|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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. | 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. | 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 | 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. | 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 | 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<< | available  |    |
|    | 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<< | available  |    |
|    | 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 | 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 | 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<< | available  |    |
|    | S3‑230103 | Update the KI#6  | ZTE Corporation  | 　[Huawei]: requests revision and clarification before approval.[ZTE] : Ask for clarification. | available  |    |
|    | S3‑230028 | Evaluation TR 33.740 Sol #1  | InterDigital, Europe, Ltd.  | 　[Huawei]: requests revision and clarification before approval. | available  |    |
|    | S3‑230029 | Evaluation TR 33.740 Sol #12  | InterDigital, Europe, Ltd.  | 　 | available  |    |
|    | S3‑230030 | Evaluation TR 33.740 Sol #13  | InterDigital, Europe, Ltd.  | 　[Huawei]: requests revision and clarification before approval. | available  |    |
|    | S3‑230031 | Evaluation TR 33.740 Sol #14  | InterDigital, Europe, Ltd.  | 　[Huawei]: requests revision and clarification before approval. | 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. | 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. | 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. | available  |    |
|    | S3‑230186 | Evaluate to the solution #20  | Huawei, HiSilicon  | 　 | 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 | available  |    |
|    | S3‑230191 | Add Evaluation for ProSe Security Sol#6  | OPPO  | 　 | available  |    |
|    | S3‑230207 | evaluation of TR33.740 Solution 8  | China Telecom Corporation Ltd.  | 　 | available  |    |
|    | S3‑230212 | evaluation of TR33.740 Solution 11  | China Telecom Corporation Ltd.  | 　 | available  |    |
|    | S3‑230215 | pCR to update TR33.740 Solution 11  | China Telecom Corporation Ltd.  | 　 | available  |    |
|    | S3‑230219 | evaluation to TR33.740 Solution 9  | China Telecom Corporation Ltd.  | 　[China Telecom] : Provided r1. | available  |    |
|    | S3‑230221 | Update to the evaluation of solution 23  | China Telecom Corporation Ltd.  | 　[China Telecom] : Provided r1. | available  |    |
|    | S3‑230234 | Update to the evaluation of solution 24  | China Telecom Corporation Ltd.  | 　[China Telecom] : Provided r1. | 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 | available  |    |
|    | S3‑230254 | Resolve EN’s in Solution #27  | Ericsson  | 　 | available  |    |
|    | S3‑230255 | Evaluation to Solution #27  | Ericsson  | 　[Nokia] : Provide comments and ask questions | available  |    |
|    | S3‑230256 | Evaluation to solution #4  | Ericsson  | 　 | available  |    |
|    | S3‑230257 | Update to solution #30  | Ericsson  | 　 | available  |    |
|    | S3‑230258 | New security solution on discovery integrated into PC5 link establishment when L3 UE-to-UE relay is in coverage  | Ericsson  | 　 | available  |    |
|    | S3‑230266 | ProSe - Evaluation Solution #10  | Philips International B.V.  | 　 | available  |    |
|    | S3‑230267 | ProSe - Editorials Solution #10  | Philips International B.V.  | 　 | available  |    |
|    | S3‑230268 | ProSe - Evaluation Solution #15  | Philips International B.V.  | 　 | 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. | 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. | 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. | available  |    |
|    | S3‑230298 | Updates to the solution #25  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230327 | EN Resolution and Evaluation of Sol #19  | Samsung  | 　[OPPO]: clarification is required.[Samsung]: provides clarification. | available  |    |
|    | S3‑230328 | EN Resolutions and Evaluation of Sol #29  | Samsung  | 　 | available  |    |
|    | S3‑230345 | pCR to TR33.740 Update Solution16 for removing ENs  | CATT  | 　 | available  |    |
|    | S3‑230346 | pCR to TR33.740 Update Solution17 for removing ENs  | CATT  | 　 | available  |    |
|    | S3‑230347 | pCR to TR33.740 Update Solution18 for removing ENs and add evaluation  | CATT  | 　 | available  |    |
|    | S3‑230348 | pCR to TR33.740 Update Solution28 for removing ENs  | CATT  | 　 | available  |    |
|    | S3‑230349 | pCR to TR33.740 Evaluation of Solution28  | CATT  | 　 | available  |    |
|    | S3‑230392 | Update to solution #8 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　 | available  |    |
|    | S3‑230393 | Update to solution #9 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　 | available  |    |
|    | S3‑230394 | Evaluation of solution #8 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　 | available  |    |
