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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 |  | available |  |
|  |  | S3‑221311 | Process for SA3#107e meeting | SA WG3 Chair | other |  | available |  |
|  |  | S3‑221312 | Process and agenda for SA3#107e | SA WG3 Chair | other | >>CC\_1<<  [Chair] presents current status  >>CC\_1<< | available |  |
| 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<< | available |  |
|  |  | S3‑221476 | [DRAFT] Reply LS on user’s consent for EDGEAPP | Ericsson | LS out | >>CC\_1<<  [Ericsson] presents  >>CC\_1<<  [Ericsson] : provides more information | available |  |
|  |  | 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 | available |  |
|  |  | 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<< | available |  |
|  |  | S3‑221405 | Reply LS about V2X PC5 unicast link with null security algorithm | Huawei, HiSilicon | LS out | >>CC\_1<<  Related with 1317  >>CC\_1<< | available |  |
|  |  | 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). | available |  |
|  |  | S3‑221584 | Null algorithm is not security deactivation | Lenovo | draftCR | >>CC\_1<<  Related with 1317  >>CC\_1<< | available |  |
|  |  | 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 | available |  |
|  |  | 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 |  | available |  |
|  |  | S3‑221366 | Addressing EN on NR Repeater in 6.27.2.2.4 of Sol#27 | CableLabs | pCR | [Nokia]: OK. | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
| 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 | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
|  |  | 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] presents  Chair requests to continue email discussion  >>CC\_1<<  [Huawei]: propose to note or further revisions to adress our concerns | available |  |
|  |  | 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. | available |  |
|  |  | 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<< | available |  |
|  |  | 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<< | available |  |
|  |  | S3‑221486 | New solution on trust domain and slice Isolation | Huawei, HiSilicon | pCR | >>CC\_1<<  [Huawei] presents.  Chair asks to continue discussion.  >>CC\_1<< | available |  |
| 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. | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221383 | Integrity and confidentiality of information over the UE-to-UE Relay | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221406 | New Key Issue on security of ProSe groupcast communications | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221418 | Authorization in the UE-to-UE relay scenario | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221419 | Privacy of information over the UE-to-UE Relay | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221421 | Key issue on Authorization in the UE-to-UE relay scenario | China Telecomunication Corp. | pCR |  | available |  |
|  |  | S3‑221422 | Key issue on Integrity and confidentiality of information over the UE-to-UE | China Telecomunication Corp. | pCR |  | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221427 | Key issue on authorization in the UE-to-UE relay scenario | ZTE Corporation | pCR |  | available |  |
|  |  | S3‑221428 | Key issue on Integrity and confidentiality of information over the UE-to-UE Relay | ZTE Corporation | pCR |  | available |  |
|  |  | S3‑221429 | Key issue on Privacy of information over the UE-to-UE Relay | ZTE Corporation | pCR |  | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221446 | Key issue on UE Identity protection during UE-to-UE relay discovery | China Telecomunication Corp. | pCR |  | available |  |
|  |  | S3‑221447 | Key issue on Privacy protection over the UE-to-UE Relay | China Telecomunication Corp. | pCR |  | available |  |
|  |  | S3‑221491 | pCR to TR33.740 Key Issue on Integrity and confidentiality of information over the UE-to-UE Relay | CATT | pCR |  | available |  |
|  |  | S3‑221495 | pCR to TR33.740 Key Issue on Authorization in the UE-to-UE relay scenario | CATT | pCR |  | available |  |
|  |  | S3‑221496 | pCR to TR33.740 Key Issue on Privacy of information over the UE-to-UE Relay | CATT | pCR |  | available |  |
|  |  | S3‑221503 | Remote UE Security Establishment via U2U Relay | OPPO | pCR |  | available |  |
