|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Agenda**  | **TDoc** | **Title**  | **Source**  | **Notes** | **Decision**  | **Replaced-by**  |
| 1 | S3‑230001 | Agenda  | SA WG3 Chair  | 　>>CC\_1<<Chair announces the agenda is approved.>>CC\_1<< | available  |    |
|    | S3‑230002 | Process for SA3#109Adhoc-e  | SA WG3 Chair  | 　 | available  |    |
|    | S3‑230003 | Process and agenda planning for SA3#109AdHoc-e  | SA WG3 Chair  | 　 | available  |    |
| 2 |  |    |    | 　 |    |    |
| 3 | S3‑230005 | LS on U2N relay direct link setup failure due to RSC mismatch or integrity failure  | C1-226908  | 　>>CC\_1<<[QC] presents.Chair asks how to proceed.[QC] proposes to keep open and discuss in this meeting, and try to work out a draft reply.[IDCC] asks question about release.[QC] clarifies it is R-18.[IDCC] comments and proposes to postpone.[Huawei] has similar concern with IDCC. It should be R-17 issue rather than R-18.Chair suggests to give a reply LS with clarification questions rather than keeping silent.[IDCC] comments reply LS should be a solution related LS.[QC] clarifies it is not FASMO issue so keep it in R-18.Chair suggests to keep discussion and try to give some feedback, even it is not direct answer for the question.>>CC\_1<<[Qualcomm]: proposes to send a reply LS and provides draft response.[Huawei]: proposes to change the response.[Qualcomm]: replies to Huawei[Huawei]: replies to Qualcomm.[Qualcomm]: replies to Huawei[Philips]: provides input.[Qualcomm]: replies to Philips[Philips]: replies. Propose to study issue further.[Qualcomm]: replies to Philips (disagrees with the comment from Philips) | available  |    |
|    | S3‑230006 | Reply LS on the progress and open issues for NPN enhancements in Rel-18  | C1-227157  | 　>>CC\_1<<[Ericsson] presents.Chair proposes to note this.**1st challenge deadline.**>>CC\_1<< | noted |    |
|    | S3‑230009 | Reply LS on Progress and open issues for NPN enhancements in Rel-18  | S1-223540  | 　 | available  |    |
|    | S3‑230008 | LS on user consent of Non-public Network  | R3-226006  | 　>>CC\_1<<[QC] gives a brief introduction about its status. 303 is draft reply LS, will be re-visited on Thursday.>>CC\_1<< | available  |    |
|    | S3‑230303 | Reply LS on user consent of Non-public Network  | Qualcomm Incorporated  | 　[Ericsson]: propose to be noted | available  |    |
|    | S3‑230007 | LS on SL positioning groupcast and broadcast  | R2-2213142  | 　>>CC\_1<<VC presents.312/299/356/357 is related draft reply.[Xiaomi] proposes to merge draft reply.>>CC\_1<< | available  |    |
|    | S3‑230312 | Reply LS to R2-2213142 on SL positioning  | Apple  | 　[Xiaomi]: proposes to merge S3-230312 with S3-230299, S3-230356, S3-230357>>CC\_1<<Chair requests to give summaries for each contribution.[Apple] summaries all 4 contributions, small different opinions, proposes to keep email discussion to find a way forward.[CATT] comments the draft reply could be made in this meeting or next meeting.Chair encourages to have conclusion in this meeting.[Xiaomi] comments, it still needs time to study solution.[Huawei] comments. Clarification may be needed, for groupcast/broadcast or groupcast+broadcast.[CATT] gives clarification.Chair proposes Apple to hold the pen.>>CC\_1<<[Apple]: provides r1 merging all the 4 draft reply LSes as discussed in Monday conf call. Please check.[Qualcomm]: provides comments and requests a revision[Huawei]: provides comments and requests a revision[Apple]: provides r2 addressing QC and Huawei’s comments.[Huawei]: provides r3.[Apple]: provides r4.[Qualcomm]: requests a minor revision in r4.[Xiaomi]: provides r5[Apple]: fine with r5[Huawei]: provides r6.[Qualcomm]: is fine with r5. Proposes to go with r5[Apple]: prefer r5. Proposes to go with r5. | available  |    |
|    | S3‑230356 | Reply LS on SL positioning groupcast and broadcast  | CATT  | 　[Xiaomi]: proposes to merge S3-230356 with S3-230299, S3-230312, S3-230357 | available  |    |
|    | S3‑230357 | [Draft] Reply LS on SL positioning groupcast and broadcast  | Xiaomi Technology  | 　[Xiaomi]: proposes to merge S3-230357 with S3-230299, S3-230312, S3-230356[Nokia]: Agree to merge and proposes S3-230357 as base.[Qualcomm]: proposes to use S3-230299 as a baseline or requests revision of this contribution (for merger) before approval[Huawei]: requests revision before approval[Xiaomi]: provides comments[Apple]: provides comments[Qualcomm]: provides comments | available  |    |
|    | S3‑230299 | reply LS on SL positioning groupcast and broadcast  | Qualcomm Incorporated  | 　[Xiaomi]: proposes to merge S3-230299 with S3-230312, S3-230356, S3-230357 | available  |    |
|    | S3‑230010 | Reply LS on the impact of MSK update on MBS multicast session update procedure  | S2-2209287  | 　>>CC\_1<<[Huawei] proposes to postpone to next meeting as R-17 meeting and waiting for a CR for reply.>>CC\_1<<[Huawei]: propose to postone. | available  |    |
|    | S3‑230040 | LS on MOCN TMGI ID impacting MSK, MTK  | Nokia, Nokia Shanghai Bell  | 　[Ericsson] : Proposed to note.>>CC\_1<<[Nokia] presents.[Ericsson] comments it is not needed.[Huawei] proposes to move this LS proposal to MBS study and decide based on discussion.>>CC\_1<<[Nokia] : Provides clarifications[Ericsson] : Proposed to note.[Qualcomm]: proposes to note | available  |    |
|    | S3‑230011 | LS on impact of URSP rule enforcement report to 5GC  | S2-2209327  | 　>>CC\_1<<VC presents.[Huawei] introduces status, proposes to keep discussion.[Google] has same opinion.[VF] comments.[Apple] comments there is no draft reply, and SA2 has another approach, proposes to wait about SA2’s progress in this same week.Chair asks to give some answers as it has action for SA3. Chair requests to Huawei to hold pen for draft reply.>>CC\_1<<[Huawei]: proposes a draft reply LS as requested by the Chair in the CC1.[Google]: We object to the proposed reply LS[Samsung] : requests clarification to Google[Google]: responds to Samsung[Samsung] : requests further clarification[Apple]: propose to note.[Ericsson]: asks Apple to clarify their reasoning for proposing to note the LS | available  |    |
|    | S3‑230012 | Reply LS on how ML model integrity, confidentiality and availability is supported between NWDAFs from different vendors  | S2-2210943  | 　>>CC\_1<<[CMCC] presents and proposes to note.Chair proposes to note.**1st challenge deadline.**>>CC\_1<< | noted |    |
|    | S3‑230013 | Slice based Steering of Roaming  | S2-2211204  | 　>>CC\_1<<[Huawei] proposes to note.Chair proposes to note.**1st challenge deadline.**>>CC\_1<< | noted  |    |
|    | S3‑230014 | Reply LS on FS\_eEDGEAPP Solution for Support of NAT deployed within the edge data network  | S6-223487  | 　>>CC\_1<<[Huawei] proposes to note.>>CC\_1<< | available  |    |
|    | S3‑230015 | LS reply on SNAAPP requirements clarifications  | S6-223488  | 　>>CC\_1<<[Docomo] presents and proposes to note.Chair proposes to note.**1st challenge deadline.**>>CC\_1<< | noted  |    |
|    | S3‑230016 | LS reply on CAPIF authorization roles related to FS\_SNAAPP  | S6-223489  | 　>>CC\_1<<[Docomo] presents.Chair proposes to note.**1st challenge deadline.**>>CC\_1<<>>CC\_3<<[Docomo] would like to trigger SNAAPPY discussion based on this LS.[Docomo] comments on authorization. [Huawei] comments the issue raised is not correct and mislead the discussion. The authorization is different with oauth authorization.[Nokia] supports Docomo.[Ericsson] comments.[Docomo] doesn’t agree with Ericsson’s comments.Chair proposes way forward, to capture the issue with NOTE.[Ericsson] comments.[Lenovo] agrees with Ericsson statament, comments.[Docomo] tries to identify the type of issue and then to decide what kind of way forward needed.[Nokia] comments.Chair proposes to send LS and have a conf call in parallel.[Huawei] considers no need to send LS, and comments.[Ericsson] has additional comments.[Nokia] agrees with Ericsson’s point.[Huawei] comments there are two layers.Chair proposes to have a conf call, and not to send an LS.>>CC\_3<< | noted |    |
|    | S3‑230017 | LS on the use of a non-network defined identifier for UE identification  | S6-223558  | 　>>CC\_1<<[Apple] presents.(Keep draft reply LS/310 open.)>>CC\_1<< | available  |    |
|    | S3‑230310 | Reply LS to S3-230017/S6-223558 on the use of a non-network defined identifier for UE identification  | Apple  | 　[Intel]: Requires changes before approval[Ericsson] : Requires revision before approval[Huawei] : request revison.[Qualcomm]: LS requires change before it can be acceptable[Apple]: provides reply to Intel[Apple] : provides r1 addressing Ericsson and Huawei’s comments.[Apple] : reply to Huawei and provides r1 addressing Ericsson and Huawei’s comments.[Apple]: provides reply to QC.[Intel]: does not agree with R1[Qualcomm]: Responds to Apple’s comment. | available  |    |
|    | S3‑230018 | Reply LS on FS\_eEDGEAPP Solution for Support of NAT deployed within the edge data network  | S6-223586  | 　>>CC\_1<<[Apple] presents.(Keep draft reply LS/311 open.)>>CC\_1<< | available  |    |
|    | S3‑230311 | Reply LS to S3-230018/S6-223586 on FS\_eEDGEAPP Solution for Support of NAT deployed within the edge data network  | Apple  | 　[Ericsson] : Requires revision before approval[Apple] : provides R1 addressing Ericsson’s comments.[Ericsson] : provides r2 | available  |    |
| 5 |  |    |    | 　 |    |    |
| 5.1 |  |    |    | 　 |    |    |
| 5.2 |  |    |    | 　 |    |    |
| 5.3 | S3‑230294 | LS on UE-to-UE relay discovery direct discovery  | Qualcomm Incorporated  | 　[China Telecom]: propose to note.[Qualcomm]: disagrees with China Telecom’s proposal[Huawei, HiSilicon]: propose to note the LS.[Xiaomi]: propose to note[Ericsson] : we support sending the LS to SA2>>CC\_2<<[CATT] gives brief introduction on key issue 1 group contributions. One-set key material in U2U relay vs two-sets key material[QC] proposes the necessity of sending LS to SA2. It should depend on SA2’s decision.[IDCC] doesn’t see the need to send LS. The proposal from Xiaomi and China Telecom is simpler.[Huawei] agrees with IDCC.[CATT] comments, supports to send out LS.[Xiaomi] comments no needs to send LS to SA2.[Oppo] comments, negative to introduce complex solution.[China Telecom] comments one side is enough.[QC] could not agree with Xiaomi, Oppo, and others, gives clarification.[CATT] considers the argument from Xiaomi/etc. is technically wrong[Philips] supports to send LS out.[Ericsson] supports to send LS.Chair asks way forward.[QC] proposes to ask questions without any solution part in draft LS.[Huawei] considers the possible answer from SA2 dose not help even if the LS is sent out.[CATT] comments.[IDCC] comments.[Oppo] doesn’t think sending LS help.[China Telecom] comments it doesn’t need to confirm from SA2.[Xiaomi] comments.[CATT] gives an example to show the necessity of sending LS.Chair proposes a show of hands on Thursday if there is no possible forward way.>>CC\_2<<[Qualcomm]: provides a clarification to Huawei[Philips] supports sending LS.[Huawei, HiSilicon]: replies to Qualcomm.[OPPO]: agrees with China Telecom, and Huawei, HiSilicon to NOTE this.[Interdigital] as stated during CC#2. propose to note[Qualcomm]: replies and requests further clarifications to Huawei, OPPO, and Interdigital. We cannot agree their objections as their comments are not valid.>>CC\_4<<[CATT] provides questions for show of hands.**Question: How to protect U2U relay discovery message?****Option 1/one set**: Huawei, ChinaTelecom, Xiaomi, IDCC, Oppo, MITRE**Option 2/two sets**: Qualcomm, Philips, CATT, Ericsson, ChinaUnicom.Chair asks way forward as that is 6 vs5.[QC] proposes offline discussion, need to involve more companies or let some of companies change position. It could not reach consensus now.[Philips] proposes to send LS to seek some guidance from other WG.[QC] comments the clarification to objection on draft LS receive no further comments.Chair points out resolving by sending LS will take time to get reply.[IDCC] has concern on sending LS.[QC] doesn’t agree with IDCC.[IDCC] has further comments.Discussion between [QC] and [IDCC]Chair requests rapporteur to have offline call discussion to get consensus and move forward.[CATT]/rapporteur does’t consider conf call is useful, to ask to have offline discussion on F2F meeting next month.[Huawei] comments.Chair points out if there is no agreement on this key issue, it needl be announced publicly and the consequence would be that PRoSe feature will not be in scope of R18.>>CC\_4<< | available  |    |
|    | S3‑230103 | Update the KI#6  | ZTE Corporation  | 　[Huawei]: requests revision and clarification before approval.[ZTE] : Ask for clarification.[Interdigital]: disagree with re-wording of requirement as it changes the meaning[ZTE] : Provide clarification.[Qualcomm]: requests a revision before approval[ZTE] : Provide R1.[Huawei]: fine with r1.[Qualcomm]: is fine with r1. | available  |    |
|    | S3‑230028 | Evaluation TR 33.740 Sol #1  | InterDigital, Europe, Ltd.  | 　[Huawei]: requests revision and clarification before approval.[Interdigital]: replies[Qualcomm]: requests a revision before approval[Interdigital]: provides r1[Huawei]: thanks, fine with r1[Qualcomm]: replies to Interdigital | available  |    |
|    | S3‑230029 | Evaluation TR 33.740 Sol #12  | InterDigital, Europe, Ltd.  | 　[Interdigital]: fixing tdoc in the subject 031-}029. Reply[Qualcomm]: requests a revision before approval[Interdigital]: provides r1[Huawei]: fine with r1.[Qualcomm]: further requests a revision | available  |    |
|    | S3‑230030 | Evaluation TR 33.740 Sol #13  | InterDigital, Europe, Ltd.  | 　[Huawei]: requests revision and clarification before approval.[Interdigital]: replies[Qualcomm]: requests a revision before approval[Interdigital]: replies | available  |    |
|    | S3‑230031 | Evaluation TR 33.740 Sol #14  | InterDigital, Europe, Ltd.  | 　[Huawei]: requests revision and clarification before approval.[Huawei]: fine with the original version. | available  |    |
|    | S3‑230104 | New solution for the KI#6  | ZTE Corporation  | 　[Ericsson] : provides comments and further clarification is needed[ZTE] : provides clarification.[Ericsson] : fine with clarification.[Huawei]: propose to noted this contribution.[ZTE] : Provide clarification.[Nokia]: ask clarification.[Huawei] : Provide clarification.[Nokia] : Provide more comments. | available  |    |
|    | S3‑230126 | Resolving EN for Solution 22  | OPPO  | 　[ChinaTelecom]: requests revision and clarification before approval.[Samsung]: proposes to add an Editor’s Note.[Samsung]: requires clarification and proposes to add an Editor’s Note.[OPPO]: replies to Samsung and China Telecom[ChinaTelecom]:provides comments and request revision.[Qualcomm]: requests a revision before approval[OPPO]: Provides r1. | available  |    |
|    | S3‑230185 | Address EN for So#l26  | Huawei, HiSilicon  | 　[Ericsson] : clarification is required[Xiaomi]: provides comments and requires clarification before approval[Huawei, HiSilicon]: replies to Ericsson and Xiaomi.[Qualcomm]: requests a clarification and a revision before approval[Huawei, HiSilicon]: provides clarification to Qualcomm. | available  |    |
|    | S3‑230186 | Evaluate to the solution #20  | Huawei, HiSilicon  | 　[Xiaomi]: provides comments and requires revision before approval[Ericsson] : requires updates[Huawei, HiSilicon]: provides reply.[Xiaomi]: provides response.[Huawei, HiSilicon]: provides r1. | available  |    |
|    | S3‑230187 | Evaluate to the solution #26  | Huawei, HiSilicon  | 　[OPPO]: proposes to add an Editor’s Note, otherwise, the contribution should be NOTED.[Xiaomi]: provides comments and requires clarification before approval[Qualcomm]: proposes to note | available  |    |
|    | S3‑230191 | Add Evaluation for ProSe Security Sol#6  | OPPO  | 　[Interdigital] : revision/clarification required[Qualcomm]: disagrees with the evaluation text[OPPO]: provide clarification and R1.[Interdigital] : Ok with r1 | available  |    |
|    | S3‑230207 | evaluation of TR33.740 Solution 8  | China Telecom Corporation Ltd.  | 　[Qualcomm]: request a revision before approval. Otherwise, proposes to note[China Telecom]: provide reply and r2. | available  |    |
|    | S3‑230212 | evaluation of TR33.740 Solution 11  | China Telecom Corporation Ltd.  | 　[Qualcomm]: disagrees with the contribution.[Huawei, HiSilicon]: agree with the evaluation.[China Telecom]: provide reply. | available  |    |
|    | S3‑230215 | pCR to update TR33.740 Solution 11  | China Telecom Corporation Ltd.  | 　[Qualcomm]: disagrees with the contribution.[China Telecom]: provide reply. | available  |    |
|    | S3‑230219 | evaluation to TR33.740 Solution 9  | China Telecom Corporation Ltd.  | 　[China Telecom] : Provided r1.[Qualcomm]: request a revision before approval. Otherwise, proposes to note[China Telecom]: provide reply and r2.[Qualcomm]: is not fine with r2. | available  |    |
|    | S3‑230221 | Update to the evaluation of solution 23  | China Telecom Corporation Ltd.  | 　[China Telecom] : Provided r1.[Qualcomm]: requests a revision before approval, and provides r2 which includes our revision proposal | available  |    |
|    | S3‑230234 | Update to the evaluation of solution 24  | China Telecom Corporation Ltd.  | 　[China Telecom] : Provided r1.[Qualcomm]: requests a revision before approval, and provides r2 which includes our revision proposal | available  |    |
