**SA3#119Adhoc-e Chair Notes**

| **Agenda**  | **Topic**  | **TDoc** | **Title**  | **Source**  | **Type**  | **For**  | **Notes**  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1  | Agenda and Meeting Objectives  | S3‑250001 | Agenda  | SA WG3 Chair  | agenda  |    |    |
|    |    | S3‑250002 | Process for SA3#119AdHoc-e  | SA WG3 Chair  | other  |    |    |
|    |    | S3‑250003 | Detailed agenda planning  | SA WG3 Chair  | other  |    |    |
| 3.1  | Reports and Liaisons related to topics in agenda  | S3‑250004 | LS on security aspects of Ambient IoT  | S2-2411049  | LS in  |    |    |
|    |    | S3‑250005 | LS on RAN2 outcome of Ambient IoT study  | R2-2411263  | LS in  |    |    |
|    |    | S3‑250006 | Reply to LS on Further Clarification for Ambient IoT Security  | S1-244920  | LS in  |    |    |
|    |    | S3‑250007 | LS on A-IoT Conclusions in SA WG2  | S2-2413035  | LS in  |    |    |
|    |    | S3‑250009 | Reply LS on clarifications on consent management  | SP-241934  | LS in  |    |    |
|    |    | S3‑250043 | Reply LS on security aspects of Ambient IoT  | OPPO  | LS out  | Approval  |    |
|    |    | S3‑250071 | LS reply to LS on security aspects of Ambient IoT  | Nokia  | LS out  | Approval  |   [OPPO]: propose[OPPO]: propose to discuss in thread of S3-250041 and capture the agreed conclusion in replay LS[Ericsson]: Agrees with OPPO. Let us wait until KI#3 is concluded. |
|    |    | S3‑250130 | LS on User Consent aspects for Energy Saving  | Ericsson  | LS out  | Approval  |   [Nokia]: Provides comments.[Huawei]: comments to 250130[CC1]: Huawei: need some small modifications, sent emails on thatNokia: agree to send, and define where to document this is next meeting[CC1] |
| 5.2  | Study on the security support for the Next Generation Real Time Communication services phase 2  | S3‑250155 | Update KI#1: Third party specific user identities to include NEF-AF interface security  | Ericsson  | other  | Approval  |   [Huawei]: propose to be noted[Ericsson]: provides comments and requests for clarification[CC1] : Vlasios presentsHuawei: KI has been concluded, not ok to restgart to study on third party IDE//: ok needs to be there to be complete, not to reopen concluded discussionsNokia: if other groups read this new requirement, will they restart their discussion?Huawei: that was the concernNokia: if SA2 does something new, could SA3 investigate the security related to that new interfacechair: SA2 is not including a new KINokia: but maybe a new feature,QC: add note that this issue can be dealt with in conclusion of KI3, as exposure is in NEFE//: agree with QC, conclude here and move the procedure to KI3, therefore send LS to SA2 to inform that this issue is dealt with in KI3together with 156 (LS)Vlasios presentsE//: The text now reads that there is also some exposure in KI1, ask SA2 two questionschair: LS out is preferred from this meeting?E//: yesNokia: as KI1 is closed, add some EN or similar directly to KI3.E//: add: if SA3 wants to add third party identifier exposureQC: not change KI1, but be clear that this will impact third party ID partchair: suggest exact text over email[CC1] |
|    |    | S3‑250131 | Solution#5 update for alignment with SA2 and addressing EN  | HUAWEI TECHNOLOGIES Co. Ltd.  | pCR  | Approval  |   [Nokia]: ask clarification[Ericsson]: Requests for clarifications before approval. |
|    |    | S3‑250089 | Updates to solution#6  | Samsung  | other  | Approval  |   [Nokia]: Comments on the contribution[Ericsson]: Requests for clarifications before approval.[Huawei]: Requests for clarification[Samsung]: Provides comments and r1.[Qualcomm]: Changes needed before approval[Qualcomm]: Further clarification |
|    |    | S3‑250090 | Evaluation updates for solution#6  | Samsung  | other  | Approval  |   [Nokia]: Comments on the contribution[Ericsson]: proposes changes.[Huawei]: Requests for clarification[Samsung]: provides comments and r1. |