|  |  | S3‑221505 | U2U Relay Trust Model | OPPO | pCR |  | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221548 | Key Issue on Security for UE-to-UE Relay Discovery | Beijing Xiaomi Mobile Software | pCR |  | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221425 | Add context to the architecture clause | ZTE Corporation | pCR |  | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
| 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<< | available |  |
|  |  | 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 IMSI  Discussion between [QC] and [IDCC], exact text for NOTE to be discussed over email.  >>CC\_2<< | available |  |
|  |  | 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<< | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221378 | Solution for Privacy aspects of variable length user identifiers | Nokia Japan | pCR | [Huawei] require justification before approval  [NCSC] asks for clarification | available |  |
|  |  | S3‑221410 | New solution for key issue 1 | Huawei, HiSilicon | pCR |  | available |  |
|  |  | 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<< | available |  |
| 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 | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221408 | New solution for key issue 1 | Huawei, HiSilicon | pCR | [Nokia]: asks for clarification  [Ericsson] : requires revision before approval  [Huawei] provides clarification | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221552 | New solution on Cross-Certification Based Trust Chain in the SBA Architecture | Beijing Xiaomi Mobile Software | pCR | [Ericsson] : requires revision before approval | available |  |
|  |  | S3‑221553 | New solution on Interconnection CA Based Trust Chain in the SBA Architecture | Beijing Xiaomi Mobile Software | pCR | [Ericsson] : requires revision before approval | available |  |
|  |  | 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:\Users\cmcc\Desktop\AgendaWithTdocAllocation_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. | available |  |
|  |  | S3‑221356 | Key Issue for AKMA roaming scenario | THALES | pCR |  | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221529 | Adding security threat and requirements to KI#1 | Samsung | pCR | [Huawei]: clarification is needed before approval. | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221352 | Solution on AKMA roaming | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: clarification is needed before approval. | available |  |
|  |  | S3‑221384 | new solution for AKMA roaming when both UE and AF are in VPLMN | Huawei, HiSilicon | pCR | [Nokia]: Ask clarification and propose changes. | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221459 | New solution of AKMA anchor key registration to the AAnF in VPLMN after primary authentication | LG Electronics France | pCR |  | available |  |
|  |  | S3‑221554 | KI#1, New Sol AKMA Application key request via proxy and NEF in roaming scenarios | Xiaomi Communication | pCR |  | available |  |
|  |  | S3‑221555 | KI#1, New Sol Proxy-based AKMA Application key request in roaming scenarios | Xiaomi Communication | pCR |  | available |  |
|  |  | S3‑221571 | AKMA roaming and LI | Lenovo | pCR |  | available |  |
|  |  | S3‑221432 | Discussion on the regulatory control point in AKMA roaming | ZTE Corporation | pCR |  | available |  |
|  |  | S3‑221456 | Discussion paper of AKMA roaming | China Mobile | discussion |  | available |  |
|  |  | S3‑221581 | Discussion about the roaming architecture | Ericsson | discussion |  | available |  |
|  |  | S3‑221458 | Solution of introducing AP into AKMA | China Mobile | pCR | [Nokia]: provide comment | available |  |
|  |  | S3‑221466 | AKMA - New solution on AP | Apple | pCR |  | available |  |
|  |  | S3‑221516 | AKMA Application Proxy solution based on GBA procedures | Qualcomm Incorporated | pCR |  | available |  |
|  |  | S3‑221556 | KI#2, New Sol Authentication via proxy AKMA scenarios. | Xiaomi Communication | pCR |  | available |  |
|  |  | S3‑221557 | KI#2, New Sol Authentication via proxy and NEF in AKMA scenarios | Xiaomi Communication | pCR |  | available |  |