|    | S3‑230253 | EN removal for solution#27  | Nokia, Nokia Shanghai Bell  | 　[Ericsson] : provides comments and discuss potential merger[Nokia] : support merger and propose r1[Ericsson] : we propose r3[Nokia] : provide comments for r3[Ericsson] : provide comments to Nokia’s comments[Nokia] : provide feedback to Ericsson’s comments[Ericsson] : provide feedback to Nokia’s comments[Nokia] : provide feedback to Ericsson’s comments, and propose further change[Philips]: Asks question. | available  |    |
|    | S3‑230254 | Resolve EN’s in Solution #27  | Ericsson  | 　[Ericsson] : provides r1[Huawei]: requests revision and clarification before approval.[Ericsson]: asks question for clarification[Ericsson]: provides r2[Huawei]: fine with r2. | available  |    |
|    | S3‑230255 | Evaluation to Solution #27  | Ericsson  | 　[Nokia] : Provide comments and ask questions[Ericsson] : Provide comments and r1[Nokia] : We’re fine with r1 | available  |    |
|    | S3‑230256 | Evaluation to solution #4  | Ericsson  | 　[Huawei]: requests revision and clarification before approval.[Ericsson]: provides r1 | available  |    |
|    | S3‑230257 | Update to solution #30  | Ericsson  | 　[Huawei]: requests revision and clarification before approval.[Ericsson]: provides r1 and comments[Huawei]: fine with r1 | available  |    |
|    | S3‑230258 | New security solution on discovery integrated into PC5 link establishment when L3 UE-to-UE relay is in coverage  | Ericsson  | 　[Huawei]: requests revision and clarification before approval.[Ericsson]: provides clarification[Ericsson]: provides r1[Huawei]: fine with r1[Xiaomi]: provides comments on r1[Ericsson]: provides r2 and comments | available  |    |
|    | S3‑230266 | ProSe - Evaluation Solution #10  | Philips International B.V.  | 　[Qualcomm]: requests a revision before approval[Philips] provides input and proposed text. | available  |    |
|    | S3‑230267 | ProSe - Editorials Solution #10  | Philips International B.V.  | 　 | available  |    |
|    | S3‑230268 | ProSe - Evaluation Solution #15  | Philips International B.V.  | 　[Qualcomm]: requests a revision before approval[Philips] provides input. | available  |    |
|    | S3‑230292 | Updates on the solution #23  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230293 | Updates on the solution #24  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230295 | Add an evaluation of solution #8  | Qualcomm Incorporated  | 　[OPPO]: propose to NOTE[Xiaomi]: propose to note[Huawei, HiSilicon]: clarification or revision is needed before approval.[Qualcomm]: disagrees with Xiaomi and OPPO and asks further clarifications on their objection. Provides clarifications to OPPO and Huawei. | available  |    |
|    | S3‑230296 | Add an evaluation of solution #9  | Qualcomm Incorporated  | 　[OPPO]: propose to NOTE[Xiaomi]: propose to note[Huawei, HiSilicon]: clarification or revision is needed before approval.[Qualcomm]: disagrees with Xiaomi and OPPO and asks further clarifications on their objection. Provides clarifications to OPPO and Huawei. | available  |    |
|    | S3‑230297 | Add an evaluation of solution #11  | Qualcomm Incorporated  | 　[China Telecom]: propose to NOTE.[Xiaomi]: propose to note[Huawei, HiSilicon]: clarification or revision is needed before approval.[Qualcomm]: disagrees with Xiaomi, China Telecom and asks further clarifications on their objection. Provides clarifications to Huawei.[OPPO]: Agrees with China Telecom and Xiaomi to NOTE the contribution.[Qualcomm]: replies to OPPO | available  |    |
|    | S3‑230298 | Updates to the solution #25  | Qualcomm Incorporated  | 　[Interdigital]: revision required[Huawei, HiSilicon]: revision/clarification is required before approval.[Xiaomi]: provides comments and requires revision before approval | available  |    |
|    | S3‑230327 | EN Resolution and Evaluation of Sol #19  | Samsung  | 　[OPPO]: clarification is required.[Samsung]: provides clarification.[Qualcomm]: requests a clarification/revision before approval[Samsung]: provides clarification and r1. | available  |    |
|    | S3‑230328 | EN Resolutions and Evaluation of Sol #29  | Samsung  | 　[Ericsson] : provides comments and requires updates[Qualcomm]: requests a clarification/revision before approval[Samsung]: provides clarification and r1. | available  |    |
|    | S3‑230345 | pCR to TR33.740 Update Solution16 for removing ENs  | CATT  | 　[Interdigital]: revision required[Huawei, HiSilicon]: revision/clarification is required before approval.[Qualcomm]: agree with the updates in the solution details, and provides a clarification to Huawei[CATT]: Provide r1 to address some comments.[Interdigital]: comment on r1[Xiaomi]: provides comments on r1 and requires revision[CATT]: Provides reply to the comments. | available  |    |
|    | S3‑230346 | pCR to TR33.740 Update Solution17 for removing ENs  | CATT  | 　[Interdigital]: revision required[CATT]: Provide r1 to address the comments.[Interdigital]: OK with r1 | available  |    |
|    | S3‑230347 | pCR to TR33.740 Update Solution18 for removing ENs and add evaluation  | CATT  | 　[Interdigital]: revision/clarification required[CATT]: Provide r1 according to the comments.[Interdigital]: OK with r1 | available  |    |
|    | S3‑230348 | pCR to TR33.740 Update Solution28 for removing ENs  | CATT  | 　[Huawei, HiSilicon]: revision/clarification is required before approval.[CATT]: Provide response to the comments.[Qualcomm]: requests a clarification[CATT]: Reply to QC’s question. | available  |    |
|    | S3‑230349 | pCR to TR33.740 Evaluation of Solution28  | CATT  | 　[Interdigital]: revision required[CATT]: Provide r1 to address the comments.[Interdigital]: OK with r1 | available  |    |
|    | S3‑230392 | Update to solution #8 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Qualcomm]: requests a clarification/revision before approval[Xiaomi]: provides response | available  |    |
|    | S3‑230393 | Update to solution #9 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Qualcomm]: requests a clarification/revision before approval[Xiaomi]: provides response | available  |    |
|    | S3‑230394 | Evaluation of solution #8 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Qualcomm]: requests a revision before approval[Qualcomm]: requests a revision before approval (adds one more comment) | available  |    |
|    | S3‑230395 | Evaluation of solution #9 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Qualcomm]: requests a revision before approval | available  |    |
|    | S3‑230396 | Remove the Editor's Note and evaluate the solution #7 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Qualcomm]: requests a revision before approval[Ericsson]: requests a revision before approval[Xiaomi]: provides r1 | available  |    |
|    | S3‑230397 | Remove the Editor's Notes of solution #20 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Ericsson] : requires updates[Qualcomm]: requests a revision before approval | available  |    |
|    | S3‑230398 | Evaluation of solution #30 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Ericsson] : revision required[Xiaomi] : provide response[Ericsson] : requires updated and provides comments[Xiaomi] : provides r1[Huawei, HiSilicon] : Ask for clarification.[Xiaomi] : Provides clarification[Huawei, HiSilicon] : replies.[Xiaomi] : provides comments | available  |    |
|    | S3‑230216 | Conclusion to the KI#1  | China Telecom Corporation Ltd.  | 　[Xiaomi]: provides comments and the merging proposal[China Telecom]: reply comments and merger to 230399.[CATT]: Disagree with the conclusion that only one set of security materials is used to protect the U2U relay discovery message.[Qualcomm]: proposes to note this conclusion | available  |    |
|    | S3‑230350 | pCR to TR33.740 Conclusion of key issue #1  | CATT  | 　[Interdigital]: revision required[Xiaomi]: provides comments and the merging proposal[Huawei, HiSilicon]: The contribution requires revision before approval.[China Telecom]: provides comments.[CATT]: Provide response to the comments.[China Unicom]: We support using two sets of discovery security materials. The security of direct discovery data should be considered.[Qualcomm]: supports this conclusion in general, request a revision, replies to Xiaomi[Qualcomm]: provides further clarification | available  |    |
|    | S3‑230399 | Conclusion on Key Issue #1 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Interdigital]: revision required[Xiaomi]: provides responses and the merging proposal[China Telecom]: merges 230216 to 230399 and provides comments.[CATT]: Disagree with the conclusion that only one set of security materials is used to protect the U2U relay discovery message.[Qualcomm]: proposes to note this conclusion[Xiaomi]: provides responses. | available  |    |
|    | S3‑230032 | Update to TR 33.740 Conclusion for KI#2  | InterDigital, Europe, Ltd.  | 　[Huawei]: propose to postpone this conclusion.[Interdigital]: SA2 has concluded relay reselection for both L2 and L3. No need to postpone[Qualcomm]: proposes to note[Interdigital]: replies[Huawei]: replies. | available  |    |
|    | S3‑230188 | conclude to KI #2  | Huawei, HiSilicon  | 　[OPPO]: does not agree with the conclusion and proposes to add an Editor’s Note.[Ericsson] : requires clarification[Huawei, HiSilicon]: replies to Oppo and Ericsson.[Xiaomi]: provide comments>>CC\_2<<[Huawei] presents.>>CC\_2<<[Qualcomm]: proposes to postpone[Huawei, HiSilicon]: provides r2 and try to merge 0235/0351/0400.[Philips] prefers 351-r1[Interdigital] ask for clarification/confirmation on merge plan 188/235/400[Xiaomi] provides response[ChinaTelecom] Ask questions about r2.[Huawei, HiSilicon]: Provides clarification to ChinaTelecom and Philip.[Qualcomm]: proposes to postpone[ChinaTelecom] fine with 0235 merge to 0188. | available  |    |
|    | S3‑230235 | Update to conclusion of KI#2 in TR 33.740  | China Telecom Corporation Ltd.  | 　[OPPO]: proposes to add an Editor’s Note.>>CC\_2<<[China Telecom] presents.[IDCC] comments they cannot be merged. There are some fundamental difference. It needs to be solved at first.[Huawei] comments only China Telecom contribution has different view. Huawei can hold the pen to merge others.[Huawei] clarifies the difference to Chair’s question.[China Telecom] clarifies.Chair requests Huawei to hold the pen for merger.>>CC\_2<<[Ericsson] : requires updates[ChinaTelecom] : provides response.[Ericsson] : provides response[ChinaTelecom] : provides response.[Ericsson] : we are fine with S3-230235 and your provided response.[Qualcomm]: request a revision before approval[Philips] clarifications required.[Huawei, HiSilicon] request a revision before approval. Propose a merger proposal under thread 188.[ChinaTelecom]: provides r1 and clarification.[Huawei, HiSilicon]: Request to discuss KI#2 conclusion under thread of 188 to avoid monitoring multiple threads.[Xiaomi] provides comments on r1[ChinaTelecom] 0235 already merged to 0188, the thread of 0235 will be closed. | available  |    |
|    | S3‑230351 | pCR to TR33.740 Conclusion of key issue #2  | CATT  | 　[Interdigital]: revision/clarification required[Huawei, HiSilicon]: propose minor revisions.[Xiaomi]: provides comments and requires clarification before approval[Ericsson] : requires updates>>CC\_2<<[CATT] presents it is similar with Huawei’s proposal.>>CC\_2<<[Huawei, HiSilicon] Propose a merger proposal under thread 188.[Philips] comments and requires revision.[CATT]: It is ok to the merger proposal. Further discussion moved to 230188.[Qualcomm]: request a revision before approval | available  |    |
|    | S3‑230400 | Conclusion on Key Issue #2 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Interdigital]: revision required[Ericsson]: revision required>>CC\_2<<[Xiaomi] presents.>>CC\_2<<[Qualcomm]: requests a revision before approval[Huawei, HiSilicon] Propose a merger proposal under thread 188. | available  |    |
|    | S3‑230352 | pCR to TR33.740 Conclusion of key issue #3  | CATT  | 　[CATT]: Provide r1 for adding missed existing content in clause 7.3 of TR 33.740.[Interdigital]: propose to note[Interdigital]: propose to note (apologies this is a resend to reply to latest)[Ericsson] : requires updates[Ericsson] : ignore our previous email>>CC\_2<<[CATT] summarizes the contribution.>>CC\_2<<[Huawei, HiSilicon]: revision/clarification is needed before approval. | available  |    |
|    | S3‑230401 | Conclusion on Key Issue #3 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Interdigital]: propose to note[CATT]: Disagree with the conclusion that authorization is performed in application layer.[Ericsson] : requires updates and clarification>>CC\_2<<[Xiaomi] presents.[CATT] comments 352 and 401 are totally different so they could not merge.[Xiaomi] comments this is related with Key issue#1 so it needs to wait the result about Key issue #1 show of hands[Ericsson]: same comments.[IDCC]: same comments as email.Chair: depends on Key Issue#1, pending issue.>>CC\_2<<[Qualcomm]: proposes to postpone[Philips] proposes to postpone | available  |    |
|    | S3‑230033 | Update to TR 33.740 Conclusion for KI#4  | InterDigital, Europe, Ltd.  | 　[Huawei]: propose to noted the conclusion.>>CC\_2<<[IDCC] presents.>>CC\_2<<[Interdigital]: sol#2 is very much aligned with SA2 concluded solution[Qualcomm]: requests a revision before approval[Interdigital]: provides r1[Huawei]: withdrawn noted, request change to r1 before approval. | available  |    |
|    | S3‑230402 | Conclusion on Key Issue #4 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Interdigital]: propose to note[Ericsson] : requires updates[Xiaomi]: provides responses.>>CC\_2<<[Xiaomi] presents.[IDCC] comments on first bullet.Chair: depends on other key issue, pending.[QC] has concern on 2nd bullet from IDCC’s contribution.[Xiaomi] has revised as r1, and try to mitigate the concern.[QC] needs to check r1, and could accept IDCC’s conclusion 1st bullet.[IDCC] clarifies it is based on SA2.[IDCC] comments.[QC] will provide comment via email.Chair asks IDCC to make the merger.>>CC\_2<<[Qualcomm]: proposes to note | available  |    |
|    | S3‑230105 | Conclusion for the KI#6  | ZTE Corporation  | 　[Huawei]: propose to noted the conclusion.>>CC\_2<<[ZTE] presents.[ZTE]: for the new solution, there is already comments.[Huawei] comments new solution is still under discussion, proposes not to include new solution this time.[IDCC] comments solution 27 needs SUCI, concern it can only work with SUCI provided, rather to cover all emergency services.Chair proposes to capture this by EN.[Ericsson] clarifies the concern from IDCC is solved in R17.>>CC\_2<<[ZTE] : Provide clarification.[Interdigital] : fine to conclude on this KI for L2/L3 relay. Propose to add a NOTE. | available  |    |
| 5.4 |  |    |    | 　 |    |    |
| 5.5 |  |    |    | 　 |    |    |
| 5.6 | S3‑230056 | Discussion on privacy issue in AKMA  | Nokia, Nokia Shanghai Bell, Samsung  | 　[Ericsson]: Propose to note the discussion paper.[Nokia]: Provide clarification[Qualcomm]: proposes to note.[Nokia]: ask opinion.[Qualcomm]: maintains position. | available  |    |
|    | S3‑230057 | key issue on AKMA privacy  | Nokia, Nokia Shanghai Bell, Samsung  | 　[Ericsson]: Propose to note.[Nokia]: provide clarification and insist on keeping it open till we conclude the discussion paper.[Qualcomm]: proposes to note. | available  |    |
|    | S3‑230325 | Key Issue on KAF refresh  | Samsung  | 　[OPPO]: supports this and proposes some additional text in the threats and requirements.[Ericsson]: Request for clarification before agreement.[Samsung]: Provides clarifications[Qualcomm]: proposes to note.[Ericsson]: Provides clarifications[NDRE]: objection from LI point of view>>CC\_4<<Question: Does SA3 agree on this key issue?[QC] comments it does not follow SA working process, proposes to focus on use case, rather than requirement.[Ericsson] replies the key issue contains use case.[Samsung] doesn’t agree with QC. Key issue contains use case, asks to go show of hands.[Oppo] supports the contribution with some comments.[QC] comments.[Nokia] supports Samsung.[Ericcson] clarifiesChair doesn’t think show of hands is useful to agree the key issue.>>CC\_4<< | available  |    |
|    | S3‑230112 | update the Key issue of AKMA roaming  | ZTE Corporation  | 　 | available  |    |
|    | S3‑230420 | adding new use case in KI1  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: Proposes to note.[Nokia]: provide clarification[Qualcomm]: proposes to note.[Nokia]: provide clarification[Qualcomm]: responds[Qualcomm]: responds further.[Nokia]: provide clarification[Nokia]: ask opinion.[Qualcomm]: maintains position. | available  |    |
|    | S3‑230058 | conclusion updates  | Nokia, Nokia Shanghai Bell  | 　[NDRE]: disagrees with removing editor's note[Nokia]: Providing clarification and seek opinion, providing r1[NDRE]: r1 OK, but SA3LI is likely to request more work from SA3[Ericsson]: Have comments on the technical aspects conclusion. Have comments for the general approach for the conclusions.[Qualcomm]: proposes to note. | available  |    |
|    | S3‑230111 | Conclusion for KI#1  | ZTE Corporation  | 　[Nokia]: asking for clarification[ZTE]: provide clarification[ZTE]: provides r1.[NDRE]: r1 OK[Ericsson]: Have comments on the technical aspects conclusion. Have comments for the general approach for the conclusions.[Qualcomm]: proposes to note.[Thales]: disagrees with the proposed conclusion.[ZTE ]: provide clarifications.[NDRE]: asks Thales for clarification | available  |    |
|    | S3‑230197 | add new conclusion to key issue#1  | Huawei, HiSilicon  | 　[Nokia]: disagree with the pCR[CMCC]: requests clarification.[Huawei]: provides clarifications[CMCC]: seeks for further clarifications and proposes a way forward on the conclusion for KI#1.[NDRE]: Points to S8HR for comparsion relating to VPLMN impact[Huawei]: provides further clarifications and a way forward[NDRE]: provides LI clarification, suggests other formulation of proposed requirement[Huawei]: provides further clarifications and a way forward[Ericsson]: requests for clarifications. | available  |    |
