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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Agenda**  | **Topic**  | **TDoc** | **Title**  | **Source**  | **Type**  | **Notes** | **Decision**  | **Replaced-by**  |
| 1 | Agenda and Meeting Objectives  | S3‑221310 | Agenda  | SA WG3 Chair  | agenda  |  | approved |    |
|    |    | S3‑221311 | Process for SA3#107e meeting  | SA WG3 Chair  | other  | 　 | noted  |    |
|    |    | S3‑221312 | Process and agenda for SA3#107e  | SA WG3 Chair  | other  | >>CC\_1<<[Chair] presents current status>>CC\_1<< | noted  |    |
| 2 | Meeting Reports  |  |    |    |    | 　 |    |    |
| 3 | Reports and Liaisons from other Groups (related to studies in the agenda)  | S3‑221315 | LS on user’s consent for EDGEAPP  | C3-223780  | LS in  | >>CC\_1<<[Rapporteur] presents[Huawei] there are two related LS reply, proposes to give reply to CT3 based on Huawei’s contribution.>>CC\_1<< | postponed |    |
|    |    | S3‑221476 | [DRAFT] Reply LS on user’s consent for EDGEAPP  | Ericsson  | LS out  | >>CC\_1<<[Ericsson] presents>>CC\_1<<[Ericsson] : provides more information[Huawei]: provides response.[Apple]: Request modification.[Ericsson]: Provides explanation[Huawei]: give response and way forward.[Apple]: Provide clarification and concrete text in the reply.>>CC\_4<<[Ericsson] presents current status, considers Q3 could be convergence, but not Q2.[Apple] requests to discuss two question both[Thales] comments[Huawei] has provided proposal to revise.[Chair]: Request Ericsson to provide a revision based on the agreements so far.>>CC\_4<<[Ericsson] : provides r1[Apple] : Not OK with r1, provides r2.[Ericsson] : Not OK with r2[Ericsson] : provides r3[Apple] : Disagree with r3 | noted  |    |
|    |    | S3‑221420 | Reply LS on User Consent for EDGEAPP  | Huawei, HiSilicon  | LS out  | >>CC\_1<<[Huawei] presents, proposes to merge and take 1420 as baseline.Discussion between [Huawei] and [Ericsson].[Ericsson] volunteers to hold the pen.>>CC\_1<<[Ericsson] : proposes to merge into 1476 and close this email thread | noted |    |
|    |    | S3‑221317 | LS on V2X PC5 link for unicast communication with null security algorithm  | R5-222035  | LS in  | >>CC\_1<<[Huawei] presents, but with bad connection.[Lenovo] presents. proposes to merge two draft proposals to reply.[QC] points out there is CT1 reply, proposes to include CT1 LS into agenda and consider it also while replying to the LS.Chair asks MCC to include CT1 LS. (assigned as S3-221587)Chair asks to continue email discussion.>>CC\_1<< | replied to  |   1535 |
|  |  | S3-221587 | Reply LS on V2X PC5 link for unicast communication with null security algorithm  | C1-223972 | LS in |  | replied to  |   1535 |
|    |    | S3‑221405 | Reply LS about V2X PC5 unicast link with null security algorithm  | Huawei, HiSilicon  | LS out  | >>CC\_1<<Related with 1317>>CC\_1<< | merged | 1535   |
|    |    | S3‑221535 | DRAFT Reply LS on V2X PC5 link for unicast communication with null security algorithm  | Lenovo  | LS out  | >>CC\_1<<Related with 1317>>CC\_1<<[Lenovo]: Provides revision r1.[Huawei, HiSilicon]: Fails to find r1.[Lenovo]: Provides revision r1 (upload error before).[Ericsson]: Could not find r1.[Ericsson]: CR is still referred.[Lenovo]: provides revision 2, removing the Cr reference.[Huawei, HiSilicon]: provides comments to r2 and propose to direct answer key question from RAN5.[Ericsson]: r2 ok.[Lenovo]: provides clarifications to Huawei comments.[Huawei, HiSilicon]: reply to Lenovo.[Qualcomm]: provides some input[Lenovo]: asks for clarification on the protection[Huawei, HiSilicon]: fine with the version from QC and reply to Lenovo. Provide r3.[Lenovo]: fine with rev3[Ericsson]: rev4 uploaded[Lenovo]: fine with rev4>>CC\_4<<[Lenovo] presents current status.[Chair]: minor editorials before sending out.>>CC\_4<<[Huawei, HiSilicon]: fine with r4[Qualcomm]: r4 is OK (but notes there is an editorial)[Lenovo]: will fix the editorial in the final version | approved |   R4 |
|    |    | S3‑221584 | Null algorithm is not security deactivation  | Lenovo  | draftCR  | >>CC\_1<<Related with 1317>>CC\_1<<[Huawei, HiSilicon]: propose to move the discussion under either S3-221535 or S3-221405. Not sure the CR is within scope. This can be revisited after the related LS have a consensus. | noted |    |
|    |    | S3‑221393 | Reply LS on Clarification on MBS Security Keys  | Huawei, HiSilicon  | LS out  | >>CC\_1<<[Huawei] presents current status.[Nokia] comments rewording is needed.[QC] comments the answer is not correct.[Samsung] comments from email.[Huawei] is open to discuss via email.Chair requests to keep email discussion.>>CC\_1<<[Samsung]: Asks for revision[Huawei]: provides r1[Samsung]: Suggests further updates[Huawei]: provides r2[Samsung]: Fine with r2[Nokia]: Fine with r2.[Ericsson]: Ok with r2.[Qualcomm]: is fine with r2>>CC\_4<<[Huawei] presents current status,>>CC\_4<< | approved | R2   |
|    |    | S3‑221316 | LS to 3GPP CT4 on Identification of source PLMN-ID in SBA  | GSMA  | LS in  | 　 | withdrawn  |    |
|    |    | S3‑221536 | Null algorithm is not security deactivation  | Lenovo  | CR  | 　 | withdrawn  |    |
| 4 | Work areas (No normative work included in this meeting)  |  |    |    |    | 　 |    |    |
| 5 | Studies areas  |  |    |    |    | 　 |    |    |
| 5.1 | Study on 5G security enhancement against false base stations  | S3‑221364 | Addressing the editor’s note in 6.27.2.1.1 of Sol#27  | CableLabs, Deutsche Telekom, Philips International B.V.  | pCR  | 　[Qualcomm]: cannot agree with this contribution | noted  |    |
|    |    | S3‑221366 | Addressing EN on NR Repeater in 6.27.2.2.4 of Sol#27  | CableLabs  | pCR  | 　[Nokia]: OK.[Qualcomm]: does not agree with this contribution | noted |    |
|    |    | S3‑221368 | Addressing the editor’s note in 6.27.2.2.1of Sol#27  | CableLabs, Deutsche Telekom, Philips International B.V.  | pCR  | 　[Nokia]: Asks clarifications for the solution.[Qualcomm]: does not agree with this contribution | noted |    |
|    |    | S3‑221370 | LS out on authenticity and replay protection of system information  | CableLabs, Deutsche Telekom, Philips International B.V., Ericsson, InterDigital, Apple, Johns Hopkins University APL, NIST  | LS out  | >>CC\_1<<[CableLabs] presents.[Nokia] is ok with contribution, but a question whether 64 bytes are only choice?[CableLabs] replies 64bytes is just an example.[Nokia] asks to revise to reduce possible misunderstanding.[QC] doesn’t agree. There is no need to send LS to RAN.[Apple] replies to QC. It helps. And supports to send LS[Docomo] comments on question 1. It needs to figure out what is the length of signature, not just an example. And asks questions. Proposes to revise Q1.[Huawei] is fine with proposal in general, but Q2 is not clear. Need to be clarified.[Samsung] supports[Intel] supports. Proposes to put reference to the TR solutions while referring to solutions in the LS.[IDCC] supports, but be careful while asking RAN about quantum safe algo. It is SA3 job.[Docomo] replies to IDCC. Wants to know the limit of length the length of key that can be accommodated, not on Quantum safe algorithms itself..[CableLabs] replies, agrees to reformulate the questions[QC] comments, when solutions are not agreed or not feasible what is the point in asking the questions to RAN2..Chair request to continue email discussion.>>CC\_1<<[Nokia]: Agree, but asks clarifications.[CableLabs]: provided -r1[Apple]: Fine with r1[Philips]: Fine with r1. Provides some comments.[Nokia]: Fine with r1.[Samsung]: Fine with r1. Asks for clarification.[CableLabs]: provided r2 and further clarification.[Huawei]: provides comment.[Samsung]: Fine with r2[CableLabs]: provided -r3 based on comments from Huawei.[Huawei]: fine with r3.[Qualcomm]: proposes to note this original outgoing LS and revisions[Apple]: provides clarification to Qualcomm.>>CC\_4<<[CableLabs] presents current status.[QC] comments the digital signature is not well described, e.g. not mention quantum safe.[CableLabs] clarifies quantum safe topic should be in SA3 scope rather than RAN group.Discussion between [QC] and [CableLabs][DT] questions why quantum safe is important.[QC] clarifies.[Philips] supports to send LS to get input from RAN side.[Apple] considers QC’s arguments leads to sending LS out. Supports to send LS out.[Docomo] considers the reference is not convenience for reader. Requests to show clear length value range.[Samsung] supports to send LS out. [Nokia] supports to send LS out and keep quantum safe aside.[IDCC] supports to send LS out.[QC] comments on detailed solution, requests not to mention solution, to make question more general, either existing SIB like SIB1 or a totally new SIBChair asks Cablelabs to revise to remove ref to solutions in the TR and keep questions general on the space available on the SIB.[CableLabs] will prepare r4.>>CC\_4<<[CableLabs]: provides -r4, based on the comments from Qualcomm in CC#4.[Qualcomm]: provides r5[CableLabs]: fine with r5[Apple]: fine with r5.[Huawei]: fine with r5.[Deutsche Telekom] : fine with -r5[Qualcomm]: provides r6.[Samsung]: Fine with r6. Samsung would like to co-sign this LS.[Deutsche Telekom] : fine with -r6 | approved |   R6 |
|    |    | S3‑221371 | Evaluation of solution #4  | Huawei, HiSilicon, Ericsson, Apple, Philips  | pCR  | >>CC\_1<<[Huawei] presents the content and current status[QC] comments the status is not correct.[Apple] comments the current content comes from RAN, if there is more evaluation, it could bring contribution to add.[QC] request to keep EN.[Docomo] questions about other Tdoc# and WG names in evaluation part.MCC suggest to revise the text.[Huawei] replies.[QC] comments to let Huawei prepare a revision to implement comments and then add their comment.>>CC\_1<<[Nokia]: OK with the contribution.[Huawei]: provide r1 based on comments in CC#1.[Qualcomm]: r1 requires changes. Provides r2.[Huawei]: provides r3.[Qualcomm]: objects to r3.[Huawei]: responses to Qualcomm’s comments. | noted |    |
|    |    | S3‑221464 | 5GFBS - Security risk in lower layers  | Apple  | pCR  | 　[Nokia]: Agree with minor re-wording.[Ericsson]: Proposes to note.[Huawei]: Proposes to note.[Apple]: request clarification from Ericsson.[Apple]: Provide feedback to Huawei and ask for further clarification.[Qualcomm]: Proposes to note. | noted |    |
|    |    | S3‑221572 | Detection of MitM attacks with secret paging  | Lenovo  | pCR  | 　[Nokia]: Do not agree and ask for clarification.[Ericsson]: Proposes to note.[Lenovo]: provides clarification.[Nokia]: Proposes to note the contribution.[Lenovo]: provides clarification to Nokia and Ericsson comments.[Qualcomm]: proposes to note this contribution[Lenovo]: requests clarification from Qualcomm | noted |    |
| 5.2 | Study on Security Impacts of Virtualisation  | S3‑221318 | Solution 5 EN on Certificates and Tokens  | U.S. National Security Agency  | pCR  | 　[Ericsson]: proposes to capture relevant part of the rationale in the evaluation>>CC\_1<<[US NSA] will revise with comments tomorrow.[Docomo] It is weird about 1st EN.[US NSA] clarifies.[Nokia] comments.[Huawei] comments to have some evaluation before simply removal of EN.>>CC\_1<<[Huawei]: agree with Ericsson and also propose to capture the text in the evaluation part[JHU]: proposes EN be removed because it is not applicable to solution 5[US NSA]: Agrees with JHU and offers r1 in response to Docomo’s comment about EN1[Ericsson]: ok to remove EN[Ericsson]: ok to remove EN[Nokia]: provides comment on original scope of the EN[US NSA]: Clarifies original scope of the EN | approved | R1   |
|    |    | S3‑221337 | Updates to Solution #5  | Johns Hopkins University APL, US National Security Agency, CableLabs, InterDigital, AT&T, CISA ECD  | pCR  | 　[Ericsson]: Changes proposed -r1 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221377-r1\_Updates\_to\_Solution5.doc} .>>CC\_1<<[JHU] presents[Ericsson] r1 is uploaded and asks to check.[Huawei] comments with bad connection.Chair request to continue discussion over email.>>CC\_1<<[Nokia]: asks for clarification.[Ericsson]: Changes proposed -r2 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221377-r2\_Updates\_to\_Solution5.doc} .[JHU]: provides clarification and propose r3.[Huawei]: Disagree the original document and the latest version r3. Requires further clarification and changes.[JHU]: fixes the document filename, provides further clarification, and provides r4 {https://www.3gpp.org/ftp/TSG\_SA/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221337-r4\_Updates\_to\_Solution5.doc}[Huawei]: propose to note or add the editor’s notes proposed.[JHU]: proposes r5 to add EN for NFs that do not register and requests approval.[Huawei]: accept r5. | approved |   R5 |
|    |    | S3‑221338 | Address EN on Run-time Attestation  | Johns Hopkins University APL, US National Security Agency, CableLabs, InterDigital, AT&T, CISA ECD  | pCR  | >>CC\_1<<[JHU] presents.[Huawei] proposes to move run-time attestation related wording from evaluation.[Docomo] comments run-time wording is not clear.[JHU] clarifies.>>CC\_1<<[Huawei]: proposes to remove all run-time related description in the solution[JHU]: proposed r1[Huawei]: ok with r1[Ericsson]: ok with r1 | approved |   R1 |
|    |    | S3‑221339 | Remove EN in clause 6.6.3.4  | Johns Hopkins University APL, US National Security Agency, CableLabs, InterDigital, AT&T, CISA ECD  | pCR  | >>CC\_1<<[JHU] presentsChair requests to continue email discussion>>CC\_1<<[Huawei]: propose to note or further revisions to adress our concerns[JHU]: provides r1[Huawei]: further comments[JHU]: provides r2[Huawei]: still have concern on r2[JHU]: provides clarification[Huawei]: responses and proposes to note | noted |    |
|    |    | S3‑221392 | Update of KI #3 to contribute an EN  | Huawei, HiSilicon  | pCR  | >>CC\_1<<[Huawei] presents.Chair requests to continue email discussion>>CC\_1<<[Huawei]: Revision is uploaded.[BT Plc]: Object to new requirement in 5.4.3. Rewording may be possible.[Huawei]: provides r1 by removing the editor’s note. | noted  |    |
|    |    | S3‑221404 | evaluation on solution 5  | Huawei, HiSilicon  | pCR  | >>CC\_1<<[Huawei] presents[JHU] comments 1337 can address some evaluation made in this contribution.>>CC\_1<<[JHU]: provides r1[Huawei]: provides r2 and give the feedback.[JHU]: request r2 to be uploaded so that it can be reviewed[Huawei]: upload r2.[JHU]: Accepts r2 | approved |   R2 |
|    |    | S3‑221485 | New solution on boot time attestation at 3GPP function level  | Huawei, HiSilicon  | pCR  | >>CC\_1<<[Huawei] presents[JHU] concerns. Some ENs are needed.[Thales] comments. Clarification is needed and proposes to note this one.Chair asks to continue discussion.>>CC\_1<<[JHU]: agrees with Thales and proposes to note. Solution does not seek to meet KI#13 requirements.[Huawei]: provides further clarifications and ask for approval.[Huawei]: requires technical comments from Thales.[Thales]: provides comments and proposes to note.[Huawei]: responses to Thales comments and ask for re-consideration.[JHU]: proposes to note.[Huawei]: responses | noted |    |
|    |    | S3‑221486 | New solution on trust domain and slice Isolation  | Huawei, HiSilicon  | pCR  | >>CC\_1<<[Huawei] presents.Chair asks to continue discussion.>>CC\_1<<[Ericsson]: more info needed[Huawei]: provides clarifications | approved |    |
| 5.3 | Study on Security Aspects of Proximity Based Services in 5GS Phase 2  | S3‑221330 | Key issue on Privacy protection over the UE-to-UE Relay  | InterDigital, Europe, Ltd.  | pCR  | 　[Interdigital] : call for merger (6 papers)[ZTE]: Agree to merge S3-221429 to S3-221330 [Huawei, HiSilicon]: Fine with the merging plan, but not include 1425..[ChinaTelecom]: Agree with the merging plan,[CATT]: Agree to merge S3-221496 into S3-221330.[Huawei, HiSilicon]: Provide r1 to reflect the merged docs.[Interdigital]: closing this thread: merged into S3-221419 | merged  | 1419   |
|    |    | S3‑221331 | Key Issue on Authorization in the UE-to-UE Relay Scenario  | InterDigital, Europe, Ltd.  | pCR  | 　[Interdigital] : call for merger (5 papers)[ZTE]: Agree to merge S3-221427 to S3-221331.[ChinaTelecom]: Agree to merge S3-221421 to S3-221331.[CATT]: Agree to merge S3-221495 into S3-221331[Huawei, HiSilicon]: Agree with the merging plan.[Interdigital]: declares merger in S3-221331-r1[Huawei, HiSilicon]: fine with r1.[Philips] Request to add requirement about out-of-coverage[Nokia]: provide comment.[CATT]: Provide comment on the problem raised by Nokia.[Nokia]: further comment on proposal of CATT.[ChinaTelecom]: Provide comment on proposal of Nokia.[Interdigital]: provides r2.[CATT]: Provide another concrete proposal for discussion.[Interdigital]: replies to CATT proposal[Ericsson]: supports CATT proposal[Interdigital]: provides r3[CATT]: Fine with r3.[Qualcomm]: fine with r3.[Huawei, HiSilicon]: ok with r3[ZTE]: Fine with R3.[Ericsson]: we are fine with R3.[ChinaTelecom]: fine with r3.[Philips]: fine with r3. Will come back with architecture assumption on out-of-coverage UE-to-UE relay operation in next meeting. | approved  |   R3 |