|    |    | S3‑250091 | Conclusion for Key issue#2  | Samsung  | other  | Approval  |   [Ericsson]: Proposes a merger of this document (0091) and 0132 to 0154 (baseline).[Samsung]: agrees to merge this contribution into 0154. |
|    |    | S3‑250132 | Conclusion to KI#2 of NG\_RTC  | HUAWEI TECHNOLOGIES Co. Ltd.  | pCR  | Approval  |   [Huawei]: Propose to merge 0091 and 0154 into S3-250132.[Ericsson]: proposes to merge this document and 0091 to 0154.[Huawei]: provide merged version and clarification.[Qualcomm]: Clarifications/changes need before approval[Ericsson]: Proposes to upload the revisions to the Inbox/Drafts[CC1]: 091, 132, 154E//: use 132r1 as baselineHuawei: r2 includes E// and QC comment, need to discuss if e2e protection is required, not needed according to HW, Samsung wants e2e chair: merger in 154?Nokia: ok with 132 as baselineHuawei: two options, EN or Note, both are okE//: commented on removing some of Nokia text, continue the discussion over email[CC1] |
|    |    | S3‑250154 | Conclusion for KI2 IMS based Avatar Communication  | Nokia, Nokia Shanghai Bell  | other  | Approval  |   [Ericsson]: Proposes that this document is the baseline for merger of 0091, 0132 and 0154.[Qualcomm]: Think Ericsson proposal could work as a way forward |
|    |    | S3‑250133 | Conclusion to KI#3 of NG\_RTC  | HUAWEI TECHNOLOGIES Co. Ltd.  | pCR  | Approval  |   [Ericsson]: comments on the document.[Huawei]: support Ericsson's opinion[CC1]: 133, 157Nokia: ok with 133 as baseline and add EN, Huawei: check r1Nokia: will provide r2chair: get LS ready[CC1] |
|    |    | S3‑250157 | Conclusion for KI3 IMS DC capability exposure  | Nokia, Nokia Shanghai Bell  | other  | Approval  |   [Nokia]: Baseline for merger of S3-250133 and S3-250157[Ericsson]: Comments on the document and merging[Huawei]: support Ericsson's first option. |
|    |    | S3‑250156 | LS on IMS support for AF authorization  | Ericsson  | LS out  | Approval  |   [Nokia]: Support the LS with comments[Ericsson]: requests for clarifications for producing a revision.[Nokia]: Provide clarification. |
| 5.9  | Study on security Aspect of Ambient IoT Services in 5G  | S3‑250047 | Generic conclusion on AIoT  | Huawei, HiSilicon  | pCR  | Approval  |   [Deutsche Telekom] : {Question for clarification}[Huawei]: provides clarification on the optionality issue[Deutsche Telekom] : highlights that optionality may result in no testcase for a well-defined use case[Huawei]: Provides minor clarification on SCAS tests[Deutsche Telekom] : thanks the quick additional clarifications and agrees on proposed way forward[Sony] : Provides r1.[KPN]: Disagrees with second bullet of conclusion and provides alternate suggestion.[Huawei]: Fine with the alternative formulation but highlights importance that intention is to reach a compromise and does not compromise security[Huawei]: provides r2 on top of r1 merging S3-250047, S3-250061, S3-250066 (pending Nokia confirmation) and S3-250159[Nokia]: Provides comments to R2.[Qualcomm]: proposes further changes before approval[Nokia]: Provides answers to Qualcomm.[Deutsche Telekom]: asks clarification on 'optional deployment', proposes changes.[Ericsson]: Comments. And Requires changes before approval.[Huawei]: provides r3 and leaves the requirement on optionality of support open for discussion during the call.[CC1]: 047r3 Noamen presentsSony: email regarding bullet #2, security between device and network Nokia: ok with first bulletE//: agree with Sony, no need for application layer securitySony: remove the application layer security part from bullet 2Huawei: remove bullet 2KPN: same views as SonyThales: 3 options, also both are possible, using the conclusion to make the work of the KI, not clear what is the handling here. Ok with removing the noteDCM: unclear whether that means network layer is required, need to be clear that network layer is optional if application security is there.IDCC: keep bullet, put the content of the Note into the bullet, because there are