|    | S3‑230275 | Conclusion to Key Issue #1  | THALES  | 　[Ericsson]: Requests for clarifications. Have comments for the general approach for the conclusions.[Qualcomm]: propose to note. | available  |    |
|    | S3‑230376 | TR 33.737 Conclusion for KI #1  | Xiaomi communications  | 　[NDRE]: comments[OPPO]: seeks clarification.[Xiaomi]: provides r1.[Xiaomi]: provides clarification.[NDRE]: r1 looks OK[NDRE]: adds informative comments[Huawei]: requests changes and asks for clarifications about the way forward[NDRE]: comments to Huawei[Ericsson]: Have comments on the technical aspects conclusion. Have comments for the general approach for the conclusions.[Qualcomm]: proposes to note.[Xiaomi]: provides r2. A merger of S3-230275, S3-230111, and S3-230058.[OPPO]: provides comments to NDRE[Nokia]: provides r3 with some proposed changes[Xiaomi]: is ok to r3.[Lenovo]: supports r3.>>CC\_4<<[Huawei] presents discussion 1(376 vs 197).[Lenovo] supports option 1.[QC] comments option 1 is not workable.[Nokia] supports option 1.[QC] comments to send LS to SA3-LI.[Huawei] is general with both, but has concern on option 1.[Samsung] prefers option 1.[Ericsson]: needs to check with LI group, agrees with Huawei so a little bit preferable to option 2.[Lenovo] comments.[Nokia] comment.[Docomo] comments.Chair comments the issue is clear and needs feedback from SA3- LI group to chose which option to go with.>>CC\_4<< | available  |    |
|    | S3‑230106 | Add editors note to solution 5  | ZTE Corporation  | 　[ZTE]: provide clarifications[LGE] : proposes to note.[ZTE]: provide r1[LGE]: Changes are needed for approval.[LGE] : Changes are needed for approval.[ZTE] : provide r2[LGE]: ok with R2. | available  |    |
|    | S3‑230107 | Add editors note to solution 11  | ZTE Corporation  | 　 | available  |    |
|    | S3‑230108 | Address EN for solution 9  | ZTE Corporation  | 　 | available  |    |
|    | S3‑230109 | AUSF stores SN ID after primary authentication in solution 1  | ZTE Corporation  | 　[Nokia]: asking for clarification[ZTE]: provide clarification[Nokia]: asking for clarification and provide details[ZTE]: provide clarifications[Nokia]: disagree with the CR and propose to note.[Lenovo]: proposes to note[ZTE]: provide clarifications | available  |    |
|    | S3‑230110 | AUSF stores SN ID after primary authentication in solution 6  | ZTE Corporation  | 　[Nokia]: asking for clarification[ZTE]: provide clarification[Lenovo]: proposes to note[ZTE]: provide clarifications | available  |    |
|    | S3‑230145 | Minor editorial corrections in Solution #5  | LG Electronics  | 　 | available  |    |
|    | S3‑230146 | Minor editorial corrections in Solution #12  | LG Electronics  | 　 | available  |    |
|    | S3‑230147 | Evaluation for Solution #5  | LG Electronics  | 　 | available  |    |
|    | S3‑230148 | Evaluation for Solution #12  | LG Electronics  | 　 | available  |    |
|    | S3‑230270 | AKMA - Evaluation Solution #10  | Philips International B.V.  | 　 | available  |    |
|    | S3‑230274 | Completion of solution #14  | THALES  | 　[Nokia]: asking for clarification[NDRE]: agrees with Nokia and adds comments/suggestions[Huawei]: requests additions in the evaluation[NDRE]: comments on trust model[Huawei]: further comments on trust model[NDRE]: further comments on trust model[Ericsson]: Requests changes to the evaluation. Requests for clarifications with respect to the SID.[Thales]: provides answers and r1.[NDRE]: answer to Thales[Thales]: asks questions to NDRE[NDRE]: clarifies by concrete proposal | available  |    |
|    | S3‑230374 | new Sol on AKMA roaming in multiple registration scenarios  | Xiaomi communications  | 　[Nokia]: asking for clarification[Xiaomi]: provides clarification.[ZTE]: ZTE is fine with Xiaomi's solution.[Huawei] disagrees with the issue being addressed.[Xiaomi] provides clarification.[Ericsson]: Proposes to note.[Xiaomi]: requests further discussion.[Qualcomm]: proposes to note.[Xiaomi]: request for technical discussion.[Nokia]: ask further clarification[Xiaomi]: provides r1 and clarification to Nokia[Nokia]: fine with the updates | available  |    |
|    | S3‑230375 | TR 33.737 Evaluation for sol #15  | Xiaomi communications  | 　[Ericsson]: Proposes to note unless modified.[Xiaomi]: provides r1.[Ericsson]: is fine with r1. | available  |    |
|    | S3‑230271 | AKMA - Editorials Clause 4  | Philips International B.V.  | 　 | available  |    |
| 5.7 | S3‑230198 | Delete EN in solution#4  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230199 | Delete EN in solution#9  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230326 | Update on use case clause and solution #6  | Samsung  | 　[Ericsson]: Request for clarification before approval.[Samsung]: Provides clarifications[Nokia]: propose a way forward | available  |    |
|    | S3‑230200 | Delete EN in solution#12  | Huawei, HiSilicon  | 　[Ericsson]: Proposes to note. The 0411 is a resubmission of an approved contributions from SA3#109 (S3-223838). | available  |    |
|    | S3‑230411 | Solution 12 updates  | Ericsson  | 　 | available  |    |
|    | S3‑230059 | Discussion paper for MPS support over WLAN and relationship with HNTRA  | Nokia, Nokia Shanghai Bell  | 　[Qualcomm]: discussion contribution should be noted | available  |    |
|    | S3‑230060 | Conclusion enhancement for MPS support over WLAN  | Nokia, Nokia Shanghai Bell  | 　[Qualcomm]: Requires revision before approval[Qualcomm]: agree with the proposal and provide r1.[Huawei]: requires clarifications before approval[Nokia]: provide clarification[Nokia]: agree with the proposal and provide r1.[Huawei]: clarifies comments[Nokia]: provide clarification and seek advice[Ericsson]: Proposes to note. | available  |    |
|    | S3‑230113 | Add conclusion to KI#1  | ZTE Corporation  | 　[Huawei]: require clarification[Qualcomm]: Clarification required before approval [Lenovo]: requires revision before approval.[Ericsson]: supports the principle of such types of clarifications in this contribution but not necessarily the exact proposed changes.[ZTE]: provides clarifications and seeks for a way forward.[Nokia]: provide Nokia view[ZTE]: deletes the controversial part and provides r1.[Lenovo]: r1 is okay.[Huawei]: require clarifications[Qualcomm]: Do not agree with r1 | available  |    |
|    | S3‑230291 | Proposed addition to the conclusions  | Qualcomm Incorporated  | 　[Deutsche Telekom] : Supports the proposed addition to the conclusion.[Nokia] : ask for clarification[Ericsson] : proposes to note.[Lenovo] : Requires clarification before approval.[Deutsche Telekom] : proposes a way forward.[Qualcomm]: Agree with DT’s comment and uploaded an R1 | available  |    |
| 5.8 | S3‑230262 | LS on data and analytics exchange in roaming case in eNA  | China mobile  | 　[Nokia]: considers this LS is not required, so proposes to be noted.[CMCC]: reply to Nokia.[Ericsson]: disagrees with the LS in its current form | available  |    |
|    | S3‑230081 | Evaluation of Solution#4  | Lenovo  | 　[Ericsson]: requires updates[Lenovo]: provides clarifications to Ericsson[Huawei]: propose to revise.[Ericsson]: replies to Lenovo[Lenovo]: Lenovo provides revision r1 with the requested changes[Nokia]: -r1 is OK[Ericsson]: proposes updates to r1[Lenovo]: provides a revision r2 with the requested update | available  |    |
|    | S3‑230082 | Removal of EN in Solution#4  | Lenovo  | 　 | available  |    |
|    | S3‑230091 | Evaluation for solution#1  | China Telecommunications  | 　[Ericsson]: requires update[China Telecom]: provides r1[Ericsson]: r1 is fine | available  |    |
|    | S3‑230101 | Resolving EN in solution#1  | China Telecommunications  | 　 | available  |    |
|    | S3‑230237 | EN related to Key Refresh and revocation  | Intel  | 　[Ericsson]: requires updates[Intel]: Requires clarification[Huawei]: ask for clarification before approval[Intel]: Uploaded r1[Ericsson]: r1 is fine[Huawei]: fine with r1. | available  |    |
|    | S3‑230240 | ENs resolving and evaluation for solution #10  | Ericsson  | 　[Huawei]: propose to revise.[Nokia]: requests clarification and potential revision[Ericsson]: provides r1 | available  |    |
|    | S3‑230241 | Evaluation to Solution #11  | Ericsson  | 　 | available  |    |
|    | S3‑230242 | Evaluation to Solution #12  | Ericsson  | 　 | available  |    |
|    | S3‑230243 | Evaluation to Solution #13  | Ericsson  | 　 | available  |    |
|    | S3‑230341 | Discussion paper on KI#3 related solutions evaluation.  | Nokia, Nokia Shanghai Bell, China Mobile (Suzhou) Software  | 　[Nokia]: asks for endorsing this discussion paper to have a working base for normative phase[Ericsson]: proposes to note the discussion paper and focus the discussion on the conclusions (S3-230344).[Nokia]: proposes to keep the discussion in the paper open to allow SA3 members to provide feedback.[Ericsson]: Replies to Nokia[Nokia]: Replies to Ericsson | available  |    |
|    | S3‑230263 | Evaluation and EN resolving for solution #14  | China mobile  | 　[Nokia]: Requests clarifications.[CMCC]: reply to Nokia. | available  |    |
|    | S3‑230102 | New solution to KI#2  | China Telecommunications  | 　[Ericsson]: requires updates[China Telecom]: replies to Ericsson and provides r1[China Telecom]: provides further clarification to Ericsson[Ericsson]: r1 is fine | available  |    |
|    | S3‑230209 | FL GROUP AUTHORIZATION OF NWDAF(S) IN 5GC  | Intel  | 　[Ericsson]: requires updates[Intel]: requires clarification from Ericsson[Huawei]: requires update[Ericsson]: replies to Intel[Intel]: Uploads r1[Ericsson]: proposes updates to r1[Intel]: provides clarification and uploaded r2 | available  |    |
|    | S3‑230239 | New solution for KI#2 to support authorization of participant NWDAFs in FL  | Ericsson  | 　[Intel]: Propose to note[China Telecom]: requires update[Huawei]: ask for clarification or add editor’s note[Huawei]: propose to revise.[Ericsson]: provides r2[China Telecom]: fine with r2[Intel]: Requires clarification and changes in r2 | available  |    |
|    | S3‑230343 | Solution for authorization in FL  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: requires updates[Nokia]: provides clarifications and -r1[Ericsson]: proposes updates to r1[Nokia]: provides clarifications | available  |    |
|    | S3‑230123 | New solution to KI#5  | China Telecommunications  | 　[Ericsson]: proposes updates[China Telecom]: provides r1 | available  |    |
|    | S3‑230064 | Update to Solution #9 in eNA  | Lenovo  | 　[Huawei]: propose to revise.[Ericsson]: requires updates[Lenovo]: Clarifies and provides r2. | available  |    |
|    | S3‑230340 | Evaluation for Solution #6  | Nokia, Nokia Shanghai Bell  | 　[Huawei]: propose to revise before approval[Ericsson]: requires updates[Nokia]: provides clarifications and revision 1 | available  |    |
|    | S3‑230065 | Cyber attack detection  | Lenovo  | 　[Huawei]: propose to note.[QC] Propose to note.[Lenovo]: Provides clarification andAsks from Qualcomm and Huawei relevant EN proposals if any/UE aspects removal.[QC] Replies.[Ericsson]: requires updates[Lenovo]: Provide r2.[QC] Ok with r2. | available  |    |
|    | S3‑230080 | New solution addressing KI#6  | Lenovo, Nokia  | 　[QC] Propose to note.[Lenovo]: provides clarifications to the concerns[QC] Request modification before approval.[Ericsson]: requires updates[Lenovo]: provides clarifications and a revision r1[Lenovo]: provides the requested updates in a revision r2[QC] Request to note.[Lenovo]: provides clarifications and requests an Editor’s Note from QC | available  |    |
|    | S3‑230264 | Conclusion for key issue#1  | China mobile  | 　[Nokia]: Proposes to align the conclusion for KI#1 with SA2 study conclusions.[Ericsson]: requires updates, proposes to merge in S3-230342[CMCC]: reply and provide r1[Ericsson]: does not agree with r1, kindly asks to use the thread for S3-230342 for the discussion of conclusions to KI#1>>CC\_3<<[CMCC] presents.[CMCC] proposes to send LS to SA2 to get clarification about different understanding, prefer to use NRF rather than NWDAF for authorization.[Huawei] prefers 264, agrees authorization should not be defined by SA2.[Ericsson] clarifies why NWDAF is more suitable for authorization.[China Telecom] prefers 264.[Nokia] clarifies.[Lenovo] minor comments on wording mistake.[CMCC] proposes way forward.[Ericsson]: asking SA2 may confuse the issue here. The problem is whether NRF or NWDAF is better.Chair asks whether it needs an LS to SA2[CMCC] clarifies.[Huawei] proposes to use existing mechanism.Chair considers LS is needed, however what content needs to be considered: solution or question, and asks whether Ericsson and Nokia could accept such compromise. [Nokia] comments. [Ericsson] comments NRF and NWDAF will cause more issue.Chair comments, park the issue for time being, it may need a show of hand on this point tomorrow.>>CC\_3<< | available  |    |
|    | S3‑230342 | Adding conclusion on KI#1  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: requires updates[Nokia]: provides clarifications[CMCC]: request update[Nokia]: provides update (r2)[Ericsson]: disagrees with r1, provides r3[Nokia]: provides -r4>>CC\_3<<[Nokia] presents r4>>CC\_3<<[CMCC]: not fine with current versions, provides r5[Nokia]: not fine with r5, provides reasoning.[Huawei]: provides r6. | available  |    |
|    | S3‑230189 | Conclusion for KI#2  | Intel  | 　[Ericsson]: requires updates[Huawei]: propose to postpone this conclusion.[Intel]: Fine to postpone this conclusion. | available  |    |
|    | S3‑230203 | Conclusion for KI#3  | Intel  | 　[Nokia]: Proposes to merge this contribution into S3-230344. A review of S3-230344 can be provided accordingly.[Intel]: Fine with proposed merger on some conditions[Nokia]: we can close this thread as per agreed merge in S3-230344 | available  |    |
|    | S3‑230244 | Adding conclusion on KI#3  | Ericsson  | 　[Nokia]: Proposes to merge this contribution into S3-230344[Ericsson]: fine to merge in S3-230344 and discuss conclusions to KI#3 in the thread for S3-230344 | available  |    |
|    | S3‑230344 | Adding conclusion on KI#3  | Nokia, Nokia Shanghai Bell, China Mobile (Suzhou) Software  | 　[Ericsson]: requires updates[Intel]: Requires changes[Nokia]: provides clarifications and -r1[Lenovo]: supports -r1[Intel]: supports -r1 , few minor comments[Huawei]: provides revision and summary of the change.[Ericsson]: does not agree with r1 or r3, provides r4>>CC\_3<<[Nokia]: the latest version is r5[Nokia] presents r5.[Huawei] comments some removing words from previous version come back, comments on 1st bullet, 2nd bullet, 5th bullet, 1st sentence.[Lenovo] fully supports r5.[Ericsson] clarifies, happy with bullet 2, but not bullet 3.[Intel] is happy with r5, but comments to bullet 3 and bullet 5.[Huawei] is ok with the compromise on bullet 3, but proposes to remove bullet 5.Chair propose to refine it over email.>>CC\_3<<[Nokia]: disagrees with r4, and provides r5[Nokia]: provides r6 according to the discussion during the call.[Intel]: Requests clarification[Nokia]: provides clarifications and -r7[Huawei]: provides r8.[Nokia]: Insists on r7. And disagrees on r8 and on changing the agreement achieved during the call.[Lenovo]: disagrees with r8.[Huawei]: provides clarification.[Ericsson]: provides r9 as a potential minimal agreeable conclusion[Nokia]: disagrees r9, insists on r7 (according to cc’s agreement)[Huawei]: r9 is acceptable.[CMCC]: fine with r9.[Lenovo]: we have the same issues as Nokia and we disagree to r9, as maximum compromise we can accept r7 (according to cc’s agreement)>>CC\_4<<[CMCC] presents current status.[Nokia] challenges r9, claims there was agreement on r7 made on previous conf call.[Ericsson] clarifies there is no full discussion on r7 so it could not say position is changed.[Lenovo] comments r9 removes so much content from r7, could not agree with r9.[Huawei] is ok with r9. r9 catches minimal part of agreeable content.[Intel] agrees with r7. could not agree with r9[Ericsson] comments on current status and asks to compromise.[Nokia] comments.Chair warns if there is no agreement, the feature may get dropped from R18.[Ericsson] comments prefer continued discussion on r9, rather than on r7.[Lenovo] comments.[Nokia] clarifies the difference between r7 and r9.Chair asks whether there is objection on current content in r9. If there is no agreement, and we will not capture anything and all the discussion will be lost. Rather than that, gradual progress would be better.. [Huawei] proposes to remove 3rd bullet to reach consensus.[Lenovo] comments more discussion is needed.Chair proposes to have an EN to address the concern.[Lenovo] doesn’t convince, ENs should be on the bullets which were removed, converting them to ENs may not help..[CMCC] proposes to add EN to address the concern and come back later.[Nokia] is ok to have EN and will provide EN details, but wonder whether such EN could be acceptable.[Intel] comments.Chair doesn’t see any conclusion on this. Suggests to continue the discussion till the end of meeting.>>CC\_4<< | available  |    |
|    | S3‑230265 | Conclusion for key issue#5  | China mobile  | 　[Ericsson]: suggests to wait another meeting cycle before concluding this key issue[CMCC]: ok to noted this contribution in this meeting. | available  |    |
|    | S3‑230179 | new pcr  | Huawei, HiSilicon  | 　 | withdrawn  |    |