|    | S3‑230395 | Evaluation of solution #9 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　 | available  |    |
|    | S3‑230396 | Remove the Editor's Note and evaluate the solution #7 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　 | available  |    |
|    | S3‑230397 | Remove the Editor's Notes of solution #20 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　[Ericsson] : requires updates | available  |    |
|    | S3‑230398 | Evaluation of solution #30 in TR 33.740  | Beijing Xiaomi Mobile Software  | 　 | 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. | 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. | 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<< | 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 | 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<< | 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<< | 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<< | 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<< | 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<< | 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<< | 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. | available  |    |
| 5.4 |  |    |    | 　 |    |    |
| 5.5 |  |    |    | 　 |    |    |
| 5.6 | S3‑230056 | Discussion on privacy issue in AKMA  | Nokia, Nokia Shanghai Bell, Samsung  | 　 | available  |    |
|    | S3‑230057 | key issue on AKMA privacy  | Nokia, Nokia Shanghai Bell, Samsung  | 　 | 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. | 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  | 　 | 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 | available  |    |
|    | S3‑230111 | Conclusion for KI#1  | ZTE Corporation  | 　[Nokia]: asking for clarification[ZTE]: provide clarification[ZTE]: provides r1.[NDRE]: r1 OK | available  |    |
|    | S3‑230197 | add new conclusion to key issue#1  | Huawei, HiSilicon  | 　[Nokia]: disagree with the pCR[CMCC]: requests clarification.[Huawei]: provides clarifications | available  |    |
|    | S3‑230275 | Conclusion to Key Issue #1  | THALES  | 　 | 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 | available  |    |
|    | S3‑230106 | Add editors note to solution 5  | ZTE Corporation  | 　[ZTE]: provide clarifications | 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 | available  |    |
|    | S3‑230110 | AUSF stores SN ID after primary authentication in solution 6  | ZTE Corporation  | 　[Nokia]: asking for clarification[ZTE]: provide clarification | 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. | 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. | available  |    |
|    | S3‑230375 | TR 33.737 Evaluation for sol #15  | Xiaomi communications  | 　 | 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  | 　 | available  |    |
|    | S3‑230200 | Delete EN in solution#12  | Huawei, HiSilicon  | 　 | 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 | available  |    |
|    | S3‑230113 | Add conclusion to KI#1  | ZTE Corporation  | 　 | available  |    |
|    | S3‑230291 | Proposed addition to the conclusions  | Qualcomm Incorporated  | 　[Deutsche Telekom] : Supports the proposed addition to the conclusion.[Nokia] : ask for clarification | available  |    |
| 5.8 | S3‑230262 | LS on data and analytics exchange in roaming case in eNA  | China mobile  | 　 | 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 | 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 | available  |    |
|    | S3‑230240 | ENs resolving and evaluation for solution #10  | Ericsson  | 　[Huawei]: propose to revise. | 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. | 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 | 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 | 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 | available  |    |
|    | S3‑230343 | Solution for authorization in FL  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: requires updates[Nokia]: provides clarifications and -r1 | available  |    |
|    | S3‑230123 | New solution to KI#5  | China Telecommunications  | 　 | 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. | available  |    |
|    | S3‑230080 | New solution addressing KI#6  | Lenovo, Nokia  | 　[QC] Propose to note.[Lenovo]: provides clarifications to the concerns | 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 | available  |    |
|    | S3‑230342 | Adding conclusion on KI#1  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: requires updates[Nokia]: provides clarifications | available  |    |
|    | S3‑230189 | Conclusion for KI#2  | Intel  | 　[Ericsson]: requires updates | 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 | available  |    |
|    | S3‑230265 | Conclusion for key issue#5  | China mobile  | 　 | 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 | available  |    |
|    | S3‑230228 | Conclusion for KI#2.1  | Ericsson  | 　>>CC\_1<<[Ericsson] presents.>>CC\_1<< | available  |    |