|    |    | S3‑221332 | Key Issue on Security of UE-to-UE Relay  | InterDigital, Europe, Ltd.  | pCR  | 　[Interdigital] : call for merger (6-7 papers)[ZTE]: Agree to merge S3-221428 to S3-221332. [Huawei, HiSilicon]: Agree to merge S3-221383 to S3-221332.[ChinaTelecom]: Agree to merge S3-221422 to S3-221332.[Xiaomi]: Agree to merge S3-221549 to S3-221332.[CATT]: Agree to merge SS3-221491 into S3-221332[Interdigital]: declares merger in S3-221332-r1[Nokia]: basically support with one comment and one question for clarification.[Xiaomi]: provides comments and responses[Huawei, HiSilicon]: Fine with r1.>>CC\_3<<[CATT] presents r1 and comments similar with 1503[IDCC] has similar view with CATT, asks to merge.[Oppo] considers this is about communication but 1503 is about link establishment[IDCC] proposes to add link establishment in requirement.Discussion between [Oppo] and [IDCC]Chair is asks, what is the way forward, to merge, to revise wording or add new requirement?[CATT] asks whether Oppo requests new requirement or new KI.[Oppo] confirms additional requirement rather than key issue.>>CC\_3<<[Interdigital]: provides r3. (r2 skipped as r1 had wrong file name r2).[OPPO]: provides r4.[Qualcomm]: identifies r3 and r4 have problems. Thus, we provide r5[CATT]: CATT is fine with r5.[Huawei, HiSilicon]: fine with r5.[Nokia]: comment on r5.[Xiaomi]: generally fine with R5 except security threats[ZTE]: Fine with R5.[OPPO]: is not fine with R5[Interdigital]: OK with R5[OPPO]: seeks clarification[Interdigital]: clarifies.[OPPO]: replies.[Qualcomm]: provides r6 (but prefers r5)[OPPO]: provides r7.[ZTE]: Provide comments[Qualcomm]: provides further clarifications for r6 and asks a question to OPPO[CATT]: Provide r8.[Interdigital]: OK with r8.[Qualcomm]: is fine with r8[Xiaomi]: ok with r8[OPPO]: accepts R8.[ChinaTelecom]: fine with r8.[Huawei, HiSilicon]: fine with r8.[ZTE]: Fine with R8.[ZTE]: Fine with R8. | approved | R8   |
|    |    | S3‑221383 | Integrity and confidentiality of information over the UE-to-UE Relay  | Huawei, HiSilicon  | pCR  | 　[Huawei, HiSilicon]: This contribution is merged into S3-221332. | merged | 1332   |
|    |    | S3‑221406 | New Key Issue on security of ProSe groupcast communications  | Huawei, HiSilicon  | pCR  | 　[Qualcomm]: propose to note this contribution | noted |    |
|    |    | S3‑221418 | Authorization in the UE-to-UE relay scenario  | Huawei, HiSilicon  | pCR  | 　[Huawei, HiSilicon]: This contribution is merged into S3-221331r1. | merged | 1331   |
|    |    | S3‑221419 | Privacy of information over the UE-to-UE Relay  | Huawei, HiSilicon  | pCR  | 　[Nokia]: basically support with one question for clarification on 221419r1[Huawei, HiSilicon]: provide clarification to Nokia.[Huawei, HiSilicon]: asks whether r1 is fine.[Nokia]: fine with the clarification.[ChinaTelecom]: fine with r1.[ZTE]: Fine with R1.[CATT]: Fine with r1.[Interdigital]: OK with r1. | approved  | R1   |
|    |    | S3‑221421 | Key issue on Authorization in the UE-to-UE relay scenario  | China Telecomunication Corp.  | pCR  | 　[ChinaTelecom]: This contribution is merged into S3-221331. | merged  | 1331   |
|    |    | S3‑221422 | Key issue on Integrity and confidentiality of information over the UE-to-UE  | China Telecomunication Corp.  | pCR  | 　[ChinaTelecom]: This contribution is merged into S3-221332. | merged | 1332   |
|    |    | S3‑221423 | Key issue on Secondary authentication of Remote UE via L3 UE-to-Network relay without N3IWF  | China Telecomunication Corp.  | pCR  | 　[Interdigital] : propose to note this paper[ChinaTelecom] : replay and clarify.[Rapporteur]: Secondary authentication related topics will be discussed in the next meeting when we discussed the LS SP-220716 from SA.[Ericsson]: provides comments, fine with postponing discussion[ChinaTelecom]: provide reply, fine with postponing and r1.>>CC\_3<<[CATT] presents current status and proposes way forward[IDCC] disagrees with CATT’s way forward proposal.[ChinaTelecom] agrees with IDCC[Vodafone] comments.[Chair] Secondary Authentication need to be taken out of Rel-17 and how to continue the work in Rel-18, we should discuss in the next meeting.>>CC\_3<< | noted  |    |
|    |    | S3‑221426 | Key issue on authorization in multi-path transmission for UE-to-Network Relay scenario  | ZTE Corporation  | pCR  | 　[Ericsson] : ask questions for clarification[ZTE]: Provide clarification[Nokia]: basically support with one question for clarification.[ZTE]: Provide clarification.[CATT]: Provide comments and clarification.[ZTE]: Provide clarification.[Ericsson]: Provide comments[ZTE]: Provide clarification.[Ericsson]: Propose to note.[ZTE]: Fine to note and wait for SA2 conclusion. | noted |    |
|    |    | S3‑221427 | Key issue on authorization in the UE-to-UE relay scenario  | ZTE Corporation  | pCR  | 　 | merged |  1331  |
|    |    | S3‑221428 | Key issue on Integrity and confidentiality of information over the UE-to-UE Relay  | ZTE Corporation  | pCR  | 　 | merged | 1332   |
|    |    | S3‑221429 | Key issue on Privacy of information over the UE-to-UE Relay  | ZTE Corporation  | pCR  | 　 | merged |   1419 |
|    |    | S3‑221430 | Key issue on Support direct communication path switching between PC5 and Uu  | ZTE Corporation  | pCR  | 　[Ericsson] : provides question[ZTE]: Provide clarification.[Qualcomm]: requests clarifications before approval[ZTE]: Provide clarification.[CATT]: Provide comments.[ZTE]: Fine to note this meeting. | noted |    |
|    |    | S3‑221446 | Key issue on UE Identity protection during UE-to-UE relay discovery  | China Telecomunication Corp.  | pCR  | 　 | merged | 1519   |
|    |    | S3‑221447 | Key issue on Privacy protection over the UE-to-UE Relay  | China Telecomunication Corp.  | pCR  | 　[ChinaTelecom]: This contribution is merged into S3-221330.[ChinaTelecom]: The first reply is wrong, this contribution is merged into S3-221419. | merged |  1419  |
|    |    | S3‑221491 | pCR to TR33.740 Key Issue on Integrity and confidentiality of information over the UE-to-UE Relay  | CATT  | pCR  | 　 | merged  | 1332   |
|    |    | S3‑221495 | pCR to TR33.740 Key Issue on Authorization in the UE-to-UE relay scenario  | CATT  | pCR  | 　 | merged  |   1331 |
|    |    | S3‑221496 | pCR to TR33.740 Key Issue on Privacy of information over the UE-to-UE Relay  | CATT  | pCR  | 　 | merged |   1419 |
|    |    | S3‑221503 | Remote UE Security Establishment via U2U Relay  | OPPO  | pCR  | 　[CATT]: Propose to merge S3-221503 into S3-221332.>>CC\_3<<[CATT] asks whether Oppo would like to merge this into 1332[Oppo] comments that is different issue, prefer not to merge.>>CC\_3<<[OPPO]: reply to CATT.>>CC\_wrap\_up<<[Oppo] requests to change status to approval[CATT] doesn’t agree>>CC\_wrap\_up<< | merged | 1332   |
|    |    | S3‑221505 | U2U Relay Trust Model  | OPPO  | pCR  | 　[Ericsson] : provides question[OPPO] : provides reply.[Qualcomm]: does not agree with the untrusted relay[Nokia]: comment>>CC\_3<<[Oppo] asks whether or not UE-to-UE relay is trusted entity or un-trusted entity.[IDCC] comments the assumption issue makes sense.Chair asks whether there is objection about the assumption that is trusted entity. There is no response for disagreement. Chair announce ta working assumption principle, i, “ UE-to- UE Relay is considered as trusted entity and further work will be based on this assumption.’ . The document will be discussed for exact text to be included in the TR.>>CC\_3<<[OPPO] : provides r1 based on cc conclusion.[Nokia]: fine with r1.[Interdigital]: OK with r1.[Ericsson]: fine with r1.>>CC\_wrap\_up<<[Oppo] requests to change status as approved[Rapporteur] it is pending based on QC’s comment>>CC\_wrap\_up<< | noted  |    |
|    |    | S3‑221519 | New Key Issue: Security for UE-to-UE Relay discovery  | Qualcomm Incorporated  | pCR  | 　[Xiaomi]: Provide merger plan for S3-221519 and S3-221548.[ChinaTelecom]: Propose to merge 1446, 1519 and 1548.[Qualcomm]: propose to merge 1446 and 1548 into 1519, and provides merging plan[ChinaTelecom]: fine with the merging plan, and propose to revise 2nd security requirement.[Xiaomi]: fine with the merging plan and agree with ChinaTelecom’s proposal[Nokia]: comments for organization of KIs.>>CC\_3<<[CATT] presents current status.[QC] comments is preparing r1.[Oppo] comments.>>CC\_3<<[Xiaomi]: provides clarification[Qualcomm]: provides r1 and clarifications[Interdigital]: prefer keeping separate KIs for discovery protection, communication security, communication privacy, communication authorization[Interdigital]: provides comment on r1[ChinaTelecom]: provides comment on r1[Xiaomi]: generally fine with r1 and provide comments[Qualcomm]: provides r2[Xiaomi]: OK with R2[CATT]: comments on reorganizing KIs.[ChinaTelecom]: fine with r2.[Nokia]: fine with r2.[Interdigital]: OK with r2.[CATT]: OK with r2. | approved  |   R2 |
|    |    | S3‑221548 | Key Issue on Security for UE-to-UE Relay Discovery  | Beijing Xiaomi Mobile Software  | pCR  | 　 | merged  |   1519 |
|    |    | S3‑221549 | Key Issue on Security of UE-to-UE Relay Communication  | Beijing Xiaomi Mobile Software  | pCR  | 　[Ericsson] : provides comments and requires updates[Xiaomi] : provides response[Ericsson] : we are fine with the merge proposal | merged | 1332   |
|    |    | S3‑221425 | Add context to the architecture clause  | ZTE Corporation  | pCR  | 　 | merged  |   1490 |
|    |    | S3‑221489 | pCR to TR33.740 Clause Introduction and Scope  | CATT  | pCR  | 　[CATT]: Provide merger plan for S3-221425 and S3-221489.[CATT]: wrong email thread, Ignore previous email. | approved |    |
|    |    | S3‑221490 | pCR to TR 33.740 Clause 4 Security Aspects of 5G ProSe  | CATT  | pCR  | 　[CATT]: Provide merger plan for S3-221425 and S3-221490.[ZTE]: Fine to merge 1425 to 1490.[CATT]: Provide r1.[ZTE]: Fine with R1. | approved |   R1 |
| 5.4 | Study on privacy of identifiers over radio access  | S3‑221340 | New key issue on users identified by Priority Access  | Johns Hopkins University APL, US National Security Agency, CISA ECD, Peraton Labs, Interdigital, Apple  | pCR  | >>CC\_2<<[JHU] presents.[Huawei] comments and challenges the threats, whether in the scope of current study.[JHU] clarifies.[IDCC] considers the threat is valid.[Apple] supports the contribution.[Ericsson] asks question, how the link between C-RNTI and TMSI is established.[JHU] replies.>>CC\_2<<[Nokia]: Asks clarifications.[Ericsson]: proposes note.[Interdigital]: proposes way forward.[JHU]: provides r1[Ericsson]: comments on r1.[JHU]: provides r2[JHU]: provides r3 to add supporter[Ericsson]: r3 is fine. | Approved |   R3 |
|    |    | S3‑221517 | Scope of SUPI Type IMSI in KI#1  | Qualcomm Incorporated  | pCR  | >>CC\_2<<[QC] presents.[IDCC] comments that this is redundant since the KI is for variable length identifiers.[QC] clarifies that this is an important clarification.[CMCC] provides way forward to compromise.[Thales] is fine to add this clarification sentence.[NCSC] supports to add this sentence.[IDCC] proposes a revision, to add a NOTE for other identifiers other than IMSIDiscussion between [QC] and [IDCC], exact text for NOTE to be discussed over email.>>CC\_2<<>>CC\_4<<[Rapporteur/IDCC] presents current general status, not able to progress because of objections.[QC] clarifies and could not accept any solution as KI is not stable, Quantum safe algorithms and impact also need to be considered.[ZTE] supports this KI, considers is stable.[Ericsson] comments KI is valid, Quantum safe algorithms are not in scope of this study. [Verizon] comments QC’s argument is not about KI but deployment.[Nokia] comments to convergence solutions.[QC] answers to Ericsson and Verizon and provides way forward.[Ericsson] comments the blocking is just about AKA problem. So KI is mature enough.[Docomo] would like to know target of QC’s comments, are they all 3 solutions? Or totally fundamental objection.[QC] clarifies.[IDCC] proposes to keep focus on existing issue.[Thales] comments.[QC] doesn’t agree with IDCC’s statement.[Verizon] comments privacy is very important. Not care about solution, but study is important, relevant key issue is important.[CableLabs] comments there is no reason to prevent KI.Chair requests everyone to cooperate to keep email discussion and progress the study.>>CC\_4<<[Interdigital]: Proposes an alternative text as a condition of approval.[Qualcomm]: does not agree with the comment and the proposal.[Interdigital]: Addresses QC comments and asks for clarification. | noted |    |
|    |    | S3‑221518 | Addition of threats due to EAP in KI#1  | Qualcomm Incorporated  | pCR  | >>CC\_2<<[QC] presents.[Huawei] asks questions.[QC] clarifies[IDCC] doesn’t consider it is a valid threat.[QC] replies.[Ericsson] comments it is redundant.>>CC\_2<<[Ericsson]: Proposes to note[Qualcomm]: responds.[Ericsson]: comments to QC | noted |    |
|    |    | S3‑221460 | Padding-based solution to the leakage of the length of SUPI through SUCI.  | Ericsson LM  | pCR  | 　[Huawei] require a revision before approval since few aspects are not clear[NCSC] ask a question[Qualcomm]: proposes to postpone.[Ericsson] clarifies[NCSC] makes a suggestion | noted |    |
|    |    | S3‑221462 | Hash-based solution to the leakage of the length of SUPI through SUCI  | Ericsson LM  | pCR  | 　[Huawei] require a revision before approval since few aspects are not clear[NCSC] asks a question[Ericsson] clarifies[Qualcomm]: proposes to postpone.[Thales]: provides comments.[Ericsson] responds and asks for clarification from QC and responds to Thales[Qualcomm]: replies. Still proposes to postpone.[Thales]: responds to Ericsson. | noted  |    |
|    |    | S3‑221463 | Map-based solution to the leakage of the length of SUPI through SUCI  | Ericsson LM  | pCR  | 　[Huawei] require a revision before approval since few aspects are not clear[Ericsson] clarifies[Qualcomm]: proposes to postpone.[Thales]: provides comments.[Ericsson] responds and asks for clarification from QC and responds to Thales | noted |    |
|    |    | S3‑221329 | New solution for Key issue #1  | InterDigital, Inc.  | pCR  | 　[Huawei] require a revision before approval since few aspects are not clear[Deutsche Telekom] : asks further clarification[NCSC] asks for clarification[Qualcomm]: proposes to postpone.[Interdigital] provided clarification and answers to NCSC, Deutsche Telekom, and Huawei[Thales]: asks questions for clarification and provides comments.[Interdigital]: Thanks Thales for the constructive questions and provides answers to Thales.[Interdigital]: Provides additional information to DT and apologizes for missing one of DT questions.[Deutsche Telekom] : thanks for the provided clarification and agrees to further discuss in stage 3, once the solution has been concluded.[Huawei] ask for further clarifications on usage[Ericsson] comments[Interdigital] provides clarifications[NCSC] agrees with solution in principle, with minor update.[Interdigital] Is glad that we are converging and agrees with the update suggested by HW and NCSC. The next version in the Drafts folder will include the proposed text.(Cpatured by VC)[Interdigital] provides r1[Thales]: provides comments.[Interdigital]: Thanks Thales for the comments and requests to provide the threat that Thales considers.[Thales]: provides answers to Interdigital.[NCSC] comments[Interdigital] proposes a way forward.[Thales: replies to Interdigital and NSCS.(captured by VC)[Interdigital] provides r3[Thales]: is fine with r3. .[NCSC]: also fine with r3 | noted  |    |
|    |    | S3‑221431 | SUPI padding solution on Key issue #1  | ZTE Corporation  | pCR  | 　[Huawei] require a revision before approval since few aspects are not clear[NCSC] asks a question[ZTE]: provides clarifications and brings r1[ZTE]: answers the question and provides r2.[Qualcomm]: proposes to postpone[Ericsson] Proposes to merge with S3 221460[ZTE]: prefers not to merge. | noted |    |
|    |    | S3‑221378 | Solution for Privacy aspects of variable length user identifiers  | Nokia Japan  | pCR  | 　[Huawei] require justification before approval[NCSC] asks for clarification[Nokia]: provides clarifications and uploaded r2[Qualcomm]: proposes to postpone.[Ericsson]: asks for clarification before approval.[Nokia]: provides clarifications[Ericsson]: asks for clarification before approval.[Huawei] propose to note since this does not address the issue identified, alternatively merge this with other padding solutions[Nokia]: Provides clarifications. | noted |    |
|    |    | S3‑221410 | New solution for key issue 1  | Huawei, HiSilicon  | pCR  | [NCSC] asks for clarification[Qualcomm]: proposes to postpone[Interdigital] : asks questions for clarification[Huawei] provide clarifications[Interdigital] : requests additional clarifications(captured by VC)[Huawei] clarifies(captured by VC)[Huawei] comments[Interdigital] : requests additional clarifications[Interdigital] : requests additional clarifications[Interdigital] : requests additional clarifications[Interdigital] : requests additional clarifications[Ericsson] comments[Ericsson] comments to Huawei[Ericsson] comments to Huawei | noted |    |
|    |    | S3‑221465 | IDPrvc - Security issue on C-RNTI  | Apple  | pCR  | >>CC\_2<<[Apple] presents it is discussed in last meeting.[Huawei] asks the difference compared with previous one[QC] has comments via email>>CC\_2<<[Ericsson]: Proposes to note.[Interdigital]: Requests a clarification from Ericsson.[Apple]: Provides answer to Ericsson.[Interdigital]: Agrees with Apple’s arguments for the inclusion of this KI.[Ericsson]: still proposes to note and suggests a way forward. | noted |    |
| 5.5 | Study on Standardising Automated Certificate Management in SBA  | S3‑221585 | Key Issue for Management of Automated Bulk Certificate updates for SBA leading to temporary service unavailability  | Nokia Japan  | pCR  | 　[Ericsson] : requires clarification/revision before approval[Nokia]: Provides clarifications[Nokia]: Provides r1 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/S3-221585-r1.doc}[Huawei] disagree with this key issue proposal[Nokia]: provides clarifications>>CC\_4<<[Nokia] presents.[Ericsson] comments it should in scope of SA2.[Huawei] comment why to wait all certificate expired at same time then to refresh. Isn’t this a self-inflicted problem, by waiting till expiry?[Nokia] clarifies, multiple solutions are possible.[Verizon] comments, load after expiry is because of waiting till the expiry and doing it in bulk.>>CC\_4<< | noted |    |
|    |    | S3‑221381 | Update KI #6 for a new security threat  | Huawei, HiSilicon  | pCR  | 　[Nokia]: asks for clarifications and corrects a typo[Ericsson] : requires clarification before approval[Huawei] provide replies[Nokia]: proposes modifications in the problem statement.[Nokia]: proposes modifications in the problem statement.[Huawei] provide r1 based on feedback[Nokia]: agrees with -r1[Ericsson] : r1 is fine to us | approved |   R1 |