| 5.9 | S3‑230097 | Conclusion on KI#2.1  | Huawei, HiSilicon, Thales  | 　>>CC\_1<<[Huawei] proposes way forward about contributions as rapporteur, proposes to discuss all conclusions at first.[Huawei] presents.[Huawei] proposes to merge all other conclusions into this one.[Samsung] comments.[Huawei] asks question for clarification.Chair proposes way forward. Request HW to hold the pen for all 2.1 conclusion proposals. And revisit this on Thursday. If needed we will go for show of hands.[Docomo] asks questions and comment, requests to have a clear description, what is default, what is optional, even after merge.>>CC\_1<<[Huawei] : Provides comments for merger according to the plenary discussion on Monday and r1. (Merging of 0228, 0333 and 0377 into 0097.)[Xiaomi] : Provides r2.[Samsung] : Provides r3 (considered r1 as baseline).[Ericsson] : request clarification and revision before approval[Huawei] : agree with Ericsson to remove raw public key, and upload r4 to remove the raw public key.[Xiaomi] : request clarification and revision before approval[Thales]: provides comments.[Samsung] : Provides clarification[Qualcomm]: Provides Qualcomm’s views on the some of the issues under discussion.[Huawei] : reply to Samsung and QC.[Samsung] : Provides clarification[Apple] : Provides comments.[Thales]: requests change.[Huawei] : provides r5 and replies.[Xiaomi] : provides some inputs[Samsung] : provides comment on the Show of Hands questions.[Ericsson] : provides r6 to address GPSI verification concerns[Thales]: provides comments>>CC\_4<<Discussion 1: conclusion on KI#2.1**Question 1: whether server side certificate-based TLS authentication is mandatory?****Yes**: Qualcomm, DT, Ericsson, Samsung, Nokia, Intel, Philips, Huawei, CableLabs, NTT Docomo, Oppo**No**: (None)It is agreed that is mandatory.**Question 2: Whether the GPSI verification is required? If needed, which mechanism is agreeable?**[QC] comments on GPSI issue.[Huawei] clarifies.[Ericsson] comments .**YES**: Ericsson, Xiaomi**NO**: Huawei,Thales, Apple, Oppo, SamsungChair points there is no agreement to do GPSI verification.Discussion 2: conclusion on KI#2.2[Samsung] presents.[Docomo] comments[QC] comments there are too much options.Chair asks to reduce options to two.[Huawei] proposes revised question:**Q1:Whether ECS/EES configuration information to include authentication method is required?****Q2:Whether TLS 1.3 to negotiate is required?**[QC] comments on Question 2.[Huawei] clarifies.[IDCC] comments on question 1.[Huawei] clarifies.[Ericsson] comments.[Docomo] comments.[Huawei] clarifies.[Docomo] challenges the necessity of Q2.[Samsung] clarifies.[QC] doesn’t convince with such clarification.Discussion between [QC] and [Samsung][CableLabs] clarifies the discussion on differnt things, built-in methods and additional methods.[QC] doesn’t agree.[QC] comments.Chair requests to have show of hands on Q1 as there is no objection on Q1.[QC] comments.[Docomo] comments.[Samsung] tries to summarize the discussion[QC] comments.[Xiaomi] comments.[QC] comments.Chair porposes way forward.[Huawei] clarifies current status.[Samsung] clarifies the necessity.[Docomo] comments.[Ericsson] has concern on 1A.[Huawei] proposes way forward.Based on discussion, **current agreement is to have TLS 1.3 negotiate as the baseline and further optimization of this negotiation is FFS.**>>CC\_4<< | available  |    |
|    | S3‑230228 | Conclusion for KI#2.1  | Ericsson  | 　>>CC\_1<<[Ericsson] presents.>>CC\_1<<[Qualcomm]: propose to merge into S3-230097 which covers the conclusion of KI#2.1 discussion | available  |    |
|    | S3‑230333 | Conclusion for KI#2.1  | Samsung  | 　>>CC\_1<<[Samsung] presents.>>CC\_1<<[Qualcomm]: propose to merge into S3-230097 which covers the conclusion of KI#2.1 discussion | available  |    |
|    | S3‑230377 | Conclusion for KI 2.1 Authentication and authorization of the EEC UE by the ECS EES.  | Xiaomi communications  | 　>>CC\_1<<[Xiaomi] presents.>>CC\_1<<[Qualcomm]: propose to merge into S3-230097 which covers the conclusion of KI#2.1 discussion | available  |    |
|    | S3‑230224 | A new solution for EEC authentication utilizing tokens  | Ericsson  | 　[Huawei]: Proposes to add an EN to contribution[Ericsson] : provides r1 | available  |    |
|    | S3‑230226 | Resolving ENs in solution#13  | Ericsson  | 　 | available  |    |
|    | S3‑230227 | Resolving ENs in solution#14  | Ericsson  | 　 | available  |    |
|    | S3‑230331 | Solution on Public key signature based authentication  | Samsung  | 　[Ericsson] : requires revision before approval[Qualcomm]: Proposes to add an EN to contribution[Samsung]: Provides r1 | available  |    |
|    | S3‑230380 | TR 33.379 Resolve ENs for sol #1 and #2  | Xiaomi communications  | 　 | available  |    |
|    | S3‑230098 | Conclusion on KI#2.2  | Huawei, HiSilicon, Thales  | 　>>CC\_1<<[Huawei] presents.[Huawei] asks whether Samsung can accept TLS 1.3. Currently majority supports TLS1.3, only Samsung disagree with this.[Samsung] clarifies its objection.>>CC\_1<<[Ericsson] : since the conclusion discussion is in 230334 email thread, proposes to close this email thread | available  |    |
|    | S3‑230114 | Add conclusion to KI#2.2  | ZTE Corporation  | 　>>CC\_1<<[ZTE] presents.>>CC\_1<<[Ericsson] : since the conclusion discussion is in 230334 email thread, proposes to close this email thread | available  |    |
|    | S3‑230202 | Conclusion for KI 2.2 of EDGE Security  | OPPO  | 　>>CC\_1<<[Oppo] presents.>>CC\_1<<[Ericsson] : since the conclusion discussion is in 230334 email thread, proposes to close this email thread | available  |    |
|    | S3‑230229 | Conclusion for KI#2.2  | Ericsson  | 　>>CC\_1<<[Ericsson] presents.>>CC\_1<<[Qualcomm]: propose to merge into S3-230334 which covers the conclusion of KI#2.2 discussion | available  |    |
|    | S3‑230334 | Conclusion for KI#2.2  | Samsung  | 　>>CC\_1<<[Samsung] presents.[Huawei] has questions.[Samsung] clarifies, is ok trying to merge TLS 1.3, but has concerns.Chair asks Samsung to hold the pen to make merger.[QC] comments.[Docomo] asks Tdoc#.to watch for the merger. Chair].---334 is baseline for merger. Please organize the merger proposal, so that it is clear how to go for a show of hands if required.>>CC\_1<<[Huawei] : Provides comments for merger according to the plenary discussion on Monday. (Merging of 0098, 0229, 0114, 0202, 0378 into 0334.)[Samsung] : Provides r1 (based on the plenary discussion on Monday)[Huawei] : Huawei can live with r1.[Ericsson] : r1 is not ok and requires revision[Xiaomi] : requests clarification[ZTE] : Kindly ask questions to Xiaomi.[Xiaomi] : provides clarification to ZTE.[Xiaomi] : provides further clarification to ZTE.[Samsung] : Provides clarification[Qualcomm]: Provides comments[Samsung] : provides clarification on the need to use the ECS configuration[Apple]: not OK with r1.[Huawei] : provide clarification to Apple.[Intel]: Do not agree with r1.[Samsung] : provides comment on Huawei’s clarification to Apple. Also suggest questions on KI#2.2 conclusion for show of hands[Qualcomm]: Responds to Samung’s comments.[Ericsson] : provides r2[Samsung]: provides clarification.[Qualcomm]: Appreciate clarification from Samsung | available  |    |
|    | S3‑230378 | Conclusion for KI 2.2 Authentication mechanism selection between EEC and ECSEES  | Xiaomi communications  | 　>>CC\_1<<[Xiaomi] presents.>>CC\_1<<[Ericsson] : since the conclusion discussion is in 230334 email thread, proposes to close this email thread | available  |    |
|    | S3‑230115 | Add evaluation to solution #6  | ZTE Corporation  | 　[Ericsson] : requests clarification/revision before approval of the contribution[ZTE] : provides response. | available  |    |
|    | S3‑230158 | Addressing the ENs in solution 15  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230159 | Addressing the ENs in solution 16  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230160 | Evaluation to solution 15  | Huawei, HiSilicon  | 　[Ericsson] : requires revision before approval[Ericsson] : further comments[Huawei]: provides feedback and revision. | available  |    |
|    | S3‑230161 | Evaluation to solution 16  | Huawei, HiSilicon  | 　[Ericsson] : requires revision before approval[Huawei]: provides revision. | available  |    |
|    | S3‑230192 | Address an EN in Sol #11  | OPPO  | 　 | available  |    |
|    | S3‑230204 | Resolving ENs in solution #9 of EDGE security  | OPPO  | 　[Ericsson] : requires revision before approval[OPPO] : Provide revision and clarification | available  |    |
|    | S3‑230206 | Resolving ENs in solution #10 of EDGE security  | OPPO  | 　[Ericsson] : requires revision before approval[OPPO] : Provide revision and clarification | available  |    |
|    | S3‑230208 | Resolving ENs in solution #11 of EDGE security  | OPPO  | 　[Ericsson] : requires revision before approval[OPPO] : Provide revision and clarification | available  |    |
|    | S3‑230210 | Address an EN in Sol #9 of EDGE security  | OPPO  | 　[Ericsson] : request clarification/revision before approval[OPPO] : Provide revision and clarification | available  |    |
|    | S3‑230211 | Address an EN in Sol #10 of EDGE security  | OPPO  | 　[Ericsson] : request clarification/revision before approval[OPPO] : Provide revision and clarification | available  |    |
|    | S3‑230213 | Address some ENs in Sol #11 of EDGE security  | OPPO  | 　[Ericsson] : request clarification/revision before approval[OPPO] : Provide revision and clarification | available  |    |
|    | S3‑230214 | Add evaluation in Sol#11 of EDGE security  | OPPO  | 　[Ericsson] : request clarification/revision before approval[OPPO] : Provide revision and clarification | available  |    |
|    | S3‑230225 | Updating solution #17  | Ericsson  | 　 | available  |    |
|    | S3‑230287 | Resolving the ENs in solution #22  | Qualcomm Incorporated  | 　[OPPO]: proposes to add an Editor’s Note, otherwise, the contribution should be NOTED.(Captured by VC)[Oppo] withdraw the comment due to wrong document number attached.[Apple] : revision is required before approval.[Qualcomm]: Questions the need for EN as existing text already address this. | available  |    |
|    | S3‑230288 | Providing evaluation for solution #22  | Qualcomm Incorporated  | 　[Samsung] : Proposes to note[Apple] : Proposes to note[Qualcomm]: Ask for clarification on TLS 1.3 change | available  |    |
|    | S3‑230332 | Evaluation for solution#22  | Samsung  | 　[Qualcomm]: Revision required before approval[Ericsson] : Revision required before approval[Samsung] : Provides r1 and clarification | available  |    |
|    | S3‑230289 | Common authentication method between EEC and ECS/EES  | Qualcomm Incorporated  | 　[Apple] : Clarification is needed before approval[Ericsson] : clarification is needed before approval[Qualcomm]: Responds to questions | available  |    |
|    | S3‑230329 | Resolving EN in solution#3 (TR 33.739)  | Samsung  | 　[Ericsson] : requests revision before approval[Samsung]: Provides r1 | available  |    |
|    | S3‑230330 | Resolving EN and updating evaluation in solution#4 (TR 33.739)  | Samsung  | 　[Ericsson] : requires revision before approval[Samsung] : Provides r1 | available  |    |
|    | S3‑230379 | TR 33.379 Evaluation for Sol #5  | Xiaomi communications  | 　[Ericsson] : needs revision before approval[Xiaomi] : provides clarification. | available  |    |
|    | S3‑230381 | TR 33.379 Resolve ENs for Sol #5  | Xiaomi communications  | 　[Ericsson] : needs revision before approval[Xiaomi] : provides clarification. | available  |    |
|    | S3‑230037 | New Solution of authorization for EDGE-9 reference point  | InterDigital Communications  | 　[Ericsson] : requires revision before approval[Interdigital] : revision provided based on comments[Interdigital] : Please confirm the revision[Ericsson] : r2 is ok | available  |    |
|    | S3‑230099 | Conclusion on KI#2.6  | Huawei, HiSilicon  | 　[Ericsson] : requires revision before approval, proposes to add an EN for further conclusion[Huawei] : provides reply to Ericsson. | available  |    |
|    | S3‑230307 | MEC - New key issue on secure retrieve of UE ID  | Apple  | 　[Nokia]: Supports the contribution, confirms the co-signing, and asks for small (typo, wording) corrections.[Ericsson] : requests clarification/revision before approval[Huawei] : share the same view with Ericsson, and request clarification before approval.[Apple]: provides revision R1 incorporating Nokia and Ericsson’s comments. Provide clarification to Huawei.[Huawei] : provides response to Apple. | available  |    |
|    | S3‑230308 | MEC - Discussion paper on enformcement of AF specific identifier  | Apple  | 　[Nokia]: Requests clarification[Apple]: Provide clarification[Ericsson] : supports the contribution[Huawei] : Propose to note this discussion paper. | available  |    |
|    | S3‑230309 | MEC - LS to SA2 on enforcement of AF specific identifier  | Apple  | 　[Nokia]: Requests clarification[Apple]: Provide clarification[Ericsson] : supports the contribution[Huawei] : support this contribution.[Nokia]: provides clarifications and new wording[Apple]: provide reply and suggestions to Nokia.[Nokia]: requests correction before approval | available  |    |
|    | S3‑230162 | A new KI for security about EAS discovery procedure via V-EASDF  | Huawei, HiSilicon  | 　[Nokia]: Supports the inclusion of the KI in the study | available  |    |
|    | S3‑230163 | A new solution to security about EAS discovery procedure via V-EASDF  | Huawei, HiSilicon  | 　[Ericsson] : requires revision before approval[Nokia]: supports Ericsson comment to add an EN for further evaluation.[Huawei]: provides revision. | available  |    |
|    | S3‑230164 | Conclusion on KI1.x Security about EAS discovery procedure via V-EASDF  | Huawei, HiSilicon  | 　[Nokia]: Proposes to postpone the conclusion of the new KI[Ericsson] : Proposes to postpone the conclusion of the new KI[Huawei]: provide feedback | available  |    |
|    | S3‑230100 | Adding the overview of the EDGE  | Huawei, HiSilicon  | 　 | available  |    |
| 5.10 | S3‑230042 | New solution for PINE authentiation with information provided by PEMC  | vivo  | 　[Nokia]: asks question for clarification.[Interdigital]: Changes are needed to be approved.[Qualcomm]: Changes and clarifications are required before the solution can be considered for acceptance.[vivo]: provides r1[vivo]: provides r2[Interdigital]: Thank you for the changes. I remove my comments.[Qualcomm]: Further changes and clarifications are required before the solution can be considered for acceptance.[vivo]: replies | available  |    |
|    | S3‑230043 | New solution for conditional PINE authorization by PEMC  | vivo  | 　[Qualcomm]: Changes and clarifications are required before the solutions can be considered for acceptance.[Interdigital]: Clarification and changes are needed for approval.[vivo]: provides r1[Interdigital]: Changes are needed for approval.[Qualcomm]: Further changes and clarifications are required before the solution can be considered for acceptance.[Qualcomm]: Further changes and clarifications are required before the solution can be considered for acceptance.[vivo]: provides r2.[Interdigital]: Agrees with R2. | available  |    |
|    | S3‑230044 | New solution for PINE authentiation over 5G UP  | vivo  | 　[Qualcomm]: Changes and clarifications are required before the solution can be considered for acceptance.[Interdigital]: Changes and clarifications are needed for approval.[vivo]: provides r1[Qualcomm]: Further changes and clarifications are required before the solution can be considered for acceptance.[vivo]: provides r2.[Interdigital]: Changes and clarifications are needed for approval. | available  |    |
|    | S3‑230079 | KI#1 New Sol for local PINE authentication  | Nokia, Nokia Shanghai Bell  | 　[Interdigital]: Changes and clarifications are needed for approval.[Qualcomm]: Updates and clarifications are required before the solution can be considered for acceptance.[Philips] updates required.[Thales]: requires changes.[Nokia]: provides r1 and replies to questions and comments.[Thales]: is fine with r1.[Interdigital]: Changes are needed for approval.[Nokia]: provides r2 with text related to PEMC synchronization removed. | available  |    |
|    | S3‑230386 | KI #2, new Sol on AF authorization in PIN scenarios  | Xiaomi communications  | 　 | available  |    |
|    | S3‑230045 | Update solution for PINE authentication and authorization over 5G CP  | vivo  | 　[Qualcomm]: Changes are required before the solution can be considered for acceptance.[Interdigital]: Changes and clarifications are needed for approval.[vivo]: provides r1[Interdigital]: Agrees with R1. | available  |    |
|    | S3‑230157 | Addressing the editor's note in solution 1  | Huawei, HiSilicon  | 　[Qualcomm]: Changes are required before the solution can be considered for acceptance.[Huawei]: Please find r1.[Philips] asks for clarification before approval.[Philips] Apologies. Please, ignore previous email. Wrong subject.[Nokia]: Asks for clarification and potential revision.[Huawei]: response to Nokia. | available  |    |
|    | S3‑230305 | Resolution of EN#1 in Solution#7 for KI#1  | Qualcomm Incorporated  | 　[Philips] asks for clarification before approval.[Nokia]: requires more details before acceptable.[Nokia]: does not agree with explanations and proposes to note. | available  |    |
|    | S3‑230306 | Resolution of EN#2 in Solution#7 for KI#1  | Qualcomm Incorporated  | 　[Philips] requires clarification before approval. | available  |    |
