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| **Agenda** | **Topic** | **TDoc** | **Title** | **Source** | **Type** | **Notes** | **Decision** | **Replaced-by** |
| 1 | Agenda and Meeting Objectives | S3‑222450 | Agenda | SA WG3 Chair | agenda |  | approved |  |
|  |  | S3‑222451 | Process for SA3#108e-AdHoc | SA WG3 Chair | other | >>CC\_1<<  Chair emphasizes the deadline, esp. 1st round objection, to avoid similar concerns as in last meeting.  >>CC\_1<< | noted |  |
|  |  | S3‑222453 | Process and agenda planning for SA3#108e-AdHoc | SA WG3 Chair | other |  | noted |  |
| 3 | Reports and Liaisons from other Groups (related to Rel-18 Studies) | S3‑222455 | LS on NCR Solutions | R3-225253 | LS in | >>CC\_1<<  [ZTE] presents  519, 627 and 801 are related draft reply LS.  >>CC\_1<< | replied to | 627 |
|  |  | S3‑222519 | Reply LS on NCR Solutions | Huawei, HiSilicon | LS out | >>CC\_1<<  [Huawei] presents. >>CC\_1<<  [Nokia]: collected all responses and is proposing new text proposal for the LS reply  [Intel]: Proposes 222627 for discussion and few comments | merged | 627 |
|  |  | S3‑222627 | Draft Reply LS on NCR Solutions | ZTE Corporation,China Mobile | LS out | >>CC\_1<<  [ZTE] presents  [Intel] supports in general but not for the reply for solution 2.  [Huawei] comments NCR is very similar with IAB so it could reuse IAB security procedure.  [ZTE] comments.  [Nokia] comments NCR is acting as UE.  Chair requests ZTE to hold the pen to find a compromised way to reply, and request to complete the work in this or next meeting.  >>CC\_1<<  [MITRE]: starting discussion on S3-222627 and ask for some clarifications in the reply LS  [ZTE]: Provide R1  [Huawei]: object r1 and provide r2.  [CMCC] does not agree with r2 and proposes to reuse the statement for Q1b in r1.  [Ericsson]: we support r2.  [ZTE]: Not fine with R2 and provide clarification  [Intel]: Not fine with R2 in current form. Uploaded r3  [ZTE]: Provide clarification.  [Huawei]: r3 is acceptable for huawei.  [Philips] comments.  [CMCC] is not ok with r3, proposes r4.  [Philips] is not ok with r4.  [Ericsson] Ericsson supports r3, we are not ok with r4  [Huawei]: supports the proposal by Ericsson.  [CMCC] provides clarifications and comments, could not accept r2 and r3.  [ZTE]: Provide clarification.  [Huawei]: provides r5.  [Intel]: Question for clarification on r5  [ZTE]: Can live with R5.  [CMCC] can live with r5, and clarification.  [MITRE]: fine with r5.  [Ericsson]: provides comments to r5.  [ZTE]: Provide clarification.  [CMCC] does not agree with the proposal from Ericsson  >>CC\_4<<  [ZTE] presents current status. R5 has rough consensus on 4 companies now.  [Intel] is fine with r5  [Ericsson] is ok with r5 >>CC\_4<<  [Intel]: Fine with r5  [Ericsson]: we are fine with r5 | approved | R5 |
|  |  | S3‑222801 | [DRAFT] Reply LS on NCR solutions | Ericsson | LS out | >>CC\_1<<  [Ericsson] presents. >>CC\_1<< | merged | 627 |
|  |  | S3‑222460 | LS on protection of the URSP rules from HPLMN | S2-2207501 | LS in | >>CC\_1<<  [Ericsson] presents.  753, 902, 903 are related draft reply LS.  [IDCC] comments LS in needs a clear answer, should answer yes or no, rather asking them for clarification.  [QC] comments to respond there is no security issue and it is sufficient.  [Nokia] has different opinion, needs to have further study.  [Huawei] comments SA3 should answer the question rather than to ask SA2 more questions.  [Lenovo] has similar view with Nokia.  Chair asks what scope it should be if it needs more study.  [Lenovo] replies.  [QC] replies to Lenovo.  Chair requests to have more discussion and not encourage more SID/WID for this, requests Ericsson to hold the pen to draft reply LS. >>CC\_1<< | postponed |  |
|  |  | S3‑222753 | Reply to LS on protection of the URSP rules from HPLMN | Nokia, Nokia Shanghai Bell | LS out | >>CC\_1<<  [Nokia] presents.  >>CC\_1<< | noted |  |
|  |  | S3‑222902 | Protection of URSP rules from HPLMN | Ericsson | discussion | >>CC\_1<< >>CC\_1<< | noted |  |
|  |  | S3‑222903 | Draft LS reply Protection of URSP rules from HPLMN | Ericsson | LS out | >>CC\_1<<  [Ericsson] presents.  >>CC\_1<<  [Nokia]: Provides perspective and proposal for way forward  [Lenovo]: supports the Nokia proposal on the way forward  [Interdigital]: supports answering “No” to SA2 on the trust-based question and “Yes” to enhancements to URSP home based protection  [Qualcomm]: requires updates: Proposes to answer Q1 as “yes, existing protection is adequate” and Q2 as “ no, SA3 has not identified any threats that would warrant introduce new schemes  [Huawei, HiSilicon]: No new threat is identified. Existing confidentiality/integrity protection is enough and no need for further enhancements.  [Ericsson]: providing revision r1  [Nokia]: providing revision r2  [Samsung]: There can be a new threat, if VPLMN modifies the URSP rules. Further, decision made by SA3 for UPU protection should apply for URSP rule protection also.  [Lenovo]: provides comments and a revision r3  [Nokia]: provides comments and a revision r4  [Thales]: provides comments.  [Huawei, HiSilicom]: provides comments. Propose to delete the last two paragraphs.  [Interdigital]: OK with r4. Suggest re-wording of paragraph about existing mechanisms as compromise  [Lenovo]: OK with Interdigital proposal  [Apple]: modification is needed before approval. If there is no consensus in this meeting, we should postpone this LS.  [Nokia]: OK with the proposal by Interdigital  [Qualcomm]: cannot accept any of the current revisions. Modification is required before approval.  [Ericsson]: providing r5  [Huawei, HiSilicon]: Cannot agree r1-r5. Last two paragraphs needs to be removed in r5.  [Thales]: disagrees with all versions.  [Nokia]: Propose to postpone the reply until next meeting.  >>CC\_4<<  [Ericsson] presents current status, there is no consensus.  >>CC\_4<< | noted |  |
|  |  | S3‑222463 | Identifier availability for Lawful Interception during Inter-PLMN handover | s3i220485 | LS in | >>CC\_1<<  [NTAC] presents and proposes to note. >>CC\_1<< | noted |  |
|  |  | S3‑222466 | LS on Security Requirements for the MSGin5G Service | S6-222343 | LS in | >>CC\_1<<  [CMCC] presents.  525 is related draft reply LS.  >>CC\_1<< | replied to | 525 |
|  |  | S3‑222525 | reply LS on Security Requirements for the MSGin5G Service | China Mobile | LS out | >>CC\_1<<  [CMCC] presents draft reply and future work plan.  Chair asks to keep continue discussion via email.  >>CC\_1<< | approved |  |
|  |  | S3‑222560 | Reply LS on the user consent for trace reporting | R3-225250 | LS in | >>CC\_1<<  [Huawei] presents. >>CC\_1<< | postponed |  |
|  |  | S3‑222654 | Reply LS on the User Consent for Trace Reportings | Huawei, HiSilicon | LS out | [Ericsson]: Clarification needed, is the intention to use user consent as the user permission to make the UE available to measurement,  >>CC\_1<<  [Huawei] presents.  [Ericsson] comments on question 2 reply is not correct. And for question 1, .... question 2 is not need to be covered in 18. question 1  [Huawei] replies in R18 it covers RAN side. It should be in scope of R18. and could not catch the question 1.  [Nokia] comments.  Chair asks Huawei to hold the pen and to continue the discussion. >>CC\_1<<  [QC]: Supports LS. Proposes additional sentence.  [Huawei]: provides clarification to Ericsson, provides r1 in the draft folder.  [Apple]: not ok with r1 and the original version, provides r2.  [Ericsson]: Propose to note original and -r1, r2, no consensus on answer on Q2  [Apple]: Fine to note or postpone if no consensus.  [Ericsson]: interprets Q1  [QC]: Object to r1/r2. Propose answers by email.  >>CC\_4<<  [Huawei] presents current status. >>CC\_4<<  [Huawei]: asks for some questions and provide some information.  [QC] Answers Huawei.  [Huawei]: answers to Qualcomm. | noted |  |
| 4 | Work areas (Rel-18) |  |  |  |  |  |  |  |
| 4.1 | New WID on Security Assurance Specification for Management Function (MnF) |  |  |  |  |  |  |  |
| 4.2 | New WID on SECAM and SCAS for 3GPP virtualized network products |  |  |  |  |  |  |  |
| 4.3 | New WID on Mission critical security enhancements phase 3 |  |  |  |  |  |  |  |
| 4.4 | New WID on Security Assurance Specification (SCAS) for 5G Rel-17 Features |  |  |  |  |  |  |  |
| 4.5 | New WID on Security Assurance Specification for the Authentication and Key Management for Applications (AKMA) Anchor Function Function (AAnF) |  |  |  |  |  |  |  |
| 4.6 | New WID on SCAS for split-gNB product classes |  |  |  |  |  |  |  |
| 4.7 | Service Based Architecture (Rel-15/16/17) |  |  |  |  |  |  |  |
| 4.8 | Security Aspects of Proximity based services in 5GS ProSe (Rel-17) |  |  |  |  |  |  |  |
| 4.9 | All topics (Rel-15/16/17/18 ) |  |  |  |  |  |  |  |
| 5 | Rel-18 Studies |  |  |  |  |  |  |  |
| 5.1 | Study on 5G security enhancement against false base stations | S3‑222851 | Updates to Solution#7 SI verification using Digital Signatures | Samsung, Apple, Deutsche Telekom | pCR | [Qualcomm]: requires revision before approval  [Samsung]: provides clarification to Qualcomm and r2. Updates in r2 are to correct typo in track change and to address comments from Qualcomm.  [Ericsson]: Proposes to note.  [Samsung]: Disagree with the comments from Ericsson. Request Ericsson to point out what is the new proposal that turn the existing solution into different solution,  [Huawei]: support the update and provide comments. | noted |  |
|  |  | S3‑222852 | Resolving EN of solution#7 (TR 33.809) | Samsung, Apple, Deutsche Telekom | pCR | [Qualcomm]: requires revision before approval  [Samsung]: provides clarification to Qualcomm's comment.  [Huawei]: provides comments.  [Samsung]: provides clarification to Huawei's comment.  [Qualcomm]: stays the same position (requires revision before approval)  [Samsung]: provides r1. | noted |  |
|  |  | S3‑222853 | Conclusion for key issue#2 | Samsung, Intel, Apple, Deutsche Telekom | pCR | [Nokia]: requests clarification, because of missing concept description related to trust-anchor enrolment, revocation and backward compatibility  [Samsung]: provides clarification to Nokia  [Deutsche Telekom]: proposes further clarification for cases of multiple KPAKs within the same PLMN-ID  [Samsung]: Agrees with DT’s clarification and provides response  [Samsung]: provides r1  [CableLabs]: provides r2 and comments  [Ericsson]: requires revision before approval  [Ericsson]: clarifies its position and proposes way forward  [Philips]: comments. Agrees on part of r2.  [Apple]: Agrees with the way forward in r2 generally, provides additional suggestions.  [Intel]: fine with r2 and Apple and Philips’ suggestion  [Nokia]: agrees to proceed with the current revision 2, and is providing some overall feedback  [Ericsson]: Proposes modification  [Huawei]: provides some overall feedback.  [Philips] comments.  [Qualcomm]: proposes to note  [Samsung]: provides r3  [Deutsche Telekom] : fine with -r3  [Apple]: fine with r3.  [Ericsson]: fine with r3. | noted |  |
|  |  | S3‑222687 | Addressing the editor’s note in 6.27.2.1.1 of Sol#27 | CableLabs | pCR | [Nokia]: requests clarification, on details related to revocation, provision/enrolment of the trust-anchor  [Qualcomm]: provides comments and requires a revision before approval  [CableLabs]: provides comments | noted |  |
|  |  | S3‑222688 | Addressing EN on NR Repeater in 6.27.2.2.4 of Sol#27 | CableLabs | pCR | [Qualcomm]: provides comments and requires revision before approval  [Ericsson]: asks for further clarification  [CableLabs]: provides comments | noted |  |
|  |  | S3‑222689 | Addressing the editor’s note in 6.27.2.2.1of Sol#27 | CableLabs, Deutsche Telekom, Philips International B.V. | pCR | [Qualcomm]: does not agree with this contribution. | noted |  |
|  |  | S3‑222541 | Evaluation of solution #4 | Huawei, HiSilicon, Apple, Philips International B.V. | pCR | [Nokia]: requests clarification, because there is a disagreement on the presented power consumption evaluation  [Huawei]: clarification in response to Nokia.  [Qualcomm]: proposes to note.  [Huawei]: clarification in response to Qualcomm. | noted |  |
|  |  | S3‑222542 | Evaluation of solution #25 | Huawei, HiSilicon, Philips International B.V. | pCR | [Nokia]: requests clarification, on the presented Step8 ‘The FBS (Fake UE) unknowingly forwards to the gNB.’  [Huawei]: provides response to Nokia.  [Ericsson]: proposes to postpone.  [Qualcomm]: propose to postpone | noted |  |
|  |  | S3‑222543 | Conclusion for KI#3 | Huawei, HiSilicon, Apple, Philips International B.V. | pCR | [Qualcomm]: proposes to note. | noted |  |
|  |  | S3‑222544 | Update to solution #25 | Huawei, HiSilicon, Philips International B.V. | pCR | [Ericsson]: requires clarification before approval.  [Philips] asks a question.  [Huawei] response to Ericsson.  [Ericsson] responds.  [Qualcomm]: propose to note as we disagree with the updates  [Philips] comments and asks questions.  [Huawei] Clarification in response to Ericsson.  [Huawei]: clarification provided | noted |  |
|  |  | S3‑222762 | An update on the evaluation of solution #4 | Qualcomm Incorporated | pCR | [Huawei]: requests revision.  [Qualcomm]: provides r2 with some updates on top of r1 provided by Huawei  [Huawei]: ok with r2. | approved | R2 |
|  |  | S3‑222454 | Reply LS on authenticity and replay protection of system information | R2-2208985 | LS in |  | postponed |  |
|  |  | S3‑222475 | Reply LS on authenticity and replay protection of system information | Huawei, HiSilicon | LS out | [Apple] provides comments to both 2475 and 2850. Suggest to merge, and fine to use either one as the basis.  [Philips] provides comments to 2475 and 2850. Suggest merging and taking 2475 as basis.  [Samsung]: provides clarification. Fine with merging S3-222475 in S3-222850. Propose to take S3-222850 as the baseline doc for the reply LS.  [Nokia]: is providing feedback, and agrees on using S3-222850 as basis and is providing feedback on Q1 and Q2  >>CC\_1<<  [Huawei] presents.  [VF] comments  [Samsung] clarifies.  [Apple] proposes to decide which contribution are used as baseline for future discussion.  [QC] comments, needs to have solution first then reply. Consider it has no possible to answer in this meeting, proposes to postpone.  [Docomo] has concern on counter bits number. It may be limited.  [Samsung] clarifies.  Chair comments the potential solution may have big impact on many aspects. Chair asks to have progress. Asks whether it is helpful to have an offline call on specifically on SIB protection topic.  [Samsung] is positive to have offline call.  [Huawei] is positive.  Chair announce an offline call tomorrow.  >>CC\_1<<  [Huawei]: fine with the merger proposal. Let’s use S3-222850 as basis and close this thread. | noted |  |
|  |  | S3‑222850 | Reply LS on authenticity and replay protection of system information | Samsung, Deutsche Telekom | LS out | [Apple] provides comments to both 2475 and 2850. Suggest to merge, and fine to use either one as the basis.  [Philips] provides comments to 2475 and 2850. Suggest merging and taking 2475 as basis.  [Samsung]: provides clarification. Fine with merging S3-222475. Propose to take S3-222850 as the baseline doc for the reply LS.  >>CC\_1<<  [Samsung] presents.  >>CC\_1<<  [Samsung]: provides r1  [Apple]: provides comments on r1.  [Deutsche Telekom]: provides comments on -r1.  [Huawei]: provides comments on r1.  [Samsung]: provides clarification.  [Samsung]: provides r2 based on the discussion in the offline call.  [Apple]: provides r3.  [Qualcomm]: proposes to note  [Nokia]: provides questions/feedback on the SIB length and periodicity values  [Nokia]: provides revision 4  [Apple]: provides r5 to include changes in both r3 and r4. Prefer r3, but can live with r5.  [Nokia]: is providing response to the questions from Apple  [Philips]: provides revision  [Samsung]: provides r7 and clarification to Qualcomm’s comment.  [CableLabs]: provides r8 with both editorial and technical changes.  [Samsung]: provides clarification and text proposal to Q3  [Huawei]: provides r9.  [Samsung]: not fine with r9. Provides r10  >>CC\_4<<  [Samsung] presents current status. Only one objection to r10.  Chair asks whether QC can live with r10.  [QC] clarifies.  [Samsung] comments RAN2 asks question, and SA3 needs to reply. So LS should go.  [Apple] comments it can be replied, even there is no consensus on detail. It can tell RAN2 there is no agreement currently. Another comment is to remove conclusion part.  [CableLabs] supports to send out LS.  [QC] replies to CableLabs. >>CC\_4<<  [Nokia]: provides response/clarification related to digital signature and certificate periodicity  [CableLabs]: provides comments to Nokia.  [Nokia]: provides feedback to CableLabs | noted |  |
|  |  | S3‑222655 | 5GFBS - Mapping of solutions and key issues | Apple | pCR | [Ericsson]: provides comments  [Apple]: provides r1 to capture Ericsson’s comments. | approved | R1 |
| 5.2 | Study on Security Impacts of Virtualisation | S3‑222537 | New solution on boot time attestation at 3GPP function level | Huawei, HiSilicon | pCR | [Ericsson]: Terminology in this solution should be clarified and lined with the IETF RATS e.g. report should be evidence.  [JHU]: Proposes to note. Further technical clarification needed and alignment to KI#13 requirements needed.  [Huawei]: responds to Ericsson and JHU.  [Thales]: provides comments and proposes to note  [Huawei]: provides further clarifications  [JHU]: provides response and request further clarification  [Huawei]: provides further clarification  [Thales]: proposes to note.  [Huawei]: requires further clarification from Thales.  [Thales]: provides answer.  [Huawei]: further clarifications. | noted |  |
|  |  | S3‑222600 | Solution #4 – Evaluation and addressing EN | MITRE Corporation | pCR | [Huawei]: revision is needed before approval  [MITRE]: Provides revision 1 and clarification  [Huawei]: provides r2.  [MITRE]: fine with r2. | approved | R2 |
|  |  | S3‑222601 | Solution #7 – Evaluation and addressing EN | MITRE Corporation | pCR | [Ericsson]: Clarification needed  [MITRE]: provides r1 and clarification  [Ericsson]: ok with r1. | approved | R1 |
|  |  | S3‑222683 | Address EN on PACF and MANO Communication | Johns Hopkins University APL, US National Security Agency, CISA ECD | pCR | [Huawei]: revision is needed before approval.  [BT Plc]: clarification may be required but strongly disagree with Huawei comments.  [Huawei]:responds to BT. | noted |  |
|  |  | S3‑222684 | Address EN on verifying attestation results for NRF and PACF | Johns Hopkins University APL, US National Security Agency, CISA ECD | pCR | [Ericsson]: Clarification question  [JHU]: Provides clarification. Contribution is for boot time attestation.  [Ericsson]: ok with the response  [Huawei]: ask clarification and revision before approval.  [Nokia]: comments that solution seems to further reduce the need for the PACF.  [JHU]: provides clarification  [Huawei]: has some concern on the reply.  [JHU]: provides further clarification  [Nokia]: provides comment.  [Huawei]: confirms that the unclear points are still needs more work and don’t see the revision. Time being, propose to postpone the proposal. | noted |  |
| 5.3 | Study on Security Aspects of Proximity Based Services in 5GS Phase 2 | S3‑222462 | Reply LS on 5G ProSe security open items | S2-2207838 | LS in | >>CC\_1<<  [CATT] proposes to have content in key issue detail and potential requirement section for each key issue merger.  Chair asks whether this contribution needs to reply or not.  [IDCC] asks no need.  Chair propose to note it after the 1st challenge deadline. >>CC\_1<<  [CATT]: According to the decision made in the conference call on Monday, this contribution is noted. | noted |  |
|  |  | S3‑222480 | New Key Issue on Security and privacy of switching between two indirect UE-to-Network Relay paths | Huawei, HiSilicon | pCR | >>CC\_1<<  Related with 2833  [Huawei] presents. >>CC\_1<<  [Qualcomm]: provides comments and requires a revision before approval  [Huawei, HiSilicon] Reply to Qualcomm and propose to merge into 2833.  [Qualcomm]: this contribution is merged into 222833. This thread is closed. | noted |  |
|  |  | S3‑222481 | New Key Issue on privacy of switching between direct Uu and indirect Layer-2 UE-to-Network Relay paths | Huawei, HiSilicon | pCR | [Ericsson] : Asks questions  [ChinaTelecom] : provide comments and request clarification.  >>CC\_1<<  Rapporteur asks to use 481 as baseline.  [Huawei] presents. >>CC\_1<<  [Qualcomm]: revision required before approval  [Nokia]: Ask clarification  [Qualcomm]: proposes to note | noted |  |
|  |  | S3‑222482 | New KI on security of U2NW multi-path connection | Huawei, HiSilicon | pCR | [Ericsson] : asks questions  >>CC\_1<<  4 contributions group (2482, 2582, 2844, 2877) - SA2 key issue 5  [Nokia] comments. It has multiple use scenarios, how to deal with it? keep it alone? Or combined with others?  [IDCC] proposes to use 2844 or 2877 as baseline.  [Huawei] clarifies.  [Oppo] comments it should have only 1 key issue on multipath topic.  Chair asks to use 2844 as baseline.  [Ericsson] comments it needs more time to decide which contribution is baseline.  Chair clarifies the comment can be made for merge document and the base document 2844..  Rapporteur also clarifies the discussion is just about merging way forward, but not decision on content.  >>CC\_1<<  [Samsung] Proposes to merge in S3-222844 based on CC.  [Huawei, HiSilicon] Fine to merge into S3-222844 and move the discuss under 2844. | noted |  |
|  |  | S3‑222520 | New Key Issue on Security and privacy of path switching between PC5 and Uu | Huawei, HiSilicon | pCR | [Ericsson] : asks questions  >>CC\_1<<  Related with 630, 630  [Huawei] presents.  [KPN] proposes to use one of 3 as baseline, like 520  Chair asks to use 520 as baseline for future discussion. >>CC\_1<<  [Huawei, HiSilicon]: Reply to the question from Ericsson.  [Qualcomm]: revision required before approval  [Nokia]: Ask clarification  [ChinaTelecom]: Provide comments and ask clarification.  [Xiaomi]: Ask clarification  [Ericsson] : provide comments  [Qualcomm]: proposes to note | noted |  |
|  |  | S3‑222582 | KI for multi path relaying security | OPPO | pCR | [Samsung] Proposes to merge in S3-222844 based on CC.  [Nokia]: comment.  [OPPO]: provide reply  [OPPO]: OK to merge into S3-222844 and move the discuss under S3-222844. | noted |  |
|  |  | S3‑222609 | New KI on U2U relay protection of remote UE traffic | OPPO | pCR | [Qualcomm]: requests clarifications before approval  [OPPO]: provides clarification  [Qualcomm]: requests revision before approval  [OPPO]: provides comments r1 based on Qualcomm comment  [Qualcomm]: is fine with r1 and provides clarifications  >>warp\_up<<  >>warp\_up<< | approved | R1 |
|  |  | S3‑222629 | Key issue on Subscription synchronization between PAnF and UDM | ZTE Corporation | pCR | >>CC\_1<<  [ZTE] presents.  [MITRE] supports this key issue. >>CC\_1<<  [MITRE] : provides r1 and requests clarification before approving  [Qualcomm]: proposes to note this contribution and suggest to work on this in Rel-17 ProSe  [ZTE]: provide clarification  [Nokia]: provide comment  [Ericsson] : provides comments  [Interdigital]: support to study this in Rel-18  [ZTE]: Provide R2.  [Huawei, HiSilicon]: Propose to leave it to implementation and propose to note.  [ZTE]: Provide clarification.  >>CC\_3<<  Rapporteur introduces current status. There is debate whether it belongs to R18 or not, need help to make decision.  [ZTE] presents shortly.  Chair suggests to take up this topic in Thursday meeting. >>CC\_3<<  >>CC\_4<<  Rapporteur introduces background.  [ZTE] presents status. QC would like to solve the issue in R-17. Huawei is not ok to introduce this.  4 companies support to have this in R-18.  [Huawei] comments it should be left for implementation, so new function needed for this.  [CATT] comments. [MITRE] comments and agree with CATT to follow SA2.  Chair suggests to come up with discussion paper and try to get agreement/disagreement in Nov. Meeting. >>CC\_4<<  [MITRE]: Proposes way forward  [ZTE]: Provide clarification.  [CATT]: Provide some information related to U2N/U2U relay provision. | noted |  |
|  |  | S3‑222630 | Key issue on Support direct communication path switching between PC5 and Uu | ZTE Corporation | pCR | >>CC\_1<<  Related with 520, xxx  [ZTE] presents. >>CC\_1<<  [Nokia]: Ask clarification  [ZTE]: Provide clarification  [Qualcomm]: provides comments and requests revision before approval  [Nokia]: further comments  [ZTE]: Provide R1  [Ericsson]: asks question  [ZTE]: Provide clarification.  [Ericsson]: thanks for clarification  [Qualcomm]: is not fine with r1, and proposes to note as we think the security threat is not valid.  [ZTE]: Provide clarification. | noted |  |
|  |  | S3‑222792 | New KI: Support for Emergency service over UE-to-Network Relaying | Ericsson | pCR | [Interdigital]: propose to note  [Huawei, HiSilicon]: Send to correct thread. Requires clarification before approval. Reply to Ericsson.  [Ericsson]: asks companies to reconsider position on KI  [Qualcomm]: supports this KI and provides some comments  [Ericsson]: provides r1  [Ericsson]: could you confirm whether you are ok with r1  [Interdigital]: propose to note | noted |  |
|  |  | S3‑222833 | add new key issue for path switching | Nokia, Nokia Shanghai Bell | pCR | >>CC\_1<<  Related with 2480  [Nokia] asks question how to organize key issue merging.  To separate key issue in SA2 as independent key issue, or to keep all related key issues in SA2 as asingle key issue. Nokia prefers latter way forward.  [Huawei] prefers to keep  separate key issues.  [KPN] prefers separate KI as way forward.  [Ericsson] prefers to keep key issue separately.  [IDCC] has same view and comments to Nokia.  >>CC\_1<<  [Nokia]: provide r1 and suggest to merge 2480 with 2833.  [Huawei, HiSilicon]: agree to merge 2480 into 2833.  [Ericsson]: provides comments  [Nokia]: provide answer and r3.  [Huawei, HiSilicon]: provides feedback. Fine with r3.  [Qualcomm]: provides comments and requires a revision before approval  [ChinaTelecom]: provides comments on r3.  [Nokia]: provide answers for comments and r4.  [Huawei, HiSilicon]: provide r5 to add details to the third threat.  [Ericsson]: asks question  [Nokia]: answer question to Ericsson.  [Huawei, HiSilicon]: answer question to Ericsson.  [Qualcomm]: requires further revision (remove security threats, requirements, and last paragraph in the Key issue details) as we think the security threats and requirements are not valid. And proposes to study this KI in the next meeting  [Nokia]: answer to Qualcomm. | noted |  |
|  |  | S3‑222844 | Key Issue for secure ProSe multi-path transmission for UE-to-Network relay | Samsung | pCR | [Nokia]: Ask clarification  [Samsung]: Provides clarification and r1  [Nokia]: comment to r1  [OPPO]: Ask for clarification and propose a wayforward to merge S3-222582  [Ericsson] : provides comments to r1  [Xiaomi]: provide comments  [Samsung]: Provides clarification  [Huawei, HiSilicon]: Merge 2482 into 2844. Propose to add other scenarios and privacy issues. Provides r2.  [Qualcomm]: asks clarifications and requires a revision before approval  [OPPO]: provide reply to Ericsson and Samsung. Provide R3.  [Samsung]: Fine with r3  [OPPO]: provide reply to Qualcomm.  [Ericsson]: provide further comments  [OPPO]: provide comment  [Qualcomm]: provides clarifications to OPPO  [Ericsson]: provides comments  [Samsung]: Provides r4 make progress  [Ericsson]: provides comments to r4  [OPPO]: OK with r4  [Huawei, HiSilicon]: OK with r4  [Samsung]: Provides clarification to Ericsson  [Ericsson]: propose to note  >>wrap\_up<<  [Samsung] comments objection from Ericsson is too late.  [Ericsson] clarifies their concern is not addressed.  Rapporteur pointed QC’s concern is not addressed  Chair announces it should be noted.  >>wrap\_up<< | noted |  |