|    | S3‑230333 | Conclusion for KI#2.1  | Samsung  | 　>>CC\_1<<[Samsung] presents.>>CC\_1<< | 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<< | available  |    |
|    | S3‑230224 | A new solution for EEC authentication utilizing tokens  | Ericsson  | 　 | 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  | 　 | 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<< | available  |    |
|    | S3‑230202 | Conclusion for KI 2.2 of EDGE Security  | OPPO  | 　>>CC\_1<<[Oppo] presents.>>CC\_1<< | available  |    |
|    | S3‑230229 | Conclusion for KI#2.2  | Ericsson  | 　>>CC\_1<<[Ericsson] presents.>>CC\_1<< | 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. | available  |    |
|    | S3‑230378 | Conclusion for KI 2.2 Authentication mechanism selection between EEC and ECSEES  | Xiaomi communications  | 　>>CC\_1<<[Xiaomi] presents.>>CC\_1<< | available  |    |
|    | S3‑230115 | Add evaluation to solution #6  | ZTE Corporation  | 　 | 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  | 　 | available  |    |
|    | S3‑230161 | Evaluation to solution 16  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230192 | Address an EN in Sol #11  | OPPO  | 　 | available  |    |
|    | S3‑230204 | Resolving ENs in solution #9 of EDGE security  | OPPO  | 　 | available  |    |
|    | S3‑230206 | Resolving ENs in solution #10 of EDGE security  | OPPO  | 　 | available  |    |
|    | S3‑230208 | Resolving ENs in solution #11 of EDGE security  | OPPO  | 　 | available  |    |
|    | S3‑230210 | Address an EN in Sol #9 of EDGE security  | OPPO  | 　 | available  |    |
|    | S3‑230211 | Address an EN in Sol #10 of EDGE security  | OPPO  | 　 | available  |    |
|    | S3‑230213 | Address some ENs in Sol #11 of EDGE security  | OPPO  | 　 | available  |    |
|    | S3‑230214 | Add evaluation in Sol#11 of EDGE security  | OPPO  | 　 | 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. | available  |    |
|    | S3‑230288 | Providing evaluation for solution #22  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230332 | Evaluation for solution#22  | Samsung  | 　 | available  |    |
|    | S3‑230289 | Common authentication method between EEC and ECS/EES  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230329 | Resolving EN in solution#3 (TR 33.739)  | Samsung  | 　 | available  |    |
|    | S3‑230330 | Resolving EN and updating evaluation in solution#4 (TR 33.739)  | Samsung  | 　 | available  |    |
|    | S3‑230379 | TR 33.379 Evaluation for Sol #5  | Xiaomi communications  | 　 | available  |    |
|    | S3‑230381 | TR 33.379 Resolve ENs for Sol #5  | Xiaomi communications  | 　 | 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 | 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. | available  |    |
|    | S3‑230308 | MEC - Discussion paper on enformcement of AF specific identifier  | Apple  | 　[Nokia]: Requests clarification | available  |    |
|    | S3‑230309 | MEC - LS to SA2 on enforcement of AF specific identifier  | Apple  | 　[Nokia]: Requests clarification | 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  | 　 | 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 | available  |    |
|    | S3‑230100 | Adding the overview of the EDGE  | Huawei, HiSilicon  | 　 | available  |    |
| 5.1 | S3‑230042 | New solution for PINE authentiation with information provided by PEMC  | vivo  | 　 | available  |    |
|    | S3‑230043 | New solution for conditional PINE authorization by PEMC  | vivo  | 　 | available  |    |
|    | S3‑230044 | New solution for PINE authentiation over 5G UP  | vivo  | 　 | available  |    |
|    | S3‑230079 | KI#1 New Sol for local PINE authentication  | Nokia, Nokia Shanghai Bell  | 　 | 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  | 　 | available  |    |
|    | S3‑230157 | Addressing the editor's note in solution 1  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230305 | Resolution of EN#1 in Solution#7 for KI#1  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230306 | Resolution of EN#2 in Solution#7 for KI#1  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230385 | TR 33.882 Resolve ENs for sol #5  | Xiaomi communications  | 　 | available  |    |
|    | S3‑230046 | Evaluation on Sol#6  | vivo  | 　 | available  |    |
|    | S3‑230118 | Add evaluation for solution#4  | ZTE Corporation  | 　 | available  |    |
|    | S3‑230269 | PIN - Evaluation Solution #4  | Philips International B.V.  | 　 | available  |    |
|    | S3‑230047 | Interim conclusions on KI#1  | vivo  | 　[Thales]: asks question for clarification[vivo]: replies | available  |    |
|    | S3‑230116 | Add conclusion for KI#1  | ZTE Corporation  | 　 | available  |    |
|    | S3‑230201 | Propose conclusion to KI#1  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230117 | Add conclusion for KI#2  | ZTE Corporation  | 　 | available  |    |