|    | S3‑230385 | TR 33.882 Resolve ENs for sol #5  | Xiaomi communications  | 　[Qualcomm]: Proposes to note.[Interdigital]: Changes and clarifications are needed for approval.[Xiaomi]: provides r2.[Interdigital]: Agrees with R2. | available  |    |
|    | S3‑230046 | Evaluation on Sol#6  | vivo  | 　[Qualcomm]: Proposes to note.[vivo]: provides r1 to add EN as Qualcomm proposed.[Qualcomm]: Proposes to note. | available  |    |
|    | S3‑230118 | Add evaluation for solution#4  | ZTE Corporation  | 　[Qualcomm]: Proposes to note.[Interdigital]: Changes and clarifications are needed for approval. | available  |    |
|    | S3‑230269 | PIN - Evaluation Solution #4  | Philips International B.V.  | 　[Nokia]: does not agree with evaluation and proposes update.[Qualcomm]: Changes are required before the solution can be considered for acceptance.[Philips] provides comments.[Thales]: proposes change.[Qualcomm]: Further changes and clarifications are required before the solution can be considered for acceptance.[Philips]: provides r1 | available  |    |
|    | S3‑230047 | Interim conclusions on KI#1  | vivo  | 　[Thales]: asks question for clarification[vivo]: replies[Interdigital]: Changes and clarifications are needed for approval.[Qualcomm]: Proposes to note.[Thales]: proposes. | available  |    |
|    | S3‑230116 | Add conclusion for KI#1  | ZTE Corporation  | 　[Nokia]: does not agree with conclusion and proposes to note.[Qualcomm]: Proposes to note.[Thales]: proposes to note. | available  |    |
|    | S3‑230201 | Propose conclusion to KI#1  | Huawei, HiSilicon  | 　[Nokia]: thinks that final conclusions are too early and without sound rational and proposes to note.[Huawei]:the rational is in the rational clause of the contribution.[Philips] requires revision.[Nokia] has read the rational, but does not agree with the rational, and still objects.[Huawei]:response to Nokia. | available  |    |
|    | S3‑230117 | Add conclusion for KI#2  | ZTE Corporation  | 　[Nokia]: does not agree with conclusion and proposes to note. | available  |    |
| 5.11 | S3‑230337 | Update of Key Issue #2  | Samsung  | 　[Samsung] : provides clarification[NTT DOCOMO]: also requests clarification[Samsung] : provides r1[Nokia] fine with r1. | available  |    |
|    | S3‑230172 | Address EN for solution 1: onboarding  | Huawei, HiSilicon  | 　[Lenovo]: needs clarification and revision before approval.[Huawei]: needs clarification. | available  |    |
|    | S3‑230173 | Address EN for solution 1: detail for token  | Huawei, HiSilicon  | 　[Xiaomi] : requests clarification.[Lenovo]: needs clarification and revision before approval.[Huawei] : provide clarification. | available  |    |
|    | S3‑230174 | Address EN for solution 1: authorization decision  | Huawei, HiSilicon  | 　[Ericsson] : requests clarification/revision before approval of the contribution[Lenovo]: needs clarification and revision before approval.[Huawei] : provide clarification[Samsung] : request clarification[Huawei] : provide clarification | available  |    |
|    | S3‑230175 | Evaluation Update on Solution 1  | Huawei, HiSilicon  | 　[Nokia] : requests update to the evaluation of sol1[Ericsson] : requires revision before approval[Huawei] : provide r1.[Lenovo]: needs clarification and revision before approval.[Huawei] : provide r2. | available  |    |
|    | S3‑230421 | pCR to 33.884 updating solution #2  | NTT DOCOMO INC.  | 　[Nokia] : requests clarification.[NTT DOCOMO]: clarifies[Ericsson] : requests revision/clarification before approval of the contribution[NTT DOCOMO]: -r1 is available | available  |    |
|    | S3‑230074 | Sol#3 Resolution of EN on root certificate provisioning  | Nokia, Nokia Shanghai Bell  | 　[Lenovo]: needs clarification and revision before approval.[Nokia]: provides clarification. | available  |    |
|    | S3‑230075 | Sol#3 Resolution of EN on cross UE API access  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230076 | Sol#3 Resolution of EN on Uastar protocol  | Nokia, Nokia Shanghai Bell  | 　[Lenovo]: needs clarification and revision before approval.[Nokia]: provides clarification. | available  |    |
|    | S3‑230077 | Sol#3 Resolution of EN on Mutual Authentication  | Nokia, Nokia Shanghai Bell  | 　[Nokia] : clarifies that mutual authentication between client and API is not part of OAuth security model.[Ericsson] : request clarification and revision before approval[Lenovo]: needs clarification and revision before approval.[Nokia]: provides clarification.[Samsung]: fine with the revision.[Nokia]: provides revision r1 with sentence covering optional mutual authentication. | available  |    |
|    | S3‑230078 | Sol#3 Resolution of EN on Client Credential Grant  | Nokia, Nokia Shanghai Bell  | 　[Huawei] : requests revision.[Nokia] : thinks that text requested in the revision might be covered already by the existing evaluation.[Huawei] : still requests revision.[Nokia] : provides revision with additional Note.[Huawei] : Requests update on r1.[Nokia] : provides revision r2 with formal corrections and revised wording to avoid possible confusion.[Huawei] : r2 is fine. | available  |    |
|    | S3‑230069 | Update to Solution #4 in SNAAPPY  | Lenovo  | 　[Samsung] : requests clarification before approval[Ericsson] : requests clarification and revision before approval[Nokia] : requests change to evaluation before acceptable.[Lenovo] : provided r1 and clarifications.[Samsung] : fine with r1.[Lenovo] : Provides some clarifications with r2.[Samsung] : fine with r2[Ericsson] : fine with r2 | available  |    |
|    | S3‑230070 | Solution to address KI#2  | Lenovo  | 　[Huawei] : requests clarification before approval.[Ericsson] : requests clarification and revision before approval[Nokia] : does not see a need for standardization of the solution approach.[Lenovo] : Provides revision r1 and clarifications.[Lenovo] : Provides r2 with clarification.[Huawei]: Request update.[Lenovo]: Provides clarifications. | available  |    |
|    | S3‑230176 | New Solution on OAuth2.0 Token Revocation  | Huawei, HiSilicon  | 　[Samsung] : requests clarification before approval.[Huawei] : clarification.[Samsung] : requests revision before approval[Huawei] : provide r1.[Samsung]: find with r1[Xiaomi] : requests clarification.[Ericsson] : requests clarification before approval[Huawei] : provide clarification[Xiaomi] : requests for further clarification[Lenovo]: needs clarification and revision before approval.[Huawei] : provide clarification. | available  |    |
|    | S3‑230230 | A solution for authorization before allowing access to resources  | Ericsson  | 　[Samsung] : requests clarification before approval.[Ericsson] : provides clarification[Samsung] : requests more clarification before approval.[Huawei] : requests clarification before approval.[Huawei] : requests revision to add ENs.[Nokia] : requests clarification.[Lenovo] : Requires clarification and revision.[Ericsson] : provides r1 and clarification[Samsung] : requests further clarification[Huawei] : request updates.[Ericsson] : provides clarification [Nokia] does not object to solution.[Huawei] : fine with r2. | available  |    |
|    | S3‑230338 | New Solution on Resource owner Authorization in API Invocation using OAuth 2.0 Authorization Code Grant  | Samsung  | 　[Huawei] : requests clarification before approval.[Samsung] : provides clarification[Lenovo] : Requires clarification before approval[Ericsson] : Requires clarification before approval[Samsung] : provides clarification | available  |    |
|    | S3‑230339 | New Solution on Resource owner Authorization in API Invocation  | Samsung  | 　[Huawei] : requests clarification before approval.[Samsung] : provides clarification[Lenovo] : Requires clarification before approval[Ericsson] : Requires clarification before approval[Samsung]: provides clarification[Huawei]: request revision[Samsung] : provides r1[Huawei] : r1 is fine. | available  |    |
|    | S3‑230389 | KI#2, New Sol OAuth 2.0 based API invocation procedure  | Xiaomi communications  | 　[Samsung] : requests clarification before approval.[Xiaomi] : provides clarification.[Huawei] : requests clarification before approval.[Xiaomi] : provides r1.[Xiaomi] : provides r2.[Ericsson] : needs revision before approval[Xiaomi] : provides clarification.[Huawei] : provides ENs. | available  |    |
|    | S3‑230390 | KI#2, New Sol on User authorization revocation for API invocation procedure  | Xiaomi communications  | 　[Huawei] : requests clarification before approval.[Samsung] : requests clarification before approval[Xiaomi] : provides r1 and clarification.[Ericsson] : requires clarification/revision before approval[Xiaomi] : provides r2 and clarification.[Huawei] : request update on r2, and provides ENs.[Samsung] : requests EN. | available  |    |
|    | S3‑230391 | KI#2, New Sol UE credential based API invocation procedure  | Xiaomi communications  | 　[Huawei] : requests clarification before approval.[Xiaomi] : provides r1.[Ericsson] : request clarification/revision before approval[Xiaomi] : provides r2 and clarification.[Huawei] : r2 is fine. | available  |    |
|    | S3‑230422 | pCR to 33.884 adding new solution: PKCE flow  | NTT DOCOMO INC.  | 　[Ericsson] : requests revision/clarification before approval of the contribution[Lenovo] : requests to include a flow diagram.[NTT DOCOMO]: -r1 is available | available  |    |
|    | S3‑230423 | pCR to 33.884 adding new solution: token validation  | NTT DOCOMO INC.  | 　[Samsung] : requests clarification before approval.[Xiaomi] : requests clarification before approval.[NTT DOCOMO]: provides clarification[Nokia]: comments and asks for further clarifications.[NTT DOCOMO]: clarifies[Ericsson] : requests revision before approval of the contribution[NTT DOCOMO]: r1 is available | available  |    |
|    | S3‑230071 | Conclusion to KI#1 in SNAAPPY  | Lenovo  | 　[Nokia] : does not agree with conclusions and proposes to note.[Ericsson] : proposes to note since solutions are under discussion[Lenovo] : Fine with postponing the conclusion discussions to next meeting.Propose to postpone this contribution. | available  |    |
|    | S3‑230072 | Conclusion to KI#2 in SNAAPPY  | Lenovo  | 　[Nokia] : does not agree with conclusions and proposes to note.[Ericsson] : proposes to note since solutions are under discussion[Huawei] : does not agree with conclusions and proposes to note[Lenovo] : Fine with postponing the conclusion discussions to next meeting.Propose to postpone this contribution. | available  |    |
|    | S3‑230178 | Conclusion for key issue #2  | Huawei, HiSilicon  | 　[Nokia] : requests update to proposed conclusions.[Samsung] : requests clarification to Ericsson[Xiaomi] : proposes to note[Lenovo]: Propose to Note.[Huawei]: provide clarification. | available  |    |
|    | S3‑230177 | Role mapping from TR 23.700-95  | Huawei, HiSilicon  | 　[Samsung] : requests clarification before approval.[Huawei] : Provide clarification.[Nokia] : does not see a need for the new Annex proposed in the contribution.[Nokia] New requirement on confidentiality of UE identifier needs clarification and refinement.[Ericsson] : propose to postpone the Annex discussion[Lenovo] : Questions the need of this contribution. | available  |    |
| 5.12 | S3‑230085 | Discussion on KI#1  | Huawei, HiSilicon  | 　[Nokia]: provide comments.[Qualcomm]: Propose to note this contribution>>CC\_4<<[Huawei] presents.[Lenovo] agrees with P1[Thales] questions on P1, and think P2 should align CT1.Chair check with Thales’s position, that is agreed in some extent on P1 and P2.[Thales] clarifies it is ok with motivation of P1, but key issue is not needed. Such P1 proposal jumps key issue study. It is an conclusion. P1 does not correspond to content of companion contribution, which targets the key issue. It is an conclusion.[Huawei] clarifies P1 is an endorsement for moving forward, rather than conclusion.[QC] doesn’t agree.[Lenovo] comments.[Huawei] emphasizes it should set up key issue, solution at first, then to get conclusion.Chair points out Thales’s position is aligned with P1 text in the Tdoc, could not understand the comment from Thales.[QC] comments.Chair suggests to expand comments for principles to be endorsed..>>CC\_4<< | available  |    |
|    | S3‑230061 | Update to KI#1 Providing VPLMN slice information to roaming UE  | Lenovo  | 　[Thales]: disagrees.[Ericsson]: Agrees with Thales and proposes to wait CT1 outcome. Proposes to note the contribution.[Qualcomm]: Also think that the KI should be noted pending the outcome of the CT1 discussions | available  |    |
|    | S3‑230086 | KI#1 update  | Huawei, HiSilicon  | 　[Qualcomm]: Propose to note this contribution[Thales]: disagrees. | available  |    |
|    | S3‑230121 | Update to KI#1 providing VPLMN slice information to roaming UE  | ZTE Corporation  | 　[Thales]: disagrees.[Qualcomm]: Disagrees with this KI | available  |    |
|    | S3‑230276 | Key Issue #1  | THALES  | 　[Huawei] : disagrees with removing security threats in this contribution.[Thales]: provides answers.[Huawei]: comments to Thales.[Lenovo]: Disagrees to the contribution. | available  |    |
|    | S3‑230062 | Solution to KI#1 eNS  | Lenovo  | 　[Thales]: disagrees.[Ericsson]: proposes to note the contribution and wait CT1 outcome.[Lenovo]: Provides r1 which removes open aspects that need CT1 outcome.R1 address only aspects related to 33.501.[Thales]: provides comments. | available  |    |
|    | S3‑230088 | New solution to KI#1  | Huawei, HiSilicon  | 　[Qualcomm]: Solution can only be accepted if related KI makes enough progress[Thales]: decision for this contribution depends on the decision for update of Key Issue #1. | available  |    |
|    | S3‑230119 | New solution to KI#1 protecting SoR container from UDM to UE  | ZTE Corporation  | 　[Qualcomm]: Solution can only be accepted if related KI makes enough progress[Thales]: decision for this contribution depends on the decision for update of Key Issue #1. | available  |    |
|    | S3‑230120 | New solution to KI#1 protecting UE assistance information  | ZTE Corporation  | 　[Thales]: disagrees.[Ericsson]: proposes to note the contribution and wait CT1 outcome. | available  |    |
|    | S3‑230249 | update to KI#2 temporary network slice  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: proposes to note the contribution. | available  |    |
|    | S3‑230387 | KI #2 update for partly allowed rejected S-NSSAI  | Xiaomi communications  | 　[Nokia]: provide comments. | available  |    |
|    | S3‑230250 | solution for KI#2 temporary network slice for NSSAA  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: proposes to postpone. | available  |    |
|    | S3‑230388 | New Sol on authorization mechanism for partly rejected S-NSSAI  | Xiaomi communications  | 　[Interdigital]: revision required.[Xiaomi]: provides r1.[Nokia]: provide comments.[Ericsson]: proposes to note. | available  |    |
|    | S3‑230087 | Update to KI#3  | Huawei, HiSilicon  | 　[Ericsson]: Propose to note this contribution | available  |    |
|    | S3‑230251 | update to KI#3 network slice admission control  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230252 | security solution for KI#3 network slice admission control  | Nokia, Nokia Shanghai Bell  | 　[Qualcomm]: Solution can only be accepted if related KI makes enough progress[Ericsson]: questions. | available  |    |
|    | S3‑230089 | New key issue on SoR AF  | Huawei, HiSilicon  | 　[Deutsche Telekom] : Supports the new key issue.[Ericsson] : Not sure if this new key issue is needed.[Huawei] : clarification for comments from Ericsson.[Thales]: provides comments.[Thales]: provides further comments.[Qualcomm]: Not convinced that this key issue is needed | available  |    |
|    | S3‑230090 | New solution to prevent S-NSSAI leakage  | Huawei, HiSilicon  | 　[Nokia]: ask clarification and suggest revision.[Thales]: proposes to note. | available  |    |
| 5.13 | S3‑230054 | solution 5 update  | Nokia, Nokia Shanghai Bell, Lenovo  | 　[Huawei]: ask for revision before approval.[Nokia]: provide answer and r1.[Qualcomm]: Request an EN to be added to evaluation[Nokia]: ask clarification.[Huawei]: fine with r1[Nokia]: providing r2 with elaborated evaluation. | available  |    |
|    | S3‑230055 | solution 6 update  | Nokia, Nokia Shanghai Bell, Lenovo  | 　[Huawei]: ask for revision before approval.[Qualcomm]: Request an EN to be added to evaluation[Nokia]: provide r1 based on Huawei and Qualcomm comment[Huawei]: fine with r1 | available  |    |
|    | S3‑230063 | Evaluation to Solution #8  | Lenovo  | 　[Huawei]: ask for revision before approval.[Qualcomm]: Request an EN to be added to evaluation[Lenovo]: Provides r1 along with clarifications.[Huawei]: fine with r1. | available  |    |
|    | S3‑230193 | A new solution on KI#4  | Huawei, HiSilicon  | 　[Nokia]: ask for clarification[Huawei]: replies to Nokia[Nokia]: provide answer and ask for clarification[Huawei]: replies to Nokia[Nokia]: provide answer[Huawei]: replies to Nokia [Lenovo]: Requires clarification and revision before approval.[Huawei]: provide answer>>CC\_3<<Chair requests to continue email discussion as it is solution details.>>CC\_3<<[Huawei]: provide r1[Nokia]: fine with the version.[Lenovo]: r1 is okay. | available  |    |
|    | S3‑230051 | TNAP mobility architecture assumptions  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230285 | Resolving the editor’s note in solution #7  | Qualcomm Incorporated  | 　[Nokia]: ask for clarification[Qualcomm]: provides a clarification[Huawei]: ask for revision before approval.[Lenovo]: Requests revision.[Nokia]: ask for clarification and request revision>>CC\_3<<[QC] presents.[Lenovo] requests to add message flow.[CableLabs] comments on NOTE.[QC] clarifies.[QC] gives further clarification.>>CC\_3<<[CableLabs]: provided comments | available  |    |