|  |  | S3‑222877 | Key Issue on security of multi-path transmission for UE-to-Network Relay | Beijing Xiaomi Mobile Software | pCR | [Samsung] Proposes to merge in S3-222844 based on CC.  [Xiaomi] Fine to merge into S3-222844 and move the discuss under 2844. | noted |  |
|  |  | S3‑222486 | E2E solution in L3 Relay | Huawei, HiSilicon | pCR | [Xiaomi]: provides comments and requires clarification before approval  [Interdigital]: request clarification/revision before approval  [Huawei]: provides clarification  [Qualcomm]: provides comments and requires a revision before approval  [Huawei]: replies  [Interdigital]: replies  [Huawei]: provides r1  [Qualcomm]: is fine with r1.  [Interdigital]: comment r1.  [Huawei]: r2 is provided.  [Interdigital]: OK with r2.  [Xiaomi]: propose to noted. | noted |  |
|  |  | S3‑222487 | E2E solution in L2 Relay | Huawei, HiSilicon | pCR | [Xiaomi]: provides comments and requires clarification before approval  [Interdigital]: request clarification/revision before approval  [Huawei]: replies  [OPPO]: Seek for clarification  [Huawei]: replies  [Interdigital]: replies  [OPPO]: Replies  [Huawei]: provides r1  [Huawei]: provides r2  [OPPO]: fine with r2  [Interdigital]: comment r2.  [Huawei]: provides r3  [Interdigital]: OK with r3.  [Xiaomi]: propose to noted. | noted |  |
|  |  | S3‑222576 | Solution for U2U relay (model A) discovery security | China Telecom Corporation Ltd. | pCR | [Xiaomi]: provides comments and requires clarification before approval  [Huawei, HiSilicon]: this contributions needs clarification/revision before approval.  [ChinaTelecom]: provide replies and clarification.  [Interdigital]: request clarification/revision before approval  [ChinaTelecom]: provided clarification.  [Qualcomm]: requests clarification and requires revisions before approval  [Huawei, HiSilicon]: replies to China Telecom.  [ChinaTelecom]: provide r1 and reply comments.  [Interdigital]: OK with r1  [Xiaomi]: OK with r1  [ChinaTelecom]: request confirmation from Qualcomm, Huawei  [Huawei, HiSilicon]: fine with r1.  [Qualcomm]: is fine with r1 | approved | R1 |
|  |  | S3‑222579 | Solution for U2U Relay (model B) discovery security | China Telecom Corporation Ltd. | pCR | [Xiaomi]: provides comments and requires clarification before approval  [Huawei, HiSilicon]: this contributions needs clarification/revision before approval.  [ChinaTelecom]: provide replies and clarification.  [Interdigital]: request clarification/revision before approval  [Xiaomi]: provides response  [Qualcomm]: requests clarification and requires revisions before approval  [Huawei, HiSilicon]: replies to China Telecom.  [ChinaTelecom]: provides clarification and proposes to merger to S3-222874.  [Xiaomi]: agree with the merging proposal | noted |  |
|  |  | S3‑222585 | Address the ENs in Sol #6 | OPPO | pCR | [Interdigital]: request clarification/revision before approval  [Huawei]: clarification is needed before approval  [Qualcomm]: requests clarifications and requires revision before approval  [OPPO]: Provide clarification and R1  [OPPO]: provide clarifications and R2  [Huawei]: comments on r2  [OPPO]: Provide reply and R3  [Huawei]: fine with r3  [Interdigital]: OK with r3  [OPPO]: Request confirmation from Qualcomm  [Qualcomm]: is fine with r3 | approvel | R3 |
|  |  | S3‑222592 | Update TR 33.740 solution#1 | InterDigital, Europe, Ltd. | pCR |  | approved |  |
|  |  | S3‑222593 | Update TR 33.740 solution#2 | InterDigital, Europe, Ltd. | pCR | [Qualcomm]: requests a clarification and requires a revision before approval  [Interdigital]: provides clarification and r1  [Interdigital]: request confirmation from Qualcomm  [Qualcomm]: is fine with r1 | approved | R1 |
|  |  | S3‑222594 | New Solution for Security of Layer-2 based UE-to-UE Relay | InterDigital, Europe, Ltd. | pCR | [Huawei]: clarification is needed before approval.  [Philips]: clarification is needed before approval.  [OPPO]: clarification is needed before approval.  [Interdigital]: replies and provides r1  [OPPO]: seek for further clarification  [Interdigital]: replies  [Huawei]: fine with r1.  [OPPO]: fine with r1.  [Interdigital]: request confirmation from Philips  [Philips] ok | approved | R1 |
|  |  | S3‑222595 | New Solution for E2E Authentication with Layer-3 UE-to-UE Relay | InterDigital, Europe, Ltd. | pCR | [Xiaomi]: provides comments and requires clarification before approval  [Interdigital]: provides clarifications  [Huawei]: clarification is needed before approval  [Qualcomm]: provides comments and requires a revision before approval  [Interdigital]: provides r1  [Huawei]: fine with r1  [Interdigital]: request confirmation from Qualcomm, Xiaomi  [Xiaomi]: r1 is ok  [Qualcomm]: is fine with r1 | approved | R1 |
|  |  | S3‑222596 | New Solution for Path Switching with Layer-2 UE-to-UE Relay | InterDigital, Europe, Ltd. | pCR | [Huawei, HiSilicon]: This contribution needs further clarification/revision before approval.  [Qualcomm]: provides comments and requires revision before approval  [Philips] provides comments and asks for clarification/revision.  [Interdigital] provides clarifications and r1  [Huawei, HiSilicon]: provides further feedback.  [Philips] provides input.  [Interdigital] replies.  [Interdigital] replies to missed question from Philips.  [Interdigital]: request confirmation from Qualcomm, Philips, Huawei  [Qualcomm]: proposes to postpone  [Huawei, HiSilicon]: Propose an EN. No further confirmation from my side is needed if the EN is included in next revision.  [Interdigital]: provides r2. clarifies the security requirement already exists in KI#2  [Philips]: ok.  [Interdigital]: request Qualcomm to confirm  [Qualcomm]: is fine with r2 | approved | R2 |
|  |  | S3‑222610 | Solution for secure communication between source and target UEs via U2U relay | OPPO | pCR | [Qualcomm]: provides comments and requires a revision before approval  [OPPO]: provides reply and R1  [Qualcomm]: proposes to postpone and revisit after the KI agreed.  [OPPO]: provides reply | noted |  |
|  |  | S3‑222631 | Solution on Subscription synchronization between PAnF and UDM | ZTE Corporation | pCR | [Qualcomm]: proposes to note this contribution and suggest to work on this in Rel-17 ProSe  [ZTE]: provide clarification  [Huawei, HiSilicon]: Propose to leave it to implementation and propose to note. | noted |  |
|  |  | S3‑222665 | ProSe - Update solution #10 (EN1) | Philips International B.V. | pCR |  | approved |  |
|  |  | S3‑222666 | ProSe - Update solution #10 (EN2) | Philips International B.V. | pCR |  | approved |  |
|  |  | S3‑222667 | ProSe - Update solution #10 (EN3) | Philips International B.V. | pCR | [Huawei, HiSilicon]: This contribution requires revision/clarification before approval.  [Qualcomm]: requires a revision before approval  [Philips] comments. Provides r1.  [Huawei, HiSilicon]: can live with r1.  [Philips] asks for confirmation.  [Qualcomm]: is fine with r1 | approved | R1 |
|  |  | S3‑222668 | ProSe - New solution KI#2 and #3 | Philips International B.V. | pCR | [Qualcomm]: provides comment and requires a revision before approval  [Philips] provides answers and r1.  [Ericsson] provides comments to r1.  [Philips] clarifies.  [Philips] asks for confirmation.  [Ericsson] asks for update  [Philips] r2 is available.  [Ericsson] fine with r2  [Qualcomm]: is fine with r2 | approved | R2 |
|  |  | S3‑222723 | pCR to TR33.740 Centralized discovery key management and U2U relay authorization | CATT | pCR | [ChinaTelecom]: Provide comments and ask for clarification.  [Xiaomi]: provides comments and requires clarification before approval  [Huawei, HiSilicon]: This contribution needs further clarification before approval.  [ChinaTelecom]: Provide comments and ask for clarification.  [Interdigital]: request clarification/revision before approval  [CATT]: Provide responses to the comments of ChinaTelecom, Xiaomi, HW and Interdigital, and provide r1.  [Qualcomm]: supports this contribution and provides comments.  [CATT]: Response to Qualcomm’s comments.  [Interdigital]: OK with r1.  [ChinaTelecom]: fine with r1.  [Xiaomi]: fine with r1.  [Huawei, HiSilicon]: No fine with r1.  [CATT]: Ask for reconsideration, for example, through adding some ENs for making progress.  [Huawei, HiSilicon]: Propose EN.  [CATT]: Required EN has been added in r2. | approved | R2 |
|  |  | S3‑222726 | pCR to TR33.740 Distributed discovery key management and U2U relay authorization | CATT | pCR | [Xiaomi]: provides comments and requires clarification before approval  [Huawei, HiSilicon]: this contribution needs clarification/revision before approval.  [Interdigital]: request clarification/revision before approval  [CATT]: Provide responses to the comments of Xiaomi, HW and Interdigital, and provide r1.  [Qualcomm]: supports this contribution and provides comments.  [Huawei, HiSilicon]: replies to CATT.  [CATT]: Response to Qualcomm’s and HW’s comments.  [Interdigital]: OK with r1.  [Huawei, HiSilicon]: Propose EN.  [CATT]: Required EN has been added in r2. | approved | R2 |
|  |  | S3‑222729 | pCR to TR33.740 Solution for U2U Relay discovery message security | CATT | pCR | [ChinaTelecom]: Provide comments and ask for clarification.  [Huawei, HiSilicon]: This contribution needs further clarification before approval.  [Interdigital]: request clarification/revision before approval  [CATT]: Provide responses to the comments of ChinaTelecom, HW and Interdigital, and provide r1.  [Interdigital]: OK with r1.  [ChinaTelecom]: fine with r1.  [Huawei, HiSilicon]: No fine with r1. Propose to note.  [CATT]: Provide more clarification and ask reconsideration, for example, through adding some ENs for making progress. | noted |  |
|  |  | S3‑222731 | pCR to TR33.740 Solution for UE-to-UE relay security | CATT | pCR | [Interdigital]: request clarification/revision before approval  [Huawei]: clarification is needed before approval.  [CATT]: Provide responses to the comments of Interdigital and HW, and provide r1.  [OPPO]: Seek for clarification.  [CATT]: Response to OPPO.  [Interdigital]: OK with r1.  [Huawei]: fine with r1.  [OPPO]: Propose to add an EN  [CATT]: Add an EN proposed by OPPO in r2.  [OPPO]: fine with r2 | approved | R2 |
|  |  | S3‑222763 | A new solution for UE-to-UE Relay discovery message protection for Model A discovery | Qualcomm Incorporated | pCR | [ChinaTelecom]: Provide comments and ask for clarification.  [Huawei, HiSilicon]: This contribution needs further clarification/revision before approval. The new security requirement in this solution needs to be discussed first.  [Qualcomm]: provides clarifications  [Qualcomm]: provides r1  [Interdigital]: request clarification/revision before approval  [Xiaomi]: request clarification/revision before approval  [Qualcomm]: provides clarifications  [Interdigital]: OK with r1  [Huawei, HiSilicon]: Not fine with r1. The new security requirement and threat in this solution needs to be discussed under KI first. | noted |  |
|  |  | S3‑222764 | A new solution for UE-to-UE Relay discovery message protection for Model B discovery | Qualcomm Incorporated | pCR | [Huawei, HiSilicon]: This contribution needs further clarification/revision before approval. The new security requirement in this solution needs to be discussed first.  [Qualcomm]: provides clarifications  [Interdigital]: request clarification/revision before approval [Qualcomm]: provides r1  [Xiaomi]: request clarification/revision before approval  [Philips]: supports the contribution and E2E security.  [Qualcomm]: provides clarifications  [Interdigital]: OK with r1  [Huawei, HiSilicon]: Not fine with r1. The new security requirement and threat in this solution needs to be discussed under KI first. | noted |  |
|  |  | S3‑222765 | A new solution for secure PC5 link establishment for UE-to-UE Relay | Qualcomm Incorporated | pCR | [Qualcomm]: provides a clarification and r1.  [Interdigital]: request clarification/revision before approval  [Huawei]: clarification is needed against r1.  [Xiaomi]: request clarification/revision before approval  [Qualcomm]: provides clarification and provides r2  [Interdigital]: OK with r2  [Huawei]: fine with r2. | noted |  |
|  |  | S3‑222791 | Deleting step 8 and EN about End-to-end IP security in solution #3 | Ericsson | pCR |  | approved |  |
|  |  | S3‑222793 | Support Emergency Service over UE-to-Network Relay | Ericsson | pCR | [Nokia]: Ask question  [Huawei, HiSilicon]: requires clarification before approval.  [Ericsson]: provides comments.  [Interdigital]: propose to note  [Huawei, HiSilicon]: propose to postpone.  [Ericsson]: provides comments  [Interdigital]: propose to note | noted |  |
|  |  | S3‑222794 | Resolve some ENs for Solution3 | Ericsson | pCR |  | approved |  |
|  |  | S3‑222795 | Resolve EN for PC5 link setup between U2U and Target UE in Solution3 | Ericsson | pCR | [Interdigital]: request clarification/revision before approval  [Xiaomi]: request clarification/revision before approval  [Ericsson]: provides comments and r1 is uploaded  [Interdigital]: OK with r1  [Xiaomi]: OK with r1 | approved | R1 |
|  |  | S3‑222796 | Resolve some ENs for Solution4 | Ericsson | pCR |  | approved |  |
|  |  | S3‑222797 | Resolve EN for protection of DCR in Solution4 | Ericsson | pCR | [Interdigital]: request clarification/revision before approval  [Xiaomi]: request clarification/revision before approval  [Ericsson]: provides comments  [Interdigital]: follow up request for clarification and possible revision  [Ericsson]: Provides r1  [Interdigital]: comment r1  [Ericsson]: provides r2  [Interdigital]: OK with r2  [Ericsson]: could Xiaomi confirm whether you are ok with r2  [Xiaomi]: OK with r2 | approved | R2 |
|  |  | S3‑222798 | Deleting step 10 and EN about End-to-end IP security in solution #4 | Ericsson | pCR |  | approved |  |
|  |  | S3‑222799 | Resolve EN for Token Provision in Solution4 | Ericsson | pCR |  | approved |  |
|  |  | S3‑222800 | Resolve EN for same credentials used for both in-coverage and out-of-coverage mode in Solution 3 | Ericsson | pCR | [Huawei]: clarification is needed before approval.  [Xiaomi]: clarification is needed before approval.  [Ericsson]: provides comments  [Huawei]: OK, and no more comment.  [Xiaomi]: provide comment.  [Ericsson]: provides r1  [Xiaomi]:r1 is ok  [Qualcomm]: requires a revision before approval  [Ericsson]: provides r2  [Qualcomm]: is fine with r2 | approved | R2 |
|  |  | S3‑222845 | Solution for ProSe multipath transmission for redundant PDUs | Samsung | pCR | [Nokia]: Ask clarification  [Nokia]: Ask clarification  [Ericsson]: provides comments  [Samsung]: provides clarification  [Qualcomm]: asks clarifications and requires a revision before approval  [Samsung]: Provides clarification  [Ericsson]: propose to note | noted |  |
|  |  | S3‑222846 | New Solution for end-to-end security establishment over the UE-to-UE Relay | Samsung | pCR | [Huawei]: clarification is needed before approval.  [Samsung]: provides clarification and r1.  [Huawei]: Huawei’s concern is not fully addressed in r1  [Samsung]: provides clarification and r2.  [Huawei]: fine with r2 | approved | R2 |
|  |  | S3‑222872 | Update to solution #7 and remove the Editor’s Note | Beijing Xiaomi Mobile Software | pCR | [Ericsson] : provides comments  [Huawei]: clarification is needed before approval  [Interdigital]: request clarification/revision before approval  [Xiaomi]: provides r1  [Huawei]:comments against r1  [Interdigital]:comment  [Xiaomi]: provides r2  [Interdigital]:OK with r2  [Huawei]:fine with r2  [Xiaomi]: request confirmation from Ericsson  [Ericsson]: fine with r2 | approved | R2 |
|  |  | S3‑222873 | Update to solution #8 in TR 33.740 | Beijing Xiaomi Mobile Software | pCR | [ChinaTelecom]: Provide comments and ask for clarification.  [Xiaomi]: provide responses  [Huawei]: clarification is needed before approval.  [Xiaomi]: provide responses  [Huawei]: propose to noted.  [Xiaomi]: provide response  [Huawei]: replies  [Xiaomi]: provides r1  [Xiaomi]: provides r2 and request confirmation from Huawei, ChinaTelecom  [ChinaTelecom]: fine with r2 | noted |  |
|  |  | S3‑222874 | Update to solution #9 in TR 33.740 | Beijing Xiaomi Mobile Software | pCR | [Interdigital]: request clarification/revision before approval  [Xiaomi]:provide r1  [Huawei, HiSilicon]: This needs revision/clarification before approval.  [Xiaomi]: provides r2  [Qualcomm]: asks a clarification and requires a revision before approval  [Xiaomi]: provides response  [ChinaTelecom]: fine with r2  [Xiaomi]: provides response  [Interdigital]: OK with r2  [Xiaomi]: request confirmation from Huawei, Qualcomm  [Qualcomm]: is fine with r2 | noted |  |
|  |  | S3‑222875 | New solution on Network-assisted Security Establishment Procedure for 5G ProSe Layer-3 UE-to-UE Relay | Beijing Xiaomi Mobile Software | pCR | [Interdigital]: request clarification/revision before approval  [Xiaomi]: provides r1  [Qualcomm]: asks a clarification before approval  [Xiaomi]: provides response  [Interdigital]: OK with r1  [Xiaomi]: request confirmation from Qualcomm  [Qualcomm]: is fine with r1 | approved | R1 |
|  |  | S3‑222876 | New solution on Security Establishment Procedure for 5G ProSe Layer-2 UE-to-UE Relay | Beijing Xiaomi Mobile Software | pCR | [OPPO]: Ask for clarification  [Huawei]: clarification is needed before approval  [Interdigital]: request clarification/revision before approval  [Xiaomi]: provides r1  [OPPO]: fine with r1  [Huawei]:comment against r1.  [Xiaomi]:provides r2  [Huawei]:fine with r2.  [Interdigital]:OK with r2. | approved | R2 |
|  |  | S3‑222628 | Add terms and abbreviations to TR 33.740 | ZTE Corporation | pCR |  | approved |  |
| 5.4 | Study on privacy of identifiers over radio access | S3‑222928 | Discussion paper for KI #1: Privacy aspects of variable length user identifiers | InterDigital, Inc., AT&T, CableLabs, Convida Wireless, Deutsche Telekom, JHU, Intel, Google, Lenovo, Nokia, NCSC, Oppo, Philips International B.V., US NSA, Verizon, Xiaomi, ZTE | discussion |  | noted |  |
|  |  | S3‑222927 | PCR for KI #1: Privacy aspects of variable length user identifiers | InterDigital, Inc., Apple, AT&T, CableLabs, Convida Wireless, Deutsche Telekom, Ericsson, Intel, JHU, Google, Lenovo, Nokia, NCSC, Oppo, Philips International B.V., US NIST, US NSA, Verizon, Xiaomi, ZTE | pCR | [Qualcomm]: requires changes before approval  >>CC\_3<<  [IDCC] presents current status, proposes to start discussion from 927.  [IDCC] presents.  [VF] comments on 1st sentence.  [QC] comments.  [Huawei] asks for clarification. The sentence looks solution based.  [IDCC] clarifies to Huawei’s comment and replies to QC’s comment.  [CMCC] comments  [IDCC] clarifies.  [QC] comments.  [IDCC] replies and proposes a compromised way.  [Huawei] clarifies it is ok to remove EN, but comment the sentence is solutions based.  [Docomo] has similar view on 1st sentence, suggest to modify the text.  [Nokia] supports to remove EN, and ok to have new sentence.  Chair asks for compromise way, request DoCoMo to suggest a compromise text.  [IDCC] is ok to have compromise, asks Docomo to suggest compromised text over email..  [QC] comments there is contribution to solve EN in another way.  >>CC\_3<<  [Qualcomm]: requires changes before approval  [NTT DOCOMO]: as requested in the conf call, my proposal is available in -r3.  [Vodafone]: as requested in the conf call, I have updated the English in r4. There should not be any change in meaning just better English.  >>CC\_4<<  [IDCC] presents current status.  [QC] comments, ok to remove EN in key issue detail, but not ok to remove EN in threat.  [IDCC] comments to QC’s comment.  [QC] replies.  [Docomo] clarifies.  [IDCC] clarifies the plan  [QC] clarifies.  [Ericsson] comments.  [Huawei] asks who will generate final version, and provides minor comments.  [Docomo] will update the contribution based on Ericsson’s proposal, and will merge 968 from QC. But not like to involve Ericsson’s proposal.  [Docomo] proposes a way forward.  [Ericsson] clarifies.  [Docomo] prefers to put such proposal into evaluation rather than issue details.  [Huawei] comments on threat.  >>CC\_4<<  [NTT DOCOMO]: r5 merges 768 into 927.  [Ericsson]: r5 is acceptable  [Interdigital]: OK with r5 and asks for QC to confirm its acceptance.  [Qualcomm]: fine with r5 and co-sourcing r5.  [Interdigital]: Appreciates QC support for R5 and insists on removing the ENs that refer to non-existing Editor’s notes in KI#1.  [Interdigital]: R6 is uploaded. The only difference from R5 is the addition of Qualcomm Incorporated as a co-sourcing company.  [Qualcomm]: fine with r6. | approved | R6 |
|  |  | S3‑222767 | Applicability of SUPI Type IMSI in KI#1 | Qualcomm Incorporated | pCR | >>CC\_3<<  [QC] presents.  [IDCC] comments it is redundant. It is not fit for the key issue as key issue focus on variable length identifiers.  [Docomo] supports this added sentence.  [Apple] proposes to change it as a NOTE.  [QC] clarifies.  [IDCC] proposes to change it as a NOTE or Editor’s Note.  [QC] is not ok to set as EN.  Chair proposes to make it as a NOTE as majority support to have this sentence and ok as a NOTE.  >>CC\_3<<  [Qualcomm]: provides r1  [Interdigital]: Asks Qualcomm to declare their choice to either  a. Note S3-222767 or  b. Merge S3-222767 into S3-222927-r5,  Since the contents of S3-222767 are absorbed into S3-222927-r5 based on the decisions from Wednesday and Thursday SA3 calls.  [Qualcomm]: fine with merging S3-222767 into S3-222927-r5 and co-sourcing S3-222927-r5. | merged | 927 |
|  |  | S3‑222768 | Addition of threats due to EAP in KI#1 | Qualcomm Incorporated | pCR | [Ericsson]: requires clarification before approval  [Qualcomm]: provides requested clarification  [Qualcomm]: Thanks for the clarification and requires changes before approval  [Ericsson]: Thanks for the clarification and requires changes before approval  [Interdigital]: Asks Qualcomm to declare their choice to either  a. Note S3-222768 or  b. Merge S3-222768 into S3-222927-r5,  Since the contents of S3-222768 are absorbed into S3-222927-r5 based on the decisions from Wednesday and Thursday SA3 calls.  [Qualcomm]: fine with merging S3-222768 into S3-222927-r5, and co-sourcing S3-222927-r5. | merged | 927 |
|  |  | S3‑222664 | Updates to Key Issue #2 | Johns Hopkins University APL, US National Security Agency, InterDigital, Apple, CableLabs | pCR | [QC] Requests changes.  [Huawei]: requires clarifications and changes before approval.  [JHU]: provides clarification and r1  [QC] Requires further revision before approval.  [Ericsson] Requests changes before approval.  [Ericsson] Requests changes before approval.  >>CC\_3<<  [JHU] presents.  [Huawei] comments on the linkage between TMSI and C-RNTI on threat part.  [JHU] clarifies that TMSI remains same while C-RNTI changes, hence linkage possible..  [Ericsson] comments there is r1 already.  [Ericsson] clarifies in r1 there is some description to answer Huawei’s comment.  >>CC\_3<<  [JHU]: provides r2 and additional clarification  [QC] Still request further revisions before approval.  [JHU] provides additional clarification  [JHU]: provides r3  [QC] Disagrees with r3. Provides r4.  [JHU]: accepts r4 | approved | R4 |
|  |  | S3‑222822 | Modification to KI details of the KI #2 | Ericsson LM | pCR | [JHU]: requests author of S3-222822 to review updates to KI#2 in S3-222664\_r1 | merged | 664 |
|  |  | S3‑222673 | PrivID - New Key Issue | Philips International B.V. | pCR | [QC] Request further explanation.  [QC] Propose to note.  [Philips] clarifies and asks to provide opinions.  [Ericsson] Proposes to note.  [Philips] comments.  [QC] Answers Philips. | noted |  |
|  |  | S3‑222506 | New solution to key issue 1 | Huawei, HiSilicon | pCR | [Interdigital]: Changes are needed for approval  [Huawei]: requests clarifications from Interdigital since all raised issues are actually addressed in the contribution  [Interdigital]: Provides clarifications and requests changes.  [Qualcomm]: requires updates.  [Ericsson] comments on the effectiveness of the solution  [Huawei]: provides r1  [Ericsson]: proposes an EN before approval  [Lenovo]: Needs clarification before approval.  [Ericsson]: proposes an EN before approval  [Huawei]: provide r2.  [Ericsson]: clarifies to Huawei.  [Qualcomm]: fine with r2.  [Ericsson]: fine with r2.  [Interdigital]: ok with r2.  [Lenovo]: r2 is okay. | approved | R2 |
|  |  | S3‑222528 | solution\_for\_privacy\_KI#1 | China mobile | pCR | [Interdigital]: Changes are needed for approval  [CMCC]: Provide R1 and comments  [Interdigital]: Further changes are needed for approval  [CMCC]: Provide comments  [Qualcomm]: requires update.  [Ericsson]: comments  [Ericsson]: proposes an EN before approval  [Ericsson]: proposes an EN before approval  [Ericsson]: proposes an EN before approval  [CMCC]: provide r2.  [Qualcomm]: fine with r2  [Ericsson]: fine with r2  [Interdigital]: OK with r2. | approved | R2 |
|  |  | S3‑222559 | New solution for privacy prevention of SUPI in NAI format | Nokia, Nokia Shanghai Bell | pCR | [Interdigital]: Changes are needed for approval  [Huawei]: asks for clarifications  [Qualcomm]: requires updates.  [Ericsson]: proposes to merge with S3-222820  [Ericsson]: proposes to merge with S3-222820  [Nokia]: Ok to merge with S3-222820, and provides clarifications and r2.  [Ericsson]: Withdraws the merging proposal  [Ericsson]: fine with r2  [Interdigital]: OK with r2.  [Qualcomm]: fine with r2  [Huawei]: fine with clarifications | approved | R2 |
|  |  | S3‑222586 | New solution for Key issue #1 | InterDigital, Inc. | pCR | [Huawei]: requires clarifications before approval  [Interdigital]: Provides clarifications  [Thales]: provides comments and proposes changes.  [Interdigital]: Agrees with both, the configuration and the USIM storage suggestion.  [Qualcomm]: requires update.  [Requires]: requires an update.  [Interdigital]: Agrees with suggestions and provides requested changes in uploaded r2.  [Qualcomm]: requires update  [Interdigital]: insists on not having the proposed ENs that refer to non-existing Editor’s notes in KI#1.  [Qualcomm]: requires addition of originally proposed EN. Otherwise, proposes to note this solution for this meeting.  [Qualcomm]: requires addition of originally proposed EN. Otherwise, proposes to note this solution for this meeting.  [Interdigital]: Provides R3 with EN added.  [Qualcomm]: fine with r3  [Ericsson]: okay with r3  [Thales]: is fine with r3. | approved | R3 |
|  |  | S3‑222632 | SUPI padding solution on Key issue #1 | China Southern Power Grid Co., Ltd, ZTE Corporation | pCR | [Interdigital]: Changes are needed for approval  [ZTE]: provides r1.  [Huawei]: asks for further clarifications  [ZTE]: responds to Huawei's comments.  [Qualcomm]: requires update.  [Ericsson]: proposes to merge with S3-222820.  [Ericsson]: proposes to merge with S3-222820.  [ZTE]: prefers not to merge.  [ZTE]: provides r2, an EN is added according to QC's suggestion.  [Qualcomm]: fine with r2  [Interdigital]: OK with r2 | approved | R2 |