| 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. | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221524 | Corrections to TR 33.741 | Lenovo | pCR |  | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221390 | AUSF triggered the primary authentication | Huawei, HiSilicon | pCR |  | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221526 | Solution to enable HN triggered Primary Authentication with UDM | Lenovo | pCR |  | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221415 | New solution UDM triggered primary authentication | Huawei, HiSilicon | pCR |  | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221515 | Solution using UDM to trigger authentication | Qualcomm Incorporated | pCR |  | available |  |
|  |  | S3‑221531 | New solution on UDM initiated re-authentcation based on AUSF request | Samsung | pCR |  | available |  |
|  |  | S3‑221532 | New solution for Kaf refresh | Samsung | pCR |  | available |  |
|  |  | S3‑221550 | New solution on UDM initiated Primary Authentication | Beijing Xiaomi Mobile Software | pCR |  | available |  |
|  |  | 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<< | available |  |
|  |  | S3‑221355 | Solution on Kaf refresh without primary authentication- AAnF | Nokia, Nokia Shanghai Bell | pCR | [Lenovo]: asks clarification | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221472 | New solution Security procedure of KAF refresh-MAC | OPPO | pCR | [Nokia]: Ask for clarification  [OPPO]: Provide clarification and way forward | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221481 | New solution Security procedure of KAF-Nonce | OPPO | pCR |  | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221576 | Discussion about the home triggered primary authentication for interworking | Ericsson | discussion | [Huawei]: propose to noted this contribution. | available |  |
|  |  | S3‑221577 | Conclusion for the primary authentication upon interworking from EPS to 5GS | Ericsson | pCR | [Huawei]: propose to noted this contribution.  [Ericsson]: Provides clarifications. | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
| 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. | available |  |
|  |  | S3‑221453 | Revision on KI#2 | China Mobile Com. Corporation | pCR |  | available |  |
|  |  | S3‑221454 | KI on Security for NWDAF-assisted application detection | China Mobile Com. Corporation | pCR |  | available |  |
|  |  | S3‑221533 | Key issue on Cyber-attack detection supported by NWDAF | Samsung | pCR | [Huawei]: Ask for clarification and revision. | available |  |
|  |  | S3‑221365 | New solution on authorization of AI/ML model retrieving | China Telecommunications | pCR |  | available |  |
|  |  | S3‑221452 | Authorization and Authentication of ML model transfer | Intel | pCR | [Huawei]: Propose to note or postpone. | available |  |
|  |  | 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 | available |  |
|  |  | 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. | available |  |
|  |  | 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 |  | available |  |
|  |  | S3‑221369 | New solution on topology hiding in data and analytics exchange in roaming case | China Telecommunications | pCR |  | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221469 | Solution for anomalous NF behaviour detection by NWDAF | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: Clarification is needed before approval. | available |  |
| 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. | available |  |
|  |  | S3‑221322 | New key issue on Authorization for ACR | InterDigital Communications | pCR | [Huawei] : request clarification. | available |  |
|  |  | S3‑221323 | New key issue on ACR security | InterDigital Communications | pCR |  | available |  |
|  |  | S3‑221411 | New KI on Authentication and Authorization between V-ECS and H-ECS | Huawei, HiSilicon | pCR | [IDCC]: Comments on S3-S3-221411 | available |  |
|  |  | S3‑221412 | New KI on Transport security for the EDGE10 interface | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221413 | New KI on Authentication and Authorization between AC and EEC | Huawei, HiSilicon | pCR | [IDCC]: Comments on S3-S3-221413 | available |  |
|  |  | S3‑221477 | Updates to authentication and authorization key issue | Ericsson | pCR |  | available |  |