|    | S3‑230286 | Evaluation of solution #7  | Qualcomm Incorporated  | 　[Huawei]: Request to update the evaluation based on the discussion of the solution. | available  |    |
|    | S3‑230416 | Key issue on authentication of N5CW devices behind RG  | CableLabs, Nokia, Nokia Shanghai Bell, Rogers Communications  | 　[Thales]: asks questions for clarification.[CableLabs]: provided clarifications.>>CC\_3<<[Nokia] presents.Chair asks why a new issue is needed.[CableLabs] clarifies.[Thales] comments.[CableLabs] clarifies on possible way forward>>CC\_3<<[Nokia]: ask opinion and way forward.[Thales]: provides answers.[CableLabs]: provides comments | available  |    |
|    | S3‑230417 | Key issue on authentication of UE behind RG  | CableLabs, Rogers Communications  | 　[Thales]: provides comments and proposes to note.[CableLabs]: provides comments and -r1. | available  |    |
|    | S3‑230418 | Solution for authentication of UE behind RG using NSWO  | CableLabs, Rogers Communications  | 　 | available  |    |
|    | S3‑230419 | Key issue on authentication of AUN3 device without 5G credentials  | CableLabs  | 　[Thales]: disagrees and proposes to note the contribution.[CableLabs]: provided comments and asked questions.[Thales]: provides answer.[CableLabs]: provides comments. | available  |    |
|    | S3‑230424 | Solution for authentication of AUN3 device without 5G Creden  | CableLabs  | 　[Thales]: disagrees and proposes to note the contribution. | available  |    |
|    | S3‑230052 | new solution for AUN3 device supporting 5G Key hierarchy (i.e. N5CW)  | Nokia, Nokia Shanghai Bell, CableLabs  | 　 | available  |    |
|    | S3‑230194 | Proposed new threat and requirement to KI#3  | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230195 | New solution to KI#3  | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230196 | conclusion to KI#3  | Huawei, HiSilicon  | 　[Qualcomm]: Proposes some changes[Huawei]: Please find r1 | available  |    |
|    | S3‑230048 | Draft New WID on Security aspect of 5WWC  | Nokia, Nokia Shanghai Bell  | 　[Thales]: proposes to postpone.[Qualcomm]: also propose to postpone.[Nokia]: provide clarification and agree to postpone[Thales]: provides comment. | available  |    |
|    | S3‑230049 | Scope section alignment  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230050 | updating the existing solution mapping  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230053 | update conclusion for KI1  | Nokia, Nokia Shanghai Bell  | 　[Qualcomm]: Proposes a change[Thales]: proposes to note this contribution. | available  |    |
| 5.14 | S3‑230409 | New Key issue on the security of the information transfer of the RAN AI/ML framework  | Ericsson  | 　>>CC\_3<<[Ericsson] gives brief introduction.>>CC\_3<< | available  |    |
|    | S3‑230410 | KI2 conclusion  | Ericsson  | 　[Nokia] : Propose to note.[Huawei]: support this proposal.>>CC\_3<<[Ericsson] gives brief status introduction.[Nokia] agrees with new key issue but not agree with conclusion.[Huawei] agrees with conclusion, since AIML algorithm is proprietary, doesn’t prefer anything to standardize for data transfer also..[Nokia] comments that there are literature about AIML data poisoning and that is different from AIML algorithm..[QC] supports the conclusion.>>CC\_3<< | available  |    |
| 5.15 | S3‑230092 | address EN for solution#2  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230093 | Adding conclusion on KI#1  | Huawei, HiSilicon  | 　[Huawei]: proposes to merge in S3-230290 | available  |    |
|    | S3‑230094 | Adding conclusion on KI#3  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230095 | address EN for solution#4  | Huawei, HiSilicon  | 　[Ericsson]: Ericsson proposes changes.[Huawei]: agree with the changes and provides r1.[Ericsson]: is fine with r1. | available  |    |
|    | S3‑230096 | Adding conclusion on KI#2  | Huawei, HiSilicon  | 　[Ericsson]: Ericsson provide r1.[Qualcomm]: Proposes to note this contribution at this meeting[Ericsson]: requests for clarifications.[Huawei]: ok with r1. | available  |    |
|    | S3‑230290 | Conclusion for key issue #1  | Qualcomm Incorporated  | 　[Huawei]: proposes r1 to merge S3-230093[Ericsson]: Proposes r2.[Huawei]: requires further clarification.[Xiaomi]: provides comments and requires clarification before approval>>CC\_3<<[Huawei] gives status introduction.[Ericsson] gives introduction.Discussion between [Huawei] and [Ericsson][QC] comments that security is based on IMPU and raises questions on 3rd party identity.The debate is about 3rd party identity, whether it is security related issue or simply service issue.>>CC\_3<<[Ericsson]: provides clarifications.[Huawei]: provides clarifications.[Xiaomi]: provides comments.[Huawei]: provides r3 to accommodate all your comments.[Qualcomm]: Provides an r4 based on the below comments | available  |    |
|    | S3‑230412 | Resolve\_EN\_solution#5  | Ericsson  | 　[Huawei]: requires clarification[Ericsson]: provides r1.[Huawei]: need further clarification.[Ericsson]: provides r2.[Ericsson]: provides r3.[Huawei]: ok with r3. | available  |    |
|    | S3‑230413 | Resolve\_ENs\_solution#1  | Ericsson  | 　 | available  |    |
| 5.16 | S3‑230083 | Removal of EN in Solution#7  | Lenovo  | 　[Ericsson]: Needs update[Lenovo]: proposes to note 0083. | available  |    |
|    | S3‑230231 | Conclusions for KI#1  | Ericsson  | 　>>CC\_2<<[Ericsson] presentsChair asks whether merger is possible.[Ericsson] affirms this and tries to merge.[Nokia] comments there are some differences, needs more discussion.[Ericsson] comments.[Nokia] repeats the question.[Ericsson] clarifies.Discussion between [Nokia] and [Ericsson]Chair proposes way forward, to add EN.[Ericsson] is ok with the proposal.>>CC\_2<<[Qualcomm]: requires update before it is acceptable[Huawei]: ask for revision.[Ericsson]: provides merger in r1[Xiaomi]: provides some inputs.[Xiaomi]: provides some comments.[Nokia]: Requires changes to R1 before acceptable.[Ericsson]: provides r2[Nokia]: provides comments to R2.[Thales]: requires changes.[Xiaomi]: provides some inputs[Ericsson]: provides r3[Xiaomi]: is ok to r3.[Thales]: provides comments.[Ericsson]: provides r4[Thales]: is fine with r4. | available  |    |
|    | S3‑230232 | Solution to KI#1 – NSWO in SNPN with CH AUSF/UDM  | Ericsson  | 　[Qualcomm]: requires clarification before approval.[Ericsson]: provides justification[Qualcomm]: requests further clarification.[Ericsson]: provides r1[Qualcomm]: fine with r1. | available  |    |
|    | S3‑230233 | Evaluation of Solution#9 – NSWO in SNPN  | Ericsson  | 　[Nokia]: Requires clarifications before acceptable.[Nokia]: Provides r1[Ericsson]: Provides r1[Nokia]: Request further clarification[Ericsson]: Provides r2[Nokia]: Nokia is fine with R2[Huawei]: ask for clarification.[Ericsson]: Provides r3 (fixing lack of change marks of figure only)[Ericsson]: Provides updated answers to questions form Huawei[Nokia]: Nokia is fine with R3 | available  |    |
|    | S3‑230304 | Solution to KI#1 – NSWO in SNPN with CH AAA  | Qualcomm Incorporated  | 　[Nokia]: Requires clarifications before acceptable.[Qualcomm]: provides requested clarification.[Huawei]: ask for clarification before it’s acceptable.[Nokia]: Requires clarification[Qualcomm]: provides requested clarifications to Nokia and Huawei.[Nokia]: Request addition of EN.[Huawei]: Request to add more evaluation.[Ericsson]: supports the solution but proposing to add EN to move forward[Qualcomm]: provides r1.[Qualcomm]: informs availability of r1 that addresses Ericsson comment.[Ericsson]: r1 is OK | available  |    |
|    | S3‑230318 | Evaluation of solution #5  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230321 | Proposal for a conclusion on KI#1  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: Propose to merge with S3-230231 using S3-230231 (Ericsson) as baseline[Nokia]: Accepts to merge and provides way forward.>>CC\_2<<[Nokia] presents.>>CC\_2<<[Huawei]: ask for revision. | available  |    |
|    | S3‑230323 | Discussion paper concerning conclusion of KI#1  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: Propose to note or merge with S3-230231 using S3-230231 (Ericsson) as baseline[Huawei]: propose to note.[Ericsson]: Asks clarifying questions. | available  |    |
|    | S3‑230382 | TR 33.858 Evaluation for Sol #1  | Xiaomi communications  | 　 | available  |    |
|    | S3‑230383 | TR 33.858 Evaluation for Sol #2  | Xiaomi communications  | 　 | available  |    |
|    | S3‑230384 | TR 33.858 Evaluation for Sol #4  | Xiaomi communications  | 　 | available  |    |
|    | S3‑230073 | Solution to Key Issue #2  | Lenovo  | 　[Ericsson]: requires updates[Interdigital] : Objection to the solution by S3-230073[Lenovo] : The IDCC comments on assumption is not correct.Clarifications provided to IDCC.[Lenovo] : provided r1 which deletes ’fixed length’ to address IDCC comments.[Interdigital]: We are fine with R1[Nokia]: Questions for clarifications before acceptable. | available  |    |
|    | S3‑230122 | Add a new solution to KI#2  | ZTE Corporation  | 　[Thales]: provides comments and proposes changes.[ZTE] : accepts the comment and provides r1.[Thales]: is fine with r1. | available  |    |
|    | S3‑230190 | Add Usecases to Solution 10  | Intel  | 　[Ericsson]: requires updates[Intel]: Uploaded r1 | available  |    |
|    | S3‑230205 | Conclusion for KI#2  | Intel  | 　[Ericsson]: proposes to merge in S3-230247[Intel]:Fine to merge in S3-230247 and discuss in 247 thread | available  |    |
|    | S3‑230245 | Update of Solution #11: Resolving Editor's Note on scenarios in SA2  | Ericsson  | 　[Lenovo]: requires clarification and revision.[Ericsson]: provides r2 | available  |    |
|    | S3‑230246 | Update of Solution #11: Resolving Editor's Note in the evaluation  | Ericsson  | 　[Lenovo]: requires revision. | available  |    |
|    | S3‑230247 | Conclusion for KI#2 "Authentication for UE access to hosting network"  | Ericsson  | 　[Thales]: provides comments and proposes changes.[Lenovo]: provides comments and requests revision.[Intel]: requests revision[Qualcomm]: requires revision before it is acceptable[Huawei]: request revision.[Nokia]: request revision including the merge.[Ericsson]: provides r1 | available  |    |
|    | S3‑230319 | Evaluation of solution #12  | Nokia, Nokia Shanghai Bell  | 　[Thales]: provides comments and proposes changes.[Nokia]: Provides answers to Thales and requests clarification.[Thales]: provides answers.[Nokia]: Provides R1.[Thales]: is fine with r1. | available  |    |
|    | S3‑230320 | Evaluation of solution #13  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: requires updates[Nokia]: Provides answers[Ericsson]: r1 is fine | available  |    |
|    | S3‑230322 | Proposal for a conclusion on KI#2  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: proposes to merge in S3-230247[Nokia]: Nokia accepts to merge and provides answers.[Ericsson]: replies to Nokia[Nokia]: replies to Ericsson>>CC\_2<<[Ericsson] gives brief introduction about status.[Ericsson] clarifies.[Lenovo] comments, prefers Nokia’s proposal.[Nokia] asks whether a merger is ok.[Ericsson] is ok to have merger.>>CC\_2<<[Ericsson]: replies to Nokia[Nokia]: Replies to Ericsson and request Intel to comment. | available  |    |
|    | S3‑230324 | Discussion paper concerning conclusion of KI#2  | Nokia, Nokia Shanghai Bell  | 　[Huawei]: propose to note. | available  |    |
|    | S3‑230036 | Key issue on SN Name binding for Kausf in SNPN using AAA server for primary authentication  | InterDigital Communications  | 　[Ericsson]: Needs update[Qualcomm]: proposes to note. | available  |    |
|    | S3‑230248 | New WID on Security aspects of enhanced support of Non-Public Networks phase 2  | Ericsson  | 　[Thales]: proposes to note | available  |    |
| 5.17 | S3‑230024 | Conclusion TR 33.891 KI #1  | InterDigital, Europe, Ltd.  | 　[Qualcomm]: Proposes to merge the KI#1 proposals[Interdigital]: OK with merger of the KI#1 proposals. | available  |    |
|    | S3‑230066 | Conclusion to KI#1 Direct C2 Security  | Lenovo  | 　[Qualcomm]: Proposes to merge the KI#1 proposals[Lenovo]: Fine to have the mergers of KI#1 proposals.[Huawei, HiSilicon]: Fine to have the merger plan of KI#1.[Lenovo]: Will provide the merged version of S3-230024, S3-230181 and S3-230281 using S3-230066 as baseline.[Lenovo]: S3-230066-r1 is now available which merges S3-230024, S3-230181 and S3-230281.>>CC\_2<<[QC] gives brief introduction on status.[Lenovo] r1 is available.[IDCC] asks questions.[QC] clarifies.>>CC\_2<<[Qualcomm]: Proposes changes to r1[Lenovo]: Provides r2 to address Qualcomm’s comment. | available  |    |
|    | S3‑230181 | Add conclusion to KI#1 about Direct C2 security  | Huawei, HiSilicon  | 　[Qualcomm]: Proposes to merge the KI#1 proposals[Huawei, HiSilicon]: Fine to have the merger plan of KI#1 and close this thread. | available  |    |
|    | S3‑230281 | Conclusion for key issue #1  | Qualcomm Incorporated  | 　[Qualcomm]: Proposes to merge the KI#1 proposals | available  |    |
|    | S3‑230067 | Conclusion to KI#2 Security of DAA unicast connection  | Lenovo  | 　[Qualcomm]: Proposes to merge the KI#2 proposals[Lenovo]: Fine to have the mergers of KI#2 proposals.[Huawei, HiSilicon]: Fine to have the mergers of KI#2 proposals.>>CC\_2<<[Lenovo]: merger proposal is ready but not revision. R1 will be ready soon.>>CC\_2<<[Qualcomm]: Ok to have merger into S3-220067[Lenovo]: will provide a merger revision.[Lenovo]: r1 is now available with merged S3-230180 and S3-230282.[Huawei, HiSilicon]: propose a minor revision idea.[Lenovo]: provides response.[Lenovo]: now r2 is available with Huawei’s proposed text.[Huawei, HiSilicon]: fine with r2.[Qualcomm]: Provides comments on r2 | available  |    |
|    | S3‑230180 | Add conclusion to KI#2 about DAA unicast security  | Huawei, HiSilicon  | 　[Qualcomm]: Proposes to merge the KI#2 proposals[Huawei, HiSilicon]: Fine to have the merger plan of KI#2 and close this thread. | available  |    |
|    | S3‑230282 | Conclusion for key issue #2  | Qualcomm Incorporated  | 　[Qualcomm]: Proposes to merge the KI#2 proposals | available  |    |
|    | S3‑230025 | Update conclusion TR 33.891 KI #3  | InterDigital, Europe, Ltd.  | 　[Qualcomm]: Proposes to merge the KI#3 proposals>>CC\_2<<[IDCC] volunteers to hold the pen for merger.>>CC\_2<<[Interdigital]: provides r2 merging in S3-230068 and S3-230283.[Lenovo]: provides some findings and requests revision.[Interdigital]: re-announce r2.[Qualcomm]: Proposes some changes on r2 to make it acceptable | available  |    |
|    | S3‑230068 | Conclusion to KI#3 Direct C2 Authorization  | Lenovo  | 　[Qualcomm]: Proposes to merge the KI#3 proposals[Lenovo]: Fine to merge with all KI#3 proposals | available  |    |
|    | S3‑230283 | Additional to conclusion for key issue #3  | Qualcomm Incorporated  | 　[Qualcomm]: Proposes to merge the KI#3 proposals | available  |    |
|    | S3‑230026 | Update conclusion TR 33.891 KI #4.  | InterDigital, Europe, Ltd.  | 　[Qualcomm]: Requires changes before it can be approved[Interdigital]: provides r1[Qualcomm]: r1 is OK | available  |    |
|    | S3‑230027 | LS on support for Restricted ProSe Direct Discovery for UAS  | InterDigital, Europe, Ltd.  | 　>>CC\_2<<[IDCC] presents.[QC] needs time to check whether LS could be sent out.Discussion between [IDCC] and [QC].>>CC\_2<<[Qualcomm]: Disagrees with sending an LS and propose to note the contribution[Interdigital]: replies with rationale for LS | available  |    |
|    | S3‑230284 | Conclusion for key issue #7  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230277 | Resolve EN on discovery in solution #3  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230278 | Resolve EN on pairing in solution #3  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230279 | Evaluation of solution #3  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230280 | Editorial changes to UAS TR  | Qualcomm Incorporated  | 　 | available  |    |
| 5.18 |  |    |    | 　 |    |    |
| 5.19 | S3‑230300 | Updates to the Key Issue #4  | Qualcomm Incorporated  | 　>>CC\_1<<[Xiaomi] presents current status. Two alternative ways: to extend existing key issue, or to introduce new key issue. It needs to be discussed.[QC] presents this contribution.>>CC\_1<<[Xiaomi]: provides change proposal[Huawei]: revision is required before approaval.[Qualcomm]: replies and asks a question to Huawei[Huawei]: provide clairification.[Xiaomi]: fine with r1[Qualcomm]: replies to Huawei[Huawei]: fine with r1. | available  |    |
|    | S3‑230353 | pCR to TR33.893 New key issue on groupcast and broadcast security  | CATT  | 　>>CC\_1<<(It is another way forward)[CATT] gives brief introduction, ok to merge but not ok with current proposal details from QC/300.[Huawei] is not fine with this new key issue. The solution for groupcast / broadcast should be different.[Xiaomi] gives clarification about difference between 2 contributions, prefers to introduce new key issue, and reply to Huawei’s comments.Chair asks whether it is ok to separate discussion about groupcast and broadcast.[QC] clarifies and ok to have separate key issue.[CATT] clarifies.[Nokia] supports separate key issue.Chair announces there is agreement to have separate KIs for groupcast and broadcast.>>CC\_1<<[Xiaomi]: requests revision before approval[Huawei]: supports xiaomi and requests revision before approval[CATT]: Provide r1, all comments have been addressed.[Qualcomm]: asks a clarification to Xiaomi and Huawei[Xiaomi]: provides clarification for the change proposal[Huawei]: r1 is fine.[Qualcomm]: replies to Huawei and Xiaomi, and provides r2.[CATT]: Fine with r2.[Xiaomi]: provides clarification and r3[Qualcomm]: cannot accept r3, proposes to go with r2[Xiaomi]: provides clarification and not fine with r2[Xiaomi]: provides r4 | available  |    |