|  |  | S3‑222696 | New solution on Key issue #1 | China Telecom Corporation Ltd. | pCR | [Interdigital]: Changes are needed for approval  [NCSC]: Asks for explanation  [China Telecom]: Provides clarification and r1  [China Telecom]: Provides clarification and r1  [China Telecom]: Provides further explaination and ask for clarification  [China Telecom]: Provides further explaination and ask for clarification  [Interdigital]: Proposes a different formulation for the EN that is needed for approval  [Qualcomm]: requires update.  [China Telecom]: Provides r2  [NCSC] fine with r2  [Ericsson] fine with r2  [Interdigital]: OK with r2.  [Qualcomm]: fine with r2 | approved | R2 |
|  |  | S3‑222769 | Solution for KI#1 | Qualcomm Incorporated | pCR | [Interdigital]: Changes are needed for approval  [Thales]: proposes change.  [Qualcomm]: provides r1.  [Lenovo]: requires revision.  [Thales]: provides further comments  [Qualcomm]: requests clarification from Thales & Lenovo  [Thales]: proposes changes.  [Qualcomm]: provides r2 with changes requested by Thales  [Interdigital]: OK with r2  [Lenovo]: r2 is okay.  [Thales]: is fine with r2. | approved | R2 |
|  |  | S3‑222790 | Solution to address KI#1 | Lenovo | pCR | [Interdigital]: Changes are needed for approval  [Huawei]: asks for clarifications  [Qualcomm]: requires updates.  [Lenovo]: Provides r1 and clarifications.  [Interdigital]: r1 is ok. Many thanks.  [Qualcomm]: ok with r1.  [Huawei]: fine with clarifications | approved | R1 |
|  |  | S3‑222820 | Padding-based solution to the leakage of the length of SUPI through SUCI | Ericsson LM | pCR | [Interdigital]: Changes are needed for approval  [Qualcomm]: requires update.  [Huawei]: requires clarifications and changes before approval.  [Ericsson]: responds to Huawei.  [Ericsson]: responds to Qualcomm  [Ericsson]: provides r1  [Ericsson]: provides r1 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_108e-AdHoc/Inbox/Drafts/S3-222820-r1\_Solution\_to\_KI%231\_Padding.docx}  [Huawei]: requests addition of an EN  [Ericsson]: responds to Huawei and proposes a more fitting EN  [Huawei]: clarifies  [Ericsson]: responds and provides r2 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_108e-AdHoc/Inbox/Drafts/S3-222820-r2\_Solution\_to\_KI%231\_Padding.docx} with all the ENs suggested  [Interdigital]: Is ok with r2. Thank you for the discussion.  [Qualcomm]: ok with r2  [Huawei]: fine with r2 | approved | R2 |
|  |  | S3‑222821 | Hash-based solution to the leakage of the length of SUPI through SUCI | Ericsson LM | pCR | [Interdigital]: Changes are needed for approval  [Qualcomm]: requires updates.  [Ericsson]: responds to Qualcomm  [Ericsson]: provides r1 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_108e-AdHoc/Inbox/Drafts/S3-222821-r1\_Solution\_to\_KI%231\_Hashing.docx}  [Ericsson]: provides r2 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_108e-AdHoc/Inbox/Drafts/S3-222821-r2\_Solution\_to\_KI%231\_Hashing.docx} with all the ENs suggested  [Interdigital]: Is ok with r2. Thank you for the discussion.  [Qualcomm]: ok with r2 | approved | R2 |
|  |  | S3‑222570 | PCR for KI #1: Privacy aspects of variable length user identifiers | InterDigital, Inc., Apple, AT&T, CableLabs, Convida Wireless, Deutsche Telekom, Ericsson, Intel, JHU, Google, Lenovo, Nokia, Oppo, Philips International B.V., US NIST, US NSA, Verizon, Xiaomi, ZTE | pCR |  | revised | [S3‑222927](file:///C:\Users\cmcc\Desktop\AgendaWithTdocAllocation_2022-10-07_18h15.htm#RANGE!S3-222927) |
|  |  | S3‑222580 | Discussion paper for KI #1: Privacy aspects of variable length user identifiers | InterDigital, Inc., AT&T, CableLabs, Convida Wireless, Deutsche Telekom, JHU, Intel, Google, Lenovo, Nokia, Oppo, Philips International B.V., US NSA, Verizon, Xiaomi, ZTE | discussion |  | revised | [S3‑222928](file:///C:\Users\cmcc\Desktop\AgendaWithTdocAllocation_2022-10-07_18h15.htm#RANGE!S3-222928) |
|  |  | S3‑222663 | Updates to Key Issue #2 | Johns Hopkins University APL, US National Security Agency, InterDigital, Apple, CableLabs | pCR |  | withdrawn |  |
|  |  | S3‑222770 | Padding-based solution to the leakage of the length of SUPI through SUCI | Ericsson LM | pCR |  | withdrawn |  |
|  |  | S3‑222771 | Hash-based solution to the leakage of the length of SUPI through SUCI | Ericsson LM | pCR |  | withdrawn |  |
|  |  | S3‑222786 | Modification to KI details of the KI #2 | Ericsson LM | pCR |  | withdrawn |  |
| 5.5 | Study on Standardising Automated Certificate Management in SBA | S3‑222617 | Mapping of solutions to key issues | Nokia, Nokia Shanghai Bell | pCR |  | approved |  |
|  |  | S3‑222615 | Resolving EN in Solution #3 | Nokia, Nokia Shanghai Bell | pCR | >>CC\_2<<  [Nokia] presents current status.  >>CC\_2<< | approved |  |
|  |  | S3‑222740 | Updates to OCSP revocation Procedure | Intel | pCR | [Ericsson] : proposes to merge 2740 into 2827 and use 2827 as the way forward.  [Intel] : Fine with the merge but need the changes proposed for documentation  [Ericsson] : email thread is closed and discussion is ongoing in 222827 email thread | merged | 827 |
|  |  | S3‑222827 | Clarification for unknown revocation status | Ericsson | pCR | [Nokia]: agrees with the proposal of Ericsson to fix the EN in solution #6  [Nokia]: agrees with the proposal of Ericsson to fix the EN in solution #6  [Huawei]: asks for clarifications on the way forward  [Ericsson] : proposes to merge 2740 into 2827 and use 2827 as the way forward.  [Nokia]: agrees on merge 2740 into 2827.  [Intel]: agrees on merge 2740 into 2827.  [Nokia]: asks for the merge of 2740  [Ericsson] : provides r1  [Intel] : fine with r1 | approved | R1 |
|  |  | S3‑222616 | Proposal to complement KI#3 | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: requires changes  [Huawei]: requires changes  [Nokia]: provides -r1  [Huawei]: fine with r1.  [Ericsson] : clarification is needed before approval  [Nokia]: provide clarification  >>CC\_4<<  [Nokia] presents.  [Ericsson] comment  [Huawei] is fine with r1 in general. But comment that is implementation dependent. >>CC\_4<<  [Ericsson] : since it is implementation issue, doesn’t agree on the changes  [Nokia]: provides clarifications  [Nokia]: provides -r2  [Ericsson] : r2 is fine | approved | R2 |
|  |  | S3‑222498 | New solution for KI #2 and #8 in NF certificate enrolment procedure | Huawei, HiSilicon | pCR | [Ericsson] : requires clarification/revision before approval  [Ericsson] : requires clarification before approval  [Lenovo] : requires clarification before approval.  Correcting the company name. disregard the previous comment.  [Huawei]: provides clarifications and r1  [ChinaTelecom] : requests clarification  [Huawei]: provides r2  [ChinaTelecom] : fine with r2  [Ericsson] : r2 requires clarification  [Huawei]: provides clarifications and r3  [Ericsson] : r3 is fine  [Lenovo]: proposes EN and asks revisions.  [Huawei]: provides r4  [Ericsson] : r4 is fine  [Lenovo] : r4 is Okay | approved | R4 |
|  |  | S3‑222499 | New solution for KI #6 Relation between certificate management lifecycle and NF management lifecycle | Huawei, HiSilicon | pCR | [ChinaTelecom] : provides comments  [Huawei]: provides clarifications and r1.  [Lenovo]: Requires clarification before approval  [ChinaTelecom] : provides comment to r1  [Huawei]: provides r2  [ChinaTelecom] : fine with r2  [Lenovo] : Needs revision and proposes EN.  [Huawei]: provides r3  [Lenovo]: r3 is okay | approved | R3 |
|  |  | S3‑222613 | Solution to indicate and validate the purpose of the certificate | Nokia, Nokia Shanghai Bell | pCR | [Ericsson] : requires clarification/revision before approval  [Huawei]: has concerns about the solution  [Nokia]: provides clarifications  >>CC\_4<<  [Nokia] presents current argument.  [Ericsson]comments  [Huawei] comments to have concern on this.  [Nokia] clarifies. >>CC\_4<<  [Ericsson] : proposes an EN as a way forward  [Nokia]: provides -r1 including the proposed EN  [Ericsson] : r1 is OK | approved | R1 |
|  |  | S3‑222614 | Solution based on OCSP Stapling addressing KI #5 & #6 | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: requests clarifications  [Nokia]: provides clarifications  [ChinaTelecom] : provides comments  [Nokia]: provides clarifications  [Huawei]: further comments on the benefits of such a solution  [Nokia]: provides clarifications  [Nokia]: provides -r1 | approved | R1 |
|  |  | S3‑222620 | Solution for ACM for network slicing | Nokia, Nokia Shanghai Bell | pCR | [Ericsson] : requires clarification/revision before approval  [Huawei]: has concerns on the solution  [Nokia]: provides clarifications and -r1  [ChinaTelecom] : requests clarifications  [Nokia]: provides clarifications, one rectification on the terminology and -r2  [Ericsson] : proposes an EN  [Nokia]: proposes -r3 addressing the EN  [Ericsson] : r3 is fine | approved | R3 |
|  |  | S3‑222829 | A new solution of building initial trust for NF certificate enrolment | Ericsson | pCR | [Huawei]: disagrees with the proposal  [Ericsson] : provides clarification  [Nokia]: asks for revision  [Ericsson] : provides r1  >>CC\_4<<  [Huawei] comments, object. The NOTE make the solution out of scope. >>CC\_4<<  [Huawei]: proposes additional changes to withdraw objection  [Ericsson] : provides r2  [Huawei]: fine with r2 | approved | R2 |
|  |  | S3‑222619 | CMPv2 profile for SBA | Nokia, Nokia Shanghai Bell | pCR | [Nokia]: provides -r1  [Ericsson] : comments on r1  [Nokia]: provides clarifications and -r2  [Huawei]: propose changes  [Nokia]: asks for reconsideration of the objection  [Nokia]: asks for reconsideration of the objection  [Nokia]: provides -r3  [Ericsson] : comments on r3  [Nokia]: provides -r4  [Ericsson] : r4 is fine | approved | R4 |
|  |  | S3‑222828 | Proposal of CMP profiling for SBA | Ericsson | pCR | [Nokia] proposes to merge this contribution into S3-222619, and continue the discussion there.  [Ericsson] : comments on 222619  [Nokia]: provides a proposal to move forward the CMP profiling  [Huawei]: asks for clarifications on the way forward  [Nokia]: provides r1 on 222619 in the corresponding thread to that contribution. | merged | 619 |
|  |  | S3‑222826 | [DRAFT] LS on automated certificate management | Ericsson | LS out | >>CC\_1<<  [Ericsson] presents  [Huawei] comments that is no need to send LS. There is no clear key issues and solutions. It is a bit early. >>CC\_1<<  >>warp\_up<<  VC pointed out there is comment from CC\_1  Rapporteur will revise the final status.  >>warp\_up<< | noted |  |
|  |  | S3‑222618 | Discussion paper on Network Function identifiers | Nokia, Nokia Shanghai Bell | discussion | [HPE] : Supports the detailed proposal  [Huawei]: asks for clarifications  [Nokia]: provides clarifications  >>CC\_4<<  [Nokia] presents.  [Huawei] asks for clarification.  [Nokia] clarifies. >>CC\_4<<  [Deutsche Telekom] : Supports the detailed proposal to study also other formats for the NF instance ID | noted |  |
| 5.6 | New SID on AKMA phase 2 | S3‑222521 | Addressing the EN of KI#1 | China Mobile | pCR |  | approved |  |
|  |  | S3‑222608 | Update KI#1 in AKMA roaming | OPPO | pCR | [CMCC]: propose to merge in S3-222521.  [Nokia]: propose to merge this in 222521  [OPPO]: agree with CMCC and Nokia to merge. | merged | 521 |
|  |  | S3‑222640 | update the Key issue of AKMA roaming | ZTE Corporation | pCR | [CMCC]: propose to merge in S3-222521.  [Nokia]: propose to merge in S3-222521.  [ZTE]:provides clarifications.  [NDRE]: clarifies LI requirements.  [Ericsson]:Propose to also merge in S3-222521.  [ZTE]: provides more clarifications.  [ZTE]: provides more clarifications.  [ZTE]:asks some questions about LI.  [NDRE]: replies on LI matters.  [Nokia]: provide comments and a way forward  [Lenovo]: provide comments on Nokia way forward  [Nokia]: provide clarification  [Lenovo]: provides additional comments  [Nokia]: provide additional comment  [Lenovo]: agrees to Nokia comment | merged | 521 |
|  |  | S3‑222583 | New KI on AKMA Kaf refresh | OPPO | pCR | [Huawei] asks some clarifications on the requirements  [CMCC] proposes to merge in S3-222837.  [Ericsson] Proposes to merge this document with another document and requests for clarifications.  [OPPO] Provide clarification, agree to merge and using S3-222837 as baseline | noted |  |
|  |  | S3‑222635 | New KI on the Kaf refresh | ZTE Corporation | pCR | [CMCC] proposes to merge in S3-222837.  [Ercsson] : proposes to merge with other similar contributions.  [ZTE]: agrees to merge and continue the discussion in S3-222837. | noted |  |
|  |  | S3‑222698 | Key issue on KAF refresh without primary reauthentication and its feasibility | Nokia, Nokia Shanghai Bell | pCR | [CMCC] proposes to merge in S3-222837.  [Ericsson]: proposes to merge with other similar contributions, provides comments.  [Nokia] agree to merge this contribution in S3-222837. | noted |  |
|  |  | S3‑222837 | Key Issue on KAF refresh | Samsung | pCR | [Ericsson] : proposes to merge with other similar contributions, provides comments.  [CMCC] : proposes to merge S3-222583, S3-222635, S3-222698, provides comments.  [Samsung]: Ok with the merger proposal from CMCC and provides clarification.  [Nokia] : providing the merged proposal with r1  [Qualcomm]: requires changes.  [Samsung]: Provides clarification.  [Nokia]: Provides clarification.  [OPPO]: Support this KI  [ZTE]: Support this KI. | noted |  |
|  |  | S3‑222488 | Add evaluation to solution#5 | Huawei, HiSilicon | pCR | [Nokia]: clarification required before approval  [Apple]: modification is required before approval.  [Huawei]: provides clarification.  [LGE]: suggests to postpone the evaluation later.  [Ericsson]: Proposes to postpone or add EN, comments.  [Huawei]: ok to noted. | noted |  |
|  |  | S3‑222489 | address Editor's Note in solution#2 | Huawei, HiSilicon | pCR | [CMCC] changes are needed before approval.  [Huawei]:please find r1.  [Ercsson]:Proposes changes.  [Huawei]:please find r2.  [CMCC]: fine with r2.  [Ericsson]: is fine with r2. | approved | R2 |
|  |  | S3‑222490 | add evaluation to solution#2 | Huawei, HiSilicon | pCR | [CMCC] changes are needed before approval.  [Huawei]: replies  [CMCC]: fine with r1. | approved | R1 |
|  |  | S3‑222568 | Removal of Editor’s Notes of solution #6 | Lenovo | pCR | [Nokia]: clarification required  [Lenovo]: provides the requested clarification  [Ericsson] : requests for clarifications, provides suggestions.  [Lenovo] : provides clarifications.  [Nokia]: clarification provided  [CMCC]: requests for clarification and changes.  [Lenovo] : provides clarifications.  [Lenovo] : provides revision r1.  [Nokia]: fine with r1  [CMCC]: fine with r1  [Ericsson]: is fine with r1  [Ericsson]: is fine with r1 | approved | R1 |
|  |  | S3‑222569 | Evaluation of solution #6 | Lenovo | pCR |  | approved |  |
|  |  | S3‑222612 | New solution on AAnF discovery and selection for internal AF and NEF in AKMA roaming | OPPO | pCR | [Nokia]: seeking clarification before approval  [Huawei]: asks for clarifications  [Ericsson] : asks for clarifications.  [OPPO] : Provide clarifications and R1  [Nokia]: seeking clarification  [Ericsson]: requests for clarifications  [OPPO]: Provide clarifications  [Nokia]: agree with the proposal of indicator  [OPPO]: Provide R2  [Nokia]: require further changes  [OPPO]: Provide R3  [Nokia]: fine with r3  [Ericsson]: proposes changes  [OPPO]: Request for feedback  [OPPO]: Provide R4 to capture comment from Ericsson  [Ericsson]: is fine with r4 | approved | R4 |
|  |  | S3‑222636 | Address EN and add evaluation for solution 3 | ZTE Corporation | pCR | [CMCC] changes are needed before approval and requests clarifications.  [ZTE] provides r1.  [Ericsson]: Proposes changes before approval, asks for clarifications.  [NDRE]: Fully concur with Ericsson on regulatory aspects.  [ZTE]: provides clarifications and r2.  [NDRE]: Seeks clarification on terminology.  [ZTE]: provides r3.  [NDRE]: r3 looks fine to me.  [ZTE]: adds an EN and provides r4.  [CMCC]: fine with r4.  [Nokia]: fine with r4.  [NDRE]: same potential contradiction as in the 639 doc.  [ZTE] provides r5.  [NDRE] r5 OK!  [Ericsson]: is fine with r5 | approved | R5 |
|  |  | S3‑222637 | Address EN and add evaluation for solution 4 | ZTE Corporation | pCR | [CMCC] changes are needed before approval.  [ZTE] provides r1.  [CMCC] fine with r1. | approved | R1 |
|  |  | S3‑222638 | Conclusion for KI#1 | ZTE Corporation | pCR | [Nokia]: propose to postpone the contribution(conclusion for KI1) to the next meeting | noted |  |
|  |  | S3‑222639 | New solution about the roaming AKMA architecture of the AF in Data Network | ZTE Corporation | pCR | [Nokia]: seeking clarification before approval  [Ericsson] : Proposes to note unless modified.  [ZTE] : provides clarifications.  [ZTE]: provides r1 based on previous discussions.  [NDRE]: Seeks clarification on terminology (same comment as on 636).  [ZTE]: provides r2.  [NDRE]: r2 looks fine to me.  [Nokia]: ask for clarification  [NDRE]: comments  [NDRE]: provides clarifications.  [Nokia]: Nokia is fine with EN.  [ZTE]: adds an EN and provides r3.  [Nokia]: fine with the revision  [Ericsson]: Proposes changes.  [ZTE]: deletes the figure and context of SBA architecture, and provides r4.  [NDRE]: Possible contradiction in r3.  [ZTE]: Provide R4.  [NDRE]: R4 is OK.  [Ericsson]: is fine with r4. | approved | R4 |
|  |  | S3‑222641 | update to solution #1 | ZTE Corporation | pCR | [Nokia]: dont agree with the changes.  [Ericsson]: Proposes to note.  [ZTE]: Agrees to decide whether to update the solution or not based on the conclusion of KI discussion.  [CMCC] proposes to note. | noted |  |
|  |  | S3‑222642 | update to solution #2 | ZTE Corporation | pCR | [CMCC] proposes to note.  [Ericsson]: proposes to note. | noted |  |
|  |  | S3‑222643 | update to solution #5 | ZTE Corporation | pCR | [CMCC] proposes to note.  [Ericsson]: proposes to note. | noted |  |
|  |  | S3‑222644 | update to solution #6 | ZTE Corporation | pCR | [CMCC] proposes to note.  [Ericsson]: proposes to note. | noted |  |
|  |  | S3‑222662 | AKMA roaming architecture | Apple | pCR | [Huawei]: asks for clarifications  [Apple]: Provides clarification.  [Nokia]: asks for clarifications  [Apple]: provide clarifications  [Nokia]: asks for further clarifications  [Ericsson]: Proposes ENs, removal of the evaluation.  [Apple]: Provides clarifications  [Apple]: Provide r1, accepting Ericsson’s all suggestions.  [Nokia]: I am also fine with r1 with EN.  [Huawei]: fine with r1  [Ericsson]: is fine with r1 | approved | R1 |
|  |  | S3‑222674 | AKMA - New solution for AKMA roaming | Philips International B.V. | pCR | [Huawei]: requires clarifications before approval.  [Nokia]: seeking clarification before approval  [Philips] provides answers.  [Ericsson]: proposes changes before approval.  [Philips]: provides r1.  [Huawei]: fine with r1  [Nokia]: fine with r1  [Ericsson]: is fine with r1 | approved | R1 |
|  |  | S3‑222839 | New solution on AKMA Roaming | Samsung | pCR | [Huawei]: asks for clarification  [Ericsson] : Requests for clarification before approval.  [Samsung]: Provides clarification.  [Huawei]: asks for further clarifications on local vAAnF configuration  [Samsung]: Provides further clarification.  [Nokia]: ask for further clarification  [Samsung]: Provides further clarification.  [Nokia]: ask for further clarification  [Huawei]: propose an EN on discovery aspects  [Samsung]: Provides r1 and clarification.  [Nokia]: fine with the proposal  [Samsung]: Provides r2  [Nokia]: fine with the r2  [Huawei]: fine with r2 | approved | R2 |
|  |  | S3‑222926 | AKMA roaming with AF outside VPLMN | THALES | pCR | [Nokia]: Ask for clarification before approval  [Thales] provides answers.  [Apple] request clarification.  [Thales]: provides answers.  [Nokia]: Ask for further clarification and propose EN  [Thales]: provides r1.  [Apple]: provides comments.  [Thales]: provides r2  [Apple]: fine with r2.  [Nokia]: fine with r2. | approved | R2 |
|  |  | S3‑222471 | Editorial change and addressing the editor's note in solution 7 | Huawei, HiSilicon | pCR | [Huawei]: propose to merge S3-222471 into S3-222522. | merged | 522 |
|  |  | S3‑222472 | Add evaluation to solution 7 | Huawei, HiSilicon | pCR |  | Approved |  |
|  |  | S3‑222522 | Addressing the EN in Solution#7 | China Mobile, Xiaomi | pCR | [Huawei]: S3-222471 is merged into S3-222522 and provide r1.  [CMCC]: fine with r1 | approved | R1 |
|  |  | S3‑222523 | Evaluation of Solution#7 | China Mobile, Xiaomi | pCR | [Huawei]: propose to merge S3-222523 into S3-222472.  [CMCC]: fine with the merger proposal. | merged | 472 |
|  |  | S3‑222524 | Conclusion of key issue#2 | China Mobile, Xiaomi | pCR | [Ericsson] : Discussion about approval of this contribution is subject to the outcome of the dependent contributions 2472, 2522. | approved |  |
|  |  | S3‑222701 | solution 1 updates for internal AF | Nokia, Nokia Shanghai Bell | pCR |  | approved |  |
|  |  | S3‑222702 | solution 1 updates for external AF | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: requires clarifications before approval.  [Nokia]: provide clarification with r1  [NDRE]: seeks clarification on trust model  [Nokia]: provide clarification with r2 (adding a note as requested)  [NDRE]: r2 looks OK  [Huawei]: fine with clarifications | approved | R2 |
|  |  | S3‑222718 | Update on the solution #5 | LG Electronics France | pCR | [Huawei]: asks for clarifications  [NDRE]: comments LI requirements  [ZTE]:supports Huawei’s opinion.  [LGE]: provides clarification.  [LGE]: provides clarification and ask question to NDRE.  [NDRE]: clarifies  [Huawei]: fine with clarifications | approved |  |
|  |  | S3‑222719 | New solution for AKMA roaming scenario | LG Electronics France | pCR | [Huawei]: requires clarifications before approval  [LGE]: provides clarification.  [Huawei]: fine with clarifications | approved |  |
|  |  | S3‑222633 | Discussion on the need and usecases for Kaf update | ZTE Corporation | pCR | [Qualcomm]: proposes to note; provides comments | noted |  |
|  |  | S3‑222697 | Discussion paper of KAF refresh without primary reauthentication | Nokia, Nokia Shanghai Bell | discussion | [Ericsson] : Proposes to note, provides comments.  [Nokia] : provide clarification.  [Qualcomm]: Proposes to note, provides comments.  [Nokia] : provide clarification and ask question | noted |  |
|  |  | S3‑222699 | Solution on Kaf refresh without primary authentication UA\* | Nokia, Nokia Shanghai Bell | pCR | [Qualcomm]: proposes to note. | noted |  |
|  |  | S3‑222700 | Solution on Kaf refresh without primary authentication AAnF | Nokia, Nokia Shanghai Bell | pCR | [Qualcomm]: proposes to note | noted |  |
|  |  | S3‑222838 | New solution on AKMA KAF refresh | Samsung | pCR | [Huawei]: requests clarifications  [Ericsson] : Requests for clarifications.  [Samsung]: Provides r1 and clarification.  [Qualcomm]: proposes to note. | noted |  |
|  |  | S3‑222916 | Discussion about KAF refresh | Ericsson | discussion |  | endorsed |  |
|  |  | S3‑222917 | New solution for KAF lifetime | Ericsson | pCR | [Samsung]: Disagree with the solution.  [Ericsson] : Provides clarifications.  [Nokia]: Disagree with the solution.  [Qualcomm]: provides comments  [ZTE]:disagree with this solution. | noted |  |
|  |  | S3‑222634 | Modify the scope of TR 33.737 | ZTE Corporation | pCR |  | approved |  |
|  |  | S3‑222918 | Updates to the architectural assumptions clause | Ericsson | pCR | [NDRE]: Seeks clarification on arch proposal. Provides suggestion.  [Ericsson] : provides r1. Requests for clarifications.  [NDRE] : r1 looks OK. Comments on term 'Regulatory control point'.  [Huawei]: comments  [Apple]: comments and provides r2.  [Ericsson] : Provides comments. | approved | R2 |
| 5.7 | Study of Security aspect of home network triggered primary authentication | S3‑222510 | Update KI#1 | Huawei, HiSilicon | pCR | [Nokia]: clarification asked before approval  [Nokia]: propose to postpone the conclusion for the next meeting  [Nokia]: Please discard the tailing email  [Ericsson]: Proposes changes before approval.  [Lenovo]: Need clarifications before approval.  [Huawei]: provide r1, please check  [Huawei]: provide r1, please check  [Lenovo]: r1 is not fine. Asks revision.  proposes option for way forward.  [Ericsson]: proposes changes  [Ericsson]: proposes changes  [Nokia]: proposes to postpone the contribution or don't agree with the current suggestions  [Huawei]: propose noted | noted |  |
|  |  | S3‑222513 | new solution on less impact on current using key | Huawei, HiSilicon | pCR | [Nokia]: ask for clarification before approval  [Qualcomm]: raise a concern with the solution  [Ericsson]: comments that KAUSF may be out of sync between the UE and the network.  [Lenovo]: Require clarifications before approval.  [Xiaomi]: Require clarifications before approval.  [Lenovo]: Is there any clarifications or revisions available for this solution,  (Captured by VC)[Huawei] announces it is noted directly. | noted |  |
|  |  | S3‑222694 | Solution on UDM initiated primary authentication based on AAnF request for Kaf refresh scenario | BUPT, China Mobile | pCR | [Ericsson] : Proposes ENs, removal of the evaluation  [BUPT] : Objection  Disagree with the proposal to add ENs  [Ericsson] : clarifies and requests changes.  [OPPO] : Request clarification and changes.  [BUPT] : Clarification for the need to perform KAF refresh upon KAF expiry.  [BUPT] : Support of requests changes.  Agree to add an EN.  [BUPT] : Additional clarifications for the need to perform KAF refresh upon KAF expiry.  [BUPT] : upload r1.  [Ericsson] : proposes changes.  [BUPT] : Clarifications on the filtering of primary authentication requests at the AAnF.  [OPPO] : fine with r1.  [Ericsson] : is fine with r1. | approved | R1 |
|  |  | S3‑222695 | Solution on AUSF initiated primary authentication based on AAnF request for Kaf refresh scenario | BUPT, China Mobile | pCR | [Huawei]: propose to noted based on the discussion in the CC.  [BUPT] : Acknowledgement  We agree to noted the S3-222695. | noted |  |
|  |  | S3‑222739 | Solution to enable HN triggered Primary Authentication with AUSF | Lenovo | pCR | [Qualcomm]: proposes to add an EN  [Huawei]: propose to noted based on the discussion in the CC.  [Lenovo]: As UDM based solution is largely preferred.  We propose not to pursue this AUSF variant document. | noted |  |
|  |  | S3‑222920 | New solution for Home Network triggered primary authentication | Ericsson | pCR | [Nokia]: partial disagree with the discussion paper and this solution  [Xiaomi]: provides comments and requires clarification before approval  [Huawei]: clarification is needed before approval.  [Ericsson]: provides clarifications.  [Ericsson]: provides r2.  [Nokia]: still keeping the same position, partial disagree with the discussion paper and this solution  [Ericsson]: requests for clarifications.  [Nokia]: provide clarification  [Lenovo]: need clarification before approval.  [Huawei]: propose editor’s Note against r2.  [Ericsson] : provides clarifications and r3.  [Nokia] : provides clarifications  [Huawei]: can live with r3.  [Ericsson]: provides r4.  [Xiaomi]: provides comments  [Ericsson]: provides clarifications, asks for clarifications.  [Ericsson]: provides r5.  [Xiaomi]: provides response  [Ericsson]: provides clarifications.  [Lenovo]: r5 didn’t added the EN proposed earlier.  Needs revision.  [Ericsson]: Provides r6.  [Xiaomi]: provides response  [Lenovo]: r6 is okay  [Xiaomi]: can live with r6  [Nokia]: fine with r6 | approved | R6 |