|  |  | S3‑221487 | New KI on data protection for the fast and efficient network exposure | Huawei, HiSilicon | pCR |  | available |  |
|  |  | 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 |  | available |  |
|  |  | S3‑221357 | Solution for Key Issue #2.2 | THALES | pCR | [Huawei] : requrie 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. | available |  |
|  |  | S3‑221377 | New solution Authentication mechanism selection in EDGE | OPPO | pCR | [Samsung]: Clarification required | available |  |
|  |  | S3‑221379 | New solution Authentication mechanism selection among EEC, ECS, and EES | OPPO | pCR | [IDCC]: Comments on S3-S3-221379 | available |  |
|  |  | S3‑221399 | Authentication mechanism selection between the EEC and ECS/EES | Huawei, HiSilicon | pCR | [Apple] : request clarification. | available |  |
|  |  | S3‑221438 | ECS EES authentication method information provisioning solution on Key issue #2.2 | ZTE Corporation | pCR |  | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221527 | Authentication mechanism selection between EEC and ECS | Samsung | pCR |  | available |  |
|  |  | S3‑221528 | Authentication mechanism selection between EEC and EES | Samsung | pCR | [Huawei] : requrie clarification.  [Samsung] : Provides clarification | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221468 | HN-auth-NAS based HN triggered authentication | Apple | pCR | [Nokia]: Ask for clarification  [Qualcomm]: Requests a clarification | available |  |
| 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. | available |  |
|  |  | S3‑221321 | New key issue on Secure Communication of between PINEs | InterDigital, Inc. | pCR | [Nokia]: Requires major clarification and update. | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221327 | New key issue on Authorization of PINE | InterDigital, Inc. | pCR |  | available |  |
|  |  | 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 | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221502 | Proposed skeleton for TR 33.882 | vivo Mobile Communication (S) | pCR |  | available |  |
|  |  | S3‑221504 | Scope of TR 33.882 | vivo Mobile Communication (S) | pCR |  | available |  |
|  |  | S3‑221506 | New KI for authentication of PINE | vivo Mobile Communication (S) | pCR | [vivo]: propose merge this contribution into S3-221335. | available |  |
|  |  | S3‑221507 | New Key Issue for controlling of remote provisioning | vivo Mobile Communication (S) | pCR |  | available |  |
|  |  | S3‑221564 | New KI: Secure authentication of PINE | Xiaomi Communication | pCR | [vivo]: propose merge this contribution into S3-221335. | available |  |
|  |  | 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. | available |  |
| 5.11 | Study on SNAAPP security | S3‑221314 | skeleton for draft TR 33.884 SNAAPP security(FS\_SNAAPPY) | NTT DOCOMO | draft TR |  | available |  |
|  |  | S3‑221336 | New Key Issue on Securing API invocation from UE applications | Nokia, Nokia Shanghai Bell | pCR |  | available |  |
|  |  | S3‑221359 | pCR to 33.884, scope | NTT DOCOMO | pCR |  | available |  |
|  |  | S3‑221478 | A new key issue on authentication and authorization of UE in UE originated API invocation | Ericsson | pCR |  | available |  |
|  |  | S3‑221479 | A new key issue on user consent in API invocations | Ericsson | pCR |  | available |  |
|  |  | 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<< | available |  |
| 5.12 | Study on enhanced security for network slicing Phase 3 | S3‑221372 | Skeleton of TR33.886 | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221373 | Scope of TR33.886 | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221374 | New KI-providing VPLMN slice information to roaming UE | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221375 | New KI-temprory slices and slice authorization | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221376 | New KI on NSAC | Huawei, HiSilicon | pCR |  | available |  |
| 5.13 | Study on Security aspects for 5WWC Phase 2 | S3‑221341 | Skeleton for 5WWC Ph2 study | Nokia, Nokia Shanghai Bell | pCR |  | available |  |
|  |  | S3‑221342 | Scope of 5WWC study | Nokia, Nokia Shanghai Bell, CableLabs | pCR | [Ericsson]: Update needed to reflect agreed objectives | available |  |
|  |  | S3‑221343 | Key issue on authentication of AUN3 device not supporting EAP | Nokia, Nokia Shanghai Bell, CableLabs | pCR | [Ericsson]: Ask for clarification | available |  |
