control reporting of detailed UE location information from the UE to the RAN. On our side we can agree that current specification doesn't control collection of detailed location information on the Uu interface, but we also consider that SA3's requirements for user privacy are still fulfilled because the UE is only identified using temporary identifiers in the RAN. This means that any coarse or detailed location information available in the RAN but not sent to external entities (TCE) can’t be used to localize any UE or user. Also, even without any reporting of UE location information from the UE, the RAN will in many cases still be aware of quite precise UE location e.g. based on the used beam and TA (timing advance), which may also be used together with other methods like radio measurement fingerprints. We believe that it would be beneficial for SA3 to be informed about this situation in an LS response from RAN3. |
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**Q2: Please provide your view on option 2.**

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| Company | Comment |
| Nokia | We believe 4573 raises a good point. The principle of the current 3GPP standards on user consent was designed around Rel-10(?), so more than 10 years ago, and it would be beneficial to request a reassessment from SA3 introducing better means for e.g. regional adaptation of user consent requirements in the 3GPP specification. |
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**Q3: Please provide your view on option 3.**

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| Company | Comment |
| Nokia | As per our view expressed under Q1, we don't believe that RAN3 should proceed with specification changes along the lines suggested by this option. |
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**Q4: Could some combination of the options above constitute a good way forward:**

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| Company | Comment |
| Nokia | We see a benefit to reply to SA3 by combining option 1 and option 2. |
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## 3.2 RAN3 specification impacts (if any)

The specification updates proposed in [4400] are either based on the introduction of a new IE (NGAP/XnAP) for user consent to location information sharing on the Uu interface, or clarification (in NGAP/XnAP) that the existing user consent information also applies for acquiring UE location information in RLF, connection failure and SCG failure reporting. The latter approach is also followed in [4679], with CRs proposed for NGAP/XnAP/S1AP/X2AP.

**Q5: In case RAN3 decides to agree to update their specification, please provide your preference between:**

* **Option A: CRs introducing a new IE for user consent to location information sharing**
* **Option B: CRs repurposing the existing MDT user consent IE**

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| Company | Comment |
| Nokia | As commented above (see our comment to Q1), current specification already satisfies SA3's requirements on user privacy and the proposed changes (option A, B) would not avoid relatively detailed UE location information to be present in the RAN. So none of the changes are beneficial. Also, we believe that the intention of the CRs is to limit location information sharing on the Uu interface. If so, we believe that NGAP/XnAP/S1AP/X2AP are not the most suitable specifications, but stage 2 should be used. If RAN3 still concludes to go for stage 3 changes, enhanced clarity could be achieved by a stage 2 CR (if needed) and addition of stage 3 procedural text like "use the information as specified in TS 37.320" . |
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[4679] contains the following additional proposals:

* **Proposal 5 [4679]: RAN3 to discuss and decide whether to consider the SCG failure report case as well.**
* **Proposal 6 [4679]: The NG-RAN node should remove the UE location information if included in the CEF report and the user consent is not received from AMF for the UE before forwarding it to OAM.**

**Q6: Please provide your view on proposals 5 and 6 in [4679].**

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| Company | Comment |
| Nokia | P5: We don't see any reason to handle *SCGFailureInformation* or *SCGFailureInformationEUTRA* messages differently from other UE reports.  P6: We're not sure to identify the scenario addressed by the proponents, because from other observations it seems clear that the UE without user consent is not eligible for MDT. The RAN needs a TCE address in order to forward the CEF report, so if the TCE address is not provided for MDT, does this proposal relate to Uu tracing? If the proposal is meant for Trace, we believe it is out of scope of the user consent discussion. |
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# 4 Conclusion, Recommendations [if needed]

If needed

# 5 References

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| [R3-224242](Docs\R3-224242.zip) | On the handling of user consent for RLF/CEF cases (Nokia, Nokia Shanghai Bell) | discussion |
| [R3-224400](Docs\R3-224400.zip) | Resolution of the issue of user consent for location in RLF/CEF (Apple) | discussion |
| [R3-224401](Docs\R3-224401.zip) | User consent for location information in RLF/CEF – option 1 (TS 38.413) (Apple) | CR0860r, TS 38.413 v17.1.1, Rel-17, Cat. F |
| [R3-224402](Docs\R3-224402.zip) | User consent for location information in RLF/CEF – option 1 (TS 38.423) (Apple) | CR0861r, TS 38.423 v17.1.0, Rel-17, Cat. F |
| [R3-224403](Docs\R3-224403.zip) | User consent for location information in RLF/CEF – option 2 (TS 38.413) (Apple) | CR0861r, TS 38.413 v17.1.1, Rel-17, Cat. F |
| [R3-224404](Docs\R3-224404.zip) | User consent for location information in RLF/CEF – option 2 (TS 38.423) (Apple) | CR0862r, TS 38.423 v17.1.0, Rel-17, Cat. F |
| [R3-224405](Docs\R3-224405.zip) | [DRAFT] Reply LS on the user consent for trace reporting (Apple) | LS out To: SA3 CC: RAN, RAN2, SA5 |
| [R3-224573](Docs\R3-224573.zip) | Way forward on user consent (Ericsson, TIM) | discussion |
| [R3-224679](Docs\R3-224679.zip) | Discussion on user consent for UE location information (CRs and draft reply LS included) (Huawei, Orange) | discussion |