|  |  | S3‑222922 | New solution for delegated Home Network controlled primary authentication | Ericsson | pCR | [Huawei]: clarification is needed before approval.  [Ericsson]: provides clarifications.  [Lenovo]: Supports this contribution. Kindly incldue Lenovo as the cosigner.  [Huawei]: clarification is needed before approval.  [Nokia]: clarification is needed before approval.  [Ericsson]: provides r1, provides some clarifications, asks for clarifications.  [Nokia]: proposing ENs  [Ericsson] : provides clarifications.  [Nokia]: provide clarification  [Ericsson]: Provides r3 .  [Nokia]: changes are missing the revision  [Ericsson]: Provides r4 .  [Nokia]: fine with r4  [Huawei]: fine with r4. | approved | R4 |
|  |  | S3‑222921 | New solution for KI#2: max lifetime for KAF | Ericsson | pCR | [Huawei]: propose to noted.  [Ericsson]: provides clarifications.  [Nokia]: Disagree with the contribution.  [Huawei]: replies.  [Ericsson]: provides r1.  [Xiaomi]: still raise concerns with r1  [Lenovo]: Requries clarification before approval.  [Huawei]:clarification is needed against r1.  [Ericsson]: provides clarifications and r2 to address Lenovo’s comment.  [Huawei]: fine with r2.  [Xiaomi]: Not convinced  [Nokia]: Not convinced  [Lenovo]: Asks revision and proposes EN.  [Ericsson]: is fine noting this | noted |  |
|  |  | S3‑222511 | Update solution#2 | Huawei, HiSilicon | pCR | [Lenovo]: requires clarification before approval.  [Ericsson] : Proposes changes.  [Huawei]: r1 is provided  [Ericsson] : is fine with r1.  [Lenovo] : r1 is okay. | approved | R1 |
|  |  | S3‑222704 | solution 1 updates | Nokia, Nokia Shanghai Bell | pCR | [Huawei]:clarification is needed before approval.  [Nokia]: clarification provided with r1  [Ericsson]: Clarifications required before approval  [Nokia]: provide clarification: the solution support policy at AAnF or UDM.  [Ericsson]: is fine with the clarification.  [Huawei]: fine with r1 | approved | R1 |
|  |  | S3‑222717 | Updates to solution 9 | Intel | pCR | [Nokia]: provide suggestions and expect improvement  [Intel]: Requests clarification  [Nokia]: provide clarification  [Ericsson]: Proposes to note as the motivation is not clear and there are already other steps in the registration procedure  [Intel]: Asks clarification to Ericsson  [Ericsson]: provides clarifications.  [Intel]: Uploaded r1 and provides clarifications.  [Nokia]: fine with r1  [Intel]: Uploaded r2 with step 6 changes  [Ericsson]: requests clarifications, proposes changes.  [Intel]: Uploaded r3  [Nokia]: proposes and EN (similar to other solutions as well)  [Intel]: Uploaded r4. Last minute EN for PST time is not acceptable  [Ericsson]: is fine with r4.  [nokia]: is fine with r4. | approved | R4 |
|  |  | S3‑222737 | Resolving Editors Notes in Solution 8 | Lenovo | pCR | [Ericsson] : Proposes changes before approval  [Lenovo] : Provides r1 and clarifications.  [Ericsson] : proposes changes.  [Lenovo] : provides r2, to remove service outage.  [Ericsson] : proposes changes  [Lenovo] : provides r3.  [Ericsson] : r3 is fine. | approved | r3 |
|  |  | S3‑222738 | Evaluation for Solution #8 | Lenovo | pCR | [Huawei]: clarification is needed before approval.  [Ericsson]: clarification is needed before approval.  [Lenovo]: Provides r1 and clarifications.  [Ericsson]: Requests for clarifications.  [Lenovo]: Provides r2 which has Ericsson and Huawei EN's.  [Huawei]: fine with r2.  [Ericsson]: is fine with r2. | approved | R2 |
|  |  | S3‑222760 | Proposed resolution of the ENs in solution #5 | Qualcomm Incorporated | pCR |  | approved |  |
|  |  | S3‑222841 | Resolving EN and adding evaluation for solution#9 | Samsung | pCR | [Ericsson] : Proposes changes before approval.  [Samsung] : provides clarification.​  [Ericsson] : proposes changes  [Samsung] : Provides r1 based on the comments from Ericsson.  [Ericsson] : is fine with r1. | approved | R1 |
|  |  | S3‑222842 | Resolving EN and adding evaluation for solution#6 | Samsung | pCR | [Ericsson] : Proposes changes before approval.  [Samsung] : Provides clarification.  [Ericsson] : proposes changes.  [Samsung] : Provides r1.  [Ericsson] : is fine with r1. | approved | R1 |
|  |  | S3‑222880 | Update to solution #7 and resolve the ENs on use case and counter wrap around reason | Beijing Xiaomi Mobile Software | pCR |  | approved |  |
|  |  | S3‑222881 | Evaluation of solution #7 in TR 33.741 | Beijing Xiaomi Mobile Software | pCR | [Ericsson] : Proposes changes before approval.  [Xiaomi] : provides r1  [Ericsson] : Proposes changes before approval.  [Xiaomi] : provides r2  [Ericsson]: is fine with r2. | approved | R2 |
|  |  | S3‑222512 | Conclusion proposal for the study | Huawei, HiSilicon | pCR | [Samsung]: Asks for clarification and proposes to merge with S3-222843  [Nokia]: propose to postpone the conclusion for the next meeting  [Huawei]: provides clarification.  [Huawei]: reply.  [Ericsson]: Proposes to postpone for a later meeting.  [Qualcomm]: generally supportive of the contribution but have some comments  [Lenovo]: Proposes to postpone.  [Huawei]: r1 is provided.  [Xiaomi]: would like to co-sign r1  [Ericsson]: proposes changes to the formulation and if agreed by others, Ericsson could consider withdrawing objection.  [Huawei]: r2 is provided.  [Huawei]: proposes to merge 843 to 512.  [Huawei]: replies to SAMSUNG.  [Qualcomm]: r2 is OK and would like to co-sign  [Deutsche Telekom] : is fine with -r2 and would like to co-sign the conclusion  [Intel] : r2 is fine and would like to co-sign the conclusion  [Ericsson] : Withdraws objection and is fine with r2  [Nokia]: fine with the r2  [Huawei]: r3 is uploaded  >>warp\_up<<  [Huawei] asks final status on this contribution. Ask whether Lenovo can drop objection as it is the only one objection.  [Lenovo] clarifies. >>warp\_up<< | noted |  |
|  |  | S3‑222703 | conclusion for KI2 | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: propose to noted in this meeting.  [Nokia]: does not agree to note the contribution and want to be discussed further | noted |  |
|  |  | S3‑222843 | Conclusion on KI#1 | Samsung | pCR | [Nokia]: propose to postpone the conclusion for the next meeting  [Ericsson]: Proposes to postpone for a later meeting.  [Qualcomm]: generally supportive of the contribution but have some comments  [Lenovo]: Proposes to postpone. | noted |  |
|  |  | S3‑222919 | Discussion about the way forward for the Home Network triggered authentication | Ericsson | discussion | [Samsung]: Disagree with the first proposal in the DP.  [Xiaomi]: Disagree with the first proposal  [Huawei]: disagree with the first proposal, and proposal to capture the second proposal with modification as the basic conclusion.  >>CC\_2<<  [Ericsson] presents.  [Nokia] partial agree with proposal 1, but not proposal 2.  [Lenovo] is fine with proposal 1, but comments to proposal 2.  [Huawei] introduces current status, and proposes way forward.  [QC] comments  [Docomo] prefers to set UDM as central point to trigger re-auth..  [Ericsson] clarifies.  [Intel] do not agree with proposal 1. do not agree about explicit HOTRA procedure, but ok to set UDM as central point.  [Nokia] doesn’t agree with second part of proposal 1.  [Lenovo] clarifies its comments, doesn’t agree for a solution specific proposal.  [Huawei] summarises, most of delegates agree to set UDM as central point so it may be possible to progress. And gives a plan for this study to progress and conclude.  >>CC\_2<<  [Qualcomm]: Disagree with first proposal and OK to use modified second proposal as conclusion  [Intel]: Disagree with the first proposal and fine to use second proposal with modification  [Huawei]: capture the modified proposal#2l in S3-222512-r1.  [Ericsson]: Provides r1 to reach some conclusions.  [Lenovo]: Need revision before approval.  [Ericsson]: requests clarifications.  [Huawei]: still disagree with proposal#1, and support proposal#2.  [Ericsson]: Provides r2  [Huawei]: fine with r2, and co-sign r2.  [Ericsson] : provides r3 | noted |  |
|  |  | S3‑222923 | Evaluation of the need to address the HONTRA use cases | Ericsson | pCR | [Nokia]: Disagree with the contribution.  [Qualcomm]: Propose to note  [Ericsson]: Provides clarifications. | noted |  |
| 5.8 | Study on security aspects of enablers for Network Automation for 5G – phase 3 | S3‑222457 | LS OUT to GSMA on the data and analytics exchange between two NWDAFs in different PLMNs | S2-2207142 | LS in | >>CC\_1<<  [CMCC] presents.  5 draft reply LSs.(787, 518, 626, 735, 882. 626 is baseline for merger.)  [Nokia] to hold the pen.  >>CC\_1<< | replied | 626 |
|  |  | S3‑222458 | LS on how ML model integrity, confidentiality and availability is supported between NWDAFs from different vendors | S2-2207156 | LS in | >>CC\_1<<  [CMCC] presents  778 is draft reply LS. >>CC\_1<< | replied | 788 |
|  |  | S3‑222787 | [DRAFT] Reply LS on the data and analytics exchange between two NWDAFs in different PLMNs | Ericsson | LS out | [Nokia]: proposes to merge this contribution into S3-222626 -r1 | merged | 626 |
|  |  | S3‑222788 | [DRAFT] Reply LS on how ML model integrity, confidentiality and availability is supported between NWDAFs from different vendors | Ericsson | LS out | [CMCC]: provide r1  [Ericsson]: provides r2  [CMCC]: fine with r2  >>CC\_4<<  [CMCC] presents current status. R2 has consensus. >>CC\_4<<  [intel]: clarification on r2 required  [Ericsson]: replies to Intel | approved | R2 |
|  |  | S3‑222518 | Reply LS on Data and Analytics Exchange between Two NWDAFs in Different PLMNs | Huawei, HiSilicon | LS out | [Nokia]: proposes to merge this contribution into S3-222626 -r1 | merged | 626 |
|  |  | S3‑222626 | LS on the data and analytics exchange between two NWDAFs in different PLMNs | Nokia, Nokia Shanghai Bell | LS out | [Nokia]: provides -r1, by considering all contributions received in this meeting to respond the LS from SA2 (S2-2207142)  >>CC\_1<<  [Nokia] presents  >>CC\_1<<  [QC]: Local consent preferred. See S3-222599.  [Ericsson]: provides r2  [Nokia]: provides clarifications and -r3  [CMCC]: need update before approved.  >>CC\_2<<  [Nokia] presents r3, and there will be an offline call on Wed to discuss further. >>CC\_2<<  [Nokia]: provides -r4  [QC]: Happy with r4. Question on timeline.  [Ericsson]: r4 is fine  [Xiaomi]: r4 is fine  >>CC\_4<<  [CMCC] presents current status. R4 has consensus.  >>CC\_4<<  [Huawei]: fine with r4. | approved | R4 |
|  |  | S3‑222735 | Reply LS on the data and analytics exchange between two NWDAFs in different PLMNs | CATT | LS out | [Nokia]: proposes to merge this contribution into S3-222626 -r1 | merged | 626 |
|  |  | S3‑222882 | Reply LS on User consent for roaming case in eNA | Beijing Xiaomi Mobile Software | LS out | [Nokia]: proposes to merge this contribution into S3-222626 -r1 | merged | 626 |
|  |  | S3‑222526 | Revision on key issue #1 | China moblie | pCR | [Ericsson]: proposes to note  [CMCC]: provide clarification.  [Ericsson]: proposes updates  [CMCC]: provide r1  [Ericsson]: r1 is fine | approved | R1 |
|  |  | S3‑222789 | Update KI#2: Authorization of selection of participant NWDAF instances in the Federated Learning group | Ericsson | pCR |  | approved |  |
|  |  | S3‑222500 | Solution on Reusing SBA for AI/ML model storage and sharing | Huawei, HiSilicon | pCR | [Ericsson]: proposes updates  >>CC\_2<<  [Huawei] presents.  [Ericsson] comments same as through email.  [Nokia] comments.  [Intel] same comment from Nokia.  [Huawei] clarifies.  Chair suggests to wait SA2 conclusion and continue discussion.  >>CC\_2<<  [Intel]: Requires updates before approval  [Huawei]: provides r1 accordingly.  [Lenovo]: proposes that there is no need for this solution.  [Huawei]: provides clarifications to Lenovo.  [Ericsson]: r1 is fine  [Intel]: r1 is fine, minor formatting error | noted |  |
|  |  | S3‑222621 | Solution on secured and authorized AI/ML Model transfer and retrieval | Nokia, Nokia Shanghai Bell | pCR | [Intel]: Request clarification  [QC] Requested clarifications.  [Huawei]: requires clarifications.  [Nokia]: provides clarifications  [Ericsson]: proposes updates  >>CC\_2<<  [Nokia] presents.  [CMCC] concerns on ML model on end-to-end encryption. It is not clear whether encryption of model transfer can be outside of operator control or not.It it can be outside, end-to-end encryption is needed.  [Intel] comments to open Huawei’s contribution, prefers to have end-to-end encryption.  [Nokia] replies.  [Huawei] shares same opinion with CMCC, and have more comment.  [Ericsson] comments.  [IDCC] doesn’t agree the argument that communication should be end-to-end encrypted.  [BT] comments.  [Lenovo] prefers end-to-end encryption.  [Nokia] proposes to separate the model  >>CC\_2<<  [Nokia]: provides -r1 and clarifications  [Ericsson]: revised proposed updates  [CMCC]: request clarification  [Nokia]: provides clarifications and -r2  [Ericsson]: r2 ok  [Ericsson]: r2 ok  [Huawei]: propose further changes on r2  [Nokia]: provides -r3  [Huawei]: ask for the editor’s note inclusion.  [Nokia]: provides –r4 including EN | approved | R4 |
|  |  | S3‑222623 | Resolving ENs (step 9) in Solution #3 | Nokia, Nokia Shanghai Bell | pCR |  | approved |  |
|  |  | S3‑222625 | Resolving EN (step 1) in Solution #3 | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: don’t agree with the proposal.  [Nokia]: provides clarifications and asks for proposal  [Ericsson]: proposes updates  [Nokia]: ask for confirmation, provides clarification and -r1  [Ericsson]: proposes updates to r1  [Nokia]: accepts the proposal in r2  [Huawei]: r1 is still not clear and propose the resolution.  [Nokia]: provides clarifications and r3  [Ericsson]: r3 is fine  [Huawei]: r3 is ok | approved | R3 |
|  |  | S3‑222747 | Updates to solution 2: remove EN E2E protection | Intel | pCR | [Huawei]: request revision before approval.  [Ericsson]: requires revision before approval  [Intel]: Responds to Ericsson and HW  [Intel]: Uploaded r1  [Ericsson]: r1 ok  [Huawei]: provides clarifications on our comments and further changes.  [Intel]: Request Clarification from HW. Last minute changes in PST time zone are not acceptable  [Huawei]: not fine with r1. Don’t think r1 address our concern.  >>warp\_up<<  Rapporteur wants to check the status.  Discussion about deadline procedure. >>warp\_up<< | noted |  |
|  |  | S3‑222748 | Updates to solution 2: remove EN Authorization | Intel | pCR | [Ericsson]: requires updates before approval  [Intel]: uploaded r1  [Ericsson]: proposes updates to r1  [Intel]: Uploaded r2 for Ericsson proposed changes  [Ericsson]: r2 is fine | approved | R2 |
|  |  | S3‑222749 | Updates to solution 2: remove EN key management | Intel | pCR | [Huawei]: ask for clarification and revision.  [Intel]: Fine with HW’s proposal  [Intel]: Uploaded r1 with HW proposal  [Huawei]: r1 is OK. | approved | R1 |
|  |  | S3‑222527 | New solution on protection of data and analytics exchange in roaming case | China mobile | pCR | [Ericsson]: requires updates before approval  [CMCC]: provide r1.  [Ericsson]: r1 is fine  [Huawei]: propose to add editor’s notes based on r1.  [CMCC]: provide r2.  [Huawei]: provides modification on the editor’s note in r2.  [CMCC]: provide r3. | Approved | R3 |
|  |  | S3‑222622 | Resolving ENs in Solution #5 | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: require clarifications  [Nokia]: provides clarifications and -r1  [Huawei]: ok with r1. | approved | R1 |
|  |  | S3‑222551 | Adding parameters to solution#6 | China Telecommunications | pCR |  | approved |  |
|  |  | S3‑222624 | Resolving EN in Solution #6 | Nokia, Nokia Shanghai Bell | pCR |  | approved |  |
|  |  | S3‑222733 | Anomalous NF behaviour event related data collection and anomalous NF | Lenovo | pCR | [Ericsson]: requires updates  [Huawei]: request revision before approval  [Lenovo]: provides r1 and clarifications.  [Ericsson]: r1 is fine  [Huawei]: r1 doesn’t seem to address my comments, but provide resolutions to r1.  [Lenovo]: provides r2. | Approved | R2 |
|  |  | S3‑222567 | New solution addressing KI#6 | Lenovo | pCR | [Huawei]: revision is required before approval  [Lenovo]: provides clarifications  [Ericsson]: also questions the proposed solution  [Lenovo]: provides answers to the questions from Ericsson  [Huawei]: ask further questions and reply.  [Lenovo]: provides answers to Huawei and a revision r1.  [Ericsson]: does not agree with r1  [Lenovo]: requests clarification from Ericsson | Noted |  |
|  |  | S3‑222734 | Cyber attack detection using NWDAF | Lenovo | pCR | [Huawei]: don’t think there is a need to repeat the discussion from Rel-17  [Ericsson]: also questions the need for this solution  [Lenovo]: Provides clarifications.  Asks why we should not discuss solutions for KI#6  [Ericsson]: replies | noted |  |
|  |  | S3‑222744 | Solution to Cyber Attack Detection | Intel | pCR | [Huawei]: don’t think there is a need for this proposal.  [Ericsson]: also questions the need for the solution | noted |  |
|  |  | S3‑222840 | Solution on analytics for DoS attack detection | Samsung | pCR | [Huawei]: don’t see there is a need for this proposal.  [Ericsson]: also questions the need for this solution  [Samsung]: provides clarification.  [Ericsson]: replies to Samsung  [Samsung]: provides r1 and clarification.  [Ericsson]: r1 does not seem to work either | noted |  |
| 5.9 | Study on Security Enhancement of support for Edge Computing — phase 2 | S3‑222530 | New sol on Key issue #1.1: How to authorize PDU session to support local traffic routing to access an EHE in the VPLMN | Huawei, HiSilicon | pCR | [Ericsson] : clarification/revision is required before approval  [Huawei] : provide clarification.  [Ericsson] : withdraws the comment | approved |  |
|  |  | S3‑222825 | A solution for authentication of EEC/UE and GPSI verification by EES/ECS | Ericsson | pCR | [Huawei] : provides comments.  [Qualcomm] : provides comments.  >>CC\_3<<  [Ericsson] presents.  [Huawei] comments.  [Ericsson] clarifies. >>CC\_3<<  [Ericsson] : provides r1  [Qualcomm] : OK with r1  [Huawei] : fine with r1. Thanks.  [Samsung] : Fine with r1. Thanks. | approved | r1 |
|  |  | S3‑222834 | A solution for authentication of UE and GPSI verification by EES/ECS | Ericsson | pCR | [Huawei] : provides comments.  [Qualcomm] : provides comments.  [Ericsson] : provides clarification  [Samsung] : provides further comments and requests for revision  [Ericsson] : provides r1  [Qualcomm] : OK with r1  [Huawei] : fine with r1. Thanks.  [Samsung] : Fine with r1. Thanks. | approved | R1 |
|  |  | S3‑222661 | MEC- New solution on Authentication in roaming architecture | Apple | pCR | [IDCC]: Clarification of solution  [Apple]: Provide Clarification.  [IDCC]: Follow up question of the solution  [Huawei] : propose to note, considerring the long discussion in the last release without any agreement.  [Ericsson] : disagree with the solution  [Ericsson] : requires revision before approval | noted |  |
|  |  | S3‑222888 | Resolve ENs in Sol #1 and Sol #2 | Xiaomi Communication | pCR |  | approved |  |
|  |  | S3‑222501 | Authentication mechanism selection between EEC and ECS | Huawei, HiSilicon | pCR | [Ericsson] : clarification/revision is required before approval  [Huawei] : provides r1 to capture Ericsson’s comments below.  [Xiaomi] : requests for clarification.  [Huawei] : provide response to Xiaomi.  [Huawei] : request Ericsson to review r1, and Xiaomi to confirm whether your concern is solved.  [Xiaomi] : provides comments.  [Ericsson] : r1 is OK  [Huawei] : provided feedback to Xiaomi that the EN is not necessary.  [Xiaomi] : provides comments.  [Huawei] : request for detailed proposal from Xiaomi.  [Xiaomi] : provide comments.  [Huawei] : provide r2 to capture the EN proposed in the other email thread.  [Xiaomi] : provides some comments.  [Huawei] : please find r3 with the proposed EN by Xiaomi. Thanks.  [Xiaomi] : r3 is fine.  [Ericsson] : r3 is fine. | approved | R3 |
|  |  | S3‑222508 | Authentication mechanism selection between EEC and EES | Huawei, HiSilicon | pCR | [Ericsson] : clarification/revision is required before approval  [Xiaomi] : requests for clarification.  [Huawei] : will provide r1 if 2501 revision is agreed in general.  [Huawei] : please check r1 with the similar changes agreed in the 2501 thread.  [Xiaomi] : provides some comments.  [Huawei] : please find r2 with the proposed EN by Xiaomi. Thanks.  [Xiaomi] : r2 is fine.  [Ericsson] : r2 is fine. | approved | R2 |
|  |  | S3‑222656 | MEC- update to key issue#2 on adding security protection on negotiation messages | Apple | pCR | [Xiaomi] : provides some comments.  [Apple] : provides clarifications  [Apple] : provides r1 to address the comments  [Huawei] : Please Xiaomi check whether r1 is fine with you! Thanks.  [Xiaomi] : propose to note. | noted |  |
|  |  | S3‑222658 | MEC- Editorial updating on solution#7 | Apple | pCR |  | approved |  |
|  |  | S3‑222659 | MEC- Addressing the EN#1 in solution#7 | Apple | pCR | [Ericsson] : Requires revision/clarification before approval | noted |  |
|  |  | S3‑222660 | MEC- Addressing the EN#2 in solution#7 | Apple | pCR | [IDCC]: Clarification of solution to address EN#2 in solution# 7  [Apple]: Provide Clarification  [IDCC]: Clarification does not resolve the issue  [Huawei] : request revision.  [Ericsson] : comments  >>CC\_3<<  [Apple] presents (with poor voice quality)  [Huawei] comments.(with poor voice quality)  [Apple] gives further clarification, Huawei should be commenting mechanism for EEC/EES should be selected.  [IDCC] comments the solution could not authenticate UE with one-way default authentication.  [Apple] clarifies and proposes way forward.  [Xiaomi] prefers no default authentication  [Ericsson] comments no default authentication implies no authentication.  Chair asks rapporteur whether the assumption is correct.  [Huawei] clarifies.  [Thales] points UE should support all kinds of authentication mechanism.  Chair requests rapporteur to get conclusion right, i.e. is it aligned with security requirement that an unauthenticated UE can consume EDGE services..  [Huawei] clarifies.  [Ericsson] comments.  Chair asks how to way forward.  [Huawei] proposes a principle and proposes to move forward with such principle.  Chair suggests to have an offline call before the November meeting and decide it in the November F2F, if there is no conclusion in this meeting.  >>CC\_3<<  [Thales]: provides comments  [Apple]: provides r1 and way forward.  [Huawei] : fine with r1.  [Ericsson] : fine with r1.  [Apple] : provides r2 only fixing a typo.  [Huawei] : fine with r2.  [Ericsson] : fine with r2. | approved | R2 |
|  |  | S3‑222823 | A solution for UE authentication method negotiation | Ericsson | pCR | [Qualcomm]: Propose some changes  [Huawei] : propose a EN to capture the configuration issue.  [Xiaomi] : requests for clarification.  [Ericsson] : provides clarification and revision #1  [Xiaomi] : provides comments.  [Qualcomm] : OK with r1  [Ericsson] : responds to Xiaomi and provides r2  [Xiaomi] : provides comments.  [Ericsson] : provides r3  [Xiaomi] : r3 is fine. | approved | R3 |
|  |  | S3‑222847 | Resolving EN and evaluation of solution#3 (TR 33.739) | Samsung | pCR | [Ericsson] : requires revision before approval  [Samsung] : Provides clarification  [Ericsson] : proposes an EN  [Samsung] : Provides r1  [Ericsson] : r1 is OK | approved | R1 |
|  |  | S3‑222848 | Resolving EN and evaluation of solution#4 (TR 33.739) | Samsung | pCR | [Huawei] : propose to revise the contribution before approval.  [Samsung] : Provides clarification and r1  [Huawei] : provide further comments on r1.  [Samsung] : Provides clarification  [Huawei] : provides feedback.  [Samsung] : Provides clarification and r2  [Huawei] : fine with r2. Thanks. | approved | R2 |
|  |  | S3‑222889 | Resolve EN in Sol #5 | Xiaomi Communication | pCR | [Huawei] : propose to revise the contribution before approval.  [Ericsson] : revision/clarification is needed before approval | noted |  |
|  |  | S3‑222502 | Authentication and Authorization between V-ECS and H-ECS | Huawei, HiSilicon | pCR | [Xiaomi] : provides r2.  [Ericsson] : request revision before approval  [Xiaomi] : provides r3.  [Huawei] : Fine with r3.  [Ericsson] : r3 is OK | approved | R3 |
|  |  | S3‑222849 | Authorization of V-ECS in roaming scenario | Samsung | pCR | [Huawei] : propose to merge into S3-222502, as discussed in the informal offline call that guys were all fine with local policy.  [Samsung] : Prefers to keep it as separate solution  [Ericsson] : requires clarification before approval  [Samsung] : Provides clarification  [Ericsson] : requires further clarification  [Samsung] : Provides r1  [Huawei] : In general, fine with r1.  [Ericsson] : fine with r1. | approved | R1 |
|  |  | S3‑222887 | KI 2.3 2.4, New Sol on authentication and authorization between V-ECS and H-ECS | Xiaomi Communication | pCR | [Huawei] : propose to merge into S3-222502, as discussed in the informal offline call that guys were all fine with local policy.  [Ericsson] : supports the merge proposal.  [Xiaomi] : agrees to the merge proposal. | merged | 502 |
|  |  | S3‑222503 | Transport security for the EDGE 10 interface | Huawei, HiSilicon | pCR |  | approved |  |
|  |  | S3‑222531 | Conclusion on Key issue #2.4: Transport security for the EDGE10 interface | Huawei, HiSilicon | pCR |  | approved |  |
|  |  | S3‑222507 | New KI on Authentication and Authorization between AC and EEC | Huawei, HiSilicon | pCR | [OPPO]: Require clarifications  [Huawei]: provides clarifications.  [Qualcomm]: Need changes before acceptable for approval.  [Huawei]: provides clarifications.  [OPPO]: ask change before approval  [Huawei]: provides clarifications.  [OPPO]: provide reply  [Qualcomm]: Proposes a way forward  [Huawei]: provides r1 based on the suggestion.  [OPPO]: OK with R1  [Qualcomm]: r1 is OK | approved | R1 |
|  |  | S3‑222529 | New KI, solution and conclusion on Authorization between EESes | Huawei, HiSilicon | pCR | [IDCC]: Clarification of using local policy for EDGE-9 authorization  [Huawei] : provides clarification to IDCC.  [IDCC] : provides clarification to HW.  [Huawei] : provides r1  [Ericsson] : requires revision before approval  [Huawei] : provides r2 to capture Ericsson’s comments below.  [Huawei] : provides r1  [Huawei] : Reply to IDCC.  [Interdigital] : r1 needs revised before approval.  [Huawei] : provide response to IDCC that the conclusion is removed in r1.  [Huawei] : please check r2  [Ericsson] : r2 is ok  [Interdigital] : response  [Huawei] : r2 without conclusion is announced as approved, rather r1.  [Interdigital] : approval of r2  [Interdigital] : approval of r3 | approved | R2 |
|  |  | S3‑222572 | New key issue on authentication and authorization for EDGE-9 reference point | InterDigital Communications | pCR | [Huawei] : Suggest to merge with S3-222529, and use S3-222529 as the baseline.  [IDCC] : Agree to merge with S3-222529, and use S3-222529 as the baseline for the KI. | merged | 529 |
|  |  | S3‑222657 | MEC - New key issue on AF specific identifier | Apple | pCR | [Ericsson] : Requires revision/clarification before approval  [Apple] : Provides clarification.  [Huawei] : request clarification, since the issue is out socpe of this SID.  [Apple] : request clarification and way forward to address this issue.  [Huawei] : provided suggestion back to Apple.  [Ericsson] : comments on the discussion  [Apple] : answer to Ericsson and Huawei. Fine to discuss more in next meeting. Emphasizing that SA3 should address this issue one way or another.  [Huawei] : suggest to note this pCR, and have a discussion in the next meeting. | noted |  |