|  |  | S3‑221344 | Key issue on authentication of AUN3 device supporting EAP | Nokia, Nokia Shanghai Bell, CableLabs | pCR | [Ericsson]: Ask for clarification | available |  |
|  |  | S3‑221345 | Key issue on Authentication of UE behind RG and connected via NSWO | Nokia, Nokia Shanghai Bell, CableLabs | pCR | [Ericsson]: Ask for clarification | available |  |
|  |  | S3‑221346 | Key issue on Security aspect of slice information exposure of N3IWF/TNGF | Nokia, Nokia Shanghai Bell, CableLabs | pCR |  | available |  |
|  |  | S3‑221416 | authentication and authorization to N3GPP device behind 5G-RG | Huawei, HiSilicon | pCR | [Nokia]: Ask for clarification | available |  |
| 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 |  | available |  |
|  |  | S3‑221574 | Content for the scope clause of the technical report | Ericsson | pCR |  | available |  |
|  |  | S3‑221575 | Initial content for the background clause of the technical report | Ericsson | pCR |  | available |  |
| 5.15 | Study on security support for Next Generation Real Time Communication services | S3‑221482 | skeleton for NGRTC | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221483 | Scope of TR 33.890 | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221484 | New KI on 3rd party ID | Huawei, HiSilicon | pCR | [Huawei]: Revision is uploaded.  [Xiaomi]: r2 is uploaded. | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
| 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 | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221492 | Scope for Study on security aspects of enhanced support of Non-Public Networks phase 2 | Ericsson | pCR |  | available |  |
|  |  | 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<< | available |  |
|  |  | 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<< | available |  |
|  |  | S3‑221562 | New KI: Home control enhancement for eNPN | Xiaomi Communication | pCR |  | available |  |
|  |  | 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 | available |  |
| 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 |  | available |  |
|  |  | S3‑221334 | Key Issue on Direct C2 Authorization | InterDigital, Europe, Ltd. | pCR |  | available |  |
|  |  | S3‑221407 | New Key Issue on security enhancement of C2 communication | Huawei, HiSilicon | pCR | [Interdigital] : request clarification for 2nd threat and requirement | available |  |
|  |  | S3‑221514 | Key issue for security of unicast connection | Qualcomm Incorporated | other | [Interdigital] : revision required | available |  |
|  |  | S3‑221512 | Proposed skeleton for TR 33.891 | Qualcomm Incorporated | other |  | available |  |
|  |  | S3‑221513 | Proposed scope for TR 33.891 | Qualcomm Incorporated | other |  | available |  |
|  |  | S3‑221534 | Key issue on Privacy and security aspects of broadcasting Remote ID | Samsung | pCR |  | available |  |
| 5.18 | Study to enable URSP rules to securely identify Applications | S3‑221567 | Skeleton for TR 33.892 FS\_USIA | Lenovo | draft TR |  | available |  |
|  |  | S3‑221568 | Scope for TR 33.892 | Lenovo | pCR | [Nokia]: Request clarifications to the scope before acceptable.  MCC commented on the scope.  [Lenovo]: Corrects subject line to the correct tdoc nr 1568 | available |  |
|  |  | S3‑221569 | KI on determination of additional information for application identification | Lenovo | pCR | [Nokia]: Provides answers  [Lenovo]: disagrees with the Nokia proposal  [Nokia]: Asks for further clarifications.  [Nokia]: Provides answer to Lenovo  [Lenovo]: S3-221360 was misplaced and should be handled under agenda 5.18.  [Lenovo]: provides further clarifications.  [Nokia]: Provides answers to Lenovo and a proposal for wording.  [Nokia]: Provides answer to Lenovo.  [Lenovo]: Ok with wording proposal, provides rev3.  [Lenovo]: provides answers to Nokia.  [Nokia]: Nokia is fine to accept R3  [Nokia]: Provides r1 as a change proposal and answers to Lenovo | available |  |
| 5.19 | Study on Security Aspects of Ranging Based Services and Sidelink Positioning | S3‑221537 | 33.893: Draft Skeleton | Xiaomi Technology | pCR |  | available |  |
|  |  | S3‑221538 | 33.893: Scope | Xiaomi Technology | pCR |  | available |  |