different ways of providing securityQC: agree with IDCC, keep second bullet as is, aligned with SA2 regarding storage of device IDE//: back to bullet1, too generic, what is meant by new services, e..g. could mean AMFHuawei: has responded to Nokia on this, example NDS/IPE//: too generic here, Huawei: for protection of backhaul and CN, and reference NDS IPDT: third bullet, needs to be clear whether support is optional or mandatory, current wording is not concluding on anythingHuawei: have this discussion on conf callKPN want to have mandatoryE//: should be mandatory to support, but optional to deployIDCC: overloading the device, depends on the type of service, writing optional/mandatory is not okHuawei: comment says need to take a decision on the conf callIDCC: so should be optional or mandatory based on AIoT servicechair: so expand to cover different use cases?QC: if mandatory to support, the impact may be high, prefer optionalE//: how is the use case determined, that is deployment, but it requires the support, so otherwise there will be device per use caseThales: network layer security needs to be mandatoryvivo: device type 1 capability is very limited, so opinion like IDCC and QC, i.e. optional to supportThales: bullet 4:disagree if PMN, so remove the bullet or limit to SNPN use caseDCM: credential holders AAA server is confusing, QC: credential holder AAA could be internal AioTF or externalDCM: so only for application layer securityQC: also for network layerDCM: for application layer security, ok with this, for network layer not sureQC: will try to rewordvivo: for SNPN case it could also be network layer[CC1] |
|    |    | S3‑250061 | pCR to TR33.713 Generic conclusion  | CATT  | pCR  | Approval  |    |
|    |    | S3‑250066 | Proposal for a conclusion  | Nokia  | pCR  | Approval  |    |
|    |    | S3‑250083 | Pseudo-CR-General conclusion for the architecture of AIoT  | China mobile  | pCR  |    |   [Qualcomm]: asks clarifications and revisions before approval[China Mobile]: Provide clarification[Thales]: provides comments.[China Mobile]: Provide more clarification |
|    |    | S3‑250084 | Pseudo-CR-System architecture and security assumptions for AIoT services  | China mobile  | pCR  |    |   [Qualcomm]: asks clarifications and revisions before approval[China Mobile]: Provide clarification[Thales]: provides comments. |
|    |    | S3‑250159 | Generic conclusion for AIoT  | Qualcomm Incorporated  | pCR  | Approval  |    |
|    |    | S3‑250028 | Update the scope in TR 33.713  | ZTE Corporation  | pCR  | Approval  |   [vivo]: proposes a further change before approval[Nokia]: Request changes.[ZTE] : Provide R1[vivo]: r1 OK. |
|    |    | S3‑250058 | Conclusion on KI#5 AIoT Authentication  | OPPO  | pCR  | Approval  |   [OPPO] : {Merged KI#5 conclusion contributions}OPPO announces the merge and close the discussion on other merged documents' threads: S3-250045, S3-250033, S3-250074, and S3-250111.Discussion and drafting is to be continued on the baseline S3-250058 document thread.Draft\_S3-250058-r1 can be found in the draft folder.[Sony] : Provides r2.[OPPO] : Accepts R2.[Qualcomm]: proposes further changes before approval (Provide r3)[Xiaomi]: proposes comments on r3[vivo]: proposes further changes before approval (Provide r4)[vivo]: Provides r5[oppo]: Provides r6 for 250058[Ericsson]: Gives comments. Disagrees with a few points and provides revision-7.