|  |  | S3‑222514 | Solution on Authentication and Authorization between AC and EEC | Huawei, HiSilicon | pCR | [OPPO]: Require clarifications  [Qualcomm]: Propose to note while related key issue not agreed  [Huawei]: Provide clarification. | noted |  |
|  |  | S3‑222459 | Reply LS on FS\_eEDGEAPP Solution for Support of NAT deployed within the edge | S2-2207394 | LS in | >>CC\_1<<  [Huawei] presents.  Chair asks whether it is no action.  [Huawei] clarifies there will be related.  Chair asks whether it should be 464 and [Huawei] confirms.  Chair proposes to note it after 1st challenge deadline. >>CC\_1<< | noted |  |
|  |  | S3‑222464 | LS on FS\_eEDGEAPP Solution for Support of NAT deployed within the edge data network | S6-221953 | LS in | >>CC\_1<<  Chair points out it needs reply.  >>CC\_1<< | noted |  |
|  |  | S3‑222465 | Reply LS to OPAG\_34\_Doc\_07\_OPAG\_LS ETSI-3GPP-Network integration | S6-222337 | LS in | >>CC\_1<<  [Samsung] presents and proposes to note  Chair proposes to note as 1st challenge deadline.  >>CC\_1<< | noted |  |
|  |  | S3‑222467 | Forward on S6-222332, LS on Network federation interface for Telco edge consideration | S6-222543 | LS in | >>CC\_1<<  [Huawei] presents.  It needs action.  [Huawei] gives clarification for the LS.  [Nokia] agrees with Huawei’s analysis. And comments  Chair asks Huawei or Nokia to hold the pen. It seems it may not be able to prepare one in this meeting, so it can be delayed to Nov. Meeting.  [Huawei] volunteered to hold the pen and propose to complete the work in this meeting.  >>CC\_1<< | postponed |  |
|  |  | S3‑222468 | Reply LS to Network federation interface for Telco edge consideration | S6-222557 | LS in | >>CC\_1<<  [Huawei] gives brief introduction and proposes to note.  >>CC\_1<<  [Nokia]: Provides clarifications | noted |  |
|  |  | S3‑222746 | draft-Reply LS on FS\_eEDGEAPP Solution for Support of NAT deployed within the edge data network | Intel | LS out | [KPN]: Provides comments and ask for modifications.  [Intel]: Provides comments  [KPN]: Reacts to Intel’s comments  [Ericsson] : Requires revision before approval  >>CC\_3<<  [Intel] present current status.  [Ericsson] comments their concern is not addressed.  [Chair] asks Ericsson to suggest text to address their concern. >>CC\_3<<  [KPN]: provides r1 as way forward.  [Intel]: Fine with R1 as a way forward  [Apple]: provides r2.  [KPN]: fine with r1, not fine with r2.  [Apple]: Provides clarifications and explanation of r2.  [Ericsson] : r1 is ok, we cannot agree with r2.  >>CC\_4<<  [Intel] presents current status.  [Apple] clarifies on r2. >>CC\_4<<  [KPN]: maintains objection against r2, fine with r1.  [Intel]: fine with r1, asks clarification to Apple  [Apple]: For the sake of progress, fine with r1. | approval | R1 |
|  |  | S3-222930 | Reply LS on Network federation interface for Telco edge consideration | Huawei | LS out | [Huawei] : provides r1 on Reply LS on Network federation interface for Telco edge consideration  [Ericsson] : propose to postpone the reply  [Huawei] : propose to collect more opinions in this meeting. | noted |  |
|  |  | S3‑222824 | A solution for authentication of UE and GPSI verification by EES/ECS | Ericsson | pCR | [Samsung]: Requires clarifications before approval | revised | [S3‑222834](file:///C:\Users\cmcc\Desktop\AgendaWithTdocAllocation_2022-10-07_18h15.htm#RANGE!S3-222834) |
| 5.10 | Study on Personal IoT Networks Security Aspects | S3‑222562 | Discussion paper – Need for LS to SA2 on PINE Identification | InterDigital, Inc. | discussion | [Qualcomm]: Proposes to note.  [Thales]: proposes to note | noted |  |
|  |  | S3‑222589 | Discussion paper on new EAP based solution variants for KI#1 | Nokia, Nokia Shanghai Bell | discussion | [Qualcomm]: Proposes to note. | noted |  |
|  |  | S3‑222563 | LS on PINE identification | InterDigital, Inc. | LS out | [Qualcomm]: Proposes to note.  [Thales]: proposes to note.  [Interdigital]: proposes to reconsider noting due to the primacy of identification decision in SA2.  >>CC\_4<<  [QC] presents current status.  [IDCC] clarifies.  >>CC\_4<< | noted |  |
|  |  | S3‑222573 | New KI on provisioning information to PINE for authenticating and authorizing PINE connects to PEGC | vivo | pCR | [ChinaTelecom] : provide comments.  [vivo] : replies.  [ChinaTelecom] : provide comments.  [vivo] : replise.  [Qualcomm]: Provides comments and proposes to postpone  [Thales]: provides comments.  [vivo]: agree to note this paper considering this is the last meeting for providing new KI. | noted |  |
|  |  | S3‑222574 | New KI on verification of PIN communication configuration sent from PEGC to 5GC | vivo | pCR | [Nokia] : Does not agree with KI.  [Qualcomm]: Proposes to note.  [Thales]: disagrees. | noted |  |
|  |  | S3‑222646 | Key issue on secure data transfer between PEGC PEMC and PIN NF | ZTE Corporation | pCR | [Qualcomm]: Proposes to note.  [ZTE]: Ask clarification  [Qualcomm]: Provides clarification and proposes to note. | noted |  |
|  |  | S3‑222894 | Update KI #2 Secure provisioning of PIN policies | Xiaomi Communication | pCR | [ChinaTelecom]: Asks for clarification.  [Xiaomi]: provides clarification.  [Qualcomm]: Asks for clarification.  [ChinaTelecom]: Provide comments.  [Xiaomi]: provides clarification.  [Huawei]: clarification is needed before approval.  [Xiaomi]: provides clarification.  [Xiaomi]: provides clarification.  [Thales]: provides comments.  [Nokia]: does not agree with the changes to the KI.  [Xiaomi]: provides clarification to Nokia.  [Qualcomm]: Asks for clarification.  [Xiaomi]: provides clarification.  [ChinaTelecom]: Provide comments.  [Xiaomi]: provides r1.  [Huawei]: propose to noted.  [Xiaomi]: provides clarification to Huawei.  [Nokia]: proposes to note.  [Nokia]: proposes to note.  [Nokia]: proposes to note. | noted |  |
|  |  | S3‑222895 | Update KI #1 Secure PINE authorization | Xiaomi Communication | pCR | [Qualcomm]: Proposes to note.  [Thales]: disagrees. | noted |  |
|  |  | S3‑222516 | Solution on PINE authentication | Huawei, HiSilicon | pCR | [Qualcomm]: Asks for clarification.  [ChinaTelecom]: revision is required before approval.  [Interdigital]: Agrees with the need for the Editors Note and proposes to modify it for clarity.  [Huawei]: provide r1.  [Thales]: provides comments.  [Huawei]: provides response.  [Qualcomm]: Asks for clarification.  [Huawei]: provides response.  [Qualcomm]: Asks for clarification.  [Huawei]: provides response and r2.  [Qualcomm]: prefer the EN instead of note.  [Huawei]: provide r3.  [ChinaTelecom]: fine with r3.  [Thales]: is fine with r3.  [Qualcomm]: fine with r3 | approved | R3 |
|  |  | S3‑222571 | New solution to KI#1 : EAP based PIN device authentication using AKMA | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: calrification is required before approval.  [Qualcomm]: Asks for clarification  [Nokia]: provides clarification to Huawei’s question.  [Nokia]: Provides clarification to Qualcomm.  [Huawei]: provide response.  [Nokia]: answers to Huawei.  [Nokia]: provide response.  [Huawei]: provide response.  [Huawei]: provide response.  [Nokia]: provide response.  [Huawei]: provide to note.  [Qualcomm]: Proposes to note.  [Nokia]: Kindly asks Huawei to reconsider position. The technical arguments provided by Huawei are not sound. As explained, hop by hop security is not available. Furthermore, hop by hop security does not provide message authenticity and integrity. If Huawei believes in a solution based on hop by hop security, they can provide this solution instead of blocking other solutions. The fact that a solution is reusing existing mechanisms is not an argument to block solutions.  [Nokia]: provides clarification and kindly asks Qualcomm to reconsider position.  >>warp\_up<<  >>warp\_up<< | noted |  |
|  |  | S3‑222577 | New solution for authentication and authorization of PINE | vivo | pCR | [ChinaTelecom] : Request clarification.  [vivo] : replies.  [ChinaTelecom] : Propose to add EN and request further clarification.  [Qualcomm]: Asks for clarification.  [vivo]: answers to Qualcomm  [vivo] : provides r1.  [Qualcomm]: Asks for clarification.  [ChinaTelecom] : Fine with r1.  [Vivo]: answers. | approved | R1 |
|  |  | S3‑222584 | New solution to KI#1: Using secondary authentication for PIN elements | Nokia, Nokia Shanghai Bell | pCR | [ChinaTelecom] : Request clarification.  [Nokia] : Provides answers to questions from China Telecom.  [Qualcomm]: Asks for clarification.  [ChinaTelecom] : revision is required before approval.  [Nokia]: provides r1 and answers to questions from China Telecom and Qualcomm.  [Qualcomm]: Asks for clarification.  [Nokia]: provides clarification to Qualcomm. | approved | R1 |
|  |  | S3‑222647 | Soultion for secure data transfer between PEGC PEMC and PIN NF | ZTE Corporation | pCR | [Huawei]: clarification is needed before approval.  [Qualcomm]: Proposes to postpone.  [Thales]: asks question.  [ZTE]: Provide clarification.  [Thales]: proposes to postpone. | postponed |  |
|  |  | S3‑222672 | PIN - New solution KI#1 | Philips International B.V. | pCR | [Qualcomm]: Asks for clarification.  [ChinaTelecom]: Asks for clarification.  [vivo]: replies to Qualcomm.  [ChinaTelecom]: Asks for clarification.  [Philips]: provides clarification and r1.  [ChinaTelecom]: request further clarification or revision.  [Philips] answers.  [Thales]: provides comments and requires update.  [ChinaTelecom]: revision is requried before approval.  [Nokia]: provides comments, solution not acceptable as is.  [Philips] comments and provides r2.  [Philips]: Asks for clarification.  [Qualcomm]: Asks for clarification.  [Thales]: asks for changes.  [Philips] r3 is available including requested EN.  [Thales]: asks for changes.  [Nokia]: accepts r3 (and possible new revision including Thales proposal for the last EN).  [Philips]: provides r4 with the EN update.  [ChinaTelecom]: fine with r4.  [Thales]: is fine with r4. | approved | R4 |
|  |  | S3‑222896 | KI 2, New Sol on CAPIF based PIN AF authorization | Xiaomi Communication | pCR | [Qualcomm]: Asks for clarification.  [Xiaomi]: provides clarification.  [Huawei]: clarification is required before approval.  [Xiaomi]: provides further clarification.  [Ericsson]: Proposes to add an Editor’s note.  [Qualcomm]: Proposes to note.  [Xiaomi]: provides clarification.  [Nokia]: replies to Qualcomm’s proposal to note.  [Nokia]: replies to Qualcomm’s proposal to note.  >>warp\_up<<  >>warp\_up<< | noted |  |
|  |  | S3‑222897 | KI 1, New Sol on EAP-based PINE authentication | Xiaomi Communication | pCR | [ChinaTelecom] : Request clarification.  [Xiaomi] : provides clarification and r1.  [ChinaTelecom] : Propose to add a EN.  [Qualcomm]: Asks for clarification.  [Thales]: provides comments.  [Xiaomi]: provides clarification and r2.  [Thales]: proposes changes.  [Xiaomi]: provides r3.  [ChinaTelecom]: fine with r3.  [Thales]: is fine with r3  [Xiaomi]: provides r4.  [Qualcomm]: fine with r4  [Thales]: is fine with r4. | approved | R4 |
|  |  | S3‑222645 | Add some context to assumptions to TR 33.882 | ZTE Corporation | pCR |  | approved |  |
|  |  | S3‑222648 | Clean up to TR 33.882 | ZTE Corporation | pCR |  | approved |  |
| 5.11 | Study on SNAAPP security | S3‑222905 | New structure for requirements | NTT DOCOMO | pCR | [Nokia]: provides comments.  [Huawei]: revision is needed.  [NTT DOCOMO]: provides -r1 and replies  [Ericsson] : revision is required before approval.  [NTT DOCOMO]: provides -r2, ask for clarifications  [Huawei]: Fine with -r2.  >>CC\_4<<  [Docomo] presents current status.  [Ericsson] comments.  [Docomo] clarifies and give a way forward.  [Lenovo] asks question to Ericsson.  [Ericsson] clarifies.  [QC] asks question for clarification on application authentication.  [Docomo] clarifies.  [QC] is fine with clarification.  [Ericsson] comments.  [Docomo] clarifies and proposes way forward, to add EN.  [Ericsson] is ok with the way forward. But has further comment.  [Docomo] replies.  Discussion between [Ericsson] and [Docomo]  It is decided to add an EN to get consensus. Further discussion are needed. >>CC\_4<<  [Ericsson] : r2 requires clarification/revision before approval  [NTT DOCOMO]: draft\_S3-22905-r3 is available implementing the new editors note and shortening the existing one.  [Ericsson] : r3 is fine | approved | R3 |
|  |  | S3‑222496 | New Solution on Obtain Resource Owner Authorization in API Invocation using OAuth Token | Huawei, HiSilicon | pCR | [Xiaomi]: clarification/revision is required before approval.  [Ericsson] : clarification/revision is required before approval.  [Huawei] : provide clarification and r1 is available.  [Samsung]: kindly requests clarification.  [Huawei] : provide clarification, and r2 is available.  [Samsung]: fine with r2.  [Ericsson] : proposes ENs  [Xiaomi] : provides comments.  [Huawei] : provide r3.  [Ericsson] : r3 is fine  [Xiaomi] : provides r4  [Huawei] : R4 is fine.  [Ericsson] : R4 is fine. | approved | R4 |
|  |  | S3‑222561 | New solution to KI#1 using OAuth client credential grant | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: clarification is needed.  [Nokia]: clarifies, solution addresses all cases of an application using UE as API invoker to access API.  [Huawei]: Further clarification is needed.  [Nokia]: answers that question is not clear.  [Huawei]: Further clarification, and propose an EN.  [Xiaomi]: clarification/revision is required before approval.  [Ericsson] : clarification/revision is required before approval.  [Nokia] : provides answers to questions from Ericsson and Xiaomi.  [Nokia] : provides r1 including EN proposed by Huawei and fixes for two typos.  [Huawei] : Fine with r1.  [Lenovo] : Requests revision for further clarification.  [Ericsson] : proposes an EN  [Xiaomi] : provides comments.  [Nokia] : provides r2 including ENs proposed by Ericsson and Xiaomi.  [Xiaomi] : is ok to r2.  [Ericsson] : is ok to r2.  [Lenovo] : r2 Needs revision.  r2 is not okay.  [Nokia] : provides r3 with EN to address Lenovo’s concerns. Apologies that we did not recognize questions earlier.  [Ericsson] : is ok to r3.  [Xiaomi] : provides r4.  [Lenovo] : r3 and r4 is okay. | approved | R4 |
|  |  | S3‑222743 | Authenticate and authorize UE in UE originated API invocation | Lenovo | pCR | [Ericsson] : clarification/revision is required before approval.  [Huawei] : clarification/revision is required before approval.  [Lenovo] : Provides clarifications.  [Nokia]: comments: role and need of APF is not clear and makes entire solution very questionable. No formal objection.  [Lenovo]: Provides r1.  AKMA option is already part of the solution. Seems the solution was overlooked.  [Ericsson] : proposes ENs  [Huawei] : proposes ENs  [Lenovo] : provides r2.  [Huawei] : Revision is needed.  [Ericsson] : r2 is ok, a minor update can be done  [Lenovo] : r4 is available.  [Huawei] : R4 is fine.  [Ericsson] : R4 is fine. | approved | R4 |
|  |  | S3‑222854 | New Solution on User Authorization in API Invocation | Samsung | pCR | [Nokia]: comments: solution only acceptable, if link to OAuth is removed.  [Ericsson] : clarification/revision is required before approval.  [Qualcomm]: requests clarification before approval  [Samsung]: provides clarification and r1 is available.  [Qualcomm]: requires further clarification.  [Samsung]: kindly requests clarification on the “app visibility to the 5GC” in your question.  [Qualcomm]: proposes to note.  [Samsung]: provides clarification and requests feedback.  [Ericsson] : proposes ENs  [Samsung]: provides r2.  [Ericsson] : r2 is OK.  [Qualcomm]: prefer to note  [Samsung]: requests clarification to Qualcomm. | noted |  |
|  |  | S3‑222906 | pCR to TR 33.884 new solution on UE authentication | NTT DOCOMO | pCR | [Nokia]: provides comments and ask for clarification.  [NTT DOCOMO]: replies to Nokia's comments, provides R1  [Ericsson] : clarification/revision is required before approval.  [NTT DOCOMO]: provides clarification  [Nokia]: appreciates r1 and requests further clarification.  [NTT DOCOMO]: provides clarification  [Nokia]: still confused.  [NTT DOCOMO]: trying to de-confuse :)  [Nokia]: comments, concept behind solution needs more analysis.  [NTT DOCOMO] -r3 is available  [Ericsson] : r3 is fine | noted |  |
|  |  | S3‑222907 | pCR to TR 33.884 new solution on non resourceowner UE authorization | NTT DOCOMO | pCR | [Nokia]: comments: solutions seems not to be consistent and not needed.  [Huawei]: agree with Nokia’s comments, and propose to note.  [NTT DOCOMO]: ok to note for this meeting, asks for further input  [Huawei]: provide clarification.  [NTT DOCOMO]: responds, asks for further input.  [Huawei]: provide further input. | noted |  |
|  |  | S3‑222908 | draft LS on SNAAPP requirements clarifications | NTT DOCOMO | LS out | [Nokia]: provides comments. LS not suitable as is.  [NTT DOCOMO]: requests clarification  [Nokia]: provides clarifications.  [NTT DOCOMO]: further comments  [Ericsson] : provides comment  [Huawei] : support to send LS  [NTT DOCOMO]: responds to Ericsson  [Samsung] requests clarification before sending the LS.  [NTT DOCOMO]: ok with posed question, requests a proposal.  [Samsung]: provides r1.  [NTT DOCOMO]: ok with r1  [Nokia]: provides r2 with Q1d added related to UE cross access.  >>CC\_4<<  [Docomo] presents current status.  [Ericsson] is generally fine but has concern on newly added part.  >>CC\_4<<  [Ericsson] : r2 is ok | approved | R2 |
|  |  | S3‑222909 | draft LS reply on CAPIF authorization roles related to FS\_SNAAPP | NTT DOCOMO | LS out | [Huawei]: Clarification is needed.  [NTT DOCOMO]: provides clarifications  [Huawei]: Revision is needed.  [NTT DOCOMO]: have issues with the timeline  [Huawei]: Provide clarification.  [NTT DOCOMO]: -r1 available  >>CC\_4<<  [Docomo] presents current status.  [Huawei] comments for question 3, proposes to remove 3rd bullet.  [Docomo] proposes way forward. Is ok to remove 3rd bullet  >>CC\_4<<  [Huawei]: Revision is needed.  [NTT DOCOMO]: provides -r3  [Huawei]: R3 is fine with typo issue.  [NTT DOCOMO]: as tasked in the conf call, the first question to SA6 has been updated in -r4  [Ericsson] : r4 is fine | approved | R4 |
| 5.12 | Study on enhanced security for network slicing Phase 3 | S3‑222545 | Update to KI#1 | Huawei, HiSilicon | pCR | [Nokia]: provide comments.  [Thales]: provides comments.  [Huawei]: provides r1 to merge 2545, 2546, 2650, 2745, 2830, 2899  [Nokia]: fine with r1  [Ericsson]:provides r2  [Nokia]: fine with r2  [Huawei]: r2 is ok for now  [Thales]: provides comments and proposes r3.  [Lenovo]: r1 and r2 is okay.  [Qualcomm]: OK with r3 (not OK with r1 or r2)  [Ericsson]: OK with r3  [Huawei]: provides comments.  [Lenovo]: r1 or r2 is okay.  Object to r3. | noted |  |
|  | >>CC\_2<<  Ask offline call in Wed  >>CC\_2<< | S3‑222546 | New KI to protect slice related information sent to Home by roaming UE | Huawei, HiSilicon | pCR | [Nokia]: comments.  [Thales]: disagrees with proposed text. | noted |  |
|  |  | S3‑222650 | Update KI#1 providing VPLMN slice information to roaming UE | ZTE Corporation | pCR | [Huawei]: Provides comments for potential merger.  [ZTE]: agrees to the merging proposal.  [Nokia]: comments to the merging proposal.  [Huawei]: clarification in response to Nokia.  [Nokia]: propose an offline call.  [Thales]: disagrees with the proposed text.  [Huawei]: merger discussion under threat 2545. | noted |  |
|  |  | S3‑222745 | Update to KI#1 Providing VPLMN slice information to roaming UE | Lenovo | pCR | [Huawei]: Provides comments for potential merger.  [Nokia]: comments.  [Lenovo]: Provides the acknowledgement to have the merger.  [Lenovo]: Asks to take 2536 as base.  [Nokia]: respond to Lenovo.  [Thales]: provides comments  [Huawei]: merger discussion under thread 2545.  [Lenovo]: provides some clarification. | noted |  |
|  |  | S3‑222830 | update to KI#1 providing VPLMN slice information to roaming UE | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: Provides comments for potential merger.  [Huawei]: additional comments.  [Nokia]: Respond to the comments.  [Thales]: disagrees.  [Huawei]: merger discussion under thread 2545. | noted |  |
|  |  | S3‑222899 | Update KI1 providing VPLMN slice information to roaming UE | Xiaomi Communication | pCR | [Huawei]: Provides comments for potential merger.  [Xiaomi]: agrees to the merging proposal.  [Nokia]: comments.  [Thales]: disagrees with proposed text.  [Huawei]: merger discussion under thread 2545. | noted |  |
|  |  | S3‑222550 | Update to KI#3 | Huawei, HiSilicon | pCR | [Qualcomm]: Does not agree with update as it overlaps with SA2 work  [Huawei]: provides clarification | noted |  |
|  |  | S3‑222832 | update to KI#3 network slice admission control | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: proposes merger with 2550  [Nokia]: merge with 2549  [Qualcomm]: Clarification needed before document can be approved  [Nokia]: Provide clarification and r1.  [Huawei]: provides 2549r1 to merge 2549 and 2832  [Nokia]: provides 2549r2  [Qualcomm]: proposes to keep issue details only  [Nokia]: Provide feedback for comments of Qualcomm.  [Ericsson]: Requires updates before approval. Not ok with r3 of 2549 (merged tdoc). | merged | 549 |
|  |  | S3‑222549 | New key issue with multiple NSACFs | Huawei, HiSilicon | pCR | [Qualcomm]: Requires some clarification before approval.  [Huawei]: provides clarification  [Ericsson]: Requires updates before approval.  [Qualcomm]: r2 requires revision  [Nokia]: Provide feedback.  [Huawei]: provides r3 with key issue details only as requested.  [Ericsson]: Requires updates before approval. Not ok with r3.  [Huawei]: r4 provided as requested by Ericsson.  [Qualcomm]: r4 is OK  [Ericsson]: r4 is OK | approved | R4 |
|  |  | S3‑222649 | New KI on the Security of Network Slice Service continuity | ZTE Corporation | pCR | [Huawei]: asks for clarification.  [ZTE]:provides clarifications.  [ZTE]:provides clarifications.  [Deutsche Telekom]: supports the proposed new KI.  [Huawei]: provides comments.  [MITRE]: asks for clarification.  [ZTE]: provides more clarifications.  [Qualcom]: does not agree with the contribution as written  [Nokia]: support the KI with comment  [ZTE]: provides r1.  [Ericsson]: proposed to note.  [ZTE]: answers questions.  [MITRE]: provides response  [ZTE]: provides clarifications to MITRE.  [MITRE]: Provides reply. | noted |  |
|  |  | S3‑222675 | Self-Secure Network Slice | US National Security Agency, MITRE, Cable Labs, InterDigital, Charter Communications, AT&T, Apple, CISA/ECD | pCR | [Huawei]: proposes to note this contribution.  [Qualcomm]: dose not agree with this contribution.  [MITRE]: provides response.  [Huawei] comments to MITRE. | noted |  |
|  |  | S3‑222547 | New solution to KI#1 | Huawei, HiSilicon | pCR | [Nokia]: revise before approval.  [Nokia]: revise before approval.  [Lenovo]: Propose to postpone the solution for this meeting, as the KI is not complete.  [Xiaomi]: provides some comments  [Thales]: proposes to postpone. | noted |  |
|  |  | S3‑222831 | add solution for KI#1 | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: asks for clarification and provides comments.  [Lenovo]: Propose to postpone the solution for this meeting, as the KI is not complete.  [Thales]: proposes to postpone. | noted |  |
|  |  | S3‑222900 | KI1, New Sol Confidentiality and integrity protection for UE initiated capability indication procedure | Xiaomi Communication | pCR | [Huawei]: asks for clarification and provides comments.  [Xiaomi]: provides clarification and r1  [Lenovo]: Propose to postpone the solution for this meeting, as the KI is not complete.  [Nokia]: provide comments to r1  [Thales]: proposes to postpone. | noted |  |
|  |  | S3‑222901 | KI1, New Sol Secure mechanism for network triggered UE capability indication procedure | Xiaomi Communication | pCR | [Huawei]: asks for clarification and provides comments.  [Lenovo]: Propose to postpone the solution for this meeting, as the KI is not complete.  [Nokia]: provide comments  [Thales]: proposes to postpone. | noted |  |
|  |  | S3‑222548 | New solution to KI#2 suporting temporary slice | Huawei, HiSilicon | pCR | [Nokia]: ask clarification.  [Qualcomm]: does not agree with this contribution  [Huawei]: clarification provided  [Nokia]: further comments. | noted |  |
| 5.13 | Study on Security aspects for 5WWC Phase 2 | S3‑222714 | KI1 update | Nokia, Nokia Shanghai Bell, Cablelabs | pCR | [Huawei]: clarification is needed before approval  [Nokia]: provide clarification  [Thales]: asks question for clarification.  [Nokia]: provide clarification  [Qualcomm]: suggests a revision for the requirements  [Nokia]: provide r1 with suggested wording  [CableLabs]: support r1  [Thales]: asks question for clarification.  [Thales]: is fine with r1.  [Huawei]: fine with r1  [Qualcomm]: OK with r1 | approved | R1 |
|  |  | S3‑222715 | Solution 1 enhancement for EN removal on key derivation | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: clarification is needed before approval  [Nokia]: clarification provided  [Huawei]: revision is needed.  [Nokia]: clarification provided and ask to provide formulated wording  [Huawei]: OK with the explanation.  [Nokia]: providing r1 with adding CableLabs as a co-signer without any content change in the pCR | approved | R1 |
|  |  | S3‑222716 | Solution 1 enhancement for EN removal on privacy | Nokia, Nokia Shanghai Bell | pCR | [Nokia]: providing r1 with adding CableLabs as a co-signer without any content change in the pCR | approved | R1 |
|  |  | S3‑222485 | New solution to address KI#1 | Huawei, HiSilicon | pCR | [Nokia]: clarification required before approval  [Huawei]: replies  [Nokia]: clarification required  [Thales]: proposes changes.  [Lenovo]: Need clarification before approval.  [Huawei]: r1 is provided  [Thales]: is fine with r1.  [Nokia]: is fine with r1  [Lenovo]: Without requirements in the TR, evaluating the solution is difficult.  We propose to postpone the contribution.  [Huawei]:requirement will be agreed in S3-222714, request reconsider the position. And ask for technique reason, otherwise the same contribution will be submitted in the next meeting, then what’s the point of delaying,  >>warp\_up<<  [Huawei] comments there is no technical argument.  [Lenovo] clarifies.  [VF] suggests to discuss in next F2F to find a compromised way. >>warp\_up<< | noted |  |
|  |  | S3‑222690 | EAP base authentication for AUN3 devices behind RG in PLMN | CableLabs | pCR | [Ericsson]: revision needed  [CableLabs]: provided -r1 and clarification.  [Thales]: provides comments.  [CableLabs]: provides comments.  [Thales]: asks questions.  [CableLabs]: provided comments  [Ericsson]: revision needed  [CableLabs]: provided -r2 and comments  [Thales]: is fine with r2.  [Ericsson]: r2 is fine | approved | R2 |
|  |  | S3‑222691 | EAP base authentication for AUN3 devices behind RG in SNPN | CableLabs | pCR | [Ericsson]: revision needed  [Thales]: provides comments  [CableLabs]: provides -r1 and comments  [Thales]: provides further comments.  [CableLabs]: provides -r2 and comments  [Ericsson]: r2 is fine  [Thales]: is fine with r2. | approved | R2 |
|  |  | S3‑222692 | EAP base authentication for AUN3 devices behind RG in SNPN by AAA | CableLabs | pCR | [Ericsson]: revision needed  [Thales]: provides comments  [CableLabs]: provides -r1 and comments  [Thales]: provides further comments  [CableLabs]: provides -r2 and comments  [Ericsson]: r2 is fine  [Thales]: is fine with r2. | approved | R2 |