|    |    | S3‑221382 | New solution for KI #6 Relation between certificate management lifecycle and NF management lifecycle  | Huawei, HiSilicon  | pCR  | 　[Nokia]: provides observations to the solution and asks for some clarifications[Ericsson] : requires revision before approval[Huawei] provide replies[Lenovo] Disagrees with the contribution.[Ericsson] : requires revision before approval[Huawei] provide replies and r1[Ericsson] : r1 is fine to us>>CC\_4<<[Huawei] presents r1 and current status.[Lenovo] comments.>>CC\_4<<[Lenovo] : Clarifies. | noted |    |
|    |    | S3‑221473 | A solution for certificate and NF lifecycle management relation  | Ericsson  | pCR  | 　[Nokia]: provides an observation to the solution[Huawei] require clarifications before approval[Ericsson] : provides clarification[Nokia]: ok with the EN on OAM aspects, and proposes an additional EN for NRF involvement.[Ericsson] : provides r1[Huawei] r1 is fine[Nokia]: -r1 is OK | approved  | R1   |
|    |    | S3‑221408 | New solution for key issue 1  | Huawei, HiSilicon  | pCR  | 　[Nokia]: asks for clarification[Ericsson] : requires revision before approval[Huawei] provides clarification[Nokia]: provides clarification[Huawei] provide clarifications[Nokia]: asks for clarifications[Nokia]: provides proposal to move forward[Ericsson] : requires revision before approval[Huawei] provide r1 based on feedback[Nokia]: ok with -r1[Ericsson] : ok with -r1 | approved | R1   |
|    |    | S3‑221475 | A new solution of using CMP for certificate enrolment and renewal  | Ericsson  | pCR  | 　[Nokia]: proposes to add an editor note to study the CMP profiling for SBA.[Intel]: Agrees with Nokia and can cosign the document[Verizon]: Agree with Nokia's comment.[Ericsson] : Provides r1 including the EN about CMP profiling[Huawei] ask for clarification on configuration aspects and security[Ericsson] : provides clarification[Nokia]: agrees on -r1, and asks to be added as co-signer[Ericsson] : provides r2 including an EN about provision of parameters to be used in CSR generation[Huawei] r2 is fine[Intel] r2 is fine | approved | R2   |
|    |    | S3‑221409 | New solution for key issue 3 and 4 based on OCSP  | Huawei, HiSilicon  | pCR  | 　[Nokia]: partially agrees with the solution, makes a proposal to move it forward and asks for some clarifications.[Ericsson] : requires revision before approval[Huawei] provide further clarification[Nokia]: provides further feedback in the discussion and proposal to move it forward[Huawei] provide r1 based on feedback[Nokia]: requires further revision before approval[Huawei] provide r2[Ericsson] : requires further revision before approval[Huawei] provide r3 based on feedback[Nokia]: reminds the suggestion from Ericsson on EN for revocation status ‘unknown’[Huawei] provide r4[Nokia]: agrees with r4[Ericsson] : r4 is ok | approved | r4   |
|    |    | S3‑221474 | A new solution for using attestation to build initial trust for certificate management  | Ericsson  | pCR  | 　[Deutsche Telekom] : asks further clarification of the Note[Ericsson] : provides clarification[Deutsche Telekom] : Thanks for clarification.[Ericsson] : provides r1 addressing DT’s comment[Nokia]: provides observations and suggestions to move it forward.[Huawei] requires clarifications and changes before approval.[Ericsson] : provides clarification[Deutsche Telekom] : fine with r1[Lenovo] : Disagrees with this contribution.[Ericsson] : provides clarification and r2[Huawei] disagree with the proposal>>CC\_4<<[Ericsson] presents r2[Huawei] considers remote attenstation is duplicated from SIV, doesn’t agree with discussing again in this study.[Ericsson] clarifies.Chair asks whether solution is same but, KIs are different in the two studies.[Huawei] replies.[Ericsson] clarifies.[Huawei] doesn’t convinced with Ericsson’s explanation. Doesn’t agree to move SIV study here.>>CC\_4<< | noted |    |
|    |    | S3‑221501 | Solution for secure initial enrolment of NF certificates  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Deutsche Telekom] : Supports the new enrolment solution proposal[Ericsson] : requires revision before approval[Huawei] ask for clarifications[Nokia]: provides clarification[Nokia]: provides clarification[Nokia]: provides further clarifications and ask for proposals if EN(s) are necessary.[Ericsson] : requires revision before approval[Huawei] clarify position[Nokia]: provides -r1 addressing all observations received so far.[Huawei] fine with r1[Ericsson] : fine with r1[Deutsche Telekom] : fine with -r1 content, comments on editorial | approved | R1   |
|    |    | S3‑221552 | New solution on Cross-Certification Based Trust Chain in the SBA Architecture  | Beijing Xiaomi Mobile Software  | pCR  | 　[Ericsson] : requires revision before approval[Xiaomi]: provides responses and provides r1.[Ericsson] : r1 requires revision before approval>>CC\_4<<[Xiaomi] presents r1.[Huawei] asks questions for clarification about NRF certificate.[Xiaomi] clarifies.[Nokia] asks questions for clarification[Xiaomi] replies.>>CC\_4<<[Xiaomi]: provides r2.[Ericsson] : r2 is ok | approved |   R2 |
|    |    | S3‑221553 | New solution on Interconnection CA Based Trust Chain in the SBA Architecture  | Beijing Xiaomi Mobile Software  | pCR  | 　[Ericsson] : requires revision before approval[Xiaomi]: provides responses and provides r1.[Ericsson] : r1 requires revision before approval[Xiaomi]: provides r2.[Ericsson] : r2 is ok | approved | R2   |
|    |    | S3‑221380 | Key Issue for Management of Automated Bulk Certificate updates for SBA leading to temporary service unavailability  | Nokia Japan  | pCR  | 　 | revised  | [S3‑221585](file:///C%3A%5CUsers%5Ccmcc%5CDesktop%5CAgendaWithTdocAllocation_2022-06-24_15h19.htm#RANGE!S3-221585)  |
| 5.6 | New SID on AKMA phase 2  | S3‑221351 | Update in KI1 for encryption keys  | Nokia, Nokia Shanghai Bell  | pCR  | 　[CMCC]: requests clarifications.[Nokia]: provide clarifications.[CMCC]: provides clarifications and another comment.[Nokia]: provide clarifications.[Huawei]: clarification is needed before approval.[Nokia]: provide clarifications.[Nokia]: provide r1 with updated text based on tailing email discussions[Ericsson]: provides r4.[Nokia]: please provide r5 because r4 is an empty file.[Ericsson]: provides r6.[Nokia]: fine with r6 and provide comment.[NDRE]: do not agree with interpretation of LI requirements[Huawei]: provides comment to r6.[Nokia]: provides comment to r7 by deleting the text.[NDRE]: provides clarification to objection>>CC\_3<<[Nokia] presents r7[Ericsson] comments the assumption looks like based on a specific solution.[Docomo] asks what is the scenario that case can be applied.[CMCC] agrees with Docomo. Asks to clarify LI requirement. Comments about encryption key.[Lenovo] comments LI can only get the communication key. And suggest to send LS to LI group.[Apple] is not clear whether it is specific issue for AKMA only, or applies to others like GBA.[Nokia] clarifies.[Docomo] prefers AF to provide the key.[Thales] provides information.[Huawei] agrees with Docomo. It purely depends on application layer.[Ericsson] gives clarification that LI requires operators, rather than AF owner.Chair suggests to add some ENs[CMCC] proposes to continue email discussion.[Ericsson] requests to make security requirements more generic.[NRDC] suggests to keep wording in line with LI requirements.>>CC\_3<<[Ericsson]: Provides comments[Ericsson]: Provides suggested rephrasing[NDRE]: previous minutes was accredited to 'Ericsson', should be 'NDRE', apologies.[NDRE]: provides some example use cases.[Thales]: provides information.[CMCC]: provides comments and a way forward.[NDRE]: provides additional LI-related feedback[Nokia]: provides additional comments and Nokia view[CMCC]: provides r8.[Samsung]: Samsung generally fine with r8. requests minor change.[CMCC]: proposes text changes.[Ericsson]: proposes changes[Samsung]: Samsung is fine with CMCC's proposed text.[Nokia]: providing r9 with the requested changes[NDRE]: r9 looks acceptable[Huawei]:fine with r9[Ericsson]: requests for clarifications.[CMCC]: provides clarifications.[Ericsson]: For the sake of progress, Ericsson is fine with r9 but the cases and the requirements need some work. | approved  |   R9 |
|    |    | S3‑221356 | Key Issue for AKMA roaming scenario  | THALES  | pCR  | 　[Nokia]: propose to merge it with 221351>>CC\_3<<[Thales] presents.[Docomo] doesn’t think it is possible, objects.[Vodafone] has same opinion with Docomo.[Nokia] has same opinion.>>CC\_3<<[Ericsson]: Propose to merge this to 1351 and requests for clarifications.[Thales]: is ok to merge this contribution into S3-221351 | merged  |   1351 |
|    |    | S3‑221435 | Update the Key issue of AKMA roaming  | ZTE Corporation  | pCR  | 　[CMCC]: request clarifications and proposes merge in S3-221351.[ZTE]:is fine to merge but some modifications are requested.[Nokia]: propose to merge this into 221351 | merged |   1351 |
|    |    | S3‑221529 | Adding security threat and requirements to KI#1  | Samsung  | pCR  | 　[Huawei]: clarification is needed before approval.[Ericsson]: Not accepted as proposed.[Samsung]: Provides clarifications[Huawei]: provide clarification to Samsung.>>CC\_3<<[Samsung] presents.[Vodafone] has concerns on wording[Ericsson] considers it can be merged with others.[Docomo] has similar comment, need to explain to LI the problem.[Nokia] has similar view with Docomo.Chair suggests to have an offline call to share ideas with LI group instead of LS exchange. That is more efficiencient Rapporteur to arrange the CC with LI.>>CC\_3<<[Ericsson]: provides some clarification.[Ericsson]: proposes to merge with 1351 and continue the discussion in that thread.[Samsung]: Agree to merge 1529 in 1351. | merged |   1351 |
|    |    | S3‑221457 | New key issue of multiple AAnF sets in AKMA roaming scenario  | LG Electronics France  | pCR  | 　[CMCC]: proposes to note or merge in S3-221351.[Nokia]: seek clarification[ZTE]: Suggest to note.[LGE]: fine to be noted. | noted  |    |
|    |    | S3‑221558 | New KI Multiple registrations in AKMA scenarios  | Xiaomi Communication  | pCR  | 　[Huawei]: proposes to postpone and focuses on the single registration case in this meeting.[Xiaomi]: provides r1.[Huawei]: fine with r1.[Ericsson]: proposes to note for this meeting.[Qualcomm]: proposes to note as well.[Xiaomi]: provides r2 and clarification.[Huawei]: disagrees with r2. | noted |    |
|    |    | S3‑221352 | Solution on AKMA roaming  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Huawei]: clarification is needed before approval.[Nokia]: provide clarification with r1.[Ericsson]: proposes a potential way forward.[Nokia]: provide r2 with LI Editor’s notes.[Nokia]: provide r3 with wording alignment with KI as requested[Ericsson]: requests for clarifcations/changes[Nokia]: provide r4 with rewording of EN[Ericsson]: requests for changes[Nokia]: provide clarification[Ericsson]: r4 is fine | approved  |   R4 |
|    |    | S3‑221384 | new solution for AKMA roaming when both UE and AF are in VPLMN  | Huawei, HiSilicon  | pCR  | 　[Nokia]: Ask clarification and propose changes.[Ericsson]: requests clarifications.[Huawei]: provides R1.[Ericsson]: requests clarifications.[Huawei]: provide answer to Ericsson[Ericsson]: proposes EN.[Huawei]: r3 is provided[Huawei]: r4 is provided[Ericsson]: is fine with r4. | approved  |   R4 |
|    |    | S3‑221385 | new solution for AKMA roaming when UE is in visited network but the AF in Home network.  | Huawei, HiSilicon  | pCR  | 　[Nokia]: Ask clarification and propose changes.[Huawei]: provide answer to Nokia[Ericsson]: Ask clarifications and proposes changes.[BT Plc]: objects as LI aspects not handled. Note document.[Huawei]: Request to discuss the LI issue in SA3-LI.[NDRE]: Support BT proposal to note the doc.[Huawei]: propose a way forward and provide r1.[BT Plc]: Responds to Huawei. Provision of all keys for all roamers is a SA3 issue to support LI requirements and not SA3-LI. Objection maintained.[NDRE]: several issues remain in r1(Captured by VC)[Huawei] is ok to be noted | noted |    |
|    |    | S3‑221433 | New solution about the roaming AKMA architecture of the AF inside and outside the HPLMN  | ZTE Corporation  | pCR  | 　[Nokia]: Ask for clarification before approval[ZTE]: provides clarifications and proposes to postpone the LI issue.[Ericsson]: Asks for clarifications.[Nokia]: Ask for clarification before approval[ZTE]: provides clarifications and brings r1.[Ericsson]: propose to merge with other similar solution.[ZTE]: prefers not to merge.[Ericsson]: Proposes an EN[ZTE]: adds the EN in r2.[Ericsson]: is fine with r2. | approved |   R2 |
|    |    | S3‑221434 | New solution about the roaming AKMA architecture of the AF inside and outside the VPLMN  | ZTE Corporation  | pCR  | 　[Nokia]: Ask for clarification before approval[ZTE]: provides clarifications and proposes to postpone the LI issue.[Ericsson]: Proposes to note.[ZTE]: accepts Ericsson's comments and brings r1.[Ericsson]: Proposes alternative way forward to merge this with e.g. 1384[ZTE]: prefers not to merge.[Ericsson]: Proposes an EN[ZTE]: adds the EN in r2.[Ericsson]: is fine with r2. | approved  |   R2 |
|    |    | S3‑221459 | New solution of AKMA anchor key registration to the AAnF in VPLMN after primary authentication  | LG Electronics France  | pCR  | 　[Huawei]: clarification is needed before approval.[LGE]: provides clarification.[Ericsson]: requests for clarifications.[Nokia]: requests to add EN[Ericsson]: Requests for clarifications.[LGE]: provides clarification to Ericsson.[LGE]: typo corrected[LG]: provides revision r2 with requested EN.[Ericsson]: Proposes to note[LG]: provides clarification[Ericsson]: Proposes some ENs[LG]: provides revision r3 with requested ENs.[Ericsson]: is fine with r3. | approved  |   R3 |
|    |    | S3‑221554 | KI#1, New Sol AKMA Application key request via proxy and NEF in roaming scenarios  | Xiaomi Communication  | pCR  | 　[Nokia]: Propose to add EN[Nokia]: Propose to add END[Xiaomi]: provides r1.[Ericsson]: asks for clarifications.[Ericsson]: provides clarifications.[Ericsson]: proposes to note. | noted  |    |
|    |    | S3‑221555 | KI#1, New Sol Proxy-based AKMA Application key request in roaming scenarios  | Xiaomi Communication  | pCR  | 　[Nokia]: Propose to add EN[Xiaomi]: provides r1.[Ericsson]: asks for clarifications.[Ericsson]: provides clarifications.[Ericsson]: proposes to note. | noted  |    |
|    |    | S3‑221571 | AKMA roaming and LI  | Lenovo  | pCR  | 　[Nokia]: Propose to add EN[Lenovo]: provides clarification to Nokia [Ericsson]: asks for clarifications.[Lenovo]: provides revision r1 with requested EN.[Lenovo]: OK to add EN if it is added in all LI solutions, asking clarification on detailed text of the EN.[Nokia]: Propose to add EN[Lenovo]: provides revision r2 with requested EN[Nokia]: fine with the version[Ericsson]: requests for clarifications/changes[Lenovo]: provides requested changes to Ericsson and revision r3[Ericsson]: is fine with r3. | approved |   R3 |
|    |    | S3‑221432 | Discussion on the regulatory control point in AKMA roaming  | ZTE Corporation  | pCR  | 　>>CC\_3<<[ZTE] presents>>CC\_3<<[Ericsson]: Proposes to note as it is a discussion paper. | noted  |    |
|    |    | S3‑221456 | Discussion paper of AKMA roaming  | China Mobile  | discussion  | 　[NDRE]: do not agree with interpretation of LI requirements>>CC\_3<<[CMCC] presents>>CC\_3<<[NTAC] Agrees with NDRE[CMCC] provides response. | noted |    |
|    |    | S3‑221581 | Discussion about the roaming architecture  | Ericsson  | discussion  | >>CC\_3<<[Ericsson] presents.>>CC\_3<< | endorsed  |    |
|    |    | S3‑221458 | Solution of introducing AP into AKMA  | China Mobile  | pCR  | 　[Nokia]: provide comment[CMCC]: provides clarifications[Nokia]: asking question for clarification[CMCC]: provides answers and r1 as a merger.[Qualcomm]: fine with r1.[Nokia]: provides comments to add/enhance EN[Ericsson]: requests for clarifications for AP versus AF.[Nokia]: provides clarification[CMCC]: provides clarifications and possible way forward.[Nokia]: agree with EN proposal[CMCC]: provides r2 with an EN.[CMCC]: provides clarification.[Nokia]: fine with the version | approved  |   R2 |
|    |    | S3‑221466 | AKMA - New solution on AP  | Apple  | pCR  | 　[Ericsson]: Proposes a merge with 1458 1516[Apple]: Fine to merge. | merged |   1458 |
|    |    | S3‑221516 | AKMA Application Proxy solution based on GBA procedures  | Qualcomm Incorporated  | pCR  | 　[CMCC]: proposes changes before approval.[Ericsson] provides comments. Asks for clarifications.[Apple] Modification is needed before approval.[Qualcomm]: Agrees to merge this into S3-221458.[Nokia]: request to add EN in this solution or merged version. | merged |   1458 |
|    |    | S3‑221556 | KI#2, New Sol Authentication via proxy AKMA scenarios.  | Xiaomi Communication  | pCR  | 　[CMCC]: provides comments.[Ericsson]: asks for clarifications.[Xiaomi]: provides clarification.[Nokia]: provide comment[Xiaomi]: provides r1.[Ericsson]: proposes changes.[Huawei]: provides comments.[Xiaomi]: provides r2.[CMCC]: doesn’t agree with r2.[Nokia]: provides comments to add/enhance EN[Ericsson]: requests for clarifications.[Xiaomi]: provides clarifications.[CMCC]: provides clarifications.[Huawei]: provides clarifications.[Xiaomi]: request for technical discussion.[CMCC]: doesn’t agree with r3.[Xiaomi]: provides r4.[CMCC]: not ok with r4, proposes to note. | noted |    |
|    |    | S3‑221557 | KI#2, New Sol Authentication via proxy and NEF in AKMA scenarios  | Xiaomi Communication  | pCR  | 　[CMCC]: provides comments.[Ericsson]: asks for clarifications.[Ericsson]: proposes changes.[Huawei]: provides comments.[CMCC]: proposes to note. | noted  |    |