| 5.11 | S3‑230337 | Update of Key Issue #2  | Samsung  | 　[Samsung] : provides clarification | available  |    |
|    | S3‑230172 | Address EN for solution 1: onboarding  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230173 | Address EN for solution 1: detail for token  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230174 | Address EN for solution 1: authorization decision  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230175 | Evaluation Update on Solution 1  | Huawei, HiSilicon  | 　[Nokia] : requests update to the evaluation of sol1 | available  |    |
|    | S3‑230421 | pCR to 33.884 updating solution #2  | NTT DOCOMO INC.  | 　[Nokia] : requests clarification. | available  |    |
|    | S3‑230074 | Sol#3 Resolution of EN on root certificate provisioning  | Nokia, Nokia Shanghai Bell  | 　 | 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  | 　 | 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 | 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. | 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. | 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. | available  |    |
|    | S3‑230176 | New Solution on OAuth2.0 Token Revocation  | Huawei, HiSilicon  | 　[Samsung] : requests clarification before approval.[Huawei] : clarification.[Samsung] : requests revision before approval | 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. | 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 | available  |    |
|    | S3‑230339 | New Solution on Resource owner Authorization in API Invocation  | Samsung  | 　[Huawei] : requests clarification before approval.[Samsung] : provides clarification | 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. | 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. | available  |    |
|    | S3‑230391 | KI#2, New Sol UE credential based API invocation procedure  | Xiaomi communications  | 　[Huawei] : requests clarification before approval.[Xiaomi] : provides r1. | available  |    |
|    | S3‑230422 | pCR to 33.884 adding new solution: PKCE flow  | NTT DOCOMO INC.  | 　 | 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. | 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 | 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 | available  |    |
|    | S3‑230178 | Conclusion for key issue #2  | Huawei, HiSilicon  | 　[Nokia] : requests update to proposed conclusions. | 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. | available  |    |
| 5.12 | S3‑230085 | Discussion on KI#1  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230061 | Update to KI#1 Providing VPLMN slice information to roaming UE  | Lenovo  | 　 | available  |    |
|    | S3‑230086 | KI#1 update  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230121 | Update to KI#1 providing VPLMN slice information to roaming UE  | ZTE Corporation  | 　 | available  |    |
|    | S3‑230276 | Key Issue #1  | THALES  | 　[Huawei] : disagrees with removing security threats in this contribution. | available  |    |
|    | S3‑230062 | Solution to KI#1 eNS  | Lenovo  | 　 | available  |    |
|    | S3‑230088 | New solution to KI#1  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230119 | New solution to KI#1 protecting SoR container from UDM to UE  | ZTE Corporation  | 　 | available  |    |
|    | S3‑230120 | New solution to KI#1 protecting UE assistance information  | ZTE Corporation  | 　 | available  |    |
|    | S3‑230249 | update to KI#2 temporary network slice  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230387 | KI #2 update for partly allowed rejected S-NSSAI  | Xiaomi communications  | 　 | available  |    |
|    | S3‑230250 | solution for KI#2 temporary network slice for NSSAA  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230388 | New Sol on authorization mechanism for partly rejected S-NSSAI  | Xiaomi communications  | 　 | available  |    |
|    | S3‑230087 | Update to KI#3  | Huawei, HiSilicon  | 　 | 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  | 　 | 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. | available  |    |
|    | S3‑230090 | New solution to prevent S-NSSAI leakage  | Huawei, HiSilicon  | 　 | available  |    |
| 5.13 | S3‑230054 | solution 5 update  | Nokia, Nokia Shanghai Bell, Lenovo  | 　 | available  |    |
|    | S3‑230055 | solution 6 update  | Nokia, Nokia Shanghai Bell, Lenovo  | 　 | available  |    |
|    | S3‑230063 | Evaluation to Solution #8  | Lenovo  | 　 | available  |    |
|    | S3‑230193 | A new solution on KI#4  | Huawei, HiSilicon  | 　[Nokia]: ask for clarification[Huawei]: replies to Nokia | 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 | available  |    |
|    | S3‑230286 | Evaluation of solution #7  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230416 | Key issue on authentication of N5CW devices behind RG  | CableLabs, Nokia, Nokia Shanghai Bell, Rogers Communications  | 　 | available  |    |