|  |  | S3‑222712 | Conclusion for KI2 | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: clarification is needed before approval  [Nokia]: provide r1 based on the comment  [Huawei]: fine with r1 in general  [Nokia]: providing r2 with adding CableLabs as a co-signer without any content change in the pCR | approved | R2 |
|  |  | S3‑222483 | Update Key Issue 3 | Huawei, HiSilicon | pCR | [Nokia]: clarification required and propose the changes  [Huawei]: replies  [Nokia]: clarification required  [Huawei]: replies  [Nokia]: clarification required  [Lenovo]: Needs clarification before approval.  Lot of aspects unclear in this KI proposal.  [Huawei]: replies, and r2 is provided  [Nokia]: fine with r2  [Lenovo]: Needs revision, proposes ENs and way forward.  [Huawei]: ask for technique reason for the proposed editor’s Note. Huawei has explained the questions previously.  [Lenovo]: provides again the technical reason as explained earlier related to the threats.  [Huawei]: reply to Lenovo. | noted |  |
|  |  | S3‑222484 | New solution to KI#3 | Huawei, HiSilicon | pCR | [Huawei]: provides r1 to fix typo  [Lenovo]: needs clarification before approval.  [Huawei]: replies  [Huawei]: ask for clarification from Lenovo  [nokia]: fine with r1  [Lenovo]: Provides clarification.  Propose to postpone the solution.  [Huawei]: ask for reconsider the position, because this may delay the progress of this topic | noted |  |
|  |  | S3‑222713 | Conclusion for KI3 | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: clarification is needed before approval  [Nokia]: provide clarification and mark this contribution noted | noted |  |
|  |  | S3‑222693 | Key issue on authentication of AUN3 device not supporting EAP | CableLabs | pCR | [Ericsson]: clarification needed  [CableLabs]: provided clarification  [Thales]: provides comments.  [CableLabs]: provides -r1 and comments.  [Ericsson]: cannot find r1 in Drafts folder  [Thales]: proposes to note.  [CableLabs]: uploaded -r1  [Ericsson]: r1 is fine  [Thales]: provides answer. | noted |  |
|  |  | S3‑222709 | Discussion paper of WWC SID update for TNAP mobility | Nokia, Nokia Shanghai Bell, Lenovo, Apple | discussion | [Qualcomm]: proposes to note this discussion paper | noted |  |
|  |  | S3‑222710 | New SID on Security aspects for 5WWC Phase 2 | Nokia, Nokia Shanghai Bell, Lenovo,Cablelabs, Charter Communications, Apple | SID revised | [Qualcomm]: propose to wait on agreeing the update based on the discussion on the related KI  [Thales]: provides comments.  [CableLabs]: provides comments.  [Nokia]: Nokia ask to reconsider the position because KI is kind of agreed.  >>CC\_4<<  Rapporteur present current status. No issue but wait for SID approval.  [QC] comments it is adhoc meeting. It needs to be retreated in next meeting.  >>CC\_4<<  [Thales]: asks to postpone. | postponed |  |
|  |  | S3‑222711 | New KI on TNAP mobility | Nokia, Nokia Shanghai Bell, Lenovo, Apple | pCR | [Ericsson]: revision proposed in r1  [Nokia]: partial agree on the r1  [Qualcomm]: needs some clarifications before it is acceptable to agree.  [Ericsson]: Providing background for KI  [CableLabs]: Providing comments to Qualcomm.  [Nokia]: provide further clarification and r2  [Qualcomm]: proposes changes to the requirements to make the key issue acceptable  [Nokia]: provide r3  [Qualcomm]: r3 is OK  [Ericsson]: r3 is OK | approved | R3 |
|  |  | S3‑222456 | Reply LS on TNAP mobility security aspect | S2-2206999 | LS in | >>CC\_1<<  [Nokia] presents.  Chair asks whether need to reply or not.  [Nokia] clarifies the action is to trigger study and we can do it.  [CableLabs] considers to reply.  [Huawei] considers no need to reply.  [QC] comments.  Chair proposes not to send LS back. >>CC\_1<< | noted |  |
| 5.14 | Study on the security aspects of Artificial Intelligence (AI)/Machine Learning (ML) for the NG-RAN | S3‑222552 | Security Event Logging for RAN AI/ML framework | Nokia, Nokia Shanghai Bell | pCR | [QC] Comment on release timing.  [Nokia]: Provides clarifications  [Ericsson] : proposes to note. | noted |  |
|  |  | S3‑222553 | Solution for User Privacy of the RAN AI/ML framework | Nokia, Nokia Shanghai Bell | pCR | [QC] Asked questions.  [Nokia]: Provides clarifications.  [Ericsson]: proposes to postpone the discussion of solutions until the key issue agreed with requirements. Also provides comments on the solution.  [Huawei]: propose to note for this meeting. | noted |  |
|  |  | S3‑222554 | Detecting sources of potential data poisoning attacks towards RAN AI-ML based network optimizations | Nokia, Nokia Shanghai Bell | pCR | [QC] Asked about the resubmission.  [Nokia]: Provides clarifications.  [Ericsson]: proposes to note or merge to 2915, asks for clarifications.  [Huawei]: proposes to note.  [Nokia]: Provides clarifications and ok to merge to 2915 with some changes.  [Ericsson]: provides comments | noted |  |
|  |  | S3‑222597 | Privacy Requirements for user privacy in RAN AI/ML framework | Qualcomm Finland RFFE Oy | pCR | [Ericsson] : proposes to merge to 2914/note and continue the discussion in 2914.  [QC] Ok to merge with 2914.  [InterDigital] Update the wording before approval  [Ericsson]: proposes to continue the discussion in 2914 and close this thread.  [Interdigital]: I am fine with 2914 r1. | merged | 914 |
|  |  | S3‑222741 | Update Security Requirements to Key issue 1 | Intel | pCR | [QC] Propose to discuss in 2597 and 2914.  [Ericsson]: Proposes to merge this in 2914 and provides comments.  [Inntel]: Provides clarification  [QC] Propose to note and merge with 2914.  [Ericsson] Proposes to merge this to 2914.  [Ericsson] : Proposes to note. | noted |  |
|  |  | S3‑222886 | Update to KI#1 in TR 33.877 | Beijing Xiaomi Mobile Software | pCR | [QC] Propose to discuss in 2597 or 2914.  [Xiaomi] agree to merge into 2597 or 2914  [Ericsson]: Proposes to merge 2886 to 2914 or note this.  [Huawei]: agree with Ericsson’s suggestion.  [Xiaomi] agree to merge into 2914  [Ericsson]: proposes to continue the discussion in 2914 and close this thread. | merged | 914 |
|  |  | S3‑222912 | Content for the scope clause of the technical report | Ericsson | pCR |  | Approved |  |
|  |  | S3‑222913 | New Key issue on the security of the information transfer of the RAN AI/ML framework | Ericsson | pCR | [QC] Agreed with the note.  [Ericsson]: Provides clarifications.  [QC] Prefer to wait.  [QC] Propose to note. | noted |  |
|  |  | S3‑222914 | Updates to KI#1 User Privacy of the RAN AI/ML framework | Ericsson | pCR | [Ericsson] : Merging of 2597, 2886 into 2914.  [Ericsson] : provides r1.  [Huawei]: fine with r1.  [Ericsson] : provides r2. | approved? | R2 |
|  |  | S3‑222915 | New Key issue on the robustness of the RAN AI/ML framework against data poisoning attacks | Ericsson | pCR | [QC] Requests a change.  [QC] Requests additional change.  [QC] Requires revisions before approval.  [Ericsson]: Provides r1.  [Huawei]: ask for clarifications and provides the resolution.  [QC] Agree to r1+Huawei’s change.  [Ericsson]: provides r2.  [Huawei]: ok with r2. | approved | R2 |
| 5.15 | Study on security support for Next Generation Real Time Communication services | S3‑222538 | Add security requirement to KI on data channel | Huawei, HiSilicon | pCR | [Ericsson]: Requests clarifications.  [Huawei]: Responds to Ericsson.  [Huawei]: provides r1.  [Ericsson]: Provides r2.  [Huawei]: OK with r1.  [Ericsson]: Asks for clarification.  [Huawei]: clarifies that Huawei is OK with r2. | approved | R2 |
|  |  | S3‑222539 | EN removal of solution#2 | Huawei, HiSilicon | pCR | [Ericsson]: Asks for clarifications. Also remarks that the titles of Huawei docs S3-222540 and S3-222539 have been mixed in the tdoc list but are correct in the contributions.  [Huawei]: provides response.  [Ericsson]: Proposes text for the note.  [Huawei]: revise the Note according to Ericsson’s proposal and provides r1.  [Ericsson]: Fine the with the Note in r1, but there is still a typo.  [Huawei]: resolve the typo and provides r2.  [Ericsson]: Fine with r2. | approved | R2 |
|  |  | S3‑222540 | New solution on SBA in IMS control plane | Huawei, HiSilicon | pCR | [Ericsson]: Proposes addition to evaluation. Also remarks that the titles of Huawei docs S3-222540 and S3-222539 have been mixed in the tdoc list but are correct in the contributions.  [Huawei]: responds to Ericsson and provides r1  [Ericsson]: Asks for clarification.  [Huawei]: r1 is available now  [Qualcomm]: r1 needs updating  [Huawei]: delete the EN and provides r2  [Qualcomm]: r2 is OK  [Ericsson]: Fine with r2. | approved | R2 |
|  |  | S3‑222761 | Proposed resolution of some ENs in solution #2 | Qualcomm Incorporated | pCR | [Huawei]: agree with the proposal and propose to merge in S3-222540.  [Qualcomm]: OK with merge | merged | 540 |
|  |  | S3‑222835 | Update Key issue #2: Security aspects of Data Channel usage in IMS network | Ericsson | pCR | [Huawei]: agree with the proposal and propose to merge in S3-222539.  [Qualcomm]: asks for clarification on contribution to merge with.  [Ericsson]: Clarifies that S3-222835 should be merged with with S3-222538, not S3-222539.  [Huawei]: Agree with Ericsson and Qualcomm. | merged | 835 |
|  |  | S3‑222836 | Update solution#1 | Ericsson | pCR | [Huawei]: Requests clarifications.  [Ericsson]: Provides responses.  [Ericsson]: Provides r1.  [Huawei]: agree with the clarification and r1. | approved | R1 |
| 5.16 | Study on security aspects of enhanced support of Non-Public Networks phase 2 | S3‑222497 | New Solution based on Reusing Existing N3GPP Security for SNPN | Huawei, HiSilicon | pCR | [Xiaomi] : provides some comments.  [Lenovo]: Need for clarification before approval.  [Huawei]: provides clarifications. | noted |  |
|  |  | S3‑222891 | KI1, New Sol on Authentication mechanism for trusted non-3GPP Access in NPN scenarios | Xiaomi Communication | pCR | [Nokia]: Request clarification before acceptable  [Xiaomi]: provides clarification.  [Nokia]: Request further clarification before acceptable  [Xiaomi]: provides clarification.  [Nokia]: Request further clarification before acceptable  [Xiaomi]: provides clarification.  [Lenovo]: Needs revision.  [Qualcomm]: also requires revision.  [Xiaomi]: provides clarification and r1.  [Huawei]: ask for more revision for r1.  [Qualcomm]: ok with r1.  [Xiaomi]: provides r2.  [Xiaomi]: provides some input.  [Huawei]: r2 is OK.  [Lenovo]: r2 is Okay  [Xiaomi]: requests for confirm.  [Nokia]: Nokia is fine with R2 | approved | R2 |
|  |  | S3‑222892 | KI1, New Sol on Authentication mechanism for untrusted non-3GPP Access in NPN scenarios | Xiaomi Communication | pCR | [Nokia]: Request clarification before acceptable  [Ericsson]: Revision needed  [Xiaomi]: provides clarification and r1.  [Nokia]: Fine to accept R1.  [Ericsson]: R1 is OK  [Huawei]: propose further changes on R1.  [Xiaomi]: provides r2.  [Huawei]: fine with r2.  [Ericsson]: R2 is OK | approved | R2 |
|  |  | S3‑222893 | KI1, New Sol on Authentication for devices not supporting 5GC NAS over WLAN access in NPN scenarios | Xiaomi Communication | pCR | [Thales]: proposes change.  [Xiaomi]: provides r1.  [Huawei]: ask for clarification or adding an EN based on r1.  [Thales]: proposes change.  [Xiaomi]: provides r2  [Huawei]: ok with r2..  [Thales]: is fine with r2. | approved | R2 |
|  |  | S3‑222904 | New solution for KI#1: Use of anonymous SUCI in trusted non-3GPP access | Ericsson | pCR | [Thales]: proposes changes.  [Lenovo]: Needs revision.  [Qualcomm]: proposes to note.  [Huawei]: disagree with the proposal.  [Ericsson]: Provides response explaining the need for the new identifier and discusses use case  [Thales]: cannot agree initial version.  [Ericsson]: Asking about comments sent on Tuesday  [Ericsson]: providing r1  [Qualcomm]: fine with r1.  [Thales]: is fine with r1  [Lenovo]: r1 is okay.  [Huawei]: r1 is ok. | approved | R1 |
|  |  | S3‑222766 | SUCI protection for non-3GPP (WLAN) access to SNPN | Qualcomm Incorporated | other | [Huawei]: don't agree the detailed proposal of the document.  [Ericsson]: Agree with Huawei and support sending the proposed reply in S3-222515 and continue the discussion in that thread.  [Lenovo]: Propose to postpone the document for this meeting.  [Qualcomm]: requests clarification.  [Huawei]: provides answers. | noted |  |
|  |  | S3‑222461 | Questions for SUCI protection requirements for non-3GPP (WLAN) access to SNPN | S2-2207700 | LS in | [Huawei]: propose to reply this meeting.  [Qualcomm]: supports replying from this meeting, but do not agree with the text proposed in S3-222515. Instead we propose that S3‑222766 be used as the basis for the reply | postponed |  |
|  |  | S3‑222515 | Reply LS on Questions for SUCI Protection Requirements for Non-3GPP (WLAN) Access to SNPN | Huawei, HiSilicon | LS out | [Ericsson]: Providing r1  [Thales]: disagrees with the proposed Reply LS (initial and r1).  [Lenovo]: Propose to postpone the document for this meeting.  [Qualcomm]: requires revision; do not agree with the proposed reply in the initial doc and r1. Supports sending the reply from this meeting if the disc converges.  [Ericsson]: Providing motivation for the reply LS  >>CC\_4<<  [Huawei] presents current status. No consensus currently. >>CC\_4<<  [Huawei]: fine with r1.  [Thales]: disagrees with r1 and proposes to postpone the sending of the Reply LS.  [Qualcomm]: Disagree with r1 | noted |  |
|  |  | S3‑222651 | New KI on the UE authentication for access to hosting network | ZTE Corporation | pCR | [Ericsson]: proposes to merge in S3-222773  [ZTE]: agrees to merge. | merged | 773 |
|  |  | S3‑222652 | New KI on the user authentication for access to hosting network | ZTE Corporation | pCR | [Ericsson]: proposes to note  [ZTE]: agrees to note if there is no security issue in scope.  [Intel]: proposes to note | noted |  |
|  |  | S3‑222742 | Key Issue on Authentication for access to localized services | Lenovo | pCR | [Ericsson]: requires updates, proposes to merge in S3-222773  [Lenovo]: Fine with merger.  Provides also clarifications.  [Ericsson]: asks Lenovo whether the contribution should be marked as merged or noted | merged | 773 |
|  |  | S3‑222772 | Service requirements related to the security for providing localized services | Ericsson | discussion |  | noted |  |
|  |  | S3‑222773 | New Key Issue "Authentication for UE access to hosting network" | Ericsson, Intel, Nokia, Nokia Shanghai Bell, ZTE | pCR | [Ericsson]: provides r1, merger of S3-222773, S3-222651, S3-222890  [Thales]: proposes changes.  [Lenovo]: Requires updates.  [Ericsson]: provides r2 (Thales’ comments) and r3 (Lenovo’s comments)  >>CC\_3<<  [Ericsson] presents current status. A show of hand may be needed.  [Ericsson] presents r1, r2 and r3 quickly.  [Thales] comments with the argument described many times as before.  [Lenovo] comments.  Chair asks whether change is needed.  [Thales] comments.  [CableLabs] prefers r2 or r1.For Lenovo’s concern, it can take contribution in future.  [Lenovo] clarifies.  [CableLabs] comments to Lenovo.  [Lenovo] replies to CableLabs.  Chair asks whether Lenovo can live with r2 as major support on r2.  [Lenovo] asks why r3 could not be accepted.  [Thales] comments.  [Lenovo] clarifies.  [CableLabs] comment the key issue details in r3 may face more challenge.  Chair asks Rapporteur to organize question for show of hands.  ====show of hands====  Supporting r1: Nokia, Intel,  Supporting r2: CableLabs, Thales, ZTE, Ericsson, Huawei, VF, Xiaomi  Supporting r3: Lenovo  ====show of hands=====  **Chair requests to use r2 as baseline for further progress as r2 has major support.**  >>CC\_3<<  [Lenovo]: Do not object to r2. | approved | R2 |
|  |  | S3‑222774 | Addressing Note in TR 23.700-08 on credentials provisioning | Ericsson | pCR | [Lenovo]: Requires updates and clarifications.  [Thales]: asks to note the contribution.  [Qualcomm]: proposes to note. | noted |  |
|  |  | S3‑222775 | Communication security and subscriber privacy for access to localized services, alternative 1 | Ericsson | pCR | [Lenovo]: Questions the need and justification for the conclusion.  It is not acceptable.  [Qualcomm]: supports pCR; cannot agree to include as part of KI unless need for study is identified | noted |  |
|  |  | S3‑222776 | Communication security and subscriber privacy for access to localized services, alternative 2 | Ericsson | pCR | [Lenovo]: Needs revision.  [Qualcomm]: proposes to note this pCR. Prefers alt 1 provided in S3‑222775. | noted |  |
|  |  | S3‑222777 | New Key Issue on authorization of UE access to the hosting network for providing localized services | Ericsson | pCR | [Lenovo]: Needs revision and clarification.  [Qualcomm]: questions the need for the KI  [Ericsson]: replies to Lenovo and Qualcomm  [Qualcomm]: proposes to note. | noted |  |
|  |  | S3‑222890 | New KI on UE authentication and authorization in hosting network scenarios | Xiaomi Communication | pCR | [Ericsson]: proposes to merge in either S3-222773 or S3-222777  [Xiaomi]: agrees to the merger proposal and provides some inputs.  [Lenovo]: Requires revision if the doc is not merged in any of S3-222773 or S3-222777. | merged | 773 |
|  |  | S3‑222587 | Key issue on security of SNPN using AAA server for primary authentication | InterDigital Communications | pCR | [CableLabs]: clarification required  [IDCC]: Provide clarification required  [IDCC]: Provide corrected clarification required  [CableLabs]: provided comments  [IDCC]: Provide response  [Qualcomm]: proposes to note.  [InterDigital]: Clarification of AUSF and AAA not in the same network for the case discussed.  [Qualcomm]: responds  [CableLabs]: provide comments  [Interdigital]: KI scenario discussion  [Interdigital]: R1 is provided based on comments  [CableLabs]: r1 requires revision.  [Interdigital]: r2 provided.  [CableLabs]: provided -r3.  [Xiaomi]: requests for clarification.  [Interdigital]: response for clarification.  [Interdigital]: fine with r3.  [Xiaomi]: provides some comments.  [Interdigital]: approve r3.  [CableLabs]: provides comments.  [Ericsson]: r3 needs revision  [Qualcomm]: still proposes to note.  [Xiaomi]: provides some inputs.  [Interdigital]: r4 provided  [Interdigital]: resppnse.  [Interdigital]: comment. | noted |  |
| 5.17 | Study on Security of Phase 2 for UAS, UAV and UAM | S3‑222754 | Proposed key issue on the privacy of 3GPP identifiers used to transport Broadcast Remote ID | Qualcomm Incorporated | pCR | [Interdigital]: request revision before approval.  [Samsung]: Request clarification before approval.  [Qualcomm]: provides clarification and has uploaded r1  [Interdigital]: OK with r1 | noted |  |
|  |  | S3‑222755 | Proposed key issue on the privacy of 3GPP identifiers used to transport broadcasted DAA traffic | Qualcomm Incorporated | pCR |  | approved |  |
|  |  | S3‑222756 | Proposed solution on the privacy of 3GPP identifiers used to transport broadcast remote ID | Qualcomm Incorporated | pCR | [Huawei, HiSilicon]: propose to revise the name of broadcast RID layer.  [Interdigital]: request clarification/revision before approval.  [Qualcomm]: uploaded r1  [Interdigital]: OK with r1  [Huawei, HiSilicon]: Fine with r1. | noted |  |
|  |  | S3‑222757 | Proposed solution on the privacy of 3GPP identifiers used to transport DAA traffic | Qualcomm Incorporated | pCR | [Huawei, HiSilicon]: propose to revise the name of DAA traffic layer.  [Qualcomm]: uploaded r1  [Huawei, HiSilicon]: Fine with r1. | approved | R1 |
|  |  | S3‑222479 | Update to Sol#1 in 33.891 | Huawei, HiSilicon | pCR | [Ericsson] : Request clarification/revision before approval.  [Huawei, HiSilicon]: provides reply.  [Huawei, HiSilicon]: provides r1.  [Ericsson] : r1 is OK | approved | R1 |
|  |  | S3‑222509 | Evaluate the Sol#1 in 33.891 | Huawei, HiSilicon | pCR |  | approved |  |
|  |  | S3‑222590 | Update Solution#4 | InterDigital, Europe, Ltd. | pCR | [Qualcomm]: Propose a modification to the contribution.  [interdigital]: provides r1  [Qualcomm]: r1 OK | approved | R1 |
|  |  | S3‑222591 | New solution: Restricted Discovery for Direct C2 | InterDigital, Europe, Ltd. | pCR | [Ericsson] : Request clarification before approval.  [Interdigital] : replies to comment  [Interdigital] : provides r1 with the NOTE proposed below  [Interdigital] : prompt for confirmation  [Ericsson] : proposes an EN  [Interdigital] : provides r2  [Ericsson] : r2 is OK | approved | R2 |
|  |  | S3‑222736 | Evaluation for Solution #2 | Lenovo | pCR |  | approved |  |
|  |  | S3‑222758 | Proposed resolution of EN on mixing traffic in solution #3 | Qualcomm Incorporated | pCR |  | approved |  |
|  |  | S3‑222759 | Making solution #3 resolve key issues #4 and #5 | Qualcomm Incorporated | pCR |  | approved |  |
| 5.18 | Study to enable URSP rules to securely identify Applications | S3‑222564 | Assumption on actors and attacker model | Lenovo | pCR | [Huawei]: asks for clarifications  [Lenovo]: provides clarifications | approved |  |
|  |  | S3‑222565 | Update of KI#1 | Lenovo, Nokia, Nokia Shanghai Bell | pCR | [Huawei]: asks for clarifications  [Lenovo]: provides clarifications  [Huawei]: propose changes  [Lenovo]: provides revision r1 with the requested changes  [Huawei]: fine with r1 | approved | R1 |
|  |  | S3‑222566 | Evaluation of solution #2 | Lenovo | pCR | [Qualcomm]: requires updates before approval  [Lenovo]: requests clarification  [Qualcomm]: provides requested clarification.  [Lenovo]: provides revision r1 with requested EN.  [Qualcomm]: fine with r1 | approved | R1 |
|  |  | S3‑222750 | Proposal for an evaluation to solution #2 | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: requires additions to this evaluation  [Nokia]: provides answers to questions.  [Ericsson]: Requires clarification whether the evaluation addresses Solution #1 or Solution #2. Otherwise it is impossible to analyze the evaluation.  [Nokia]: Provides clarity – it’s for solution 1 – and provides a revision addressing the comments.  [Nokia]: Request feedback from Huawei.  [Ericsson]: proposes updates to r1  [Nokia]: Accepts proposal and provides R2  [Huawei]: requests EN on the usage of URSP procedures for provisioning of security material in the evaluation  [Nokia]: Providing the revision R3 addressing the comment from Huawei.  [Ericsson]: r3 is fine  [Huawei]: fine with r3 | approved | R3 |
|  |  | S3‑222751 | Proposal for a KI on injection of authentication data | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: disagrees with this key issue  [Nokia]: disagrees with the comments provided.  [Qualcomm]: proposes to note. | noted |  |
|  |  | S3‑222752 | Discussion paper on a way forward for LS on protection of the URSP rules from HPLM | Nokia, Nokia Shanghai Bell | discussion | [Qualcomm]: proposes to note. | noted |  |
| 5.19 | Study on Security Aspects of Ranging Based Services and Sidelink Positioning | S3‑222473 | address the editor's note in key issue 1 | Huawei, HiSilicon | pCR | [Philips]: suggest merging S3-222671 and S3-222473 taking S3-222671 as baseline.  [Philips]: postpone for the same reason as S3-222671. | noted |  |
|  |  | S3‑222671 | Ranging - Update Key Issue #1- privacy risks of exposing positioning reference signals | Philips International B.V. | pCR | [Huawei]: proposed to merge S3-222671 into S3-222473.  [Philips]: provides answers/disagrees.  [Qualcomm]: proposes to postpone | noted |  |
|  |  | S3‑222858 | 33.893: Additional Roles for Authorization in KI#2 | Xiaomi Technology | pCR | [Ericsson] : propose to postpone  [Huawei, HiSilicon]: postpone, or revision/clarification needs before approval.  [Xiaomi]: provides response. The concern is only on part of the proposal, which is revised in r1 by removing the part in concern.  [Qualcomm]: proposes to postpone or requires a revision  [Xiaomi]: provides clarification and r2 | noted |  |
|  |  | S3‑222557 | New Key issue for Detecting ranging triggered DoS attacks | Nokia, Nokia Shanghai Bell | pCR | [Xiaomi]: provides comments and requests clarification  [Huawei]: clarification is needed before approval.  [Nokia]: Provides clarifications  [Huawei]: provide feedback.  [Nokia]: Provides clarifications  [Qualcomm]: provides comments and requires revision before approval  [Nokia]: Provides clarifications and provides revision r1.  [Huawei]: clarification is required before approval.  [Nokia]: Provides clarifications and provides revision r2.  [Xiaomi]: provides further comments and requests further clarification  [Qualcomm]: proposes to note as our concerns are not addressed | noted |  |
|  |  | S3‑222558 | New Key issue for Updating security policy parameters on ranging device when it is out of 5G coverage | Nokia, Nokia Shanghai Bell | pCR | [Xiaomi]: provides comments and proposes to move the discussion on 2677 under AI 5.3 if needed  [Nokia]: Provides clarifications  [Huawei]: agree with Xiaomi and proposes to move the discussion on 2677 under AI 5.3 if needed  [Qualcomm]: proposes to note and discuss this under AI 5.3 in the next meeting if needed | noted |  |
|  |  | S3‑222677 | Protection of Sidelink IDs | US National Security Agency, MITRE, Cable Labs, Charter Communications, AT&T, Apple, CISA/ECD | pCR | [Xiaomi]: provides comments and proposes to move the discussion on 2677 under AI 5.3  [Huawei]: agree with Xiaomi.  [MITRE]: Provides response.  [Qualcomm]: propose to note  [MITRE]: Provides response. | noted |  |
|  |  | S3‑222474 | solutions on privacy protection for UEs in ranging | Huawei, HiSilicon | pCR | [Xiaomi]: provides comments and requests clarification  [Huawei]: provide clarification.  [Xiaomi]: provides response and requests further clarification  [Huawei]: provide r1.  [Xiaomi]: provides r2  [Huawei]: provides r3.  [Xiaomi]: fine with r3 | approved | R3 |
|  |  | S3‑222670 | Ranging - New solution KI#1, #2, #3 | Philips International B.V. | pCR | [Huawei]: clarification is needed before approval.  [Philips] answers and provides r1.  [Qualcomm]: proposes to postpone or remove the PRS related threat and solution descriptions, and the evaluation in the contribution.  [Xiaomi]: shares QC’s view and proposes to postpone | noted |  |
|  |  | S3‑222859 | 33.893: Solution on Application Server Authorization for KI#2 | Xiaomi Technology | pCR | [Huawei]: proposed to merge S3-222859 into S3-222878.  [Xiaomi]: provides response to the comments and prefers to keep the two papers separate  [Huawei]: proposed to merge.  [Xiaomi]: agree to merge 2859 into 2878.  [Xiaomi]: 2859 is merged into 2878. This thread can be closed. | merged | 878 |
|  |  | S3‑222860 | 33.893: Solution on 5GC NF Authorization for KI#2 | Xiaomi Technology | pCR | [Huawei]: proposed to merge S3-222860 into S3-222878.  [Xiaomi]: provides response to the comments and prefers to keep the two papers separate  [Huawei]: proposed to merge.  [Xiaomi]: keeps 2860 as a separate paper  [Huawei]: provides change proposal.  [Xiaomi]: provides response and r1  [Huawei]: provide r2.  [Xiaomi]: fine with r2 | approved | R2 |
|  |  | S3‑222861 | 33.893: Solution on Subscription-based Authorization of the Role of the UE during Discovery | Xiaomi Technology | pCR | [Huawei, HiSilicon]: This contribution needs further clarification/revision before approval.  [Xiaomi]: provides response to the comments.  [Xiaomi]: provides response to the comments and r1.  [Huawei, HiSilicon]: provides response.  [Xiaomi]: Provides response and r2.  [Xiaomi]: Keeps r1 of 2861 for approval, as there is no r2 for 2861.  [Xiaomi]: provides r2  [Huawei, HiSilicon]: provides suggestion.  [Xiaomi]: provides r3  [Huawei, HiSilicon]: fine with r3 | approved | R3 |