| 5.7 | Study of Security aspect of home network triggered primary authentication  | S3‑221386 | Skeleton update  | Huawei, HiSilicon  | pCR  | 　[Qualcomm]: Proposes a way forward for the contribution and several others[Lenovo]: Need revision for approval.[Lenovo]: Need revision for approval.[Huawei]: Provides r1 in the draft folder.[Huawei]: provides r1 accordingly.[Lenovo]: r1 is not okay.[Rapporteur]: provide clarification.[Qualcomm]: Ok with rapporteurs suggestion[Rapporteur]: r1 can be approved, because S3-221389-r5 will be approved, and request Lenovo to confirm.[Lenovo]: r1 is okay. | approved  |   R1 |
|    |    | S3‑221387 | new KI in interworking  | Huawei, HiSilicon  | pCR  | 　[Qualcomm]: Proposes a way forward for the contribution and several others[Lenovo]: Need revision for approval. | noted |    |
|    |    | S3‑221388 | new KI in SoR/UPU counter wraparound  | Huawei, HiSilicon  | pCR  | 　[Qualcomm]: Proposes a way forward for the contribution and several others[Lenovo]: Need revision for approval. | noted  |    |
|    |    | S3‑221389 | new KI in Kakma refresh  | Huawei, HiSilicon  | pCR  | 　[Nokia]: Ask clarification and propose changes.[Qualcomm]: Proposes a way forward for the contribution and several others[Ericsson] is in general fine with the proposal to consider 1 key issue with the existing requirement. Asks for clarifications for the requirement.[Qualcomm] Provide clarification on proposed requirement handling[Samsung]: Agrees with Nokia's comments. Requires update.[Lenovo]: Need revision for approval.[Huawei]: Provides r1 for moving forward.[Ericsson] asks for clarifications.[Huawei]: provides r2.[Apple]: Fine with r2.[Qualcomm]: requests this be discussed in AI 5.7 and not 5.6.[Ericsson]: Provides r3[Huawei]: ask clarifications on r3.[Ericsson]: provides some clarifications.[Qualcomm]: OK with r3>>CC\_4<<[Huawei] presents r3[QC] comments why to revise current baseline, why not merge 1386 and 1389.[Huawei] is ok to merge.[Lenovo] proposes another way forward.>>CC\_4<<[Lenovo]: r3 is not okay.Needs clarification.[Huawei]: provides r4.[Ericsson]: proposes changes[Lenovo]: r4 is okay.Provides also clarifications.[Huawei]: response.[Ericsson]: Does not agree with r4. Proposes to keep the EN on the security threats.[Huawei]: provide r5 and ask for confirmation.[Qualcomm]: OK with r5[Ericsson]: is fine with r5.[Lenovo]: r5 is okay. | approved |   R5 |
|    |    | S3‑221524 | Corrections to TR 33.741  | Lenovo  | pCR  | 　 | approved |    |
|    |    | S3‑221391 | New KI on race condition  | Huawei, HiSilicon  | pCR  | 　[Nokia]: Ask for clarification.[Ericsson]: Proposes to note.[Qualcomm]: Do not understand the need for this KI[Samsung]: Propose to note | noted |    |
|    |    | S3‑221580 | KI#2 update to remove the signalling overhead for KAF  | Ericsson  | pCR  | 　[OPPO]: Provides comments[Nokia]: Provides comments[Ericsson] provides r1.[OPPO]: r1 is not acceptable, propose to note this contribution[Lenovo]: Disagrees with the KI.[Ericsson]: provides clarifications.[Lenovo]: provides clarifications and suggests way forward.[Ericsson]: provides removing the requirement from KI#2.[Huawei]: ask for clarification and don’t agree with r2.[Ericsson]: requests for clarifications.[OPPO]: agree with Huawei to keep the original security requirement[Rapporteur]: For now, UE impact is not allowed and Kaf refresh without primary authentication is not in the scope of this study.[Ericsson]: requests clarifications[Rapporteur]: propose to noted | noted  |    |
|    |    | S3‑221390 | AUSF triggered the primary authentication  | Huawei, HiSilicon  | pCR  | 　[Samsung]: Requires updates[Lenovo]: Need clarifications and revision for approval.[Xiaomi]: provides comments and requires clarification before approval[Ericsson]: requests clarifications. | noted |    |
|    |    | S3‑221525 | Solution to enable HN triggered Primary Authentication with AUSF  | Lenovo  | pCR  | 　[Nokia]: Ask for clarification[Huawei]: clarification is needed before approval.[Lenovo]: Provides clarification to Nokia and Huawei.[Ericsson] disagrees with the solution.[Lenovo] Answers and provides citations to Ericsson’s question.Asks clarifications from Ericsson as their opinion stated is not correct.[Xiaomi]: provides comments and requires clarification before approval[Lenovo]: Provides clarification.Asks question to Xiomi.[Xiaomi]: provides comments.[Lenovo]: Provides r1.Clarifications annd revision provided.[Nokia]: propose to add EN.[Lenovo]: Provides clarification to Nokia question.[Xiaomi]: generally ok with r1 and provides comments[Lenovo]: Provides r2. | noted  |    |
|    |    | S3‑221526 | Solution to enable HN triggered Primary Authentication with UDM  | Lenovo  | pCR  | [Ericsson] disagrees with the solution. [Lenovo] Provided r1 which removed all parts related to AUSF triggering authentication. [Xiaomi]: provides comments and requires clarification before approval[Lenovo]: Provides r2 and clarifications.[Lenovo]: The comments Ericsson provided are related to AUSF based solution, which is not relevant for a UDM based solution.[Ericsson]: Proposes changes as a way forward.[Lenovo]: Provides r3 with Ericsson proposed changes.[Xiaomi]: OK with r3[Nokia]: r3 is fine.[Ericsson]: is fine with r3. | approved |   R3 |
|    |    | S3‑221530 | New solution on HN initiated re-authentcation via AUSF  | Samsung  | pCR  | 　[Huawei]: clarification is needed before approval.[Samsung]: provides r1 and clarification to HW[Qualcomm]: requests clarification[Samsung]: provides clarification to QC[Qualcomm]: requests clarification[Ericsson] does not agree with the AUSF triggering authentication.[Xiaomi]: provides comments and requires clarification before approval[Samsung]: provides r2 and clarifications[Xiaomi]: generally fine with r2 and provides comments[Nokia]: request to add EN[Lenovo]: Requests minor clarification and revision.[Samsung]: Provides clarification and r3[Xiaomi]: ok with r3>>CC\_4<<[Samsung] presents r3[Ericsson] comments there may has multiple AUSF.[Lenovo] considers it is not a problem about multiple AUSFs.[Verizon] comments.[Ericsson] believes there is issue about AUSF selection under multiple AUSFs case.[Samsung] could not understand Ericsson’s concern.[Ericsson] clarifies.[Lenovo] comments.[Nokia] agrees with Ericsson.Chairs ask rapporteur to arrange an offline call on this topic>>CC\_4<<[Lenovo]: r3 is okay.[Qualcomm]: r3 is OK.[Samsung]: Provides clarification to Ericsson's comment[Ericsson]: clarifies, proposes EN.[Samsung]: Provides r4 with EN as suggested by Ericsson.[Ericsson]: clarifies about the deregister opearation.[Samsung]: Asks Ericsson to confirm if r4 is fine.[Ericsson]: Asks for clarifications[Samsung]: Provides r5 and clarification[Qualcomm]: r4 is OK.[Ericsson]: is fine with r4.[Samsung]: A mail got skipped in between, that might have created confusion, r5 is the latest version which includes EN suggested by Ericsson. Please check and confirm.[Ericsson]: is fine with r5. | approved  |   R5 |
|    |    | S3‑221551 | New solution on AUSF initiated Primary Authentication  | Beijing Xiaomi Mobile Software  | pCR  | 　[Huawei]: clarification is needed before approval.[Xiaomi]: provides responses.[Nokia]: clarification is needed before approval.[Qualcomm]: clarification is needed before approval.[Ericsson] does not agree with the AUSF triggering authentication. [Xiaomi] provides responses[Lenovo] Requires clarification before approval.[Xiaomi] provides responses[Nokia] provides responses[Nokia] provides clarifications.[Xiaomi] provides R1 and request further clarification[Huawei] the solution should not impact on UE[Xiaomi] provides R2[Lenovo]: r1 is okay.[Qualcomm] r2 is OK[Xiaomi]: Check if r2 is fine.[Lenovo]: r2 is okay.[Huawei]: r2 is fine.[Xiaomi]: check if r2 is ok[Ericsson]: maintains objection.[Xiaomi]: Sorry for the last email. Request clarification | noted |   |
|    |    | S3‑221353 | Solution on HN triggering primary authentication for various scenarios  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Huawei]: clarification is needed before approval.[Nokia]: provide clarification.[Lenovo]: Asks clarifications.[Nokia]: provide clarifications.[Huawei]: r1 is fine.[Huawei]: fine with r1.[Ericsson]: proposes changes.[Nokia]: provide clarifications that EN is already there for the same[Lenovo]: Requests ENs.[Nokia]: provide clarifications and r2[Nokia]: provide r3 with addition of 2 EN.[Lenovo]: r3 is okay.[Ericson]: proposes changes[Nokia]: provide r4 with EN[Ericson]: proposes changes[Nokia]: provide r5 with EN at the requested place[Ericsson]: is fine with r5 | approved  |   R5 |
|    |    | S3‑221415 | New solution UDM triggered primary authentication  | Huawei, HiSilicon  | pCR  | 　[Samsung]: Requires updates[Lenovo]: Requires clarification for approval.[Xiaomi]: provides comments and requires clarification before approval[Huawei]: r1 is available.[Xiaomi]: fine with r1[Nokia]: request to add EN[huawei]: provides r2[ZTE] : asks questions.[Huawei]: answer to ZTE[Lenovo]: r2 is okay.[Samsung]: r2 is fine.[Nokia]: r2 is fine.[Ericsson]: is fine with r2.[Huawei]: upload r3 to change the cover page. Thanks for reminding. | approved  |   R3 |
|    |    | S3‑221436 | Home network triggered authentication solution for 4G to 5G interworking on Key issue #1  | ZTE Corporation  | pCR  | 　[Nokia]: Ask for clarification.[ZTE]: provides clarifications.[Nokia]: provide clarification.[Ericsson]: supports the contribution.[ZTE]: replys to Nokia and Ericsson.[Huawei]: provide Editor’s Note.[ZTE] : provides calrifications.[Huawei]: insist on Editor’s Note and propose several NOTE.[ZTE] : can compromise for the sake of progress, and provides r1.[Huawei]: fine with r1. | approved |   R1 |
|    |    | S3‑221498 | New solution on KI#1 AMF based solution  | NEC Corporation  | pCR  | 　[Nokia]: Ask for clarification[NEC]: clarifies to Nokia.[Huawei]:clarification is needed before approval.[Ericsson]:Proposes changes.[NEC] : provides r01 incorporating comments from Nokia, Ericsson and Huawei.[Huawei]: can live with r1.[Nokia]: can live with r1.[Ericsson] proposes an EN[NEC] provides r02 to address Vlasios comments.[Ericsson]: is fine with r2. | approved |   R2 |
|    |    | S3‑221515 | Solution using UDM to trigger authentication  | Qualcomm Incorporated  | pCR  | 　[Samsung]: requires clarification/revision[Ericsson]:Proposes changes.[Lenovo]: Requires clarification.[Qualcomm]: Provided an r1 to address comments[Lenovo]: Asks to refine the EN.Clarifications provided.[Qualcomm]: Provided an r2 to address comments[Ericsson]: is fine with r2.[Lenovo]: r2 is okay. | approved  |   R2 |
|    |    | S3‑221531 | New solution on UDM initiated re-authentcation based on AUSF request  | Samsung  | pCR  | 　[Ericsson]: does not agree with the solution where the AUSF triggers primary authentication.[Qualcomm]: Please remove step 6a from the figure[Samsung]: Provides r1[Xiaomi]: provides comments[Samsung]: Provides r2[Huawei]:provide way forward.[Ericsson]: clarifies, proposes an EN[Samsung]: Provides r3 and clarification[Nokia]: Nokia is fine with the version r3 with EN[Ericsson]: clarifies the comment about the deregister operation[Qualcomm]: OK with r3[Samsung]: Asks Ericsson's confirmation on r3[Ericsson]: is fine with r3. | approved |   R3 |
|    |    | S3‑221532 | New solution for Kaf refresh  | Samsung  | pCR  | 　[Qualcomm] does not agree with the inclusion of this solution in the TR | noted |    |
|    |    | S3‑221550 | New solution on UDM initiated Primary Authentication  | Beijing Xiaomi Mobile Software  | pCR  | 　[Ericsson]: proposes to note unless modified.[Xiaomi]: provides r1.[Lenovo]: Requires clarification before approval.[Xiaomi]: provides responses.[Ericsson]: proposes changes.[Lenovo]: Provides clarification.Requests revision.[Xiaomi]: provide r2 and check if r2 is fine.[Lenovo]: r2 is okay.[Huawei]: r2 is fine[Ericsson]: is fine with r2. | approved |  R2  |
|    |    | S3‑221354 | Solution on Kaf refresh without primary authentication -UA\*  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Lenovo]: asks clarification[Samsung]: Asks for clarification>>CC\_2<<[Nokia] presents.[Ericsson] comments, is it in scope of this study? There is another issue also.[Huawei] has similar view with Ericsson.[Nokia] replies that this was presented in AKMA study in the last meeting and was asked to present in this SI..[Ericsson] has further comments.[QC] comments there are two issues Kaf refresh and HN triggered Auth. The proposal does not belong to this study.[Nokia] replies[Oppo] clarifies, Kaf refresh was pushed out of Rel-16/R-17 so need to be addressed in Rel-18..[Apple] comments it needs more study.[Nokia] is fine to be in place either AKMA study or Home triggered authentication study, but it needs to be studied.[ZTE] this issue is independent with key issue 1. Kaf refresh discussion in AKMA study suggest to study in this study area.[Huawei] doesn’t think it is in scope in this study. And impact of UE could be considered. Suggests to have another SID to study this issue.[Samsung] supports Nokia’s view.[QC] considers it is out of scope of this study. And not in scope of R18 AKMA study.[Apple] asks whether it is possible to study in AKMA study.[Nokia] in last meeting it is decided to study in this study but it is rejected from some company to study in this study in this meeting.[CMCC] this issue doesn’t belong to current AKMA and HNTA study. But if this issue is considered as necessary, SID could be revised to include this.[Huawei] clarifies the decision made from last meeting[Lenovo] clarifies.>>CC\_2<<[Ericsson] does not agree with the solution.[Qualcomm] does not agree with the inclusion of this solution in the TR[Apple] propose to move this contribution to AKMA study, and revise AKMA SID to include this objective in next meeting. | noted |    |
|    |    | S3‑221355 | Solution on Kaf refresh without primary authentication- AAnF  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Lenovo]: asks clarification[Ericsson] does not agree with the solution.[Qualcomm] does not agree with the inclusion of this solution in the TR[Nokia] During the SID discussion, it was agreed that ME impact solutions will be allowed with lower priority | noted  |    |
|    |    | S3‑221437 | Kaf update solution without triggering primary authentication on Key issue #2  | ZTE Corporation  | pCR  | 　[LGE] : Asks for clarification on K\_AUSF regeneration.[Nokia]: Ask for clarification[ZTE]: provides clarifications to LGE.[ZTE]: provides clarifications to Nokia.[Ericsson] does not agree with the solution.[Qualcomm] does not agree with the inclusion of this solution in the TR | noted |    |
|    |    | S3‑221472 | New solution Security procedure of KAF refresh-MAC  | OPPO  | pCR  | 　[Nokia]: Ask for clarification[OPPO]: Provide clarification and way forward[Ericsson] does not agree with the solution.[Qualcomm] does not agree with the inclusion of this solution in the TR | noted  |    |
|    |    | S3‑221480 | New solution Security procedure of KAF refresh-Counter  | OPPO  | pCR  | 　[Nokia]: Ask for clarification[OPPO]: Provide clarification and way forward[Nokia]: fine with the way forward[Ericsson] does not agree with the solution.[Qualcomm] does not agree with the inclusion of this solution in the TR | noted |    |
|    |    | S3‑221481 | New solution Security procedure of KAF-Nonce  | OPPO  | pCR  | 　[Ericsson] does not agree with the solution.[Qualcomm] does not agree with the inclusion of this solution in the TR | noted  |    |
|    |    | S3‑221497 | New solution on KI#1 UE based solution  | NEC Corporation  | pCR  | 　[Nokia]: Ask for clarification[NEC]: provides clarification to Saurabh.[Qualcomm]: Asks for a further clarification[Ericsson] asks for clarifications.[NEC]: withdraws the pCR as this has ME impact. | noted |    |
|    |    | S3‑221576 | Discussion about the home triggered primary authentication for interworking  | Ericsson  | discussion  | 　[Huawei]: propose to noted this contribution. | noted  |    |
|    |    | S3‑221577 | Conclusion for the primary authentication upon interworking from EPS to 5GS  | Ericsson  | pCR  | 　[Huawei]: propose to noted this contribution.[Ericsson]: Provides clarifications. | noted  |    |
|    |    | S3‑221578 | Discussion about the need for initiating home triggered primary authentication for the SoR/UPU use case.  | Ericsson  | discussion  | 　[Huawei]: propose to noted this contribution. | noted  |    |
|    |    | S3‑221579 | Conclusion for the primary authentication upon SoR and UPU counter wrap around.  | Ericsson  | pCR  | 　[Huawei]: propose to noted this contribution for this meeting.[Nokia]: propose to note this contribution for this meeting.[Ericsson]: asks for clarifications from Nokia.[Nokia]: provide clarification[Xiaomi] proposes to postpone this solution contribution for this meeting[Samsung]: Disagree with the conclusion. Proposes to postpone.[Lenovo]: Do not agree with the conclusion.[Ericsson] provides explanation.>>CC\_4<<[Ericsson] presents.[Huawei] comments there are some objection via email and it is too early to get conclusion[Nokia] agrees with Huawei’s comment.[Ericsson] clarifies.[Lenovo] comments proposed conclusion blocks any other potential solutions.[Huawei] comments as email described.[Ericsson] replies.[Lenovo] proposes to freeze discussion on conclusion and consider the solutions.[Huawei] clarifies current situation.[Lenovo] doesn’t consider the key issue is stable.>>CC\_4<< | noted  |    |
| 5.8 | Study on security aspects of enablers for Network Automation for 5G - phase 3  | S3‑221451 | Anomaly in Multivendor NWDAF Framework  | Intel  | pCR  | 　[Nokia]: agrees on the KI[Ericsson] : need some clarification[Intel] : Provides clarifications[Huawei]: Propose to note.[CMCC]: Propose to note, or revise KI#3 in TR 33.738.[Intel]: Response to CMCC and HW comments and a proposal[Intel] : Uploaded r1 based on the discussion  | noted |    |
|    |    | S3‑221453 | Revision on KI#2  | China Mobile Com. Corporation  | pCR  | 　 | approved |    |
|    |    | S3‑221454 | KI on Security for NWDAF-assisted application detection  | China Mobile Com. Corporation  | pCR  | 　 | approved  |    |