|  |  | 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. | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221540 | 33.893: New Key Issue on Privacy | Xiaomi Technology | pCR | [Xiaomi]: provides revision for the merger  [Huawei]: request revision. | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221543 | 33.893: New Key Issue on Direct Communication Security | Xiaomi Technology | pCR | [Philips]: Clarification needed | available |  |
|  |  | S3‑221444 | Key issue on security of service exposure to a UE | ZTE Corporation | pCR | [Philips]: Provides comments | available |  |
|  |  | S3‑221541 | 33.893: New Key Issue on Authorization for Ranging/SL Positioning Service | Beijing Xiaomi Mobile Software | pCR |  | available |  |
|  |  | 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 | available |  |
| 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<< | available |  |
|  |  | 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<< | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221583 | TR 33.898 Skeleton | OPPO | pCR |  | available |  |
|  |  | S3‑221509 | Scope of TR 33.898 | OPPO | pCR |  | available |  |
|  |  | S3‑221510 | References in TR 33.898 | OPPO | pCR |  | available |  |
|  |  | 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<< | available |  |
|  |  | 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<< | available |  |
|  |  | S3‑221324 | New key issue on Federated Learning AIML model protection | InterDigital Communications | pCR | [Huawei]: Propose to note. | available |  |
|  |  | 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. | available |  |
|  |  | S3‑221326 | New key issue on Federated Learning AIML model privacy protection | InterDigital Communications | pCR | [Huawei]: Propose to note. | available |  |
|  |  | S3‑221566 | New KI: Privacy-preserving federated learning | Xiaomi Communication | pCR |  | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221508 | TR 33.898 Skeleton | OPPO | pCR |  | revised | [S3‑221583](file:///C:\Users\cmcc\Desktop\AgendaWithTdocAllocation_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 |  | available |  |
|  |  | 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<< | available |  |
|  |  | 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<< | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
|  |  | 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. | available |  |
|  |  | 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 | available |  |
|  |  | 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<< | available |  |
|  |  | 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. | available |  |
| 5.22 | Study of Security aspects on User Consent for 3GPP Services Phase 2 | S3‑221400 | Skeleton of UC3S\_Ph2 | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221401 | Scope of UC3S\_Ph2 | Huawei, HiSilicon | pCR | [Ericsson]: asks for clarification | available |  |
|  |  | S3‑221402 | New key issue on Roaming of eNA | Huawei, HiSilicon | pCR | [Ericsson]: comments  [Lenovo]: requests clarification | available |  |
|  |  | S3‑221403 | New Key Issue on NTN | Huawei, HiSilicon | pCR | [Ericsson]: Proposes to revise. | available |  |
|  |  | 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 | available |  |
|  |  | 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 | available |  |
|  |  | S3‑221545 | 33.896: New Solution for NTN Specific User Consent | Xiaomi Technology | pCR | [Ericsson]: proposes to note | available |  |
| 5.23 | Study on security enhancements for 5G multicast-broadcast services Phase 2 | S3‑221394 | Skeleton of MBS phase2 | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221395 | Scope of MBS phase2 | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221396 | New key issue on TMGI protection | Huawei, HiSilicon | pCR | [Ericsson]: Ask for clarification. | available |  |
|  |  | 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} . | available |  |
|  |  | S3‑221414 | New key issue on security protection for Ues in RRC inactive state | Huawei, HiSilicon | pCR |  | available |  |
|  |  | S3‑221461 | Discussion paper about the security enhancements enabling UE’s receiving Multicast MBS Session data in RRC\_INACTIVE state | Ericsson | discussion |  | available |  |
| 6 | Any Other Business |  |  |  |  |  |  |  |