|    | S3‑230417 | Key issue on authentication of UE behind RG  | CableLabs, Rogers Communications  | 　 | 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. | 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  | 　 | available  |    |
|    | S3‑230048 | Draft New WID on Security aspect of 5WWC  | Nokia, Nokia Shanghai Bell  | 　 | 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  | 　 | available  |    |
| 5.14 | S3‑230409 | New Key issue on the security of the information transfer of the RAN AI/ML framework  | Ericsson  | 　 | available  |    |
|    | S3‑230410 | KI2 conclusion  | Ericsson  | 　[Nokia] : Propose to note. | 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  | 　 | available  |    |
|    | S3‑230096 | Adding conclusion on KI#2  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230290 | Conclusion for key issue #1  | Qualcomm Incorporated  | 　[Huawei]: proposes r1 to merge S3-230093[Ericsson]: Proposes r2.[Huawei]: requires further clarification. | available  |    |
|    | S3‑230412 | Resolve\_EN\_solution#5  | Ericsson  | 　[Huawei]: requires clarification | 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<< | available  |    |
|    | S3‑230232 | Solution to KI#1 – NSWO in SNPN with CH AUSF/UDM  | Ericsson  | 　 | 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 | available  |    |
|    | S3‑230304 | Solution to KI#1 – NSWO in SNPN with CH AAA  | Qualcomm Incorporated  | 　[Nokia]: Requires clarifications before acceptable. | 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<< | available  |    |
|    | S3‑230323 | Discussion paper concerning conclusion of KI#1  | Nokia, Nokia Shanghai Bell  | 　 | 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. | available  |    |
|    | S3‑230122 | Add a new solution to KI#2  | ZTE Corporation  | 　[Thales]: provides comments and proposes changes. | available  |    |
|    | S3‑230190 | Add Usecases to Solution 10  | Intel  | 　[Ericsson]: requires updates | 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  | 　 | available  |    |
|    | S3‑230246 | Update of Solution #11: Resolving Editor's Note in the evaluation  | Ericsson  | 　 | available  |    |
|    | S3‑230247 | Conclusion for KI#2 "Authentication for UE access to hosting network"  | Ericsson  | 　[Thales]: provides comments and proposes changes. | available  |    |
|    | S3‑230319 | Evaluation of solution #12  | Nokia, Nokia Shanghai Bell  | 　[Thales]: provides comments and proposes changes. | 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<< | available  |    |
|    | S3‑230324 | Discussion paper concerning conclusion of KI#2  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230036 | Key issue on SN Name binding for Kausf in SNPN using AAA server for primary authentication  | InterDigital Communications  | 　[Ericsson]: Needs update | 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<< | 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. | 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<< | 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 | 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<< | 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<< | 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<< | 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. | 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. | available  |    |
|    | S3‑230155 | update the evaluation in solution 1  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230156 | conclusion on key issue 1  | Huawei, HiSilicon  | 　 | 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. | available  |    |
|    | S3‑230272 | Ranging - New solution KI#1, #2, #3  | Philips International B.V.  | 　 | 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. | available  |    |
|    | S3‑230358 | 33.893: Additional Evaluation for Solution #1  | Xiaomi Technology  | 　 | 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 | available  |    |
|    | S3‑230154 | update to solution 3  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230259 | New solution with authorization tokens exchanged after PC5 security establishment  | Ericsson  | 　 | available  |    |
|    | S3‑230260 | Update of evaluation to solution #2  | Ericsson  | 　 | available  |    |
|    | S3‑230261 | Update of evaluation to solution #3  | Ericsson  | 　 | available  |    |
|    | S3‑230359 | 33.893: Update to Solution #2  | Xiaomi Technology  | 　 | available  |    |
|    | S3‑230360 | 33.893: Resolve the Editor’s Note in Solution #4  | Xiaomi Technology  | 　 | 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 | 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. | 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  | 　 | 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  | 　 | 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. | 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  | 　 | 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 | 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<< | 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. | available  |    |