|    |    | S3‑221533 | Key issue on Cyber-attack detection supported by NWDAF  | Samsung  | pCR  | 　[Huawei]: Ask for clarification and revision.[Samsung]: Provides r1 and clarification[CMCC]: prefer to keep the original key issue title.[Samsung]: Provides r2[CMCC]: fine with r2[Huawei]: fine with r2. | approved |   R2 |
|    |    | S3‑221365 | New solution on authorization of AI/ML model retrieving  | China Telecommunications  | pCR  | 　[Ericsson] : need some revisions before approval[China Telecom] : provide R1[CMCC] : need some clarification before approved.[China Telecom] : provide clarification to CMCC[CMCC] : fine with r1.[Ericsson] : fine with r1. | approved |   R1 |
|    |    | S3‑221452 | Authorization and Authentication of ML model transfer  | Intel  | pCR  | 　[Huawei]: Propose to note or postpone.[Intel]: Uploaded r1 and provides clarification/answers[Huawei]: give response.[Ericsson] : propose to postpone in this meeting>>CC\_3<<[Intel] presents r2[Huawei] comments the procedure depends on SA2 progress.[Intel] clarifies.[Huawei] has further comments.[CMCC] has concern on end-to-end encryption. Who produces the key? Current SBA authentication/authorization can be applied if NWDAF is not compromised. And the 3rd question.[Lenovo] responds to the questions, data needs to be stored protected and there is e2e protection while sending..[Intel] replies, aligned with Lenovo.[Huawei] is not convinced with Lenovo’s argument. ADRF could not be seen as un-trusted entity.[Ericsson] agrees with Huawei’s observation. But ok with current version with ENs.[Intel] and [Lenovo] replies.>>CC\_3<<[Intel] : Response to comment and fine with EN proposed by HW[Intel] : Uploaded r2 based on the discussion[CMCC] : fine with r2 and the added ENs[Nokia]: requires to add a EN before approval[Intel]: r3 uploaded with Nokia’s EN[Nokia]: kindly requests to move the EN to step 4) and correct typo[Intel]: r4 uploaded with EN placement after step 4.[Huawei]: fine with r4.[Nokia]: agrees with -r4 | approved |   R4 |
|    |    | S3‑221470 | Solution for AI-ML model authorization and retrieval  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Huawei]: Propose to postpone or note.[Nokia]: Provides clarifications and a constructive way to move it forward[Minutes]: Provides clarifications and a constructive way to move it forward[Nokia]: Provides clarifications and a constructive way to move it forward[Huawei]: provides editor’s notes[Ericsson] : propose to postpone[CMCC]: need clarification.[CMCC]: need clarification. Resend with the correct thread.[Nokia]: provides clarifications and -r1>>CC\_3<<[Nokia] presents.[Docomo] comments on other user credential.[Intel] comments concern on step 9.[CMCC] concerns about step 9 but with EN is ok.[Nokia] replies, will keep the ENs and resolve it in next meeting.>>CC\_3<<[Nokia]: kindly asks for feedback on -r1 and compromise[Huawei]: fine with r1.[Ericsson] : fine with -r1[CMCC] : fine with r1[Intel] : Requests to add EN per the conference call[Nokia]: provides -r2 to add the EN from Intel.[Intel]: r2 is fine | approved  |   R2 |
|    |    | S3‑221570 | AI/ML model storage and sharing security  | Lenovo  | pCR  | 　[Huawei]: Propose to postpone or note. Or adding ENs before approval.[Lenovo]: Answers to the concerns and proposes EN to Huawei.[Lenovo]: Answers to the concerns and proposes EN to Huawei.[Lenovo]: provides revision r1.[Huawei]: give response.[Ericsson] : propose to note or postpone[Lenovo]: provides clarification, OK to add the proposed EN.[Lenovo]: provides response to Ericsson and asks questions.[Ericsson] : provides response to Lenovo and asks for more clarification[Lenovo]: provides requested clarification to Ericsson.[Ericsson] : proposes adding ENs[Lenovo]: accepts ENs from Ericsson, provides revision r3.[Ericsson] : fine with -r3[Huawei]: fine with r3. | approved |   R3 |
|    |    | S3‑221367 | New solution on Using Federated-Learning-related Analytics Id for authorization of selection of participant NWDAF instances in the Federated Learning group  | China Telecommunications  | pCR  | 　[CMCC]: need update before approved.[Nokia]: asks for clarifications[Ericsson] : asks for clarifications and propose to note[China Telecom] : provides r1 and clarification | noted |    |
|    |    | S3‑221369 | New solution on topology hiding in data and analytics exchange in roaming case  | China Telecommunications  | pCR  | 　[CMCC]: need update before approved.[Ericsson] : asks for clarification[China Telecom] : provide clarification and R1[Ericsson] : propose to note | noted |    |
|    |    | S3‑221471 | Solution for access control and anonymization for data and analytics exchange in roaming  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Huawei]: Propose to note, alternatively add editor’s notes.[Nokia]: Provides clarifications, -r1 with ENs.[Ericsson] : asks for clarifications[Nokia]: provides clarifications[Ericsson] : asks for revision[CMCC] : asks for revision[Nokia]: provides -r3 capturing all previous observations[CMCC] : fine with r3[Ericsson] : fine with -r3[Huawei]: fine with r3. | approved |   R3 |
|    |    | S3‑221469 | Solution for anomalous NF behaviour detection by NWDAF  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Huawei]: Clarification is needed before approval.[Nokia]: provides clarifications[Ericsson] : propose to add EN before approval[Nokia]: provides -r1 including the EN proposed by Ericsson[Ericsson] : ok with -r1[Huawei]: fine with r1. | approved  |   R1 |
| 5.9 | Study on Security Enhancement of support for Edge Computing — phase 2  | S3‑221320 | New key issue on UE privacy protection and authorization in NW exposure of UE traffic related information to AF  | InterDigital Communications  | pCR  | 　[Huawei] : request clarification.[IDCC] : clarification.[Ericsson] : request clarification before approval[IDCC] : request clarification for clarification[Huawei] : request the details on the issue.[IDCC] : Provides the details on the issue (if the request is for IDCC).[Huawei] : suggest to postpone the issue after the specific issue is identified.[IDCC] : Meeting dicuss all KIs on EDGE technical merits before approval.[Huawei] : trying to clarify more.[IDCC] : response to HW’s comments.[Huawei] : reply to IDCC.[IDCC] : reply to HW.[Ericsson] : doesn’t agree with the key issue | noted  |    |
|    |    | S3‑221322 | New key issue on Authorization for ACR  | InterDigital Communications  | pCR  | 　[Huawei] : request clarification.[IDCC] : clarification.[Ericsson] : requires clarification before approval[IDCC] : Provides clarification[Huawei] : request further clarification.[IDCC] : Provide further clarification.[Huawei] : suggest to note this key issue in this meeting.[IDCC] : More discussion on authorization of ACR.[Huawei] : not convinced with clarification.[Ericsson] : propose to postpone to the next meeting[IDCC] : EDGE-9 and interface between EASes.[Huawei] : Huawei is also generally fine with CAT-F CR to solve it in Rel17. Then, this contribution will be marked as Noted. | noted |    |
|    |    | S3‑221323 | New key issue on ACR security  | InterDigital Communications  | pCR  | 　[Ericsson] : requires clarification before approval[IDCC] : Provides clarification[Huawei] : provide clarification on the EDGE-9.[IDCC] : provide clarification on the EDGE-9.[Huawei] : request clarification.[IDCC] : Provide clarification.[Huawei] : reply to IDCC.[Huawei] : reply to IDCC.[Ericsson] : proposes to postpone[IDCC] : Response to Ericsson[Huawei] : Thanks for the discussion. The contribution will be marked as Noted. | noted |    |
|    |    | S3‑221411 | New KI on Authentication and Authorization between V-ECS and H-ECS  | Huawei, HiSilicon  | pCR  | 　[IDCC]: Comments on S3-S3-221411[Ericsson] : requires revision before approval[Huawei] : Provide clarification.[IDCC] : request for further clarification.[Huawei]: provides r1.[Ericsson] : r1 is ok[Huawei]: ask for confirmation.[IDCC]: ok to r1. | approved  |   R1 |
|    |    | S3‑221412 | New KI on Transport security for the EDGE10 interface  | Huawei, HiSilicon  | pCR  | 　 | approved  |    |
|    |    | S3‑221413 | New KI on Authentication and Authorization between AC and EEC  | Huawei, HiSilicon  | pCR  | 　[IDCC]: Comments on S3-S3-221413[Huawei]: provides clarification.[IDCC]: response to clarification.[Qualcomm]: Seeks some clarification on the proposed KI[Huawei]: provides r1.[IDCC]: Propose to note the proposed KI[Qualcomm]: Proposes to note the KI | noted |    |
|    |    | S3‑221477 | Updates to authentication and authorization key issue  | Ericsson  | pCR  | 　 | approved |    |
|    |    | S3‑221487 | New KI on data protection for the fast and efficient network exposure  | Huawei, HiSilicon  | pCR  | 　[Ericsson] : requires clarification before approval[Huawei] : Provide feedback.[Ericsson] : requires clarification[Huawei] : R1 is uploaded with a new NOTE to capture E///’s concern.[Ericsson] : propose to postpone[Huawei] : agree to note at this meeting. | noted |    |
|    |    | S3‑221488 | New KI on how to authorize PDU session to support local traffic routing to access an EHE in the VPLMN  | Huawei, HiSilicon  | pCR  | 　[Nokia]: proposes to postpone[Huawei] : reply to NOKIA.[Nokia]: makes a proposal to include EN[Huawei] : provide r1.[Nokia]: -r1 is OK for us | approved  |   R1 |
|    |    | S3‑221357 | Solution for Key Issue #2.2  | THALES  | pCR  | 　[Huawei] : require clarification, and propose to merge into S3-221399.[OPPO] : Provide comments[Apple] : request clarification.[vivo] : Questions on the pre-requisites that why Edge-capable UE shall support all three methods[Apple] : modification is needed before approval.[Xiaomi] : agrees with OPPO and provides some comments.[Ericsson] : requires revision before approval[Thales]: provides answers and r1.[OPPO]: requires revision before approval[vivo]: cannot accept r0 and r1 now>>CC\_3<<[Thales] presents[Vivo] comments already from email.[Huawei] would like to raise discussion about the rule to mechanism selection if one authentication method fails. Currently there is no mandatory mechanism specified to be supported.[Lenovo] comments [Apple] comments “shall” is not allowed outside potential requirements. TLS certificate based solution is mandatory.[Oppo] has similar view with Vivo and Apple.[Docomo] asks about the “shall”, and don’t want any negotiation for failure case.[Huawei] clarifies that one of solution is mentioned in contribution.[Xiaomi] shares same view with Vivo and Apple, and may need to negotiate.[Thales] clarifies that doesn’t want to specify all solutions.[Apple] proposes way forward.>>CC\_3<<[Apple]: Not Ok with R1.[Thales]: provides r2.[Ericsson] : r2 requires revision before approval[Thales]: provides r3.[Ericsson] : r3 is ok[Huawei] : r3 is fine with me.[Apple] :fine with R3.[vivo] :OK with R3. | approved |   R3 |
|    |    | S3‑221377 | New solution Authentication mechanism selection in EDGE  | OPPO  | pCR  | 　[Samsung]: Clarification required[Ericsson] : requires revision before approval[OPPO]: Provide clarifications[OPPO] : Provide clarification before revision[OPPO] : Provide r1[Samsung]: Fine with r1[OPPO] : Provide r2 to fix editorial mistake[Huawei] : provide EN as generally agreed in the 379.[OPPO] : Provide r3 and clarification[Huawei] : fine with r3.[Ericsson] : r3 requires revision[OPPO] : Provide r4 to capture E///’s concern[Ericsson] : r4 is ok | approved |   R4 |
|    |    | S3‑221379 | New solution Authentication mechanism selection among EEC, ECS, and EES  | OPPO  | pCR  | 　[IDCC]: Comments on S3-S3-221379[Ericsson] : requires revision/clarification before approval[Huawei] : request clarification.[OPPO] : Provide clarification and revision[Huawei] : request minor change.[OPPO] : Provide r2 to remove the evaluation part[Huawei] : fine with r2.[Ericsson] : r2 requires revision[OPPO] : Provide r3 to capture E///’s concern.[Ericsson] : r3 is ok | approved |   R3 |
|    |    | S3‑221399 | Authentication mechanism selection between the EEC and ECS/EES  | Huawei, HiSilicon  | pCR  | 　[Apple] : request clarification.[Ericsson] : requires clarification/revision before approval>>CC\_3<<[Huawei] presents[Apple] in R17 it is specified TLS with certificate[Thales] clarifies[QC] comments.[Huawei] clarifies the motivationChair suggests to have a discussion to get a conclusion as early as possible.>>CC\_3<<[Huawei] : provide the feedback, and r1.[Thales]: asks question for clarification.[Huawei] : reply to Thales.[ZTE] : provides comments.[Huawei] : reply to ZTE on the default authentication.[Thales]: replies to Huawei regarding the choice of the default authentication method.[Huawei] : Reply to Thales on the default authentication method, and provide r2.[Apple] : Not Ok with R2, provide R3.[Huawei] : not OK with r3, suggest to use r2.[vivo] : not OK with r0, r1, and r2.[OPPO] : OK with R3.[Thales]: provides comments.[Apple]: provides comments.[Huawei] : r3 is not OK with me. Suggest the delegates to add ENs to r2 if necessary.[Ericsson] : comments[vivo] : comments[Huawei] : reply to comments.[vivo] : provides r5 for progress and only accept r3 and r5.[Huawei] : reply to Vivo on r5, and provide r6.[Apple] : prefer R3 or R5, not OK with R4.[vivo] : comments on r6.[Ericsson] : comments on r6.[Huawei] : Please check r6.[Thales]: disagrees with the revisions.[Apple] : Not ok with R6, Suggest to note for this meeting.[Huawei] : provide r7.[Ericsson] : r7 is ok. | noted |   |
|    |    | S3‑221438 | ECS EES authentication method information provisioning solution on Key issue #2.2  | ZTE Corporation  | pCR  | 　[Ericsson] : requires clarification/revision before approval[ZTE] : provides clarifications and brings r1.[Ericsson] : r1 is ok | approved  |   R1 |
|    |    | S3‑221467 | MEC - Negotiation procedure for the authentication and authorization  | Apple  | LS out  | 　[Huawei] : requrie clarification, and propose to merge into S3-221399.[Apple] : provide clarification to Huawei’s comments.[Ericsson] : requires clarification before approval[Apple] : Provides r1 to address Ericsson’s comment.[Huawei] : provide EN as generally agreed in the 379.[Apple] : provide r2 to address Huawei’s comments.[Huawei] : Fine with r2. Thanks.[Ericsson] : r2 is ok | approved  |   R2 |
|    |    | S3‑221527 | Authentication mechanism selection between EEC and ECS  | Samsung  | pCR  | 　[Ericsson] : requires clarification/revision before approval[Samsung] : Provides clarification[Samsung] : Provides r1.[Ericsson] : r1 is ok | approved  |   R1 |
|    |    | S3‑221528 | Authentication mechanism selection between EEC and EES  | Samsung  | pCR  | 　[Huawei] : requrie clarification.[Samsung] : Provides clarification[Ericsson] : requires clarification/revision before approval[Samsung]: Provides clarification[Huawei] : suggest to add an EN to capture the concern.[Samsung]: Provides r1[Huawei] : fine with r1.[Ericsson] : fine with r1. | approved  |   R1 |
|    |    | S3‑221559 | KI#2.1, New Sol Authentication and authorization between EEC hosted in the roaming UE and ECS  | Xiaomi Communication  | pCR  | 　[Huawei] : request clarification before approval.[Xiaomi] : provides clarification.[Huawei] : provide feedback inline.[Xiaomi] : provides clarification.[Ericsson] : requires clarification before approval[Xiaomi] : provides clarification.[Huawei] : Provides feedback inline.[Xiaomi] : Provides r1.[Huawei] : fine with r1.[Ericsson] : fine with r1. | approved  |   R1 |
|    |    | S3‑221560 | KI#2.1, New Sol Authentication and authorization between EEC hosted in the roaming UE and EES  | Xiaomi Communication  | pCR  | 　[Huawei] : request clarification before approval.[Xiaomi] : provides clarification.[Ericsson] : requires clarification before approval[Xiaomi] : provides clarification.[Xiaomi] : Provides r1.[Huawei] : fine with r1.[Ericsson] : fine with r1. | approved |   R1 |
|    |    | S3‑221561 | KI#2.2, New Sol 5GC-based authentication mechanism selection between EEC and ECS or EES  | Xiaomi Communication  | pCR  | 　[IDCC]: Comments on S3-S3-221561[Ericsson] : requires revision before approval[Xiaomi]: provides r1 and clarification.[Xiaomi] : provides r1 and clarification.[Ericsson] : r1 requires revision[Xiaomi] : provides r2.[Ericsson] : r2 is ok[Xiaomi] : provides some inputs.[IDCC] : OK with r2. | approved  |   R2 |
|    |    | S3‑221468 | HN-auth-NAS based HN triggered authentication  | Apple  | pCR  | 　[Nokia]: Ask for clarification[Qualcomm]: Requests a clarification[Ericsson]: requests clarification.[Ericsson]: Proposes to merge with other similar solutions or note.[Apple]: Provides clarification to Nokia, Ericsson and Qualcomm, and fine to merge.[Apple]: Provides r1 to address the comments.[Ericsson]: Proposes to note. | noted |    |
| 5.10 | Study on Personal IoT Networks Security Aspects  | S3‑221319 | New key issue on Protecting Identification of PIN and PIN Privacy  | InterDigital, Inc.  | pCR  | [vivo]: Provide r1.[vivo]: Provide r1.[Huawei]: asks for clarification, otherwise postpone.[vivo]: answers to Huawei.[Philips]: provides comments[Qualcomm]: Agrees with Huawei and proposes to note.[vivo]: Clarifies and provides r2 and co-sign.>>CC\_4<<[ViVo] presents current status.[Huawei] comments PNI ID is not clear for now. need more time to treat issue.[QC] would like to know the specific ID it mentioned.>>CC\_4<<[Interdigital]: Supports R2.[Huawei]: propose to noted | noted |    |
|    |    | S3‑221321 | New key issue on Secure Communication of between PINEs  | InterDigital, Inc.  | pCR  | 　[Nokia]: Requires major clarification and update.[Qualcomm]: Proposes changes and asks for clarification.[Philips]: provides feedback[vivo]: provides r1[Nokia]: appreciates feedback from Philips and comments that 3GPP needs to agree on an approach towards support of PIN networks.[Ericsson]: propose to note | noted |    |