|  |  | S3‑222862 | 33.893: Solution on Token-based Authorization of the Role of the UE during Discovery | Xiaomi Technology | pCR | [Huawei, HiSilicon]: This contribution needs further clarification/revision before approval.  [Xiaomi]: Provides response and r1.  [Huawei, HiSilicon]: Provides reply.  [Xiaomi]: Provides response  [Huawei, HiSilicon]: replies.  [Xiaomi]: Provides response  [Xiaomi]: asks for confirmation  [Huawei, HiSilicon]: still think the token mechanism is not necessary. | noted |  |
|  |  | S3‑222878 | New solution on GMLC based authorization for Ranging/SL Positioning services | Beijing Xiaomi Mobile Software | pCR | [Huawei]: clarification request before approval.  [Xiaomi]: provides response  [Huawei]: provides feedback.  [Xiaomi]: provides response  [Xiaomi]: provides r1  [Huawei]: provide proposal.  [Xiaomi]: provide r2.  [Huawei]: fine with r2. | approved | R2 |
|  |  | S3‑222879 | New solution on Token based Authorization for Network assisted sidelink positioning services | Beijing Xiaomi Mobile Software | pCR | [Xiaomi]: provides merged version r1 based on the plan of merging 2929 into 2879 as agreed in the thread of 2929.  [Huawei, HiSilicon]: This contribution requires revision/clarification before approval.  [Xiaomi]: provides response to the comments.  [Ericsson]: we are fine with r2  [Huawei, HiSilicon]: Propose update based on r2.  [Xiaomi]: provides r3.  [Huawei, HiSilicon]: fine with r3. | approved | R3 |
|  |  | S3‑222929 | Use of authorization tokens at PC5 security establishment | Ericsson | pCR | [Xiaomi]: proposes to merge 2929 and 2879  [Ericsson]: we are fine to merge 2929 and 2879  [Xiaomi]: 2929 is merged into 2879. This thread is closed. | merged | 879 |
|  |  | S3‑222478 | New solution of security for the Ranging SL positioning device discovery | Huawei, HiSilicon | pCR | [Xiaomi]: provides comments and requests clarification  [Qualcomm]: provides comments and requires a revision before approval  [Xiaomi]: provides comments and r2  [Huawei, HiSilicon]: provides comments and r2  [Huawei, HiSilicon]: provides comments and r2  [Qualcomm]: proposes to note as our concerns are not addressed yet | noted |  |
|  |  | S3‑222477 | New solution for protecting direct communication | Huawei, HiSilicon | pCR | [Qualcomm]: provide comments and requires a revision before approval  [Xiaomi]: provides comments and requests revision before approval  [Huawei, HiSilicon]: provides feedback and r1.  [Xiaomi]: fine with r1  [Xiaomi]: fine with r1  [Qualcomm]: proposes to note as our concern is not addressed yet | noted |  |
|  |  | S3‑222863 | 33.893: Solution on Direct Communication Security for SL Positioning Service | Xiaomi Technology | pCR | [Huawei, HiSilicon]: This contribution requires revision/clarification before approval.  [Huawei, HiSilicon]: Add more comments.  [Xiaomi]: Provides response and r1.  [Huawei, HiSilicon]: replies to Xiaomi.  [Xiaomi]: Provides response and r2.  [Xiaomi]: Keeps r1 for approval, as there is no r2.  [Xiaomi]: There is r2 of 2863 and pls takes r2 for approval .  [Xiaomi]: provides r3  [Huawei, HiSilicon]: r3 needs minor revision, please provide r4 and no need further confirmation.  [Xiaomi]: provides r4 | approved | R4 |
|  |  | S3‑222857 | 33.893: Terminology Alignment | Xiaomi Technology | pCR | [Huawei, HiSilicon]: An abbrev needs to be revised.  [Xiaomi]: provides r1  [Huawei, HiSilicon]: fine with r1. | approved | R1 |
| 5.20 | Study on Security and Privacy of AI/ML-based Services and Applications in 5G | S3‑222602 | KI on authorization of AF accessing th 5GC assistance information | OPPO, Xidian | pCR | [QC] Provided comments.  [OPPO] Provided reply.  [OPPO] Provided reply.  [QC] Propose to note.  [OPPO] Provided reply.  [QC] Change position to: Agree, no further comments.  [Ericsson]: proposes updates  >>CC\_4<<  Rappoteur/Oppo presents current status that 0 progress, asks way to move forward.  [Nokia] comments there is only one objection, asks how to go proceed.  [IDCC] comments. Don’t want to re-open discussion on scope again and again.  [ZTE] comments Nov. Meeting is last time to complete key issue, could not wait for SA2’s final conclusion.  [IDCC] comments and proposes to make procedure change.  [VF] comments on procedure change.  [QC] replies  [Ericsson] comments  [Oppo] comments  [Thales] supports VF’s views.  Chair introduces progress in other WG, and proposes way forward  [Thales] is ok in general with Chair’s proposal, but comment it should not make it unless there is no other choice.  [Nokia] replies.  [IDCC] complains there is no progress for several meetings.  [Oppo] comments.  [QC] clarifies.  Chair introduces time restraint for SA3. it can have only 1 more meeting cycle on stage 2. It is not possible to wait for SA2 to complete the work and start SA3 work, this will not fit in the 3GPP Rel timeline. Ask Qualcomm to reconsider the objections on KIs which are dependent on SA3 feedback, particularly the KIs which are directly related to the SA2 LS..  [QC] replies.  [Ericsson] comments it should be considered case by case. It is not possible to give a general way.  [QC] agrees with Ericsson.  [Oppo] comments all proposals are followed with SA2.  [QC] replies.  [Nokia] comments.  >>CC\_4<<  [OPPO] Provided reply and revision in R1.  [Ericsson]: proposes updates to r1  [OPPO]: Accepts proposed update with minor editorial and provides R2  [Nokia]: fine with the r2 and want to co-sign the KI  [Ericsson]: minor comments on r2  [OPPO]: Accepts proposed update with minor editorial and provides R3, adding Nokia, Nokia Shanghai Bell as co-signer  [Ericsson]: r3 is fine | approved | R3 |
|  |  | S3‑222603 | KI on authorization of UE accessing the 5GC analytic information | OPPO, Xidian | pCR | [QC] Provided comments.  [OPPO] Provided reply.  [Ericsson]: requires updates before approval  [QC] Requires update before re-evaluation.  [OPPO] Provided reply and provides r1.  [QC] Propose to note.  [OPPO] propose to merge with S3-222708.  [QC] Fine to merge with S3-222708. | noted |  |
|  |  | S3‑222708 | Key issue on authorization of UE accessing the 5G analytics | Nokia, Nokia Shanghai Bell, IDCC, OPPO, Verizon | pCR | [QC] Prefer to have SA2 decision.  [Ericsson]: requires updates before approval  [Nokia]: provide clarification  [QC] Propose to note.  [Nokia] Nokia does not agree with the reasoning to note the contribution  >>CC\_4<<  [Nokia] presents.  [QC] comments.  [Nokia] replies.  Discussion among [Nokia], [QC] and [Oppo].  Chair asks to move on, other WGs are waiting for SA3 reply.  [QC] comments.  Chair asks to reconsider the position when the key issue is directly related with other WGs and needs to reply the wait from other WGs.  [QC] comments.  >>CC\_4<<  [Ericsson]: proposes to note | noted |  |
|  |  | S3‑222611 | New KI:the Authorization of Federated Learning Model Sharing | China Telecom Corporation Ltd. | pCR | [QC] Propose to note.  [Ericsson] : proposes to note for this meeting  [ChinaTelecom] : provides clarifications  [QC] Answers.  [ChinaTelecom] : asks companies to reconsider position on KI  [QC] Propose to note.  [Ericsson] : comments | noted |  |
|  |  | S3‑222707 | Key issue on AF authorization for AIML operations | Nokia, Nokia Shanghai Bell | pCR | [QC] Propose to note.  [Ericsson]: requires updates before approval  [Nokia]: provide clarification  [QC] Answers.  [Nokia]: provide clarification  [QC] Answers. | noted |  |
|  |  | S3‑222604 | KI on securing application AIML data exchange between UE and AF | OPPO, Xidian | pCR | [QC] Propose to note.  [OPPO] Provided reply.  [Ericsson]: requires updates before approval  [OPPO]: provides reply.  [QC] Maintains position. Provides SA2 info.  [Interdigital] Don’t agree with Aziz’s view of the AIML study scope.  [QC] Propose to note and to continue the discussion on S3-222706’s thread. | noted |  |
|  |  | S3‑222706 | Key issue on securing AIML operation | Nokia, Nokia Shanghai Bell, IDCC, OPPO, Verizon | pCR | [QC] Prefer to wait.  [Nokia]: provide clarification  [Ericsson]: requires updates before approval  [Nokia]: This KI has no direct relationship with the SA2 KI2 so the comment is not valid  [QC] Requires update before approval.  [Nokia]: provide clarification  [OPPO] If Qualcomm believes update is require, please propose an update.  [QC] Propose to note.  [Nokia] Nokia does not agree with the reasoning to note the contribution  [QC] Repeat question.  [Nokia] provides clarification  [Ericsson]: requires clear motivation and considerable update before agreement  [Intel]: Agree with Ericsson , request an EN for approval  [Nokia] happy to add EN and provide if we agree on the KI  [QC] Answers Nokia.  [Ericsson]: clarifies that the contribution should be noted, since no clear motivation was given during the meeting | noted |  |
|  |  | S3‑222605 | KI on securing provisioning of external parameters | OPPO, Xidian | pCR | [QC] A comment and questions.  [OPPO] Provided reply and ask for clarification.  [Ericsson]: asks for clarification, proposes updates  [QC] Propose to note as existing procedures will be reused.  [OPPO] Disagree with proposal to NOTE and provide reply to Qualcomm and Ericsson.  [QC] Replies. | noted |  |
|  |  | S3‑222575 | New key issue on Federated Learning AIML model protection | InterDigital Communications | pCR | [QC] Propose to note.  [IDCC] Provide feedback for QC comments.  [Ericsson] : proposes to note  [QC] Propose to note.  [Interdigital] : Response to comments  [Ericsson] : comments  [Interdigital] : response to comments | noted |  |
|  |  | S3‑222705 | Key issue on Security criteria of UE selection for AIML | Nokia, Nokia Shanghai Bell, IDCC | pCR | [QC] Asked questions.  [Nokia]: provide clarification  [Ericsson] : requires clarification/revision before approval  [Nokia]: provide clarification  [QC] Requires update before approval.  [Nokia]: provide clarification  [QC] Propose to note. | noted |  |
|  |  | S3‑222606 | KI on classification and protection of AIML data among 5GC AF and UE | OPPO, Xidian | pCR | [QC] Prefer to wait for SA2.  [OPPO] Provided reply.  [QC] Propose to note.  [OPPO] requests Qualcomm to reconsider.  [QC] Changes required before agreeing.  [Ericsson]: recommends updates  [OPPO] provides R1.  (Captured by VC)[QC] provides r2  [Ericsson]: r2 is fine | approved | R2 |
|  |  | S3‑222578 | New key issue on Federated Learning AIML model privacy protection | InterDigital Communications | pCR | [QC] Propose to note.  [IDCC] Provide feedback for QC comments.  [Ericsson] : proposes to note  [Interdigital] : Response to comments  [Ericsson] : comments  [Interdigital] : response to comments | noted |  |
|  |  | S3‑222607 | KI on user consent for 5GC provided assistance information | OPPO | pCR | [QC] Comment that this is out of scope.  [OPPO] Disagree with Qualcomm and provide reply.  [Ericsson]: questions the need for this key issue  [OPPO] Provides reply.  [QC]: Propose to note, pending SA2 complete design.  [OPPO]: Asks Qualcomm to check SA2 TR.  [OPPO]: provides r1 for the merger of S3-222607 and S3-222653.  [QC] Checked TR. Answered.  [OPPO]: Replies to Qualcomm’s comment.  >>warp\_up<<  [Oppo] tries to check the position from QC and status of this contribution.  [QC] is still not convinced.  Chair asks to mark as noted.  >>warp\_up<< | noted |  |
| 5.21 | Study on applicability of the Zero Trust Security principles in mobile networks | S3‑222504 | Evaluation of tenet 1 on resources | Huawei, HiSilicon | pCR | [Lenovo]: propose to merge in S3-222679.  [Huawei]: fine with the merge proposal | merged | 679 |
|  |  | S3‑222910 | Alignment of 3GPP’s 5G Security to the first NIST Tenet of ZTA | Ericsson | pCR | [Lenovo]: propose to merge in S3-222679.  [Ericsson]: OK to merge. | merged | 679 |
|  |  | S3‑222679 | ZT Tenet 1 | US National Security Agency, NIST, CISA ECD, Lenovo, CableLabs, InterDigital, AT&T, Johns Hopkins University APL, CIS | pCR | [Huawei]: requires updates before approval  [Nokia]: agrees with proposed merge of contributions related to T1, and asks for clarifications  [Lenovo]: Provides r1.  Consider S3-222504, S3-222910, S3-222720 are merged in draft\_S3-222679-r1.  [CMCC] does not agree to this contribution, proposes to use other related contribution as baseline for merging.  [Lenovo]: Provides clarifications.  [CMCC] is still not ok for the revision 1.  [Nokia]: proposes -r2 intended to address CMCC’s concerns and co-signs the proposal  [Lenovo]: Provides r3 to address CMCC’s feedback.  [CMCC] is fine with r3.  [Ericsson]: clarification needed.  [Lenovo]: clarifications provided to Ericsson and Request revision from Ericsson over r3.  [Huawei]: provide r4  [Lenovo]: provide r6  [Huawei]: fine with r6  [Ericsson]: approves r6, and asks to co-sign  [Nokia]: agrees on r6, and ask to co-sign  [CMCC] is ok with r6. | approved | R6 |
|  |  | S3‑222720 | Evaluation of Tenet #1 | Lenovo, US NSA | pCR | [Lenovo]: announces merger of S3-222720 in S3-222679. | merged | 679 |
|  |  | S3‑222505 | Evaluation of tenet 2 on secure communication | Huawei, HiSilicon | pCR | [Lenovo]: propose to merge in S3-222721.  [Huawei]: fine with the merge proposal | merged | 721 |
|  |  | S3‑222911 | Alignment of 3GPP’s 5G Security to the second NIST Tenet of ZTA | Ericsson LM | pCR | [Lenovo]: propose to merge in S3-222721.  [Ericsson]: OK to merge. | merged | 721 |
|  |  | S3‑222721 | Evaluation of Tenet #2 | Lenovo, US NSA | pCR | [Huawei]: requires updates before approval  [Lenovo]: Provides r1.  [CMCC] does not agree with this contribution. Propose to note.  [Lenovo] Provides r2 to address CMCC’s concerns and also provides some clarifications.  [CMCC] provides r3 as the version can live with  [Huawei]: provide r4  [Lenovo]: r4 is okay.  [Ericsson]: approves r4, and asks to co-sign  [CMCC] is ok with r4. | approved | R4 |
|  |  | S3‑222924 | Alignment of 3GPP’s 5G Security to the third NIST Tenet of ZTA | Ericsson LM | pCR | [Lenovo]: propose to merge in S3-222681.  [Ericsson]: OK to merge. | merged | 681 |
|  |  | S3‑222681 | ZT Tenet 3 | US National Security Agency, NIST, CISA ECD, Lenovo, CableLabs, InterDigital, AT&T, Johns Hopkins University APL, CIS | pCR | [Huawei]: disagrees with proposal in its current form since it is very incomplete  [Lenovo]: provides r1.  Consider S3-222722, S3-222924 as merged in S3-222681.  [CMCC] is generally fine with this merged contribution, and requests to revise a bit.  [Lenovo] Provides r2 to address CMCC’s feedback.  [CMCC] could not find r2.  [Lenovo] Provide link to find r2.  [Huawei]: provides r3  [CMCC] is generally ok with both r2 and r3, and asks minor question for clarification in r3.  [Lenovo]: provides r4 to restrict the scope of discussion to the SID’s scope.  Clarifies that SID’s scope is limited to 5G core network.  [Huawei]: fine with r4  [Ericsson]: approves r4, and asks to co-sign  [CMCC] is ok with r4. | approved | R4 |
|  |  | S3‑222722 | Evaluation of Tenet #3 | Lenovo, US NSA | pCR | [Lenovo]: announces merger of S3-222722 in S3-222681. | merged | 681 |
|  |  | S3‑222682 | ZT Tenet 4 | US National Security Agency, NIST, CISA ECD, Lenovo, CableLabs, InterDigital, AT&T, Johns Hopkins University APL, CIS | pCR | [Huawei]: disagrees with the proposal in its current form since the analysis wrongly assimilates NFs to human users/subjects and the evaluation does not take into consideration any of the already specified mechanisms.  [Nokia]: agrees with the consideration of adding mutual TLS, and makes a couple of observations  [CMCC] comments. The contribution needs to be revised at least.  [Lenovo] provides r1 to address CMCC, Nokia and Huawei feedback.  Clarification were also provided inline  [Huawei]: provide r2  [Lenovo]: Do not accept to r2.  Provides clarification.  [Huawei]: provides clarifications  >>CC\_3<<  [Lenovo] presents r1  [Huawei] comments it is related to relationship between users and devices.  [US NSA] comments it could be extended.  [VF] comments the description is about management rather than NF operation  [US NSA] clarifies.  [CMCC] shares similar view as Huawei and VF.  >>CC\_3<<  [Lenovo]: provides clarifications.  Suggests way forward.  [Huawei]: agree with the way forward and provide r3 for editorial purposes  [Lenovo]: No alignment reached, so it is noted. | noted |  |
|  |  | S3‑222724 | Evaluation of Tenet #4 | Lenovo, US NSA | pCR | [Lenovo]: announces merger of S3-222724 in S3-222682. | noted |  |
|  |  | S3‑222517 | Evaluation of tenet 5 on security posture | Huawei, HiSilicon | pCR | [Lenovo]: propose to merge in S3-222680.  Do not accept the current version as it is not clear.  [Huawei]: fine with the merge proposal  [Lenovo]: Based on the comments provided if the document cannot be merged, we propose to note it.  [Huawei]: closes this thread | merged | 680 |
|  |  | S3‑222680 | ZT Tenet 5 | US National Security Agency, NIST, CISA ECD, Lenovo, CableLabs, InterDigital, AT&T, Johns Hopkins University APL, CIS | pCR | [Huawei]: fine with merge but proposes updates  [CMCC] disagree with merged contribution and proposes to note.  [Lenovo] Provides r2 to address CMCC and Huawei’s concern.  [Huawei]: disagrees with r2 and proposes 2517 as an alternative  [Lenovo]: Provides r3 as a way forward which also onboards most of text from 2517.  >>CC\_3<<  [Lenovo] presents current status. T4,T5,T6,T7 are still open, and starts discussion from T5.  The latest version is r4  [Lenovo] presents r4.  [Huawei] comments tenet evaluation is most important, it is wrong to replace 5G system to enterprise in NIST reference.  [Lenovo] clarifies and refers to 676.  [Lenovo] proposes way forward, by adding a sentence in evaluation part to agree there is need to collect data.  [Huawei] comments.  [VF]: wording problem.  [Huawei] comments it looks like a bit contradiction, and proposes not to hurry.  Chair asks VF to make refinement.of the text.  >>CC\_3<<  [Lenovo]: Provides r4 which also onboards most of text from 2517.  [Huawei]: provides r5 and a way forward  [Nokia]: proposes to add a EN on the security posture evaluation aspect of Tenet 5  [Huawei]: asks for clarifications  [Nokia]: provides clarifications and -r6  [Lenovo]: provides clarifications and r7.  [Nokia]: provides clarifications  [Huawei]: fine with r6 but not r7  [Lenovo]: Asks clarification to Huawei’s comments. | approved | R6 |
|  |  | S3‑222725 | Evaluation of Tenet #5 | Lenovo, US NSA | pCR | [Lenovo]: announces merger of S3-222725 in S3-222680. | merged | 680 |
|  |  | S3‑222678 | ZT Tenet 6 | US National Security Agency, NIST, CISA ECD, Lenovo, CableLabs, InterDigital, AT&T, Johns Hopkins University APL, CIS | pCR | [Huawei]: disagrees and requires updates before approval since analysis is based on the wrong interpretation assimilating NFs to human users/subjects and ignores existing security mechanisms for dynamic authorization (OAuth2.0)  [US NSA]: Asks for clarification on how OAuth 2.0 provides dynamic authorization  [CMCC] requests to revise and provides clarification for US NSA’s question.  [Lenovo]: Provides r1 to address CMCC and Hauwei feedback.  [Huawei]: provides r2  [Lenovo]: provides r3  [Lenovo]: provides r4  [Huawei]: Provides r5  [US NSA]: accpets r5 and the ENs to move forward  [CMCC] is fine with r5. | approved | R5 |
|  |  | S3‑222727 | Evaluation of Tenet #6 | Lenovo, US NSA | pCR | [Lenovo]: announces merger of S3-222727 in S3-222678. | merged | 678 |
|  |  | S3‑222676 | ZT Tenet 7 | US National Security Agency, NIST, CISA ECD, Lenovo, CableLabs, InterDigital, AT&T, Johns Hopkins University APL, CIS | pCR | [Huawei]: fine with merge but requires updates  [CMCC] requests for clarification, and proposes to note or postpone this one if possible.  [Lenovo]: Provides r1 and some clarifications to address CMCC and Hauwei’s feedback.  [US NSA] Offers r2 and replies to comments  [Huawei]: provides r3  [Lenovo]: r3 needs clarification and revision.  R3 is not correct.  [Huawei]: asks for clarifications  [Lenovo]: provides clarifications and r4.  >>CC\_3<<  [Lenovo] presents the argument point.  [Huawei] comments .  [CableLabs] proposes way forward, to go to Nov. meeting.  [US NSA] is ok to discuss in Nov. Meeting.  [Huawei] challenges the last sentence.  [Lenovo] clarifies.  [CableLabs] has concrete proposal  [VF] comments.  [Lenovo] clariifes.  [VF] comments, data and information are different thing.  Chair asks whether only last sentence or whole evaluation needs refinement.  [VF] comments information mentioned in 5.Y.1 but data mentioned in 5.Y.3. They are different.  Chair asks VF to hold the pen to revise the document.  >>CC\_3<<  [Huawei]: provide r5  [Vodafone]: provide r6 – with English changes  [Lenovo]: Accepts all english changes from Vodafone.  Provides r7 to correct one typo and reverts a deletion in r5.  [Huawei]: asks for clarifications and suggests a way forward  [Lenovo]: Provides some more clarifications and asks way forward.  [Huawei]: disagrees with r7 and proposes a way forward  [Lenovo]: Provides r8.  Earlier comment on ‘Provides some more clarifications and asks way forward.  Was from lenovo not Huawei.  [Lenovo]: S3-222676-r8 is already available which onboards Huawei proposed deletion and addition of ENs. Can you check and confirm?  [Huawei]: r8 is fine  [CMCC] is ok with r8. | approved | R8 |
|  |  | S3‑222728 | Evaluation of Tenets #7 | Lenovo, US NSA | pCR | [Lenovo]: announces merger of S3-222728 in S3-222676. | merged | 676 |
|  |  | S3‑222730 | Evaluation of Tenets and current security mechanisms | Lenovo, US NSA | pCR | [Huawei]: propose changes  [Lenovo]: provides clarification.  Agrees to the suggestion.  [Lenovo]: provides r1  [Huawei]: fine with r1 and provide potential improvements for future considerations  [Lenovo]: Provides acknowledgement. | approved | R1 |
|  |  | S3‑222588 | New Key Issue on Potential Excessive Trust of NFs | China Telecom Corporation Ltd. | pCR | [Lenovo]: Propose to merge in S3-222732.  [Huawei]: propose to postpone discussion on any key issue proposal until SA3 reaches a common understanding/interpretation of the tenets.  [CMCC] is not agree with this contribution, proposes to note.  [Chinatelecom]: Agree to merge in S3-222732.  [Chinatelecom]: respond to the comments  [CMCC] provides further comment.  [Chinatelecom]: provide clarification  [CMCC] comments to revise contribution in next meeting.  [Chinatelecom]: reply to the comment  [CMCC] clarifies about China Telecom’s question.  [Chinatelecom]: fine with CMCC's proposal | noted |  |
|  |  | S3‑222732 | Key Issue on Need for continuous security monitoring and Trust evaluation | Lenovo, Nokia, Nokia Shanghai Bell, Rakuten Mobile Inc., Interdigital, US NSA, Motorola Solutions, Johns Hopkins University APL, Intel, Center for Internet Security, China Mobile, ZTE, CableLabs | pCR | [Huawei]: propose to postpone discussion on any key issue proposal until SA3 reaches a common understanding/interpretation of the tenets.  [Lenovo]: Would like to clarify that, it is Huawei which denies to agree on the facts of Tenets and the purpose of the Key issue from the beginning of the study.  Further during last meeting Huawei stated in S3-222057 mail thread that tenet evaluation is not to compete or suspend the discussion on key issues/solutions. But in this meeting, in contradiction, Huawei propose to postpone the KI.  [Huawei]: maintains its objection to the key issue due to the apparent divergence in the interpretation/understanding of tenets 4,5,6,7  [Lenovo]: Provides justifications about the facts.  [Lenovo]: requests way forward.  Provides r1.  [Huawei]: disagrees with r1 since it does not reflect the current status of the tenet evaluation  [Lenovo]: Provides r2.  [Huawei]: maintains its objection.  [Lenovo]: r4 is available with no threats.  [Lenovo]: S3-222732-r4 is already available which onboards all Huawei proposed deletion of threat, requirement, part of the title, with additional ENs you proposed. Can and check and confirm,  [Huawei]: fine with r4 | approved | R4 |
| 5.22 | Study of Security aspects on User Consent for 3GPP Services Phase 2 | S3‑222491 | New key issue on User Consent for AI/ML for Network Optimization | Huawei, HiSilicon | pCR | [QC] Asked to merge with S3-222598.  [Lenovo]: Requires clarification before approval.  [Huawei]: responds. | noted |  |
|  |  | S3‑222653 | New KI on User consent for application layer AIML operation | ZTE Corporation | pCR | [QC] Asked to merge with S3-222598.  [ZTE] Do not agree with the merging proposal.  [OPPO] Propose to merge into S3-222607.  [ZTE] Agree to the merging proposal.  [OPPO] provides R1 of merged document in S3-222607r1. | noted |  |
|  |  | S3‑222598 | New Key Issue on user consent for Personally Identifiable Information used for Network Optimization | Qualcomm Finland RFFE Oy | pCR | >>CC\_2<<  [QC] presents.  Chair asks whether it is possible to make simple requirement  [Huawei] comments general security requirement is enough, and ok to merge 2491 in.  [Ericsson] is not convinced about Annex V usage for user consent.  Chair asks whatis a specific use case for UC for 3rd party sharing  [Huawei] clarifies MEC could be the case.(respond to Chair)  [Huawei] proposes to work offline for the merging.  [Ericsson] comments. It is ok to specify “personally identifiable information”  >>CC\_2<<  [Huawei]: propose r1 based on conference discussion accordingly.  [Ericsson]: ask for clarifications  [Apple]: ask for clarifications and revision.  [Lenovo]: Requires clarification before approval.  [InterDigital] Propose to note  [InterDigital] Propose to note  [InterDigital] Propose to note  [QC] Reject Interdigital’s request to note.  [QC] Answers to Ericsson, Apple and Lenovo-  [Ericsson]: disagree with QC comments, hence propose to note  [Huawei]: provides more clarifications.  [Interdigital] Maintain the position to note.  [Huawei]: disagree with Interdigital’s comments. | noted |  |
|  |  | S3‑222492 | Key Issue Update on User Consent for NTN | Huawei, HiSilicon, Philips International B.V., Xiaomi, Qualcomm | pCR | >>CC\_2<<  [Huawei] presents.  [Ericsson] comments  [Apple] supports this contribution, and reply to Ericsson’s comment.  [Huawei] proposes to add EN to capture Ericsson’s concern.  >>CC\_2<<  [Lenovo]: requries clarification before approval.  [Huawei]: answers to Lenovo.  [Apple]: Support the requirement.  [Xiaomi]: Supports the proposal and provides clarification  [Lenovo]: needs revision  [Huawei]: ask for the question.  [Lenovo]: Propose to NOTE.  >>warp\_up<<  [Huawei] asks to check the status.  [Lenovo] clarifies the objection is raised from Wed. and not withdrawn.  [Huawei] comments.  [VF] comments the email is most important. No objection from cc does not overrule the objection from email.  >>warp\_up<< | noted |  |
|  |  | S3‑222818 | UC3S User consent checking by roaming partner NF | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: don’t think this proposal is needed.  [QC]: Local consent preferred. See S3-222599.  [Nokia]: -r1 uploaded. comments on questions are provided. This contribution addresses an SA2 LS request on user consent. Those aspects, also for eNA are addressed in UC3S.  [Nokia]: -r2 uploaded.  [QC]: Propose to note.  [Nokia]: Points out that this meeting was the last one to accept key issues, which seems a good strategy to delay work to Rel-19. | noted |  |
|  |  | S3‑222819 | UC3S Central authorization function for user consent | Nokia, Nokia Shanghai Bell | pCR | [Huawei]: request clarification before it’s acceptable, very unclear about the KI. Propose to postpone this solution.  [Nokia]: clarifies. -r1 uploaded.  [Huawei]: r1 does not seem to work neither  [Nokia]: HW proposed to postpone solutions. -r2 uploaded, which only removes the solution part.  Since there is general interest to see whether a unified framework is needed, I suggest to agree on the key issue, since the rapporteur suggested that this meeting as the last one for accepting key issues.  [QC] Supports. Ok with r2.  [Huawei]: Provides r3 with some changes.  [Nokia]: -r3 ok. | approved | R3 |