|    | S3‑230301 | A new solution for groupcast protection for Ranging/SL Positioning services  | Qualcomm Incorporated  | 　>>CC\_1<<[QC] presents.[Nokia] comments for clarification, whether confidentialality is optional or not.[QC] clarifies.[Xiaomi] comments it could not solve broadcast issue.>>CC\_1<<[Huawei]: propose to postpone.[Philips] provides input. In our view, postponing is not needed if we can clarify the solution.[Qualcomm]: provides clarification to Huawei and Philips. Propose to add ENs | available  |    |
|    | S3‑230354 | pCR to TR33.893 New solution for protecting groupcast and broadcast data in coverage  | CATT  | 　>>CC\_1<<[CATT] presents.[Huawei] has several questions.[CATT] asks to have questions on email reflector. [Huawei] is ok to post questions.>>CC\_1<<[Huawei]: propose to postpone.[CATT]: Provide response. | available  |    |
|    | S3‑230355 | pCR to TR33.893 New solution for protecting groupcast and broadcast data in out of coverage  | CATT  | 　>>CC\_1<<[Xiaomi] comments.[CATT] clarifies.[Huawei] comments.[Xiaomi] has further comments.[CATT] clarifies.[Oppo] comments.[CATT] clarifies.[Xiaomi] is not fine with clarification.>>CC\_1<<[OPPO]: clarification is required.[Huawei]: propose to postpone.[Philips] requests ENs.[CATT]: Provide response.[CATT]: Provide r1, all required ENs have been added. | available  |    |
|    | S3‑230155 | update the evaluation in solution 1  | Huawei, HiSilicon  | 　[Xiaomi]: requests clarification before approval[Huawei]: provide clarification.[Xiaomi]: provides response and propose to note[Huawei]: provide r1.[Qualcomm]: requests a revision before approval[Huawei]: provide r2. | available  |    |
|    | S3‑230156 | conclusion on key issue 1  | Huawei, HiSilicon  | 　[Ericsson] : requires clarifications[Huawei]: provide clarification[Qualcomm]: proposes to postpone[Philips] proposes to postpone.[Huawei]: propose to note and give clarification. | available  |    |
|    | S3‑230184 | New solution to select assistant ranging procedure based on privacy requirement  | Huawei, HiSilicon  | 　[Interdigital]: requests postponing until the Assistant UE procedure is resolved in other WGs.[Huawei, HiSilicon]: replies to Interdigital.[Interdigital]: The proposed EN seems reasonable.[Huawei, HiSilicon]: provides r1.[Xiaomi]: requests clarification before approval[Philips] requires clarification/revision before approval.[Huawei, HiSilicon]: Replies to Xiaomi and Philip to clarify the concerns. Provides r2.[Philips] thanks for the clarification. | available  |    |
|    | S3‑230272 | Ranging - New solution KI#1, #2, #3  | Philips International B.V.  | 　[Xiaomi]: requests clarification before approval[Qualcomm]: proposes to postpone[Philips] disagrees to postpone. Proposes way-forward.[Huawei]: clarification is required before approval. | available  |    |
|    | S3‑230273 | Ranging - Update Key Issue #1- privacy risks of exposing positioning reference signals  | Philips International B.V.  | 　[Xiaomi]: requests clarification for questions[Philips] Provides input.[Xiaomi]: requests further clarification[Qualcomm]: requests a revision before approval[Philips] provides further input.[Philips] provides input.[Xiaomi]: provides response[Philips] provides answer.[Philips] provides r1. | available  |    |
|    | S3‑230358 | 33.893: Additional Evaluation for Solution #1  | Xiaomi Technology  | 　[Huawei]: revision is required before approval.[Xiaomi]: provides response and r1[Huawei]: disagree with r1 and provide clarification. | available  |    |
|    | S3‑230363 | 33.893: Resolve the Editor’s Note in Solution #7  | Xiaomi Technology  | 　[Qualcomm]: requests a revision before approval[Xiaomi]: accepts the proposed update and provides r1[Huawei, HiSilicon]: requests revision before approval.[Xiaomi]: provides clarification and r2[Huawei, HiSilicon]: replies to Xiaomi.[Xiaomi]: provides clarification | available  |    |
|    | S3‑230154 | update to solution 3  | Huawei, HiSilicon  | 　[Xiaomi]: provides comments[Huawei]: provide r1. | available  |    |
|    | S3‑230259 | New solution with authorization tokens exchanged after PC5 security establishment  | Ericsson  | 　[Xiaomi]: requests clarification before approval[Huawei, HiSilicon]: requests clarification/revision before approval[Qualcomm]: requests a clarification | available  |    |
|    | S3‑230260 | Update of evaluation to solution #2  | Ericsson  | 　[Xiaomi]: provides comments and request revision before approval[Ericsson]: provides comments and r1[Xiaomi]: provides further comments and r2[Ericsson]: provides comments and r3[Xiaomi]: provides clarification and r4 | available  |    |
|    | S3‑230261 | Update of evaluation to solution #3  | Ericsson  | 　[Xiaomi]: provides comments and request revision before approval[Ericsson]: provides comments and r1[Huawei]: provide proposal.[Xiaomi]: provide clarification and r2. | available  |    |
|    | S3‑230359 | 33.893: Update to Solution #2  | Xiaomi Technology  | 　[Huawei]: revision is required before approval.[Xiaomi]: provides r1[Huawei]: r1 is ok. | available  |    |
|    | S3‑230360 | 33.893: Resolve the Editor’s Note in Solution #4  | Xiaomi Technology  | 　[Huawei]: requests clarification/revision before approval.[Xiaomi]: provides clarification[Huawei, HiSilicon]: replies to Xiaomi.[Qualcomm]: requests a revision before approval[Xiaomi]: provides clarification and r1 | available  |    |
|    | S3‑230361 | 33.893: Evaluation for Solution #4  | Xiaomi Technology  | 　[Ericsson] : provides comments[Huawei, HiSilicon]: revision is needed before approval.[Xiaomi]: provides response and r1[Ericsson] : requires updates[Xiaomi]: provides response and r2[Huawei, HiSilicon]: replies to Xiaomi. | available  |    |
|    | S3‑230364 | 33.893: New Solution on Token-based Authorization of the Role of the UE during Discovery  | Xiaomi Technology  | 　[Ericsson] : propose to note[Huawei, HiSilicon]: clarification/revision is needed before approval.[Qualcomm]: requests clarifications and revisions before approval[Xiaomi]: provides responses and r1[Philips] Asks a question.[Xiaomi]: provides clarification[Philips] Provides input. Clarification required for approval.[Xiaomi]: provides clarification and r2[Interdigital] Clarification is required for approval.[Xiaomi]: asks for clarification before further revision[Interdigital] Provides requested clarification to XIAOMI to receive initially requested clarification.[Xiaomi]: provides clarification[Interdigital] Appreciated the provided clarification and asks for changes for approval.[Xiaomi]: provides response[Xiaomi]: provides r3[Interdigital]: Agrees with R3. | available  |    |
|    | S3‑230365 | 33.893: New Solution on Role Verification during Discovery based on Discovery Keys  | Xiaomi Technology  | 　[Ericsson] : provides comments and update is required[Qualcomm]: requests clarifications and revision required before approval[Huawei, HiSilicon]: clarification/revision is needed before approval.[Xiaomi]: provides responses and r1 | available  |    |
|    | S3‑230366 | 33.893: New Solution on Authorization of SL Positioning Client UE for Obtaining Ranging Result  | Xiaomi Technology  | 　[Huawei, HiSilicon]: requests revision/clarification before approval.[Xiaomi]: provides clarification | available  |    |
|    | S3‑230404 | Remove the Editor's Note of solution #3 in TR 33.893  | Beijing Xiaomi Mobile Software  | 　 | available  |    |
|    | S3‑230405 | Remove the Editor's Note of solution #5 in TR 33.893  | Beijing Xiaomi Mobile Software  | 　[Huawei, HiSilicon]: requests revision/clarification before approval.[Qualcomm]: request a revision before approval[Xiaomi]: provides responses. | available  |    |
|    | S3‑230182 | New solution of security for the Ranging SL positioning device discovery  | Huawei, HiSilicon  | 　[Qualcomm]: requests a clarification and revision before approval[Huawei, HiSilicon]: provides clarification and r1.[Xiaomi]: requests clarification before approval[Huawei, HiSilicon]: Replies to Xiaomi.[Xiaomi]: provides response | available  |    |
|    | S3‑230403 | New solution on Ranging/SL Positioning discovery and link establishment procedure for V2X capable UEs  | Beijing Xiaomi Mobile Software  | 　 | available  |    |
|    | S3‑230183 | New solution for protecting direct communnication  | Huawei, HiSilicon  | 　[Xiaomi]: requests clarification before approval[Qualcomm]: requests a revision before approval | available  |    |
|    | S3‑230236 | Update to solution#6 in TR 33.893 - add authorization check step  | China Telecom Corporation Ltd.  | 　 | available  |    |
|    | S3‑230238 | Update to solution#6 in TR 33.893 - SLPK ID usage  | China Telecom Corporation Ltd.  | 　 | available  |    |
|    | S3‑230362 | 33.893: Evaluation for Solution #6  | Xiaomi Technology  | 　[OPPO]: clarification is required.[Xiaomi]: provide clarification and r1[OPPO]: OK with r1 | available  |    |
|    | S3‑230038 | New Key issue for Monitoring and detecting attacks on ranging devices and services  | Nokia, Nokia Shanghai Bell  | 　>>CC\_1<<[Nokia] presents.[Xiaomi] comments.[Nokia] clarifies.[Huawei] comments.[Nokia] clarifies.>>CC\_1<<[Xiaomi]: requests clarification before approval[Nokia]: Provides clarifications.[Qualcomm]: proposes to note[Nokia]: Provides clarifications. | available  |    |
|    | S3‑230125 | New KI on security of ranging usiong assistance UE  | OPPO  | 　>>CC\_1<<[Oppo] presents.[Xiaomi] comments.[IDCC] comments, it may need to wait SA2’s progress.[QC] comments, is not clear about the proposal.>>CC\_1<<[Interdigital]: proposes to postpone until the Assistant UE in Rel-18 question is resolved in other WGs.[OPPO]: Appreciates Interdigital comment and proposes an Editor’s Note as a way forward.[Interdigital]: Appreciates the generous proposal from OPPO and agrees to it.Also, there is a need to clarify the Threats in the proposed KI.[Qualcomm]: proposes to note[OPPO]: seeks clarification from Qualcomm and provides R1[Interdigital]: Agrees with R1 and thanks OPPO for drafting and posting it. | available  |    |
| 5.20 | S3‑230124 | LS on clarification on user consent for AIML  | OPPO  | 　[QC] No need for LS. Consent purpose is only known at the application layer.[Ericsson]: Also questions the need for this LS, therefore proposes to note.[OPPO] Reply to Qualcomm.[IDCC] Support the LS[Nokia]: Supports the LS[QC] Confirms position. Open to simpler LS.[OPPO]: Thanks Qualcomm for their reconsideration and provides r1.[QC] Objects to r1.[OPPO]: Provides clarification and asks further questions.[QC] Reiterated wording.[Ericsson]: disagrees with r1, provides r2>>CC\_4<<R4 is latest version.Chair asks to have offline discussion.>>CC\_4<< | available  |    |
|    | S3‑230034 | New key issue on Federated Learning AIML model privacy protection  | InterDigital Communications  | 　[QC] SA2 conclusions do not support this work. Propose to note.[Ericsson]: proposes to note[IDCC] Ask for clarification of “SA2 conclusions do not support this work”.[Interdigital]: AIML Enablement Infrastructure security study scope[QC] Clarifies.[IDCC] Please clarify what had been stated[QC] Defines and provides “Evidence of absence”.[Interdigital] Not agree with your contradicted reasoning | available  |    |
|    | S3‑230035 | New key issue on Federated Learning AIML model protection  | InterDigital Communications  | 　[QC] SA2 conclusions do not support this work. Propose to note.[Ericsson]: proposes to note[IDCC] Ask for clarification of “SA2 conclusions do not support this work”.[Interdigital]: AIML Enablement Infrastructure security study scope[QC] Clarified on the 0034 thread. | available  |    |
|    | S3‑230372 | KI #1, New Sol on OAuth 2.0 based 5GC assistance information exposure authorization  | Xiaomi communications  | 　[Nokia]: ask for clarification[Huawei]: ask for clarification[Ericsson]: requires clarification[Xiaomi]: provides clarification | available  |    |
|    | S3‑230217 | New solution on reusing existing authorization mechanism for 5G assistance information exposure to AF  | OPPO  | 　 | available  |    |
|    | S3‑230218 | New solution on authorization for 5GC assistance information exposure to external AF  | OPPO  | 　[Ericsson]: requires update[OPPO]: Provide update | available  |    |
|    | S3‑230220 | New solution on authorization for 5GC assistance information exposure to internal AF  | OPPO  | 　[Ericsson]: requires update[OPPO]: Provide update[Huawei]: ask for clarification.[OPPO]: Provide clarification and revision. | available  |    |
|    | S3‑230223 | New solution on privacy protection for 5GC assistance information exposure to AF  | OPPO  | 　[Nokia]: ask for clarification[OPPO]: provide clarification[Nokia]: proposes EN[OPPO]: provide revision 2. | available  |    |
|    | S3‑230373 | TR 33.898 Resolve EN for sol #2  | Xiaomi communications  | 　 | available  |    |
|    | S3‑230222 | New solution on authorization for 5GC assistance information exposure to internal AF  | OPPO  | 　 | withdrawn  |    |
| 5.21 |  |    |    | 　 |    |    |
| 5.22 | S3‑230039 | New key issue on enhancement of user consent for using MDT for NG-RAN AI/ML  | Nokia, Nokia Shanghai Bell  | 　[QC] Propose to note.[Nokia]: Provides clarifications[Ericsson]: Clarification needed. | available  |    |
|    | S3‑230084 | 33.896: Updates to Key Issue on User Consent for NTN  | Google Inc.  | 　[Ericsson]: propose to note[Lenovo]: Asks revision.[Google]: Provides r1 as requested[QC]: Propose to note and continue with 0165 | available  |    |
|    | S3‑230165 | Key Issue Update on User Consent for NTN  | Huawei, HiSilicon  | 　[Lenovo]: Needs revision before approval. | available  |    |
|    | S3‑230166 | Implict User Consent for NTN feature usage  | Huawei, HiSilicon  | 　[Google]: Asks for clarification[Huawei]: provide clarification.[Lenovo]: propose to note | available  |    |
|    | S3‑230167 | Conclusion for key issue #2  | Huawei, HiSilicon  | 　[Nokia]: requests changes before support>>CC\_2<<[Huawei] presents.[Lenovo] comments the case is not complete, requirement is still pending.[Google] asks question. [Huawei] clarifies.[Google] comments there is different understanding.[Nokia] is ok with conclusion but some updates needed.[Huawei] clarifies and proposes way forward.[Lenovo] comments.[Huawei] clarifies.[Xiaomi] questions the need of this conclusion.[Nokia] has additional comment.[Apple] comments[Huawei] clarifies.[Xiaomi] doesn’t convince with Huawei’s clarification.[Huawei] clarifies and replies to comments.[Google] comments.[Huawei] clarifies to Google’s comment, operator always know user’s location.>>CC\_2<<[Lenovo]: Do not accept the current conclusion.Needs revision before approval.[Huawei]: provides r1 in the draft folder.[Ericsson]: Approves -r1 | available  |    |
|    | S3‑230168 | User consent for roaming scenarios where the data source is in vPLMN  | Huawei, HiSilicon  | 　[Ericsson]: Asks for clarification.[QC] Changes required before approval. | available  |    |
|    | S3‑230169 | User consent for roaming scenarios where the data source is in hPLMN  | Huawei, HiSilicon  | 　[Ericsson]: Asks for clarification.[QC] Changes required before approval. | available  |    |
|    | S3‑230170 | Conclusion for key issue #1  | Huawei, HiSilicon  | 　[Ericsson]: Asks for clarification.>>CC\_2<<[Huawei] presents.[Docomo] asks question.[VF] comments.[Docomo] comments different regulation is not corner case.[VF] agrees with Docomo.[Huawei] clarifies.[China Mobile] proposes way forward, to remove the last sentence.[Docomo] proposes another way forward, to set assumption about regulatory requirement.[Huawei] is ok with the way forward.[Xiaomi] provides compromised proposal.[Nokia] would like to see the compromised text.[Chair]Suggest to discuss the compromised text via email.>>CC\_2<<[QC] Changes required before approval.[Huawei]: provide r1 in the draft folder.[Xiaomi]: fine with r1 | available  |    |
|    | S3‑230171 | Conclusion for key issue #4  | Huawei, HiSilicon  | 　[Nokia] : object to use WID to draft guidance text. The KI#4 related guidance input should be documented first in the study.[Ericsson]: objects and comments. | available  |    |
|    | S3‑230370 | 33.896: Evaluation for Solution #1  | Xiaomi Technology  | 　[Ericsson]: propose to note and to move forward on S3-230166 | available  |    |
|    | S3‑230371 | 33.896: Evaluation for Solution #2  | Xiaomi Technology  | 　[Ericsson]: propose to note and to move forward on S3-230167 | available  |    |
|    | S3‑230406 | Remove the Editor's Note and evaluate the solution #3 in TR 33.896  | Beijing Xiaomi Mobile Software  | 　 | available  |    |
|    | S3‑230407 | Remove the Editor's Note and evaluate the solution #4 in TR 33.896  | Beijing Xiaomi Mobile Software  | 　[QC] Changes required before approval. | available  |    |
|    | S3‑230408 | Conclusion on Key Issue #1 in TR 33.896  | Beijing Xiaomi Mobile Software  | 　>>CC\_2<<[Xiaomi] presents.>>CC\_2<<[QC] Confirming this is noted.[Huawei]: answer this question. | available  |    |
|    | S3‑230414 | KI and Solution on user consent in roaming  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: propose to note[Nokia]: provides clarification and -r1.[QC] Propose to note.[Nokia]: provides clarification. reasoning by QC to note is not justifying to note.[Ericsson]: propose to note remains, -r1 doesn’t address nor clarifies our stated concerns | available  |    |