|    |    | S3‑221325 | New key issue on Secure policy and parameters provisioning for PIN  | InterDigital, Inc.  | pCR  | 　[Nokia]: Requests update[Interdigital]: The initially-proposed requirement,“The 5G system should provide means to securely provision PIN policy/parameters configuration to PEGC, PEMC, PINE for the PIN service.”does not explicitly or implicitly ask for a \*new\* solution to fulfill it. This is not what a requirement should do. It is written in the way that SA3 is used to have. Rewriting the requirement in the shape that you suggested makes it unnecessarily conditional and confusing for the implementer.[Ericsson]: update required[Qualcomm]: Proposes to postpone.[Huawei]:propose to postpone. | postpone |    |
|    |    | S3‑221327 | New key issue on Authorization of PINE  | InterDigital, Inc.  | pCR  | 　[Qualcomm]: Proposes to postpone.[Huawei]:clarification is needed before approval. | postpone |    |
|    |    | S3‑221328 | New key issue on PIN and PINE discovery authorization  | InterDigital, Inc.  | pCR  | 　[Nokia]: Proposes to postpone.[Interdigital]: Answers to Nokia and provides a supporting quote from TR 23.700 requiring PIN discovery. It is, however, the job of SA3 to study how to secure such discovery.Per clause 5.2 of TR 23.700, “The PIN discovery is used for a UE or non-3GPP device to discover a PIN. PINE discovery is used for a UE or non-3GPP device to discover the PIN Elements (i.e. PINE, PEGC, and PEMC).”There is a need to have a secure discovery authorization procedure of PINEs in a given PIN.For that, SA3 does not need to wait for SA2 for their OK to define such a requirement and even less for the SA2 study to “conclude in SA2 first, even when it postpones SA3 work.”[Ericsson]: Propose to postpone[Qualcomm] Proposes to postpone. | postponed |    |
|    |    | S3‑221335 | New Key Issue on controlling access of PIN elements to 5G network  | Nokia, Nokia Shanghai Bell  | pCR  | 　[vivo]: Ask for clarification[Nokia]: agrees to merge and proposes to use S3-221335 as baseline.[Nokia]: provides S3-221335-r1 as base line for merge with S3-221417, S3-221506, S3-221564.[Qualcomm]: Agrees to merge and proposes changes to the baseline.[Huawei]:propose to remove the threat and requirement, and cannot accept r1 now.[Thales]: requires changes.[vivo]: propose merge into S3-221417.[Nokia]: agrees with merge into S3-221417.[Interdigital]: Uploads R4 with editorial corrections.[rapporteur]: [Interdigital] uploads R4 of S3-221417. | merged |   1417 |
|    |    | S3‑221417 | Authentication and authorization to PINE behind PEGC and PEMC  | Huawei, HiSilicon  | pCR  | 　[vivo]: propose merge this contribution into S3-221335.[Nokia]: asks for clarification.[vivo]:provides r1[vivo]: provides r2 and co-sign[Nokia]: agrees with merge of 1335 into 1417, provides r3 and co-sign.[Interdigital]: Uploads R4 with editorial corrections and co-sign.[Huawei]: can live with r4, but does not mean we agree everything in the key issue details. Just for sake of progress.[Huawei]: can live with r4, but does not mean we agree everything in the key issue details. Just for sake of progress.[Thales]: can live with r1. | approved(thales check)  |   R4 |
|    |    | S3‑221440 | Key issue on secure data transfer between PEGC PEMC and PIN NF  | ZTE Corporation  | pCR  | 　[Nokia]: Proposes to postpone or note.[Interdigital]:1. Requires changes and a possible merger with S3-221321.2. The first requirement, 'The PEGC/PEMC and PIN NF shall mutually authenticate each other for secure PIN communication.' does not correspond to any of the attacks described in the Attacks clause. It has to be removed.3. All other requirements have to be re-formulated while preserving their essence.[ZTE]: Provide clarification.[Qualcomm]: Proposes to postpone.[ZTE]: Agree to note it this meeting and wait for SA2 progress. | noted |    |
|    |    | S3‑221502 | Proposed skeleton for TR 33.882  | vivo Mobile Communication (S)  | pCR  | 　 | approved |    |
|    |    | S3‑221504 | Scope of TR 33.882  | vivo Mobile Communication (S)  | pCR  | 　 | approved |    |
|    |    | S3‑221506 | New KI for authentication of PINE  | vivo Mobile Communication (S)  | pCR  | 　[vivo]: propose merge this contribution into S3-221335.[vivo]: propose merge this contribution into S3-221417. | merged |   1417 |
|    |    | S3‑221507 | New Key Issue for controlling of remote provisioning  | vivo Mobile Communication (S)  | pCR  | 　[Qualcomm]: Proposes to note.[Thales]: agrees with Qualcomm and proposes to note.[vivo]: clarifies and provides r1, which merged 1565.>>CC\_4<<[Vivo] presents.[Thales] comments. It may have a mixed discussion[QC] has commented via email, has similar view with Thales.[ViVo] clarifies.[QC] replies as Vivo’s clarification doesn’t fit the question.>>CC\_4<<[Thales]: asks to note initial version and r1 | noted  |    |
|    |    | S3‑221564 | New KI: Secure authentication of PINE  | Xiaomi Communication  | pCR  | 　[vivo]: propose merge this contribution into S3-221335.[vivo]: propose merge this contribution into S3-221417. | merged |  1417  |
|    |    | S3‑221565 | New KI: Secure provisioning of credentials for non-3GPP device via PEGC  | Xiaomi Communication  | pCR  | 　[Thales]: provides comments and proposes to note the contribution.[Interdigital]: provides comments that place credential provisioning in the scope of PIN.[Thales]: provides answers to Interdigital.[Interdigita]: provides comments stating that provisioning is in scope since it is not explicitly out.[Interdigital]: provides additional comments stating that provisioning is in the scope of SA2 TR 23.700-88 and therefore, is in the scope of the SA3 PIN study.[Xiaomi]: provides clarification.[vivo]: agree with Xiaomi and Interdigital, and propose merge 1507 with this contribution[Nokia]: raises concerns about scope of KI.[vivo]: answers to Nokia.[Thales]: provides answers.[Qualcomm]: Agrees with Thales and NOKIA and proposes to note.[vivo]: clarifies.[vivo]: propose merging this contribution into S3-221507.[Xiaomi]: accepts the merging plan. | noted |    |
| 5.11 | Study on SNAAPP security  | S3‑221314 | skeleton for draft TR 33.884 SNAAPP security(FS\_SNAAPPY)  | NTT DOCOMO  | draft TR  | 　 | approved |    |
|    |    | S3‑221336 | New Key Issue on Securing API invocation from UE applications  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Ericsson] : requires clarification before approval and proposes to merge contributions 1336 and 1478[Nokia] : provides clarification and agrees merge to 1478[Nokia] : contribution is merged to S3-221478-r1 | merged |   1478 |
|    |    | S3‑221359 | pCR to 33.884, scope  | NTT DOCOMO  | pCR  | 　 | approved |    |
|    |    | S3‑221478 | A new key issue on authentication and authorization of UE in UE originated API invocation  | Ericsson  | pCR  | 　[Ericsson] : starts the discussion[Nokia] : proposes way forward.[Ericsson] : comments and provides r1[Nokia] : agrees to the merged version S3-221478-r1.[Qualcomm]: fine with r1. | approved | R1   |
|    |    | S3‑221479 | A new key issue on user consent in API invocations  | Ericsson  | pCR  | 　[Nokia]: asks for clarification.[Qualcomm]: requires changes before the KI can be agreed.[Nokia]: asks QC for clarification of comment.[Ericsson] : provides clarification[NTT DOCOMO]: provides clarifications[Huawei]: provides suggestion.[Nokia]: asks for clarification.[NTT DOCOMO]: reply to question[Ericsson] : provides r1[Qualcomm]: r1 not ok. Propose to note for this meeting. | noted |    |
|    |    | S3‑221582 | pCR to 33.884, key issues from scope objective 1  | NTT DOCOMO  | pCR  | 　 | withdrawn  |    |
|    |    | S3‑221586 | LS on CAPIF authorization roles related to FS\_SNAAPP  | S6-221771  | LS in  | >>CC\_1<<[Docomo] presents and proposes way forward[Huawei] agrees with Docomo observation.[CableLabs] asks questions to Docomo and Huawei.[Apple] asks whether there is a draft reply.[Docomo] replies there is not yet.Chair asks to continue email discussion and asks Docomo to hold the pen if there is progress and response.>>CC\_1<<[NTT DOCOMO]: providing draft\_S3-221586-r2 as discussion point[Nokia]: agrees with the general approach used for the LS, but has some questions related to SNAAPP in general.[NTT DOCOMO]: proposes a joint call with SA6[NTT DOCOMO]: proposes a joint call with SA6>>CC\_4<<[Docomo] presents draft reply r2[Huawei] asks questions for clarification.[Docomo] clarifies[Huawei] comments that is not the answer for SA6’s question.[Docomo] clarifies.>>CC\_4<<[Nokia]: supports joint call with SA6.[Huawei]: ask for clarification.[Nokia]: comments on discussion about near real time authorization in our SA3 call: Current user consent mechanism does not cover AF specific authorization at all.[NTT DOCOMO]: -r3 available[Huawei]: ask further change and clarification.[Nokia]: provides proposal to rephrase 'near real time'.[NTT DOCOMO]: propose to postpone and way forward[NTT DOCOMO]: propose to postpone and way forward[Huawei]: support the joint call with SA6.} [NTT DOCOMO]: propose to postpone and way forward | Postpone  |  draft reply will reserve a new number and noted. |
| 5.12 | Study on enhanced security for network slicing Phase 3  | S3‑221372 | Skeleton of TR33.886  | Huawei, HiSilicon  | pCR  | 　 | approved |    |
|    |    | S3‑221373 | Scope of TR33.886  | Huawei, HiSilicon  | pCR  | 　[Nokia]: provide comment[Ericsson]: agree with Nokia and provide r1 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221373-r1%20Scope%20of%20TR33.886.docx}[Huawei]: provides r2.[Interdigital]: request clarification[Huawei]: r3 provided in response to Interdigital.[Ericsson]: revision 4 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221373-r4.docx} uploaded[Nokia]: fine with r4.[Huawei]: r5 is provided.[Interdigital]: OK with r5.[Ericsson]: OK with r5. | approved |   R5 |
|    |    | S3‑221374 | New KI-providing VPLMN slice information to roaming UE  | Huawei, HiSilicon  | pCR  | 　[Nokia]: provide comment[Lenovo]: KI needs revision.[Ericsson]: provide comment and question the need of having this KI, r2 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221374-r2%20New%20KI-providing%20VPLMN%20slice%20information%20to%20roaming%20UE.docx}[Huawei]: provides responses and r3.[Ericsson]: r4 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221374-r4.docx} uploaded[Huawei]: r5 is provided in response to Ericsson.[Nokia]: fine with r5.[Lenovo]: r5 needs revision.[Ericsson]: r6 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221374-r6.docx} uploaded[Huawei]: r7 is available.[Ericsson]: we cannot agree r7. r6 is ok.[Lenovo]: r6 is ok. | approved | R6 |
|    |    | S3‑221375 | New KI-temprory slices and slice authorization  | Huawei, HiSilicon  | pCR  | 　[Nokia]: ask clarification[Lenovo] KI needs revision.[Ericsson]: is it too early to have threats and requirements, R1 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221375-r1%20New%20KI-temporary%20slice%20authorization%20and%20slice%20authorization.docx} provided.[Ericsson]: is it too early to have threats and requirements, R1 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221375-r1%20New%20KI-temporary%20slice%20authorization%20and%20slice%20authorization.docx} provided.[Ericsson]: r2 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221375-r2%20New%20KI-temporary%20slice%20authorization%20and%20slice%20authorization.docx} uploaded[Huawei]: r3 provided in response to comments received.[Nokia]: we cannot agree with r3.[Lenovo]: r3 is okay.[Ericsson]: we also cannot agree r3. R2 is ok.[Huawei]: r2 is ok.[Lenovo]: r2 is okay. | approved  |   R2 |
|    |    | S3‑221376 | New KI on NSAC  | Huawei, HiSilicon  | pCR  | 　[Nokia]: provide comments[Ericsson]: propose to note[Huawei]: response to comments.[Ericsson]: compromise proposal KI without threats and requirements, see r1 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221376-r1%20New%20KI%20on%20NSAC.docx}[Huawei]: fine with r1 without threats and requirements for now | approved |   R1 |
| 5.13 | Study on Security aspects for 5WWC Phase 2  | S3‑221341 | Skeleton for 5WWC Ph2 study  | Nokia, Nokia Shanghai Bell  | pCR  | 　 | approved |    |
|    |    | S3‑221342 | Scope of 5WWC study  | Nokia, Nokia Shanghai Bell, CableLabs  | pCR  | 　[Ericsson]: Update needed to reflect agreed objectives[Nokia]: provide r1 (v1) with updated scope[Ericsson]: r1 OK | approved |   R1 |
|    |    | S3‑221343 | Key issue on authentication of AUN3 device not supporting EAP  | Nokia, Nokia Shanghai Bell, CableLabs  | pCR  | 　[Ericsson]: Ask for clarification[Nokia]: provide clarification[Huawei]:clarification is needed before apprvoal.[Qualcomm]: not clear what is expected to be studied[Nokia]: provide clarification[CableLabs]: provide clarification.[Thales]: ask question for clarification before approval.[CableLabs]: provide clarification.[Thales]: provides further comments.[CableLabs]: provides -r1.[Nokia]: provides -r2.[Ericsson]: Propose to note>>CC\_4<<[Nokia] presents.[CableLabs] gives further clarification.[Thales] comments.[QC] is not fully convinced, will provide comments via email.>>CC\_4<<[Thales]: provides further comments.[CableLabs]: provides -r3 based on comments from Thales.[Thales]: disagrees wih r3 and previous versions.[Ericsson]: Still propose to note | noted |    |
|    |    | S3‑221344 | Key issue on authentication of AUN3 device supporting EAP  | Nokia, Nokia Shanghai Bell, CableLabs  | pCR  | 　[Ericsson]: Ask for clarification[Huawei]:clarification is needed before approval.[Nokia]: provide clarification[CableLabs]: provide clarification[Thales]: provides comment.[CableLabs]: provides -r1.[Nokia]: provides -r2.[Thales]: provides further comment.[Thales]: proposes changes.[Nokia]: providing r3 with removing USIM details[Thales]: requires additional change.[CableLabs]: provides -r4 based on the comments from Thales.[Thales]: provides comments.[Thales]: provides further comments.[Qualcomm]: provides comments.[CableLabs]: provides comments.[Thales]: disagrees wih r4 and provides proposal.[Nokia]: providing r5 with requested changes[Qualcomm]: OK with r5[Huawei]:r5 is fine.[Thales]: is fine with r5.[CableLabs]: provides comments to Thales. | approved  |   R5 |
|    |    | S3‑221345 | Key issue on Authentication of UE behind RG and connected via NSWO  | Nokia, Nokia Shanghai Bell, CableLabs  | pCR  | 　[Ericsson]: Ask for clarification[Huawei]:clarification is needed before approval.[Qualcomm]: clarification required[CableLabs]: provide clarification.[Ericsson]: Ask for further clarification and update>>CC\_4<<[Nokia] presents.[CableLabs] supports.and think there is not too much need to be done.[QC] comments similar to 1343[Huawei] comments it is not discussed about architecture, so need to discuss architecture first.[CableLabs] clarifies UE behinds RG, but RG could be connected with non-3GPP access as NSWO.>>CC\_4<<[Qualcomm]: Propose to note[CableLabs]: provides -r1 based on the comments from Ericsson.[Ericsson]: provide comments and propose to note[AT&T]: Propose to note | noted |    |
|    |    | S3‑221346 | Key issue on Security aspect of slice information exposure of N3IWF/TNGF  | Nokia, Nokia Shanghai Bell, CableLabs  | pCR  | 　[Huawei]:clarification is needed before approval.[Nokia]: provide clarification[Qualcomm]: provide a proposal to simplify the key issue[Nokia]: provide r1 where KI is divided into 2 KIs[Huawei]:fine with r1.[Qualcomm]: OK with r1 | approved |   R1 |
|    |    | S3‑221416 | authentication and authorization to N3GPP device behind 5G-RG  | Huawei, HiSilicon  | pCR  | 　[Nokia]: Ask for clarification[Huawei]: provide the clarification[Ericsson]: Propose to postpone[Huawei]: fine to postpone[CableLabs]: provide comments>>CC\_4<<[Huawei] announce it is noted.>>CC\_4<< | noted |    |
| 5.14 | Study on the security aspects of Artificial Intelligence (AI)/Machine Learning (ML) for the NG-RAN  | S3‑221573 | TR skeleton  | Ericsson  | draft TR  | 　 | approved |    |
|    |    | S3‑221574 | Content for the scope clause of the technical report  | Ericsson  | pCR  | 　[QC] Requests to note this contribution.[QC] Clarify QC request to modify the scope.[Erisson] provides explanation.[Nokia]: Adds comments.[QC] QC drops objections and agrees. | approved |    |
|    |    | S3‑221575 | Initial content for the background clause of the technical report  | Ericsson  | pCR  | 　[Huawei]: Ask for modification.[Ericsson] requests clarifications.[Huawei]: provide r1.[Ericsson]: requests clarifications for r1.[Ericsson]: provides r2.[Huawei]: ok with r2. | approved |   r2 |
| 5.15 | Study on security support for Next Generation Real Time Communication services  | S3‑221482 | skeleton for NGRTC  | Huawei, HiSilicon  | pCR  | 　 | approved |    |
|    |    | S3‑221483 | Scope of TR 33.890  | Huawei, HiSilicon  | pCR  | 　 | approved  |    |
|    |    | S3‑221484 | New KI on 3rd party ID  | Huawei, HiSilicon  | pCR  | 　[Huawei]: Revision is uploaded.[Xiaomi]: r2 is uploaded.[Ericsson]: provides r3[Xiaomi]: provides comments[Huawei]: provides r4[Xiaomi]: ok with R4.[Qualcomm]: Propose some further changes[Ericsson]: provides r5[Huawei]: provides further clarifications[Xiaomi]: provides r6.[Ericsson]: provides r7, which is r5 without the NOTE in the requirements[Huawei]: is OK with r7.[Xiaomi]: provides comments[Huawei]: provides clarifications[Xiaomi]: provides response[Ericsson]: agrees with Huawei’s clarification[Xiaomi]: provides r8[Huawei]: fine with r8.[Ericsson]: agrees with r8 and would like to co-sign r8[Qualcomm]: OK with r8.[Huawei]: provides r9 with adding Ericsson as co-signer and editorial changes to the header.[Ericsson]: provides r10 which has same content as r9 and r8, but clearly shows which text is new[Huawei]: fine with R10[Xiaomi]: ok with r10[Qualcomm]: OK with r10. | approved |  R10  |
|    |    | S3‑221546 | Key Issue on Authorization for Third Party Specific User ID Usage  | Beijing Xiaomi Mobile Software  | pCR  | 　[Huawei]: proposes to merge in S3-221484[Xiaomi]: is fine with the merging proposal | merged |   1484 |
|    |    | S3‑221547 | Key Issue on Verification of the Third Party User Specific ID  | Beijing Xiaomi Mobile Software  | pCR  | 　[Huawei]: proposes to also merge in S3-221484[Xiaomi]: is fine with the merging proposal | merged |  1484  |