|  |  | S3‑222493 | New Solution on User Consent for Analytics Request from vPLMN | Huawei, HiSilicon | pCR | [QC]: Local consent preferred. See S3-222599.  [Lenovo]: requires clarification before approval.  [Huawei]: provides clarification and resolution.  [QC] Propose to note.  [Lenovo] Proposes EN. Needs revision.  [Huawei]: provides to Lenovo. | noted |  |
|  |  | S3‑222883 | New solution on User Consent for UE Data Exposure to HPLMN in the Roaming case | Beijing Xiaomi Mobile Software | pCR | [QC]: Local consent preferred. See S3-222599.  [QC]: No answer. Propose to note. | noted |  |
|  |  | S3‑222884 | New solution on User Consent for UE Data Exposure to VPLMN in the Roaming case | Beijing Xiaomi Mobile Software | pCR | [QC]: Local consent preferred. See S3-222599.  [QC]: No answer. Propose to note. | noted |  |
|  |  | S3‑222885 | New solution on Modification or Revocation of User Consent for eNA in the Roaming case | Beijing Xiaomi Mobile Software | pCR | [QC]: Local consent preferred. See S3-222599.  [QC]: No answer. Propose to note. | noted |  |
|  |  | S3‑222494 | New Solution on unified User Consent Architecture for RAN features | Huawei, HiSilicon | pCR | [Ericsson]: asks for clarification  [Huawei]: provide clarification.  [Lenovo]: Requires clarification before approval.  [Huawei]: answers to Lenovo.  [Lenovo]: Without security requirement, agreeing to solution is difficult.  Propose to postpone. | noted |  |
|  |  | S3‑222669 | UC - New solution NTN | Philips International B.V. | pCR | [Ericsson]: objects  [QC] Provided comments.  [Philips] Provides answers. | noted |  |
|  |  | S3‑222870 | 33.896: Solution on Obtaining User Consent with Mobility in RAN for KI#2 | Xiaomi Technology | pCR | [Ericsson]: Propose to note.  [Xiaomi]: provides response to the comments and requests Ericsson to reconsider the position if concerns are addressed  [Huawei]: ask for clarifications and propose ENs.  [Xiaomi]: provides response to the comments and r1  [Huawei]: provide the answers and resolution for r1.  [Xiaomi]: provides r2  [Ericsson]: Propose to note. | noted |  |
|  |  | S3‑222871 | 33.896: Solution on Obtaining User Consent with Mobility in SN for KI#2 | Xiaomi Technology | pCR | [Huawei]: propose to add editor’s note and ask for some clarification.  [Xiaomi]: provides response to the comments and r1  [Ericsson]: asks for further clarifications | noted |  |
|  |  | S3‑222869 | 33.896: Resolve the ENs in Solutions #1 and #2 | Xiaomi Technology | pCR | [Huawei]: question the need for this contribution.  [Xiaomi]: provides response to the comments  [Huawei]: propose further changes for r1.  [Xiaomi]: provides r2  [Huawei]: fine with r2. | approved | R2 |
|  |  | S3‑222495 | Overview of UC3S\_Ph2 | Huawei, HiSilicon | pCR | [QC] Wondered about a sentence.  [Huawei]: provide clarification.  [Ericsson]: comments  [Huawei]: provides answers and ask the way forward.  [Lenovo]: Disagrees with this contribution.  Need clarification before approval.  [Huawei]: answers to Lenovo.  [Ericsson]: disagree with Huawei. If the use and purpose of the term “user consent” was well known to all 3GPP WGs we wouldn’t get incoming LS from these e.g. S3-222560 from RAN3 on the use of “user consent”.  [Lenovo]: Propose an EN.  [Huawei]: provides clarification to Lenovo. | noted |  |
|  |  | S3‑222925 | Guiding principles for determining the applicability for user consent | Ericsson | pCR | [Huawei]: don’t agree with the proposal before it’s rewritten down.  [Ericsson]: Clarifies the need of the contribution and ask Huawei to clarify why 3,4, and 5 are not needed.  [QC]: 3+ can be recommendations.  >>CC\_2<<  [Ericsson] presents.  [QC] 1-2 can be requirement, and 3+ can be recommendation.  [Huawei] comments, doesn’t know what the problem trigger this.  [Nokia] comments.  [Ericsson] clarifies.  [Nokia] suggests to catch common understanding in notes.  Chair suggests to catch the clarification in content of TR. That is more formal text.  >>CC\_2<<  [Ericsson]: provides -r1  [QC]: Disagrees with r1. Changes required before agreement.  [Huawei]: Don’t agree with r1.  [Ericsson]: provides r2  [Huawei]: r2 does not address the concern as discussed.  [Ericsson]: asks Huawei to clarify their statement, so that if it is valid, it can be properly addressed in next revision.  [Huawei]: provides clarification. | noted |  |
|  |  | S3‑222599 | Discussions on User Consent for Analytics Request in roaming scenarios | Qualcomm Finland RFFE Oy | discussion | >>CC\_1<<  [QC] clarifies this discussion paper is also related with LS: 457  >>CC\_1<<  [Xiaomi]: requires clarification  >>CC\_2<<  [QC] presents.  [BT] agrees with its principle but is not convinced it is practical.  [Nokia] agrees with BT.  [Xiaomi] wonders how to treat if local regulation is different with non-local regulation.  [Docomo] comments.prefers to keep Xiaomi’s concern out of standard as that is legal problem, that should be treated by lawyer.  [QC] clarifies. >>CC\_2<<  [QC] Answered Xiaomi.  [QC] Moved to 5.22. Continue online discusssion.  [Ericsson]: comments  [Huawei]: ask for clarifications and provide the way forward  [QC]: Answers Huawei and Ericsson.  >>warp\_up<<  [QC] asks to endorse.  Rapporteur points there is objection.  Chair gives suggestion to treat contribution properly.  >>warp\_up<< | noted |  |
|  |  | S3‑222783 | [DRAFT] Reply LS on the data and analytics exchange between two NWDAFs in different PLMNs | Ericsson | LS out |  | withdrawn |  |
|  |  | S3‑222784 | [DRAFT] Reply LS on how ML model integrity, confidentiality and availability is supported between NWDAFs from different vendors | Ericsson | LS out |  | withdrawn |  |
|  |  | S3‑222785 | Update KI#2: Authorization of selection of participant NWDAF instances in the Federated Learning group | Ericsson | pCR |  | withdrawn |  |
| 5.23 | Study on security enhancements for 5G multicast-broadcast services Phase 2 | S3‑222469 | Requirement on TMGI protection | Huawei, HiSilicon | pCR | [Ericsson]: r1 uploaded  [Huawei]: fine with r1. | approved | R1 |
|  |  | S3‑222470 | Security threat and requirement in MOCN network sharing scenario | Huawei, HiSilicon | pCR | [Huawei]: merge S3-222855 into S3-222470 and provide r1.  [Samsung]: fine with merger of S3-222855 in S3-222470. Provides r2.  [Huawei]: provide feedback.  [Ericsson]: We believe that the content will be protected by the application e.g. CA/DRM and then we don’t have this issue at all. Provides r3.  >>CC\_2<<  [Huawei] presents r3, and ask which requirement should be chosen.  [Docomo] asks for clarification about “may support”  [Samsung] clarifies.  >>CC\_2<<  [Huawei]: provide r4 {https://www.3gpp.org/ftp/tsg\_sa/WG3\_Security/TSGS3\_108e-AdHoc/Inbox/Drafts/draft\_S3-222470-r4.docx}.  [Ericsson]: Comment about the note  [Huawei]: provide r5.  [Nokia]: Fine with r5.  [Samsung]: fine with r5  [Qualcomm]: requires a revision before approval  [Samsung]: Does not agree with the revision proposed by Qualcomm. Provides clarification.  [Huawei]: provide r6 and add Nokia as consigner.  [Nokia]: Fine with r6  [Qualcomm]: is fine with r6  [Ericsson]: Fine with r6 | approved | R6 |
|  |  | S3‑222555 | MOCN security handling for MBS | Nokia, Nokia Shanghai Bell | pCR | [Samsung]: asks clarification on the MTK generation  [Nokia]: Provides clarification and r1.  [Huawei]: provide comments.  [Ericsson]: Shares Samsung’s and Huawei’s concerns.  [Nokia]: Provides clarifications, and proposes EN for FFS.  >>CC\_2<<  [Nokia] presents.  [Huawei] how the MTK derivation is not clear.  Chair asks Nokia to solve the comment, maybe add an EN.s  >>CC\_2<<  [Huawei]: provide comments.  [Nokia]: Provides r2 with ENs included.  [Huawei]: r2 is fine with Huawei.  [Samsung]: fine with r2  [Qualcomm]: requires a revision before approval  [Nokia]: Provides r3 with removed evaluation.  [Qualcomm]: is fine with r3  [Ericsson]: Fine with r3 | approved | R3 |
|  |  | S3‑222556 | TMGI protection during group Paging | Nokia, Nokia Shanghai Bell | pCR | [Qualcomm]: asks questions and requires revisions before approval  [Nokia]: Provides clarifications and revision r1.  [Ericsson]: Proposed to note. | noted |  |
|  |  | S3‑222855 | Updates to KI on MOCN scenario | Samsung | pCR | [Huawei]: proposes to merge S3-222855 into S3-222470  [Samsung]: fine with merger of S3-222855 in S3-222470. | mreged | 470 |
|  |  | S3‑222856 | Solution on MBS protection for MOCN deployments | Samsung | pCR | [Ericsson]: asks clarification on the MTK distribution  >>CC\_2<<  [Samsung] presents.  [Huawei] comments the solution is not complete.  [Ericsson] comments about MTK distribution.  [Samsung] clarifies.  Chair requests to continue discussion.  >>CC\_2<<  [Huawei]: revision request before approval.  [Samsung]: provides clarification to Ericsson and Huawei.  [Huawei]: provide response.  [Samsung]: provides clarification to Huawei and r1.  [Huawei]: provide response and r2.  [Samsung]: Fine with r2  [Qualcomm]: requires a revision before approval  [Samsung]: Disagree with the comments. Provides clarification.  [Ericsson]: requires a revision before approval  [Samsung]: Request clarification from Ericsson to provide revision.  [Ericsson]: propose to note for this meeting  [Huawei]: propose a way forward.  >>warp\_up<<  Rapporteur presents status.  [Samsung] clarifies there is no objection but suddenly happenen in Friday.  [Ericsson] clarifies.  [Samsung] presents details.  Chair announces the first objection after objection deadline could no be considered.  [QC] clarifies the comments on r2  [Samsung] clarifies.  [Ericsson] clarifies the concern is not addressed.  [Huawei] does not agree with Ericsson’s clarification.  Chair announces the comments is passed deadline, so it should be approved.  [QC] does not agree the decision, comments the concern should not be omitted.  Chair clarifies there is no objection before objection deadline.  [Ericsson] comments.  >>warp\_up<< | approved | R2 |
| 5.24 | Study on enhanced Security Aspects of the 5G Service Based Architecture | S3‑222802 | Editorial updates to 33875-130 | Nokia, Nokia Shanghai Bell | pCR |  | approved |  |
|  |  | S3‑222803 | Abbreviations | Nokia, Nokia Shanghai Bell | pCR |  | approved |  |
|  |  | S3‑222804 | Trust in standalone SCP | Nokia, Nokia Shanghai Bell | pCR | [Ericsson]: updates required before approval  [Nokia]: -r1 uploaded  [Mavenir]: updates required before approval  [Nokia]: -r2 uploaded  [Ericsson]: r2 requires updates  [Mavenir]: replies to Ericsson and requires clarification  [Ericsson]: asks Mavenir to clarify  [Mavenir]: respond with clarification to Ericsson.  [Ericsson]: replies to Mavenir | noted |  |
|  |  | S3‑222805 | Extend trust in inter-PLMN | Nokia, Nokia Shanghai Bell | pCR | [Ericsson]: proposes to note if not the contribution is clarified and updated considerably  [Nokia]: proposes to update to reflect better the intention. -r1 uploaded.  [Ericsson]: proposes to wait with the trust model for the roaming hub  [Nokia]: proposes to agree on -r1. I don’t see the connection of Ericsson’s comment with the changes proposed. No trust model statement has been made in -r1.  [Ericsson]: replies to Nokia  [Nokia]: proposes EN to capture the need to address this topic. -r2 provided.  [Ericsson]: r2 is fine | approved | R2 |
|  |  | S3‑222686 | Resolving ENs in solution 6.13 | CableLabs | pCR | [Ericsson]: requires updates  [Mavenir]: Removing ENs is not justified. updating the contribution and keeping the ENs is required before approval  [CableLabs]: provided comments  [Mavenir]: replies to CableLabs  [CableLabs]: replies to Mavenir  [Mavenir]: replies to CableLabs | noted |  |
|  |  | S3‑222806 | KI1 analysis on NFp authentication in indirect comm | Nokia, Nokia Shanghai Bell | pCR | [Ericsson]: requires updates  [Mavenir]: updating the contribution is required before approval  [Nokia]: -r1 uploaded  [Mavenir]: r1 does not address Mavenir comments.  [Nokia]: -r2 uploaded  [Ericsson]: r2 requires updates  [Nokia]: -r3 uploaded  [Ericsson]: r3 fine | approved | R3 |
|  |  | S3‑222532 | Conclusion on KI#1 authentication of NRF/NFp in the indirect communication mode | Huawei, HiSilicon | pCR | [Ericsson]: requires updates  [Mavenir]: updating the contribution is required before approval  [Huawei] : Provide feedback before a new revision.  [Ericsson]: replies to Huawei  [Huawei] : Reply to Ericsson.  [Nokia] : propose to note.  [Huawei] : clarify that this contribution did not propose to use the new solution for conclusion.  [Ericsson]: replies to Huawei  [Huawei] : provide further response. | noted |  |
|  |  | S3‑222536 | Resolving EN in Key issue #3 | Huawei, HiSilicon | pCR | [Ericsson]: requires updates before approval  [Huawei] : waiting for Eriscsson’s proposal.  [Nokia] : I propose to merge and close this thread and continue in 2807 which already tries to improve the requirements.  [Huawei] : agree with the merger, and continue the discussion in 2807  [Nokia] : noted, since discussion was not continued | noted |  |
|  |  | S3‑222778 | KI#3 (Subscribe-Notify): Clarification of Editor's Note | Ericsson | pCR | [Huawei] : request clarification.  >>CC\_2<<  [Nokia] presents current status.  [Ericsson] presents contribution.  [Huawei] comments.  [Nokia] asks for clarification.  [Ericsson] clarifies.  Chair asks whether to make such EN extension, or to make a new security requirement instead.  [Ericsson] replies.  >>CC\_2<<  [Nokia] : -r1-Nokia uploaded to provide input to the key issue for resolving the EN.  [Ericsson]: disagrees with r1, comments  [Nokia]: agrees that these are good comments and suggest to take this document in a joint effort for a working session and approve (or note) it within an email approval phase within the next 10 days.  >>warp\_up<<  [Docomo] proposes way forward.  [Nokia] asks to go email approval and have some conf call.  [Huawei] comments.  >>warp\_up<< | Email approval |  |
|  |  | S3‑222807 | KI3 EN resolution on requirements for subscribe notify | Nokia, Nokia Shanghai Bell | pCR | >>CC\_2<<  [Nokia] presents  [Ericsson] comments it may not be able to provide such information under attack.  [Nokia] clarifies.  [CableLabs] comments 1st requirement is clear.  [Huawei] comments if requiremnt extension is needed, it needs to consider more.  >>CC\_2<<  [Ericsson]: requires updates before approval  [Nokia] : noted. concerns by Ericsson were not addressed. | noted |  |
|  |  | S3‑222534 | Resolving ENs in Sol#12 | Huawei, HiSilicon | pCR | [Ericsson]: requires updates  [Huawei] : will revise after we have the agreement via the S3-222533 email thread.  [Ericsson]: points out that there are additional aspects in 2534 that are not present in 2533  [Huawei] : Reply on comment 3).  [Ericsson]: comments on binding indication  [Huawei] : To move forward, r1 is uploaded with the EN on reallocation, removing the binding information, and FFS on the evaluation in the evaluation part.  [Ericsson]: r1 requires updates before approval  [Huawei] : provides r2 according to the concrete proposal.  [Nokia]: -r2 requires updates.  [Ericsson]: r2 is fine  [Huawei] : provides r3.  [Ericsson]: comments on Nokia’s proposal  [Ericsson]: disagrees with r3, proposes update  [Huawei] : provide r4.  [Nokia] : ok with r3.  [Nokia] : ok with r4.  [Ericsson]: r4 is fine | approved | R4 |
|  |  | S3‑222808 | KI3 EN resolution in sol12 | Nokia, Nokia Shanghai Bell | pCR | [Ericsson]: requires updates  [Nokia]: provides clarification  [Ericsson]: proposes to merge in S3-222534 and continue the discussion there  [Nokia]: merged in S3-222534, thread closed | merged | 534 |
|  |  | S3‑222779 | KI#3 (Subscribe-Notify): Removing EN and providing evaluation for Solution #12 | Ericsson | pCR | >>CC\_2<<  [Nokia] presents current status.  >>CC\_2<<  [Huawei] : provides comments and suggests to merge into the S3-222534  [Nokia] : note or merge with 2534 | merged | 534 |
|  |  | S3‑222533 | Resolving ENs in Sol#15 | Huawei, HiSilicon | pCR | [Ericsson]: requires updates  [Huawei] : provides r1 and reply back to Ericsson.  [Ericsson]: disagrees with r1, proposes to note and focus on EN and key issue requirements  [Huawei] : To move forward, r2 is uploaded with the EN on reallocation and FFS on the evaluation in the evaluation part.  [Ericsson]: r2 requires updates  [Huawei] : provide r3 according to the concrete proposal.  [Ericsson]: r3 requires updates  [Huawei] : provides r4.  [Ericsson]: r4 is fine | approved | R4 |
|  |  | S3‑222780 | KI#3 (Subscribe-Notify): Removing EN and providing evaluation for Solution #15 | Ericsson | pCR | [Huawei] : provides comments and suggests to merge into the S3-222533  [Nokia] : proposes to stop thread because of merging 2780 into S3-222533 | merged | 533 |
|  |  | S3‑222781 | KI#3 (Subscribe-Notify): Analysis and conclusion | Ericsson | pCR | [Huawei] : Propose to note this contribution before the evaluation and Ens were fully discussed. | noted |  |
|  |  | S3‑222809 | KI4 Sol SCP authorization check by NRF | Nokia, Nokia Shanghai Bell | pCR | [Ericsson]: major clarification and/or update required before approval  [Mavenir]: contribution needs to be updated before approval  [Nokia]: noted, since it requires more discussion. | noted |  |
|  |  | S3‑222685 | Resolving ENs in solution 6.16 | CableLabs | pCR | [Mavenir]: updating the contribution is required before approval  [Ericsson]: requires updates before approval  [CableLabs]: provided comments  [Mavenir]: replies to CableLabs  [CableLabs]: provided comments  [Nokia]: noted, since no revision available.  [Mavenir]: Thanks to CableLabs cooperation and comment | noted |  |
|  |  | S3‑222810 | KI6 EN resolution Sol7 | Nokia, Nokia Shanghai Bell | pCR | [Mavenir]: updating the contribution is required before approval  [Ericsson]: requires updates/clarification before approval  [Nokia]: can be approved with the proposed update by Mavenir, to which also Ericsson agreed.  -r1 providing this version.  [Ericsson]: r1 is fine | approved | R1 |
|  |  | S3‑222811 | KI7 Sol17 EN resolution | Nokia, Nokia Shanghai Bell | pCR | [Mavenir]: Deleting the EN is NOT justified despite the added clarification. This solution does not address the KI  [Huawei] : provides comments that the first EN can not be removed, the second EN shall be reformulated.  >>CC\_2<<  [Nokia] presents r1  [Huawei] requests operator to check whether only 1 operation is deployed.  [Mavenir] comments to not to challenge GSMA.  [Ericsson] clarifies GSMA has guidance.  [Verizon] clarifies.  [Mavenir] comments about oauth2Required is absent.  [Huawei] comments the solution is not sufficient.  Chair requests to continue discussion specifically Huawei to comment on the LS to CT4.  >>CC\_2<<  [Nokia] : -r1 uploaded. see disc. in 2535  [Huawei] : not fine with r1.  [Nokia] : -r2 uploaded  [Huawei] : comments on r2.  [Nokia] : -r3 uploaded.  [Mavenir] : not fine with r3.  [Nokia] : -r4 uploaded.  [Mavenir] : r4 is good. Thanks.  [Huawei] : not fine with r4.  [Nokia] : -r5 uploaded. as requested: removing first change on KI update; keeping EN as requested by Huawei.  no other comments were received. -r5 is purely a solution update now.  [Huawei] : fine with r5. Thanks. | approved | R5 |
|  |  | S3‑222535 | Conclusion on KI#7 authorization mechanism determination | Huawei, HiSilicon | pCR | [Mavenir]: updating the contribution is required before approval  [Nokia]: comments  [Huawei] : provide reply back to NOKIA before providing a new revision.  [Ericsson]: requires updates before approval  [Mavenir]: provide response to Huawei.  [Mavenir]: respond to Ericsson  [Huawei] : Response to Mavenir, and provide r1 with a NOTE to capture the required LS, and remove the conclusion part.  [Nokia] : propose to note or merge this contribution and continue working on S3-222812.  [Mavenir]: respond to Huawei  [Nokia]: noted since ongoing discussion | noted |  |
|  |  | S3‑222812 | KI7 conclusion | Nokia, Nokia Shanghai Bell | pCR | [Mavenir]: updating the contribution is required before approval  [Huawei] : propose to note this contribution, since the sol#17 does not solve the requirements.  [Ericsson]: supports the gist of this contribution  [Huawei] : suggest to discuss the issue in the S3-222535 email thread to avoid fork disucssion. Suggest to try to merge into S3-222535, since both pCRs revise the same clause.  [Nokia]: -r1 uploaded. comments provided. pls. also refer to comments in 2535.  [Huawei] : not agree with r1.  [Nokia] : r2 uploaded removing the conclusion part.  [Mavenir] : provide comments to Nokia.  [Nokia] : suggests to ask leadership for LS approval to CT4 within next 10 days.  [Ericsson]: r2 requires updates  [Huawei] : provide r3, and clarify that an agreed proposal for procedure is required before sending an LS to CT4/GSMA.  [Ericsson]: r3 requires updates  [Nokia]: will provide an update  [Nokia]: -r4 uploaded; it removes all contentious parts and just provides a neutral summary with the agreed drawbacks identified so far.  [Huawei] : fine with r4. Thanks for the efforts.  [Ericsson]: r4 ok | approved | R4 |
|  |  | S3‑222813 | KI9 solution 18 update | Nokia, Nokia Shanghai Bell | pCR |  | approved |  |
|  |  | S3‑222814 | KI9 Sol11 EN resolution | Nokia, Nokia Shanghai Bell | pCR |  | approved |  |
|  |  | S3‑222817 | KI10 Update of Sol20 RHUB PRINS | Nokia, Nokia Shanghai Bell | pCR |  | approved |  |
|  |  | S3‑222815 | KI10 Clarification on securing remote RHUB and SEPP discovery | Nokia, Nokia Shanghai Bell | pCR | [Mavenir]: proposes to note this contribution.  [NTT DOCOMO]: responds to on Mavenir  [Mavenir]: comments on NTT DOCOMO response.  [Ericsson]: also proposes to note  [Nokia]: clarifies  [Mavenir]: provides a follow up on the proposed security requirement. | noted |  |
|  |  | S3‑222816 | KI10 Solution for securing remote RHUB and SEPP discovery | Nokia, Nokia Shanghai Bell | pCR | [Mavenir]: proposes to note this contribution.  [Ericsson]: also proposes to note | noted |  |
|  |  | S3‑222782 | Solution for KI#12 Different SEPP Type requirements | Ericsson | pCR | [Mavenir]: proposes to note this contribution.  [Ericsson]: replies to Mavenir  [NTT DOCOMO]: also proposes to note this contribution  [Mavenir]: replies to Ericsson.  [Nokia]: provides additional clarification and supports to note in this meeting.  [Ericsson]: replies to Nokia, Mavenir and NTT DOCOMO | noted |  |
|  |  |  |  |  |  |  |  |  |
| 5.25 | Study on Security Aspects of Satellite Access | S3‑222864 | 33.700-28: Draft Skeleton | Xiaomi Technology | draft TR |  | approved |  |
|  |  | S3‑222865 | 33.700-28: Scope | Xiaomi Technology | pCR | [Ericsson] : Proposes changes before approval.  [Xiaomi]: provides responses to the comments and r1  [Ericsson] : proposes changes.  [Xiaomi]: provides r2  [Ericsson] : r2 is fine. | approved | R2 |
|  |  | S3‑222866 | 33.700-28: Assumptions | Xiaomi Technology | pCR | [Ericsson] : Comments and proposes changes before approval.  [Xiaomi]: provides r1  [Ericsson] : r1 is fine. | approved | R1 |
|  |  | S3‑222476 | Key issue on security enhancement with discontinuous satellite coverage | Huawei, HiSilicon | pCR | [Xiaomi]: proposes to merge 2476 into 2867 and 2868  [Huawei]: Propose to merge this into 2476 and provide r1 in the draft folder.  [ChinaTelecom]: Ask clarification  [Ericsson] : asks for clarifications.  [Huawei]: provides clarification and r2.  [Xiaomi]: not fine with r2 and provides r3  [Ericsson]: Proposes changes to r3.  [Qualcomm]: Need justification for the KI before approval  [ChinaTelecom]: provides clarification and r4.  [Huawei]: provides clarification and r5.  [Xiaomi]: fine with r5 and provides response and further comments.  [Nokia]: requests clarification on the threat description  [Lenovo]: requires clarification before approval.  [Huawei]: Suggest Lenovo to check the email thread and check what happened already.  [Xiaomi]: provides response and r6  [Qualcomm]: the need for this KI is still unclear.  [Xiaomi]: provides response and r6  [Ericsson]: proposes changes to r6.  [Xiaomi]: provides response and r7  [Qualcomm]: proposes to note this KI for this meeting  [ChinaTelecom]: proposes a way forward  [Xiaomi]: provides r8 based on the way forward proposed by CTC | noted |  |
|  |  | S3‑222581 | Key issue on Security for Satellite Coverage Information provisioning | China Telecom Corporation Ltd. | pCR | [Xiaomi]: proposes to merge 2581 into 2867  [ChinaTelecom]: reply the comments from Xiaomi.  [Huawei]: propose to merge S3-222581 into S3-222476, taking S3-222476 as basis.  [Ericsson] : proposes to merge 2581 into 2476.  [Qualcomm]: proposes to note (or consider merged into 2476)  [Xiaomi]: 2581 is merged into 2476. This thread can be closed. | noted |  |
|  |  | S3‑222867 | 33.700-28: New Key Issue on Protection of Satellite Coverage Information used by the UE | Xiaomi Technology | pCR | [ChinaTelecom]: provides comments and proposes to merge with S3-222581 and S3-222868 and S3-222476.  [Huawei]: propose to merge 2867 into 2476 by taking 2467 as the baseline.  [Xiaomi]: provides responses and asks question for clarification  [Ericsson] : proposes to merge to 2476.  [Xiaomi]: provides further comments  [Qualcomm]: proposes to note (or consider merged into 2476)  [Xiaomi]: 2867 is merged in 2476. This thread can be closed. | noted |  |
|  |  | S3‑222868 | 33.700-28: New Key Issue on Protection of Satellite Coverage Information used by 5GC/EPC | Xiaomi Technology | pCR | [ChinaTelecom]: provides comments and proposes to merge with S3-222581 and S3-222867 and S3-222476.  [Huawei]: don’t agree with merging 2868 into others. This could be treated separately. Propose to revise 2868.  [Xiaomi]: proposes to treat 2868 separately, provides responses and r1  [Ericsson]: proposes changes before approval.  [Xiaomi]: provides responses and r2  [Ericsson]: proposes changes.  [Qualcomm]: requests rationale for the KI.  [Xiaomi]: provides response and r3  [Nokia]: requests clarification on the clause threats as these seem to be requirements  [Xiaomi]: provides response and r4  [Qualcomm]: responds to Xiaomi; still questions the need for KI.  [Ericsson]: proposes changes to r4.  [Xiaomi]: provides response and r5  [Qualcomm]: requests further updates  [Xiaomi]: provides r6  [Qualcomm]: ok with r6  [Ericsson]: is fine with r6.  [Nokia]: ok with r6 | approved | R6 |
|  |  | S3‑222898 | New KI on AF authorization in Satellite access scenarios | Xiaomi Communication | pCR | [Ericsson] : Proposes to note as aspects of this key issue are included in other key proposals.  [Thales] : Proposes to note, waiting for SA2 conclusions. | noted |  |
| 6 | New Study/Work item proposals |  |  |  |  |  |  |  |
| 7 | CVD and research |  |  |  |  |  |  |  |
| 8 | Any Other Business | S3‑222452 | Meeting notes from SA3 leadership | MCC | report |  | reserved |  |

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F2F meeting logistics.

[Huawei] asks to define some subject line format for efficiency.

[IDCC] asks about the rule for COVID-19 prevention measures.

[Mavenir] shows the email about potential public transportation issue.

[Apple] asks parallel session details, would like to know how to split topics.

[IDCC] reminds to reserve new Tdoc# and upload revision contribution.

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