[Nokia]: Provides comments and new revision - R8[CC1]: 058r8Oppo: prefer r6E//: prefer r7Thales: not ok with bullet 1, want mutual authenticationQC: original proposal asked only for one way authentication, not clear how mutual device authentication can be done for inventory only caseNokia: what is the restriction to do only one way authenticationQC: not sure what solution can do mutual auth without extra signallingCATT: agree with QC, mutual auth not possible in one way signallingHuawei: not reasonable to have mutual auth without adding extra signallingOppo: similar view as QC and Huawei, there is only one round trip, so mutual not possibleSony: is the request to actually authenticate before "attaching", then is it message authentication during inventory, or is it an authentication procedure, assumption is it is message authentication, not device auth?IDCC: majority opinion is that mutual authentication is not neededNokia: in RAN2 3step contention leaves room for mutual authenticationE//: re Sony's comment: is it message authentication or entity authentication, ok with one way for inventory only, DCM: key issue and conclusion are not matched, vivo: one way for inventory only is sufficient, too complex to implement mutual authenticationOppo: too much time on this key issue, show of hands? More people supporting one way onlyE//: why move on? Agree to make it more clear about what authentication we mean, it's about entity authentication, Oppo: disagree with message authentication being sufficientchair: can we get to interim conclusion in the documentHuawei: it is only interim conclusions anyways, maybe give control to pen holderE//: KI5 is about entity authentication KI4 is about message authenticationDCM: confusion is coming from use case inventory, rather than what is done for entity authenticationSony: have a different conclusion paper, for device type 1 use implicitly message authentication instead of device authenticationE//: too late to go back to what is the KI about[CC1] |
|    |    | S3‑250045 | Discussion paper on the conclusion on key issue#5  | Huawei, HiSilicon  | pCR  | Approval  |   [Deutsche Telekom] : {Question for clarification}[OPPO] : {suggest to close this threats and continue the discussion on merged baseline S3-250058}Discussion and drafting is to be continued on the merged baseline document S3-250058 thread. |
|    |    | S3‑250033 | Conclusion for KI#5  | ZTE Corporation  | pCR  | Approval  |   [OPPO] : {suggest to close this threats and continue the discussion on merged baseline S3-250058}Discussion and drafting is to be continued on the baseline document S3-250058 thread.[ZTE] : OK to merge and discuss under S3-250058 |
|    |    | S3‑250012 | KI#5, Conclusions  | Sony  | pCR  | Approval  |   [vivo] : {provide wayforward}[Sony] : comments on the wayforward |
|    |    | S3‑250016 | Conclusion to key issue#5  | Lenovo  | pCR  | Approval  |   [vivo] : {provide wayforward}[Lenovo]: provide clarifications[Qualcomm]: asks clarifications and/or revisions before approval[Lenovo]: provides clarification and proposes that 0016 can be considered merged into 0058. |
|    |    | S3‑250074 | pCR to TR33.713 Conclusion#5  | CATT  | pCR  | Approval  |   [Deutsche Telekom] : {Question for clarification}[OPPO] : {suggest to close this threats and continue the discussion on merged baseline S3-250058}Discussion and drafting is to be continued on the baseline document S3-250058 thread.[CATT] : We are ok with the merger plan. Therefore, this thread has been closed and further discussion will be moved to the S3-250058 thread. |
|    |    | S3‑250111 | Conclusion for KI#5 in TR 33.713  | Beijing Xiaomi Mobile Software  | pCR  | Approval  |   [OPPO] : {suggest to close this threats and continue the discussion on merged baseline S3-250058}Discussion and drafting is to be continued on the baseline document S3-250058 thread.[Philips] Closing S3-250111 thread as it is getting merged into S3-250058.[Xiaomi] Closing S3-250111 thread as it is getting merged into S3-250058. |
|    |    | S3‑250127 | KI#5 conclusions  | Philips International B.V.  | pCR  | Approval  |   [vivo] : {provide wayforward}[Philips] Closing S3-250127 thread as it is getting merged into S3-250058. |
|    |    | S3‑250139 | Conclusion for Key Issue#5 AIoT Authentication  | vivo  | pCR  | Approval  |   [OPPO]: propose to NOTE for this meeting.[vivo]: provide clarification.[Thales]: provides comments. |