| 5.16 | Study on security aspects of enhanced support of Non-Public Networks phase 2  | S3‑221361 | Key issue on connected and idle mode mobility  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Ericsson]: proposal to note[Nokia]: Disagrees with the proposal and provides answers.[Ericsson]: replies to Nokia[Qualcomm]: proposes to note. | noted |    |
|    |    | S3‑221362 | Key issue on non-3GPP access in SNPN’s  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Ericsson]: proposes to merge in S3-221493[Nokia]: Accepts proposal to merge and clarifies.[Ericsson]: discussion continues in the thread for S3-221493 | merged  |   1493 |
|    |    | S3‑221363 | Key issue on providing access to localised services  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Ericsson]: proposes to merge in S3-221494[Nokia]: Accepts proposal to merge and provides clarifications.[Ericsson]: discussion continues in the thread for S3-221494 | noted |    |
|    |    | S3‑221450 | Authentication and Authorization for Localized Services  | Intel  | other  | 　[Ericsson]: proposes to merge in S3-221494[Intel]: Fine with proposal to merge in S3-221494 and provides clarifications.[Ericsson]: discussion continues in the thread for S3-221494 | noted |    |
|    |    | S3‑221492 | Scope for Study on security aspects of enhanced support of Non-Public Networks phase 2  | Ericsson  | pCR  | 　 | approved  |    |
|    |    | S3‑221493 | New Key Issue "Security of non-3GPP access for SNPN"  | Ericsson  | pCR  | 　[Ericsson]: provides r1, proposed merger with S3-221362 and S3-221563>>CC\_2<<[Ericsson] presents r1.[Nokia] comments about “re-use” in last NOTE.[CableLabs] has similar comments with Nokia, and doesn’t exclude any non-3GPP device.>>CC\_2<<[Nokia]: Changes needed before acceptable.[Ericsson]: replies to Nokia[Nokia]: provides answers to Ericsson[Ericsson]: provides r2[Nokia]: Nokia is fine to accept R2[CableLabs]: fine with R2[Ericsson]: provides r3, with same content as r2, just additional cosigning company[Nokia]: Nokia is also fine to accept R3 | approved |   R3 |
|    |    | S3‑221494 | New Key Issue "Hosting network and UE mutual authentication"  | Ericsson  | pCR  | 　[Ericsson]: provides r1, proposed merger with S3-221450 and S3-221363[Nokia]: Provides r2 with a concrete text proposal.>>CC\_2<<[Ericsson] the latest version is r3, merger with 1450 and 1363.[Ericsson] presents.[Intel] comments whether it is assumption[Ericsson] clarifies[Intel] proposes way forward.[Lenovo] will share feedback in future, comments on the NOTE.[Ericsson] replies. There is different trust model.[Nokia] comments about NOTE, doesn’t want to include the NOTE at all, when SA2 has not agreed on the solutions..[Ericsson] will try to reformulate the wording addressing the concerns...>>CC\_2<<[Ericsson]: provides r3[Philips]: provides comments[Nokia]: Provides answers to Ericsson[Intel]: Comments on r3[Ericsson]: proposes r4[Thales]: requests changes.[Ericsson]: replies to Thales[Lenovo]: The KI description needs further clarification and revision for approval.[Ericsson]: provides r5[Nokia]: Nokia is fine accepting both R4 and R5.[Thales]: proposes changes.[Intel]: Proposes changes to Thales suggestion.[Thales]: responds to Intel.[Ericsson]: provides r6, asks Intel and Thales whether r6 can be a way forward.[Nokia]: R6 is not acceptable and provides alternative wording[Thales]: is fine with r6.[Ericsson]: replies to Nokia, proposes other alternative wording[Nokia]: Accepts proposal by Ericsson.[Thales]: provides comments.[Nokia]: Provides answers to Thales[Thales]: provides answers to Nokia and Ericsson.[Ericsson]: provides r7, with the security requirement “The UE and the hosting network shall support mutual authentication between the UE and the network”, and rest of the KI adapted to the requirement[Nokia]: Nokia is fine to accept R7[Intel]: r7 is fine by us[Thales]: is fine with r7.[Lenovo]: revisions didn’t capture suggested relevant scenarios from TS 22.261.Proposes way forward: revise or note.[Ericsson]: asks Lenovo to either make a minor change proposal or live with r7[Ericsson]: explains to Lenovo that there is no need to capture all stage-1 requirements in the same key issue[Lenovo]: Clarifies Ericsson. | noted |    |
|    |    | S3‑221562 | New KI: Home control enhancement for eNPN  | Xiaomi Communication  | pCR  | 　[Qualcomm]: proposes to note.[Xiaomi]: provides clarification and requests for further technical discussion.[Qualcomm]: Replies. Still proposes to note.[Xiaomi]: provides clarification about why we need to study the KI.[Qualcomm]: replies to the provided clarification.[Ericsson]: asks for clarification about the threat, proposes to note the contribution if the threat cannot be clarified[Xiaomi]: provides clarification.[Ericsson]: replies to Xiaomi[Xiaomi]: requests clarification and deeper technical discussion.[Qualcomm]: responds to provided clarification.[Xiaomi]: requests further clarification.[Ericsson]: replies to Xiaomi[Xiaomi]: tries to explain the attack that we concern about.[Ericsson]: asks Xiaomi to explain the attack in detail[Xiaomi]: provides details about the attack.[Ericsson]: Does not see how this attack could be possible, and why it should be specific to NPN.[Xiaomi]: provides details about the attack.[Ericsson]: replies to Xiaomi[Qualcomm]: responds to Xiaomi.[Xiaomi]: provides clarification.[Xiaomi]: provides further clarification.[Xiaomi]: provides r1 to provide more details about the attack.[Ericsson]: disagrees with r1, the attack does not seem to exist[Xiaomi]: provides clarification.[Ericsson]: replies to Xiaomi[Xiaomi]: thanks for the technical discussion. | noted  |    |
|    |    | S3‑221563 | New KI: Support for secure non-3GPP access for NPN  | Xiaomi Communication  | pCR  | 　[Ericsson]: proposes to merge in S3-221493[Xiaomi]: is ok with the merge suggestion.[Ericsson]: discussion continues in the thread for S3-221493 | merged  |   1493 |
| 5.17 | Study on Security of Phase 2 for UAS, UAV and UAM  | S3‑221333 | Key Issue on Direct C2 Security  | InterDigital, Europe, Ltd.  | pCR  | 　[Qualcomm]: Document requires revision[Interdigital]: clarifies provides r1[Qualcomm]: requests changes to r1[Interdigital]: provides r2 (merger of 1407)[Qualcomm]: r2 OK[Huawei, HiSilicon]: r2 is fine. | approved |   R2 |
|    |    | S3‑221334 | Key Issue on Direct C2 Authorization  | InterDigital, Europe, Ltd.  | pCR  | 　[Qualcomm]: Propose to note this contribution[Interdigital]: replies | noted |    |
|    |    | S3‑221407 | New Key Issue on security enhancement of C2 communication  | Huawei, HiSilicon  | pCR  | 　[Interdigital] : request clarification for 2nd threat and requirement[Ericsson] : requires clarification before approval[Qualcomm]: requires clarification[Huawei, HiSilicon]: provides clarification and propose to merge into the KI that covers the C2, e.g. 1514 or 1333 .[Qualcomm]: propose merge into 1333 make more sense[Huawei, HiSilicon]: fine to merge into 1333 . | merged |   1333 |
|    |    | S3‑221514 | Key issue for security of unicast connection  | Qualcomm Incorporated  | other  | 　[Interdigital] : revision required[Qualcomm]: provides a response to revision request[Ericsson] : requires clarification[Huawei, HiSilicon]: Clarification about DAA is needed.[Interdigital] : replies to Qualcomm[Qualcomm]: Accepts the proposed split and uploads an r1[Ericsson] : requires clarification[Interdigital] : request change to requirement wording[Qualcomm]: r2 uploaded[Interdigital] : OK with r2[Huawei, HiSilicon] : fine with r2[Ericsson] : fine with r2 | approved |   R2 |
|    |    | S3‑221512 | Proposed skeleton for TR 33.891  | Qualcomm Incorporated  | other  | 　 | approved |    |
|    |    | S3‑221513 | Proposed scope for TR 33.891  | Qualcomm Incorporated  | other  | 　[Huawei]: revision required[QC]: r1 is available[Huawei]: r1 is fine. | approved |   R1 |
|    |    | S3‑221534 | Key issue on Privacy and security aspects of broadcasting Remote ID  | Samsung  | pCR  | 　[Huawei]: revision required[Samsung]: Provides r1[Ericsson] : revision/clarification is required before approval[Qualcomm]: request for clarification[Samsung]: Provides r2 and clarification[Ericsson] : proposes to postpone the key issue[Huawei] : provides comments.[Qualcomm]: Propose to note[Samsung]: Ok to postpone for this meeting | noted |    |
| 5.18 | Study to enable URSP rules to securely identify Applications  | S3‑221567 | Skeleton for TR 33.892 FS\_USIA  | Lenovo  | draft TR  | 　[NTT DOCOMO]: requires update[Lenovo]: provides requested update in revision r1[NTT DOCOMO]: -r1 is ok | approved |   R1 |
|    |    | S3‑221568 | Scope for TR 33.892  | Lenovo  | pCR  | 　[Nokia]: Request clarifications to the scope before acceptable.MCC commented on the scope.[Nokia]: Asks for further clarifications.[Lenovo]: provides further clarifications.[Nokia]: Provides answers to Lenovo and a proposal for wording.[Lenovo]: Ok with wording proposal, provides rev3.[Nokia]: Nokia is fine to accept R3[Lenovo]: Corrects subject line to the correct tdoc nr 1568[NTT DOCOMO]: object to the changes in scope.[Lenovo]: requests clarification[NTT DOCOMO]: ok with changes provided by MCC | noted  |    |
|    |    | S3‑221569 | KI on determination of additional information for application identification  | Lenovo  | pCR  | 　[Nokia]: Provides answers[Lenovo]: disagrees with the Nokia proposal [Nokia]: Provides answer to Lenovo[Lenovo]: S3-221360 was misplaced and should be handled under agenda 5.18.[Nokia]: Provides answer to Lenovo.[Lenovo]: provides answers to Nokia.[Nokia]: Provides r1 as a change proposal and answers to Lenovo[Apple]: modification and clarification is required before approval.[Lenovo]: provides answers to Apple.[Apple]: provides answer to Lenovo. Requests modification before approval.[Lenovo]: provides revision r2 without requirement according to Apple’s request. | approved |   R2 |
| 5.19 | Study on Security Aspects of Ranging Based Services and Sidelink Positioning  | S3‑221537 | 33.893: Draft Skeleton  | Xiaomi Technology  | pCR  | 　 | approved  |    |
|    |    | S3‑221538 | 33.893: Scope  | Xiaomi Technology  | pCR  | 　 | approved |    |
|    |    | S3‑221441 | Add context to the architecture assumption  | ZTE Corporation  | pCR  | 　[Xiaomi]: proposes to merge into S3-221539[ZTE]: Fine to merge[Xiaomi]: Merged to 1539. This thread is closed. | merged |   1539 |
|    |    | S3‑221539 | 33.893: Architecure Assumptions  | Xiaomi Technology  | pCR  | 　[Xiaomi]: provides revision for the merger[Philips] Suggests to refer to SA2 architecture rather than copying it[Xiaomi]: provides r2[Huawei]: Suggests to refer to SA2 architecture rather than copying it[Philips]: can live with r2 in this meeting.[Xiaomi]: provides r3[Huawei]: fine with r3.[Philips]: fine with r3.[Ericsson]: provide minor comment[Xiaomi]: provides r4[Ericsson]: we are fine with r4[ZTE]: we are fine with r4 | approved |  R4  |
|    |    | S3‑221398 | New key issue on privacy protection for Ranging/Sidelink positioning with the assistance of assistant UE  | Huawei, HiSilicon  | pCR  | 　[Xiaomi]: proposes to merge into S3-221540[Huawei]: fine to merge into S3-221540[Xiaomi]: S3-221398 is merged into S3-221540 | merged |   1540 |
|    |    | S3‑221455 | Key issue on Privacy protection for Network assisted Sidelink Positioning  | China Telecomunication Corp.  | pCR  | 　[Xiaomi]: proposes to merge into S3-221540[ChinaTelecom]: agree to merge 1455 into 1540.[Xiaomi]: S3-221455 is merged into S2-221540. This thread is closed. | merged |   1540 |
|    |    | S3‑221540 | 33.893: New Key Issue on Privacy  | Xiaomi Technology  | pCR  | 　[Xiaomi]: provides revision for the merger[Huawei]: request revision.[Interdigital]: request revision.[Nokia]: Supports KI, and requests updates.[Qualcomm]: requests further updates[Xiaomi]: provides response to comments and r2[Philips]: Requests a small addition[Qualcomm]: requests further updates[Xiaomi]: provides response to comments and r3[Xiaomi]: provides r4[Huawei]: fine with r4.[ChinaTelecom]: fine with r4.[Interdigital]: Ok with r4.[Philips]: proposes to add Editor's note[Philips]: proposes to change should to shall[Xiaomi]: provides r5[Qualcomm]: is fine with r5 | approved  |   R5 |
|    |    | S3‑221442 | Key issue on discovery message protection between reference UEs and target UEs  | ZTE Corporation  | pCR  | 　[Xiaomi]: proposes to merge into S3-221542[ZTE]: Fine to merge[Xiaomi]: Merged to 1542. This thread is closed. | merged |   1542 |
|    |    | S3‑221542 | 33.893: New Key Issue on Discovery Security  | Xiaomi Technology  | pCR  | [Xiaomi]: provides revision for the merger[Huawei, HiSilicon]: propose to not include the text about the UE role privacy issue.[Xiaomi]: provides clarification and r2[Huawei, HiSilicon]: fine with r2.[Nokia]: Fine with r2 and supports KI.[Nokia]: Fine with r2 and supports KI.[ZTE]: Fine with r2[Qualcomm]: requests further revision before approval[Xiaomi]: ask questions for clarification before further revision[Xiaomi]: ask questions for clarification before further revision[Xiaomi]: ask questions for clarification before further revision[Qualcomm]: provides clarifications[Xiaomi]: provides r3[Philips] proposes to add Editor's note[Xiaomi]: provides r4[Philips] Proposes to change should to shall.[Xiaomi]: provides clarification[Philips] Ok with the rapporteur's plan to update next meeting[Qualcomm]: is fine with r4 | approved |   R4 |
|    |    | S3‑221443 | Key issue on security of network based sidelink positioning  | ZTE Corporation  | pCR  | 　[Ericsson] : ask questions[ZTE]: Provide clarification.[Xiaomi]: Proposes to merge in S3-221543[Huawei] : agrees with Ericsson and proposes to postpone.[ZTE]: Fine to merge.[Xiaomi]: Merged to 1543. This thread is closed.[Ericsson]: propose to note 1443[Xiaomi]: 1443 is noted. This thread is now closed. | noted |    |
|    |    | S3‑221445 | Key issue on security of UE based sidelink positioning  | ZTE Corporation  | pCR  | 　[ZTE]: Fine to merge.[Xiaomi]: Proposes to merge into S3-221543[Xiaomi]: Merged to 1543. This thread is closed. | noted |    |
|    |    | S3‑221543 | 33.893: New Key Issue on Direct Communication Security  | Xiaomi Technology  | pCR  | 　[Philips]: Clarification needed[Xiaomi]: provides replies to the comments and r1[Philips]: ok with r1[Ericsson]]: Not ok with r1,[ZTE]: Provide clarification and OK with R1.[Huawei, HiSilicon]: This contribution needs to be revised before approval.[Nokia]: Not OK, and asks clarifications.[Xiaomi]: provides clarification and r2[ChinaTelecom]: provide comments and request clarification[Huawei, HiSilicon]: provide reply to Xiaomi.[Philips] Provides suggestion[Xiaomi]: provides clarification and r3>>CC\_3<<[Xiaomi] presents (2nd req in r3 should be removed)[Huawei] has concerns about isolation[Xiaomi] replies.[Huawei] has further comments.[Vodafone] comments on last requirement[QC] comments ranging is separate from Prose/V2X, so proposes to remove related requirements.[Xiaomi] asks a question, if the UE enables both prose and ranging. Does it need one set of security context or two sets?Chair asks for relationship between Prose and ranging[Xiaomi] clarifies that Prose and ranging are based on same PC5 link.Chair asks some clarification, maybe EN, or maybe some other kind of revision.>>CC\_3<<[Qualcomm]: proposes to note this contribution[ZTE]: Support this key issue.[Qualcomm]: provides further clarification[Xiaomi]: provides response and r4[ChinaTelecom]: provides comments.[Huawei, HiSilicon]: replies to Xiaomi and provides suggestion for revision.[Xiaomi]: provides response to the comments and r5[ChinaTelecom]: fine with r5.[Philips]: proposes to add Editor's note[Huawei, HiSilicon]: proposes to change the word ‘security level’.[Xiaomi]: provides r6[Huawei, HiSilicon]: Cannot accept with r6.[Qualcomm]: provides r7.[Philips] Could not see difference between r6 and r7.[Qualcomm] provides r8 (r7 was wrongly uploaded).[Xiaomi]: fine with r8 | noted |    |
|    |    | S3‑221444 | Key issue on security of service exposure to a UE  | ZTE Corporation  | pCR  | [Philips]: Provides comments[ZTE]: Provide R1.[Philips]: Ok with r1[Nokia]: OK with r1.[Xiaomi]: provides comments and r2[Philips] provides comments on r2 and suggestion[Xiaomi]: provides response to the comments[ZTE]: Provide R3.[Philips]: Ok with R3. Provides further feedback on 'shall' versus 'should'.[Xiaomi]: provides r4[Qualcomm]: proposes to postpone this KI[ZTE]: Ask clarification from Qualcomm[Ericsson]: proposes to postpone this KI[ZTE]: Suggest a way to make progress.[Ericsson]: we are fine with setting the security requirements to 'TBD'.[ZTE]: Provide R5.[Qualcomm]: provides clarifications and stays the same position (proposes to postpone) | noted |    |
|    |    | S3‑221541 | 33.893: New Key Issue on Authorization for Ranging/SL Positioning Service  | Beijing Xiaomi Mobile Software  | pCR  | 　[Nokia]: Asks for clarifications and suggests spilit of KI.[Xiaomi]: provides responses.[Xiaomi]: ask for confirmation from Nokia[Qualcomm]: requests revision before approval[Xiaomi]: provide r1[Philips] Proposes to change should to shall[Xiaomi]: provide r2[Philips]: fine with r2 | approved  |  R2  |
|    |    | S3‑221360 | Key issue on application impersonation  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Nokia]: tdoc is incorrectly placed. Please move it to agenda item 5.18[Apple]: similar comments with 1569, modification and clarification is required before approval.[Nokia]: Provides answers to Apple.[Apple]: provides clarification to Nokia, request modification before approval.[NTT DOCOMO]: needs clarification before it can be accepted.[Nokia]: Provides r1 and answers to NTT DOCOMO.[NTT DOCOMO]: this KI needs further work, note[Nokia]: Provides answers to NTT DOCOMO | noted  |    |
| 5.20 | Study on Security and Privacy of AI/ML-based Services and Applications in 5G  | S3‑221313 | LS on 5GC information exposure to UE  | S2-2205286  | LS in  | >>CC\_2<<[Oppo] presents.[Oppo] points out there are two related draft LS out, and merged with discussion, the merger is 1358>>CC\_2<< | replied to |   1358 |