|    | S3‑230415 | Sol update central authorization for user consent handling  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: Propose to note.[Nokia]: Proposes to delete the sentence, which caused Ericsson to request to propose note.Proposes updates to reflect the concerns on the solutions.[Nokia]: -r1 created to include the proposals since no comment against has been received in response to the provided clarification.[Ericsson]: For the sake of progress, -r2 uploaded[Nokia]: -r3 uploaded | available  |    |
| 5.23 | S3‑230041 | TMGI protection during group Paging  | Nokia, Nokia Shanghai Bell  | 　[Huawei]: revision is needed before clarification[Ericsson] : Proposed to note.[Nokia] : Provides clarifications[Ericsson] : Proposed to note.[Nokia] : Provides r1.[Qualcomm]: proposes to note[Huawei]: support to capture the solution in TR for record. | available  |    |
|    | S3‑230149 | A new solution to address the privacy issue with TMGI  | Huawei, HiSilicon  | 　[Ericsson]: proposes to note[Huawei]: provide clarification.[Ericsson]: do we need this solution if it exists already,[Huawei]: yes. | available  |    |
|    | S3‑230150 | conclusion on key issue 2  | Huawei, HiSilicon  | 　[Qualcomm]: proposes to postpone[Ericsson]: proposes to postpone | available  |    |
|    | S3‑230151 | Addressing the editor's note in solution 3  | Huawei, HiSilicon  | 　[Ericsson] : Revision r1 uploaded. Figure still needs un update.[Samsung] : requests clarification before approval.[Huawei]: provides r2 and clarification.[Samsung] : propose to note the contribution and revisions (r1 and r2)>>CC\_3<<[Huawei] presents current status. Latest version is r2. proposes way forward and ask whether Samsung is ok with it.[Samsung] it is ok to update with detail proposal, but consider this solution could not solve KI#1.[Huawei] provides another way forward.>>CC\_3<<[Ericsson] : r2 ok.[Huawei]: provide r3. | available  |    |
|    | S3‑230152 | Discussion paper on way forward of key issue#1  | Huawei, HiSilicon  | 　[Samsung] : propose to note the discussion paper>>CC\_3<<[Huawei] presents.[Samsung] has already shown the concern in email, repeats the concern.[Huawei] clarifies.[Samsung] doesn’t agree Huawei’s clarification, has different understanding.[Huawei] proposes way forward.[Ericsson] comments, doesn’t know what the purpose of raising proposal 1.[Samsung] clarifies.[Huawei] is ok to note this and focus on solution and evaluation.>>CC\_3<< | available  |    |
|    | S3‑230153 | conclusion on key issue 1  | Huawei, HiSilicon  | 　[Huawei]: proposed to merge S3-230336 into S3-230153[Samsung] : asks for clarifications on merger proposal from Huawei[Huawei]: provide clarification.[Samsung] : propose to have discussion on KI#1 conclusion in S3-230336[Samsung] : propose to note the contribution. | available  |    |
|    | S3‑230302 | A new solution for mitigating privacy attacks exploiting group paging with TMGI  | Qualcomm Incorporated  | 　[Ericsson]: proposes to note[Qualcomm]: provides a clarification and propose to add EN for progress[Nokia]: Proposes to note.[Qualcomm]: replies to Nokia[Huawei]: support the contribution in general and provide comment. | available  |    |
|    | S3‑230335 | Updates to solution#1 in TR 33.883  | Samsung  | 　>>CC\_3<<[Samsung] presents.>>CC\_3<<[Ericsson]: few questions[Huawei] : revision is required before approval.[Huawei]: propose change.[Samsung]: provides r1[Nokia]: requests clarifications[Samsung]: provides clarification to Nokia | available  |    |
|    | S3‑230336 | [MBS] Conclusion for Key Issue#1  | Samsung  | 　[Huawei]: proposed to merge S3-230336 into S3-230153[Samsung] : asks for clarifications on merger proposal from Huawei[Huawei]: provide clarification.[Samsung] : propose to have discussion on KI#1 conclusion in S3-230336[Qualcomm]: proposes to postpone[Samsung] : provides clarification to Qualcomm | available  |    |
| 5.24 | S3‑230143 | Study on 5G roaming topics  | Nokia, Nokia Shanghai Bell  | 　[Nokia] : asks for endorsing this DP to have a working base for Athens meeting.The paper suggests to take N32 security / roaming topic out of the eSBA study and continue working on those aspect as N32 related R19 study.This allows to close the R18 eSBA study. SID template proposal is in S3-230144.[Deutsche Telekom] : Supports the proposed way forward.[Ericsson] : Comment. By not concluding KI-10 and KI-12 in current study, and continuing with it in a new study, will it not further delay the standardisation of the these specific two key issues while proposed broader N32 security related study continues for release 19,[Nokia] : provides comments.[Ericsson] : supports the proposed way forward.MCC provided guidance and some changes on the Study document.[Huawei] : Huawei supports the way forward. Thanks.[Cisco] : requests changes[Mavenir]: does not support broadening the scope of the study and focus the study on 5G SA roaming[Huawei] : request NOKIA to provide a revision on detailed scopes for endorsement. Otherwise, propose to postpone the endorsement, and discuss the details on February meeting.[Nokia] : provides -r1 and requests endorsement.[Nokia] : provides -r1 and asks for endorsement.[Huawei] : propose to postpone the SID discussion, including the endorsement.[Deutsche Telekom] : proposes to adjust the scope and limit/focus on the hosted SEPP scenarios only.[Mavenir]: support DT proposal to limit the scope of the study to the listed use cases.[Nokia] : provides -r2 and asks for endorsement.[Mavenir]: support r2 and the suggested way forward[Deutsche Telekom]: is fine with -r2 and agrees to work on the wording in 0144 for approval at SA3#110. | available  |    |
|    | S3‑230144 | SID on 5G roaming issues  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230137 | KI10 analysis and conclusion on RHUB  | Nokia, Nokia Shanghai Bell, BSI  | 　 | available  |    |
|    | S3‑230138 | KI10 sol20 EN resolution – reference to new study  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230142 | KI12 analysis and conclusion on hosted SEPP  | Nokia, Nokia Shanghai Bell, BSI  | 　 | available  |    |
|    | S3‑230140 | KI12 sol19 EN resolution – reference to new study  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230127 | KI1 corrections  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230128 | KI1 sol13 EN resolution  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: requires updates[Nokia]: -r1 uploaded. providing comments. | available  |    |
|    | S3‑230129 | KI1 analysis update  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: requires updates[Nokia]: -r1 uploaded | available  |    |
|    | S3‑230130 | KI3 sol12 EN resolution  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230131 | KI4 analysis and conclusion update  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: requires updates[Nokia]: -r1 uploaded in line with proposals. | available  |    |
|    | S3‑230132 | KI3 sol15 EN resolution  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230133 | KI5 sol16 EN resolution  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: requires updates[Nokia]: -r2 provided | available  |    |
|    | S3‑230134 | KI6 conclusion update  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: requires updates[Nokia]: -r1 upload | available  |    |
|    | S3‑230135 | KI7 Sol17 EN resolution  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230136 | KI8 conclusion update  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: suggests update[Nokia]: -r1 uploaded | available  |    |
|    | S3‑230139 | KI11 resolution of ENs in sol21 and sol22 by adding the related solution  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: the solution requires updates and clarification[Nokia]: -r1 uploaded[Ericsson]: requires further clarification[Mavenir]: provide clarification to Ericsson. r2 uploaded to fix a format issue[Ericsson]: requires further clarifications and updates[Nokia]: requires and provides -r3 | available  |    |
|    | S3‑230314 | New Solution to KI #11 based on O&M Provisioning NRF with NFc profile  | Ericsson LM  | 　[Mavenir]: Object to this contribution[Nokia]: does not object, but requests updates before accepting[Mavenir]: Can ONLY agree to the below or objection remains[Ericsson]: accepts some proposals and proposes a way forward[Huawei] : request clarification.[Ericsson] : gives clarification to Huawei.[Nokia]: asks Ericsson to provide a revision in line with Mavenir proposal. i.e. include also conclusion into this pCR.[Ericsson] : comments.[Mavenir]: provide clarification to Ericsson[Ericsson] : response to Maveni’r clarification.[Ericsson] : provides r1.[Nokia] : provides comments, suggests to come back next meeting[Nokia] : provides r2 | available  |    |
|    | S3‑230313 | New Solution to KI #11 based on Nnrf\_AccesToken Service  | Ericsson LM  | 　[Nokia] : clarification and update required[Ericsson]: comments.[Mavenir]: Objects to this solution.[Nokia] : comments[Ericsson] : disagrees with Mavenir , proposes a way forward, and requests for reconsideration[Huawei] : request clarification.[Ericsson] : gives clarification to Huawei.[Ericsson] : comments.[Mavenir] : maintains objection. Propose to note this contribution.[Ericsson] : asks Mavenir to explain why our clarification is not sufficient.[Mavenir]: Not trying to break any discussion thread and provided enough material and reasoning to prove that such solution is not inline with 5GC architecture and should be noted.[Ericsson] : provides r1.[Nokia] : comments and requests further work before inclusion in TR. | available  |    |
|    | S3‑230022 | KI10 update on RHUB  | BSI (DE), Nokia, Nokia Shanghai Bell  | 　[Deutsche Telekom] : Supports the proposed changes.[Ericsson] : Request for revision.Propose to remove statement starting “From the perspective of the PLMN itself, the Hosted SEPP provider operates within its own security domain”.[Mavenir] : Supports the proposed changes.[Huawei] : Support the changes. | available  |    |
|    | S3‑230021 | KI10 solution 25 update on security profiles  | BSI (DE), Nokia, Nokia Shanghai Bell  | 　[Nokia] : -r1 uploaded | available  |    |
|    | S3‑230023 | KI12 solution 19 update on hosted SEPP  | BSI (DE), Nokia, Nokia Shanghai Bell  | 　[Deutsche Telekom] : Supports the proposed requirements and provides additional comments.[Nokia] : provides comments.[Ericsson] : Request for revision. For now, we propose to remove “From the perspective of roaming partners, PLMN trust domain extends to the Hosted SEPP instance representing this PLMN” because the trust domain depends on PKI governance that is yet not fully formalized.[Nokia] : provides comments and -r1 update on “trust domain”, also adding DT as supporter.[Ericsson] : support S3-230023-r1. Agree, and yes understood the better readability aspect.We support 230023-r1 as the revision by using only word ‘trust’ helps avert correlation with the trust domain and security domain. And also that there is a level of trust inferred by a contract between PLMN and hosted SEPP provider when they enter into business with each other.[Mavenir]: provides a critical editorial changes to avoid confusion (at least for now)[Nokia] : provides -r2 with the proposed update by MVNR and an additional clarification on Local/Hosted.[Mavenir]: r2 is good.[Ericsson]: supports S3-230023-r2.[Huawei] : fine with r2.[Deutsche Telekom]: fine with -r2. | available  |    |
|    | S3‑230141 | KI12 Hosted SEPP solution  | Nokia, Nokia Shanghai Bell  | 　[BSI] : Provides revision 1 in drafts folder.[Mavenir]: support r1. Please fix a minor typo.[Nokia]: support the proposed updates.-r2 uploaded with editorials (typos fixed). | available  |    |
|    | S3‑230315 | Discussion. Key issue #12: Security in Hosted SEPP scenarios  | Ericsson  | 　[Nokia] : DP can be noted. A text copy of the DP is provided in separate tdocs, where revisions are needed. (KI in S3-230316 and sol. in S3-230317) | available  |    |
|    | S3‑230316 | Update of Key issue #12: Security in Hosted SEPP scenarios  | Ericsson  | 　[Nokia] : requires updates. chaining or cascading of SEPPs is an excluded scenario, but could be understood by the current proposal made (mixing local SEPP and hosted SEPP). See LS S3-221737 from GSMA.[Ericsson] : Feedback to revision asked. We are inclined to keep S3-23016 as-is to keep it consistent with S3-23015 Discussion Paper described three specific variants in response to GSMA LS S3-221737. We propose to cover chained-SEPP/cascading-SEPP scenario with more clarity and further liaison with GSMA first, and then cover in the proposed SID for the release-19.[Nokia] : proposes to note the contribution.[Nokia] : commenting contribution uploaded as -r1.[Mavenir] : commenting on Nokia comments uploaded as -r2.[Huawei] : Huawei supports r2.[Nokia] : -r3 upload[Ericsson] : supports Nokia’s r1 but with our additional proposal, and a feedback to Mavenir’s r2.[Ericsson] : provides r4 in drafts directory. This version is using Nokia’s r1 of Ericsson’s original submitted S3-230316 by incorporating feedback from emails and today’s conference call.[Mavenir] : does not agree with r4. Uploaded r5 for review and agreement[Ericsson] : Comment on r5, and request for clarification. We are nearly there.[Mavenir] : provides clarification to Ericsson.[Nokia] : -r6 uploaded.[Mavenir] : -r6 is good. However, there is a comment from Mavenir to remove “Hosted” from the respective figure is still outstanding.[Ericsson] : -r7 is uploaded with schematic update. | available  |    |
|    | S3‑230317 | Solution for KI#12: Security in Hosted SEPP scenarios  | Ericsson  | 　[Nokia] : requires updates. chaining or cascading of SEPPs is an excluded scenario, but could be understood by the current proposal made (mixing local SEPP and hosted SEPP). See LS S3-221737 from GSMA.[Ericsson] : Feedback to revision asked. We are inclined to keep S3-23017 as-is to keep it consistent with S3-23015 Discussion Paper and S3-23016 update to KI-12. We propose to cover chained-SEPP/cascading-SEPP scenario with more clarity and further liaison with GSMA first, and then cover in the proposed SID for the release-19.[Nokia] : propose to note. the solution describes parts that are out of scope. last solution is already standardized.[Huawei] : Propose to note this contribution.[Mavenir]: Propose to note this contribution. | available  |    |
| 5.25 | S3‑230367 | 33.700-28: Add Potential Requirements for Key Issue #1  | Xiaomi Technology  | 　[Huawei]: revision is needed before approval.[Xiaomi]: provides response and r1[Ericsson]: proposes to note unless modified.[Xiaomi]: provides clarification before further revision[Huawei]: provide clarification.[Xiaomi]: provides further comments[Huawei]: provide clarification.[Ericsson]: provides clarifications.[Xiaomi]: provides further comments and r2>>CC\_3<<[Xiaomi] presents,[Ericsson] comments on AF’s authority, and requirements needs to wait SA2 decision.[Huawei] comments.[Xiaomi] clarifies SA2 has completed the work and has conclusion.[Ericsson]: SA2 conclusion has multiple options. It impacts proposed requirement.Chair proposes to have EN to move forward.[Xiaomi] clarifies the proposed EN from Ericsson is accepted in revisions.>>CC\_3<<[Thales]: provides comments and supports r2[Huawei]: r2 is fine.[Ericsson]: requests for clarifications. | available  |    |
|    | S3‑230369 | 33.700-28: New Solution to KI#1 for AF Authorization on per UE Level  | Xiaomi Technology  | 　[Huawei]: clarification is needed before approval.[Ericsson]: Proposes to note until the key issue stable and SA2 has made some progress.[Qualcomm]: proposes to note. Also, the req for KI#1 is not yet stable. | available  |    |
|    | S3‑230019 | Key Issue for NAS UE Registration Procedure  | Nokia, Nokia Shanghai Bell  | 　[Qualcomm]: proposes to note. | available  |    |
|    | S3‑230020 | New Key Issue on Protection of 5GS SIB19  | Nokia, Nokia Shanghai Bell  | 　[Huawei]: propose to note.[Nokia]: provides further clarification on the need of SIB19 protection: SIB19 contains satellite assistance information for NTN access, which are vulnerable to threat vectors, like DoS.[Qualcomm]: proposes to note. | available  |    |
|    | S3‑230368 | 33.700-28: New Key Issue on Protection of UE Unreachability Period retrieved by the UE  | Xiaomi Technology  | 　[Huawei]: revision is needed before approval.[Huawei]: propose to note.[Xiaomi]: provides response and r1[Qualcomm]: proposes to note. | available  |    |
| 6 |  |    |    | 　 |    |    |
| 7 |  |    |    | 　 |    |    |
| 8 | S3‑230004 | Report from SA#98 on SA3 topics  | WG Chair  | 　>>CC\_1<<Chair presents.R-18 stage 2 is extended to June 2023. Chair comments that June is also SA3 deadline. As there is no new content from SA2, so deadline will not extend automatically.[Ericsson] comments there will be key issues and solutions depends on details from SA2 that will impact SA3 work. How to manage this?Chair replies it is a possibility that additional issues may be referred to SA3 from SA2 normative work, but whether to extend our date beyond Jun 2023, we cannot say right now. We can discuss this again on Fri in this meeting and also in the Feb meeting and deceide.[Ericsson] comments about work planning guidance from SA..Chair replies that SA wants each WG to have a clear plan for work planning management during Rel-19. How each WG manages this is left to the individual WG. We will discuss how SA3 work can do this. Whether based on TU, how define the TU etc need to be discussed. We should do this probably on Fri in this meeting or may be in Feb meeting. .>>CC\_1<< | available  |    |