|    |    | S3‑250046 | conclusion on key issue#4  | Huawei, HiSilicon, OPPO, China Unicom  | pCR  | Approval  |   [Xiaomi]: provide clarification and fine with r2[Huawei]: fine with r2[Qualcomm]: proposes a change before approval[CC1]: 046r3E//: r4 is there, contains what is mandatory to support and what is optional to supportPhilips: same discussion as in the last discussion, Huawei: agree with Philips, bullet 1 is ok for Huawei, but main difference between r3 and r4QC: prefer r3Thales: prefer r4Huawei: remove first sentence of r4try to revise over email[CC1] |
|    |    | S3‑250015 | Conclusion to key issue#4  | Lenovo  | pCR  | Approval  |   [Huawei]: Propose to merge the contribution into S3-250046 and use S3-250046 as baseline.[Lenovo]: agrees to merge the contribution into S3-250046 and use S3-250046 as baseline. |
|    |    | S3‑250032 | Conclusion for KI#4  | ZTE Corporation  | pCR  | Approval  |   [Huawei]: Propose to merge the contribution into S3-250046 and use S3-250046 as baseline.[ZTE] : OK to merge and discuss under S3-250046 |
|    |    | S3‑250073 | pCR to TR33.713 Conclusion#4  | CATT  | pCR  | Approval  |   [Huawei]: Propose to merge the contribution into S3-250046 and use S3-250046 as baseline.[CATT] : We are ok with the merger plan. Therefore, this thread has been closed and further discussion will be moved to the S3-250046 thread. |
|    |    | S3‑250110 | Conclusion for KI#4 in TR 33.713  | Beijing Xiaomi Mobile Software  | pCR  | Approval  |   [Huawei]: Propose to merge the contribution into S3-250046 and use S3-250046 as baseline.[Xiaomi]: Closing S3-250110 thread as it is getting merged into S3-250046. |
|    |    | S3‑250126 | KI#4 conclusions  | Philips International B.V.  | pCR  | Approval  |    |
|    |    | S3‑250138 | Conclusion for Key Issue#4 Information Protection  | vivo  | pCR  | Approval  |   [Qualcomm]: asks clarifications before approval[OPPO]: asks clarifications before approval |
|    |    | S3‑250041 | Conclusion on AIOT KI#3  | OPPO  | pCR  | Approval  |   [OPPO]: Provide revision 2.[OPPO]: Provide revision 3.[Philips] provides clarification and r4[Ericsson]: Requires modification before approval.[Philips] provides r5[OPPO]: Reply to Ericsson and seek clarification. Provides comments to R4 by Philips.[Qualcomm]: provides r6 (that contains proposed changes) before approval[Sony]: provides r7[Ericsson]: comments. Disagrees with making the mechanism optional. Provides revision 8.[Nokia]: provides r8[Nokia]: provides r9 ontop of R7[Sony]: Disagree with r8 and provides r10[Xiaomi]: disagree with r10[Lenovo]: agrees with r10, provides clarifications[Ericsson]: disagrees with r10. |
|    |    | S3‑250011 | KI#3, Conclusions  | Sony  | pCR  | Approval  |   [OPPO]: Propose to merge the contribution into S3-250041.[Sony] : We are ok with the merger plan. Therefore, this thread is closed and further discussion will be moved to the S3-250041 thread. |
|    |    | S3‑250014 | Conclusion to key issue#3  | Lenovo  | pCR  | Approval  |   [OPPO]: Propose to merge the contribution into S3-250041.[Lenovo]: Agrees to merge the contribution into S3-250041. |
|    |    | S3‑250031 | Conclusion for KI#3  | ZTE Corporation  | pCR  | Approval  |   [OPPO]: Propose to merge the contribution into S3-250041.[ZTE] : OK to merge and discuss under S3-250041 |
|    |    | S3‑250072 | pCR to TR33.713 Conclusion#3  | CATT  | pCR  | Approval  |   [OPPO]: Propose to merge the contribution into S3-250041.[CATT] : We are ok with the merger plan. Therefore, this thread is closed and further discussion will be moved to the S3-250041 thread. |
|    |    | S3‑250125 | KI#3 conclusions  | Philips International B.V.  | pCR  | Approval  |   [OPPO]: Propose to merge the contribution into S3-250041.[Philips]: Agree to merge the contribution into S3-250041. |
|    |    | S3‑250075 | Conclusion for KI#2 in TR 33.713  | OPPO, Xiaomi  | pCR  | Approval  |   [OPPO]: provide revision 1[vivo]: r1 is OK.[Sony]: Suggests update to r1.[Nokia]: Nokia supports the proposal by Sony and provides R2 reflecting this change. |