| 5.2 | 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. | 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”. | 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”. | 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 | 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 | available  |    |
|    | S3‑230220 | New solution on authorization for 5GC assistance information exposure to internal AF  | OPPO  | 　[Ericsson]: requires update | available  |    |
|    | S3‑230223 | New solution on privacy protection for 5GC assistance information exposure to AF  | OPPO  | 　[Nokia]: ask for clarification | 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. | 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 | 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. | 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<< | available  |    |
|    | S3‑230168 | User consent for roaming scenarios where the data source is in vPLMN  | Huawei, HiSilicon  | 　[Ericsson]: Asks for clarification. | available  |    |
|    | S3‑230169 | User consent for roaming scenarios where the data source is in hPLMN  | Huawei, HiSilicon  | 　[Ericsson]: Asks for clarification. | 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<< | 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. | available  |    |
|    | S3‑230370 | 33.896: Evaluation for Solution #1  | Xiaomi Technology  | 　 | available  |    |
|    | S3‑230371 | 33.896: Evaluation for Solution #2  | Xiaomi Technology  | 　 | 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  | 　 | available  |    |
|    | S3‑230408 | Conclusion on Key Issue #1 in TR 33.896  | Beijing Xiaomi Mobile Software  | 　>>CC\_2<<[Xiaomi] presents.>>CC\_2<< | available  |    |
|    | S3‑230414 | KI and Solution on user consent in roaming  | Nokia, Nokia Shanghai Bell  | 　[Ericsson]: propose to note[Nokia]: provides clarification and -r1. | 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. | 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. | available  |    |
|    | S3‑230149 | A new solution to address the privacy issue with TMGI  | Huawei, HiSilicon  | 　 | available  |    |
|    | S3‑230150 | conclusion on key issue 2  | Huawei, HiSilicon  | 　 | 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. | available  |    |
|    | S3‑230152 | Discussion paper on way forward of key issue#1  | Huawei, HiSilicon  | 　 | 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. | available  |    |
|    | S3‑230302 | A new solution for mitigating privacy attacks exploiting group paging with TMGI  | Qualcomm Incorporated  | 　 | available  |    |
|    | S3‑230335 | Updates to solution#1 in TR 33.883  | Samsung  | 　 | 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. | 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. | 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  | 　 | available  |    |
|    | S3‑230129 | KI1 analysis update  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230130 | KI3 sol12 EN resolution  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230131 | KI4 analysis and conclusion update  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230132 | KI3 sol15 EN resolution  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230133 | KI5 sol16 EN resolution  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230134 | KI6 conclusion update  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230135 | KI7 Sol17 EN resolution  | Nokia, Nokia Shanghai Bell  | 　 | available  |    |
|    | S3‑230136 | KI8 conclusion update  | Nokia, Nokia Shanghai Bell  | 　 | 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 | available  |    |
|    | S3‑230314 | New Solution to KI #11 based on O&M Provisioning NRF with NFc profile  | Ericsson LM  | 　[Mavenir]: Object to this contribution | 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. | 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. | available  |    |
|    | S3‑230021 | KI10 solution 25 update on security profiles  | BSI (DE), Nokia, Nokia Shanghai Bell  | 　 | 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) | available  |    |
|    | S3‑230141 | KI12 Hosted SEPP solution  | Nokia, Nokia Shanghai Bell  | 　[BSI] : Provides revision 1 in drafts folder. | 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. | 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. | 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. | 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. | available  |    |
|    | S3‑230019 | Key Issue for NAS UE Registration Procedure  | Nokia, Nokia Shanghai Bell  | 　 | 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. | 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. | available  |    |
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| 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  |    |