|    |    | S3‑221358 | draft-LS reply on 5GC information exposure to UE  | NTT DOCOMO  | LS out  | 　[Nokia]: provide clarification and propose changes[NTT DOCOMO]: provides further clarification[OPPO]: comments and suggestion for reply.[IDCC]: Support sending LS.[NTT DOCOMO]: asks for clarification[Huawei]: Requires modification in the LS-out.>>CC\_2<<[Docomo] presents.[Nokia] comments there is no key issue current so could not reply whether there is security issue or not, proposes to have a general reply.[Oppo] clarifies.[Nokia] has further comments.[Oppo] relies[Docomo] clarifies, clarification from SA1 on requirements is important.[Nokia] clarifies his comments.>>CC\_2<<[OPPO]: provides clarification.[NTT DOCOMO]: requests further clarification[Nokia]: Provide clarification[OPPO]: provides further comments.[Nokia]: fine with OPPO’s suggestions[NTT DOCOMO]: -r1 provided[Nokia]: provide comment on the r1[NTT DOCOMO]: provide response[OPPO]: provides suggested changes.[NTT DOCOMO]: -r2 available incorporating proposal by OPPO.>>CC\_4<<[Docomo] presents r2[Oppo] comments on dates[Nokia] agrees with the general content but concerns about sending to SA1. Would like to get a clarification.[Docomo] clarifies, we want SA3 to be kept in the loop for the answer.>>CC\_4<<[NTT DOCOMO]: -r3 available; incorporating input from the conf call | approved  |   R3 |
|    |    | S3‑221511 | Draft LS on 5GC Information Exposure to UE  | OPPO  | LS out  | 　[Nokia]: propose to merge this document into NTT DOCOMO’s draft LS S3-221358 {https://www.3gpp.org/ftp/TSG\_SA/WG3\_Security/TSGS3\_107e-AdHoc/Docs/S3-221358.zip}[OPPO]: agree to merge with S3-221358 {https://www.3gpp.org/ftp/TSG\_SA/WG3\_Security/TSGS3\_107e-AdHoc/Docs/S3-221358.zip} and continue discussion on S3-221358 {https://www.3gpp.org/ftp/TSG\_SA/WG3\_Security/TSGS3\_107e-AdHoc/Docs/S3-221358.zip} thread | merge |   1358 |
|    |    | S3‑221583 | TR 33.898 Skeleton  | OPPO  | pCR  | 　 | approved |    |
|    |    | S3‑221509 | Scope of TR 33.898  | OPPO  | pCR  | 　[Huawei]: ask for clarification and change.[OPPO]: provided reply. | approved |    |
|    |    | S3‑221510 | References in TR 33.898  | OPPO  | pCR  | 　 | approved |    |
|    |    | S3‑221347 | Key issue on authorization of AIML operations  | Nokia, Nokia Shanghai Bell  | pCR  | 　[Huawei]: Propose to modify.[Nokia]: provide clarification and a way forward>>CC\_2<<[Nokia] presents.[Huawei] comments through email, concern about user consent between UE and AF, requests to remove 3rd bullet.[QC] comments, isn’t AF out of scope of 3GPP.[Nokia] replies.[IDCC] comments 6.x.2 does not covers 6.x.1. [Oppo] shares similar view with IDCC.[Nokia] replies.>>CC\_2<<[Huawei]: provides further suggestions.[QC]: Request to Note.[Nokia]: provide r1 based on a suggestion from Huawei and not agree to note the contribution[QC]: Request to Note. | noted |    |
|    |    | S3‑221349 | Key issue on securing AIML operation  | Nokia, Nokia Shanghai Bell  | pCR  | 　[OPPO]: in generally supports this contribution and proposes some changes.[Huawei]: Propose to note.[Nokia]: Agree with OPPO's suggestion and provide r1 and provide clarification to Huawei[Nokia]: closing this thread because the other thread is already open and providing clarification in that thread.>>CC\_2<<[Nokia] presents.[QC] comments about communication between AF and UE. There is AKMA already. Why do we need to do anything more?[Nokia] clarifies.[IDCC] comments[Huawei] doesn’t think it is in scope of 3GPP.[Thales] comment if AKMA is mentioned, GBA should be also considered.[Oppo] clarifies[Apple] asks questions, considers secure connection means confidentiality and integrity, and agrees with previous comments.[Nokia] replies.[IDCC] comments.>>CC\_2<<[OPPO]: accepts R1 and would like to co-sign.[Thales]: requires changes.[Nokia]: provide r1 with additional of GBA[OPPO]: provide further comments and suggestion.[IDCC]: request clarification for r1 before approval[Nokia]: provide clarification[Nokia]: don't agree with the comment and ask questions.[IDCC]: don't agree with response that exclude the deployment possibility in hierarchical FL[IDCC]: request clarification for r1 before approval[IDCC]: Updates to the KI[QC]: Request to Note.[Nokia]: provide r3 with an EN and don't agree to note the contribution[Nokia]: provide r4 because EN was missed in the previous version[IDCC]: provide r5 with update of EN[OPPO]: OK with r5.[Nokia]: Fine with r5[QC]: Asked for clarification. | noted  |    |
|    |    | S3‑221324 | New key issue on Federated Learning AIML model protection  | InterDigital Communications  | pCR  | 　[Huawei]: Propose to note.[QC]: Propose to note.[IDCC]: Intermediate model trained by UE been model/data poisoning attacked | noted  |    |
|    |    | S3‑221350 | Key issue on Security criteria of UE selection for AIML  | Nokia, Nokia Shanghai Bell  | pCR  | 　[OPPO]: seeks clarification.[Nokia]: Provide clarification to OPPO and Huawei[Nokia]: closing this thread and responding in another thread on the same tdoc number.[Huawei]: Propose to note.[OPPO]: further comments.[Nokia]: Provide clarification[Huawei]: ask for further clarification.[Nokia]: provide clarification.[OPPO]: further comments.[QC]: Propose to note. | noted |    |
|    |    | S3‑221326 | New key issue on Federated Learning AIML model privacy protection  | InterDigital Communications  | pCR  | 　[Huawei]: Propose to note.[QC]: Propose to note.[IDCC]: Privacy violation in the trained model.[Nokia]: Nokia agrees with the KI[QC]: Re-affirmed position. | noted |    |
|    |    | S3‑221566 | New KI: Privacy-preserving federated learning  | Xiaomi Communication  | pCR  | 　[Huawei]: ask for the clarification.[Xiaomi]: provides clarification.[Nokia]: asking clarification.[OPPO]: asking clarification.[Xiaomi]: provides clarification.[Nokia]: asking for clarification and providing Rel 17 similar feature[Xiaomi]: provides clarification.[Huawei]: ask for further clarification.[Xiaomi]: provides further clarification.[OPPO]: comments and asks for clarification.[Xiaomi]: provides r1 and clarification.[QC]: Propose to note.[Nokia]: asking for clarification[Xiaomi]: provides r2 and requests for technical discussion.[Nokia]: ask clarification before approval.[Xiaomi]: provides r3.[Nokia]: propose to note | noted |    |
|    |    | S3‑221348 | Key issue on authorization of UE accessing the 5G analytics  | Nokia, Nokia Shanghai Bell  | pCR  | 　[OPPO]: supports this KI and proposes some changes.[Huawei]: Requires changes before its approval[Nokia]: Agree with OPPO's suggestion and provide r1 and provide clarification to Huawei[QC]: Propose to note.[QC]: Clarified statement.[Nokia]: provide clarification and dont agree to Note the contribution[Nokia]: provide clarification and dont agree to Note the contribution[Nokia]: request to approve this KI otherwise we need to block/change the LS reply as well.[QC]: Propose to note. LS unrelated. Continue the discussion as SA2 evolves their solution. | noted  |    |
|    |    | S3‑221508 | TR 33.898 Skeleton  | OPPO  | pCR  | 　 | revised  | [S3‑221583](file:///C%3A%5CUsers%5Ccmcc%5CDesktop%5CAgendaWithTdocAllocation_2022-06-24_15h19.htm#RANGE!S3-221583)  |
| 5.21 | Study on applicability of the Zero Trust Security principles in mobile networks  | S3‑221520 | Proposal for TR 33.894 Skeleton  | Lenovo  | other  | 　 | approved |    |
|    |    | S3‑221523 | Update of Scope  | Lenovo, Rakuten Mobile Inc, Interdigital, US NSA, Motorola Solutions, Johns Hopkins University APL, Intel, Center for Internet Security  | pCR  | [Huawei] disagrees with the proposal since it deviates from the original objectives[Ericsson] Disagrees with the proposal.[Lenovo] Considering the progress, uploads r1 as suggested by Huawei and Ericsson.Provides also the clarification and justification for the initial tdoc.>>CC\_2<<[Lenovo] presents current status.[Huawei] clarifies the objection.>>CC\_2<<[Ericsson] Asks for clarification for r1[Lenovo] Provides clarification.[Lenovo] Asks confirmation on r1.[Ericsson] okay with r1[Huawei] fine with r1 | approved | R1   |
|    |    | S3‑221522 | Security Assumptions  | Lenovo, Rakuten Mobile Inc., Interdigital, US NSA, Motorola Solutions, Johns Hopkins University APL, Intel, Center for Internet Security  | pCR  | [Huawei] disagrees with the proposal since it is formulated as a requirement or even a conclusion, not an assumption[Ericsson]: Proposes to note.[Lenovo]: Propose to not pursue this document.Provides clarification.>>CC\_2<<[Lenovo] presents current status.[Huawei] clarifies the objection.>>CC\_2<< | noted  |    |
|    |    | S3‑221439 | new key issue Exposure of Network Capabilities  | ZTE Corporation  | pCR  | 　[Lenovo]: Propose to merge S3-221439 in S3-221521.[CMCC] proposes to revise[ZTE]: Accepts CMCC's comment and agree to merge.[Ericsson]: Proposes to note.[CMCC] is fine with ZTE’s revision proposal. | noted  |    |
|    |    | S3‑221449 | Key Issue on Secure Trust Evaluation  | Intel  | other  | 　[Lenovo]: Propose to merge S3-221449 in S3-221521.[CMCC] proposes to note[Ericsson]: Proposes to note. [Intel]: Fine with merger and responds to CMCC and Ericsson[CMCC] is ok to see merging into 1521[Intel]: Merged with 1521. Closing Thread for Discussions | noted  |    |
|    |    | S3‑221500 | Key issue on determining and maintaining trust indication in 5G Core  | Nokia, Nokia Shanghai Bell  | pCR  | 　[CMCC] does not agree[Lenovo]: Propose to merge S3-221500 in S3-221521.[Nokia]: provides clarifications[CMCC] is not convinced and provides further comments.NCSC supports contribution, disagrees with CMCC.[CMCC] proposes to note.[Lenovo] Suggests way forward.[Nokia}: agrees to merge and will provide a proposal[Lenovo]: Requests minor clarification.[Nokia]: provides clarification[Lenovo]: Accepts Nokia clarifications.[Ericsson]: agrees with the merging proposal.[Nokia]: Merged with 1521. Closing Thread for Discussions | noted  |    |
|    |    | S3‑221521 | Key Issue#1 on Need for continuous Trust evaluation  | Lenovo, Nokia, Nokia Shanghai Bell, Rakuten Mobile Inc., Interdigital, US NSA, Motorola Solutions, Johns Hopkins University APL, Intel, Center for Internet Security  | pCR  | 　[Lenovo]: revision r1 uploaded.[CMCC] supports and asks to co-sign.[Huawei] require clarifications before approval[Ericsson] comments and asks for clarification before approval[Lenovo] Provides r2 with merger of S3-221439 (ZTE), S3-221449 (Intel), S3-221500 (Nokia) in S3-221521.[Huawei] disagree with proposal and propose a way forward[Lenovo] Provides r3 with refinements.[Ericsson] proposes to note[Lenovo] provides clarification.[Lenovo] Provided sufficient clarifications to Ericsson and Huawei.As the draft r3 is very clear and stable, it is good to go. Delaying the key issue ‘with no actual proposal for any specific text refinements’ will impact the progress of the SID.If you have any specific text refinement provide r4. Open to discuss.[Lenovo] Provided sufficient clarifications to Ericsson and Huawei.As the draft r3 is very clear and stable, it is good to go. Delaying the key issue ‘with no actual proposal for any specific text refinements’ will impact the progress of the SID.If you have any specific text refinement provide r4. Open to discuss.[Lenovo] Provided sufficient clarifications to Ericsson and Huawei.As the draft r3 is very clear and stable, it is good to go. Delaying the key issue ‘with no actual proposal for any specific text refinements’ will impact the progress of the SID.If you have any specific text refinement provide r4. Open to discuss.[Ericsson] comments | noted |    |
|    |    | S3‑221499 | Key issue on misuse of OAuth 2.0 access token by anomalous Network functions  | Nokia, Nokia Shanghai Bell  | pCR  | 　[CMCC] proposes to revise before approval.[Nokia]: request for clarification to proceed with the revision[CMCC] is fine with revision proposal.[Nokia]: provides -r1 based on the agreed formulation and offline discussion.[Lenovo]: Supports this contribution.Requests minor clarification.[Nokia]: provides -r2 adding Lenovo a co-signer and updating the security requirement to capture the key issue details.[Ericsson]: Proposes to note.>>CC\_2<<[Lenovo] presents current status.[Nokia] presents.[Huawei] comments there has security solutions for 5GC already, need to consider threat carefully.[Lenovo] clarifies.[Ericsson] agrees with Huawei’s proposal, and need to consider complete scenario to generate trust evaluation and how to consume it.[Nokia] replies.[Lenovo] clarifies, and considers it is the basis of ZTS so it could not proceed if it is not accepted.[Huawei] comments 2nd requirement is solution based.[Nokia] clarifies[Huawei] provides further comments on 2nd req.[Huawei] asks which thread will be used for further discussion about merger contribution.>>CC\_2<<[Nokia]: provides further clarifications and fix the break of the thread[Nokia]: asks for compromising and moving forward[Ericsson]: Still proposes to note.[Nokia]: disagrees with the reasoning for noting the contribution | noted |    |
|    |    | S3‑221448 | Key Issue on secure storage and limited access to NF credentials  | Intel  | other  | 　[CMCC] does not agree. It is out of 3GPP scope.[Ericsson]: Proposes to note. | noted |    |
| 5.22 | Study of Security aspects on User Consent for 3GPP Services Phase 2  | S3‑221400 | Skeleton of UC3S\_Ph2  | Huawei, HiSilicon  | pCR  | 　 | approved |    |
|    |    | S3‑221401 | Scope of UC3S\_Ph2  | Huawei, HiSilicon  | pCR  | 　[Ericsson]: asks for clarification[Huawei]: provides response. | approved |    |
|    |    | S3‑221402 | New key issue on Roaming of eNA  | Huawei, HiSilicon  | pCR  | 　[Ericsson]: comments[Lenovo]: requests clarification[Huawei]: Response to comments.[Huawei]: provides response.[Ericsson]: comments[Huawei]: provides r1 based on suggestion.[Lenovo]: happy with the clarification | approved |   R1 |
|    |    | S3‑221403 | New Key Issue on NTN  | Huawei, HiSilicon  | pCR  | 　[Ericsson]: Proposes to revise.[Huawei]: Provides r1 according to the comments.[Xiaomi]: not fine with r1[Huawei]: provides response.[Ericsson]: r1 is OK.[Xiaomi]: still not fine with r1, provides more comments and r2[NTT DOCOMO]: requests clarification[Apple]: not OK with r1, kindly request modifications.[Xiaomi]: provides clarification to the question[Huawei]: fine with either r1 or r2.[Nokia]: Fine with r2[Ericsson]: Disagrees with r2.[Huawei]: provides wayforwd.[NTT DOCOMO]: KI needs further work, note for this meeting[Huawei]: provides clarification.[NTT DOCOMO]: ok with editor's note; provides editor's note[Huawei]: provides r3.[NTT DOCOMO]: ok with -r3[Xiaomi]: OK with r3[Ericsson]: r3 is OK. | approved  |   R3 |
|    |    | S3‑221424 | Key Issue for NTN specific user consent for UE location sharing  | Nokia Japan  | pCR  | 　[Huawei]: Propose to merge into S3-221403.[Xiaomi]: Proposes to merge S3-221403, S3-221424 and S3-221544.[Ericsson]: Proposes to merge with S3-221403[Nokia]: Agrees with merge proposals. | merged  |   1403 |
|    |    | S3‑221544 | 33.896: New Key Issue on NTN Specific User Consent  | Xiaomi Technology  | pCR  | 　[Huawei]: Propose to merge into S3-221403.[Xiaomi]: fine with the merging plan[Ericsson]: Comments and proposes to merge with S3-221403[Xiaomi]: provides reply to the comments[Xiaomi]: provides reply to the comments | merged  |   1403 |
|    |    | S3‑221545 | 33.896: New Solution for NTN Specific User Consent  | Xiaomi Technology  | pCR  | 　[Ericsson]: proposes to note | noted  |    |
| 5.23 | Study on security enhancements for 5G multicast-broadcast services Phase 2  | S3‑221394 | Skeleton of MBS phase2  | Huawei, HiSilicon  | pCR  | 　 | approved  |    |
|    |    | S3‑221395 | Scope of MBS phase2  | Huawei, HiSilicon  | pCR  | 　 | approved |    |
|    |    | S3‑221396 | New key issue on TMGI protection  | Huawei, HiSilicon  | pCR  | 　[Ericsson]: Ask for clarification.[Huawei]: provides clarification.[Qualcomm]: requests further clarification and revisions before approval[Huawei]: provides clarification.[Ericsson]: revision needed[Huawei]: provides r2.[Ericsson]: r2 is ok.[Qualcomm]: is fine with r2. | approved | R2   |
|    |    | S3‑221397 | New key issue on security handling in MOCN network sharing scenario  | Huawei, HiSilicon  | pCR  | 　[Ericsson]: Changes proposed -r1 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221397-r1\_key%20issue%20on%20security%20handling%20in%20MOCN.docx} .[Huawei]: fine with r1.[Qualcomm]: requests clarifications and revision before approval[Huawei]: provide clarification.[Ericsson]: comment, security at the application layer[Huawei]: provide clarification.[Qualcomm]: stays our position (revision required before approval)[Huawei]: provides r2.[Ericsson]: ok with r2.[Qualcomm]: is fine with r2. | approved | R2   |
|    |    | S3‑221414 | New key issue on security protection for Ues in RRC inactive state  | Huawei, HiSilicon  | pCR  | 　[ZTE]: Aak for update.[Huawei]: provide clarification.[ZTE]: Provide comments.[Huawei]: provide r1.[ZTE]: Fine with R1.[Ericsson]: Not convinced about the issue.[Huawei]: provide clarification.[Ericsson]: Still not convinced.[Huawei]: provide clarification.[Ericsson]: r2 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_107e-AdHoc/Inbox/Drafts/draft\_S3-221414-r2.docx} uploaded[Qualcomm]: requests further clarification before approval[Huawei]: fine with r2.[Huawei]: provide r3.[Ericsson]: r3 is ok[Qualcomm]: proposes to note this contribution and bring it with concrete security threats and requirements in the next meeting[Huawei]: disagree with the reason for noting the contribution and provide r4. | approved (left for email confirmation) | R4   |
|    |    | S3‑221461 | Discussion paper about the security enhancements enabling UE’s receiving Multicast MBS Session data in RRC\_INACTIVE state  | Ericsson  | discussion  | 　[Huawei]: proposes to note the contribution. | noted  |    |
| 6 | Any Other Business  |  |    |    |    | 　 |    |    |