|    |    | S3‑250030 | Conclusion for KI#2  | ZTE Corporation  | pCR  | Approval  |   [OPPO]: Propose to merge S3-250030 into S3-250075[ZTE] : OK to merge and discuss under S3-250075 |
|    |    | S3‑250140 | Conclusion to KI#1  | OPPO  | pCR  | Approval  |   [Nokia] : Proposes to merge into S3-250013.[Ericsson]: Requires modification before approval. |
|    |    | S3‑250013 | Conclusion to key issue#1  | Lenovo  | pCR  | Approval  |   [Deutsche Telekom] : {Question for clarification}[Lenovo] : provides clarification[Deutsche Telekom] : Thanks for the clarification[ZTE] : propose to merge[Lenovo] : provides additional clarification |
|    |    | S3‑250029 | Conclusion for KI#1  | ZTE Corporation  | pCR  | Approval  |   [Nokia] : Proposes to merge into S3-250013.[Ericsson]: Requires modification before approval.[Ericsson]: correct previous comment and proposes to merge with 0013 |
|    |    | S3‑250122 | KI#1 update: Addressing EN  | Philips International B.V.  | pCR  | Approval  |    |
|    |    | S3‑250026 | Update the KI#2 in TR 33.713  | ZTE Corporation  | pCR  | Approval  |    |
|    |    | S3‑250042 | Update AIOT KI#3  | OPPO  | pCR  | Approval  |   [Qualcomm]: asks a clarification and revision before approval[OPPO]: provide clarification |
|    |    | S3‑250027 | Update the KI#3 in TR 33.713  | ZTE Corporation  | pCR  | Approval  |    |
|    |    | S3‑250123 | KI#3 update: Addressing ENs  | Philips International B.V.  | pCR  | Approval  |   [Qualcomm]: proposes a revision before approval.[Philips] provides clarification |
|    |    | S3‑250124 | KI#4 update: Addressing ENs  | Philips International B.V.  | pCR  | Approval  |   [Qualcomm]: proposes a revision before approval.[Philips]: provides clarification |
|    |    | S3‑250134 | Update on Key Issue#6  | vivo  | pCR  | Approval  |   [Huawei]: asks revision before approval and proposes to remove the requirement.[Qualcomm]: asks a revision before approval. |
|    |    | S3‑250024 | Resolving ENs in sol#6 in TR 33.713  | ZTE Corporation  | pCR  | Approval  |    |
|    |    | S3‑250025 | Evaluation for solution 6  | ZTE Corporation  | pCR  | Approval  |   [Thales]: proposes change[ZTE] : Provide R1 |
|    |    | S3‑250044 | addressing the editor's note in solution#4  | Huawei, HiSilicon  | pCR  | Approval  |    |
|    |    | S3‑250054 | Adding evaluation for solution#3  | Apple  | pCR  |    |   [OPPO]: Suggest changes. |
|    |    | S3‑250055 | Update solution#8  | Apple  | pCR  |    |   [Thales]: proposes change |
|    |    | S3‑250056 | Update solution#28  | Apple  | pCR  |    |   [OPPO]: Suggests revision. |
|    |    | S3‑250057 | Update solution#31  | Apple  | pCR  |    |    |
|    |    | S3‑250059 | pCR to TR33.713 Update solution#9 to remove EN  | CATT  | pCR  | Approval  |   [Thales]: proposes change[CATT]: Thales' comment is addressed in r1. |
|    |    | S3‑250067 | Proposal for a resolution to an EN concerning counter synchronisation  | Nokia  | pCR  | Approval  |    |
|    |    | S3‑250068 | Proposal for a resolution of an EN concerning alignment with RAN specifications  | Nokia  | pCR  | Approval  |    |
|    |    | S3‑250069 | Proposal for a resolution to an EN concerning device constrains  | Nokia  | pCR  | Approval  |   [Thales]: proposes change[Nokia]: Propose R1 and requests clarifications.[Qualcomm]: proposes a further change before approval |
|    |    | S3‑250070 | Proposal for a resolution to an EN concerning key identification  | Nokia  | pCR  | Approval  |    |
|    |    | S3‑250076 | pCR to TR33.713 Update solution#30 to remove EN  | CATT  | pCR  | Approval  |   [Thales]: proposes to note the contribution. |
|    |    | S3‑250077 | Resolving ENs for AIoT Security Sol#37  | Xidian, OPPO  | pCR  | Approval  |    |
|    |    | S3‑250078 | Resolving ENs in Solution #42 of TR 33.713  | KPN N.V.  | pCR  |    |   [Interdigital]: Clarification and changes are needed to be approved. |
|    |    | S3‑250092 | Resolving EN in solution #22  | Samsung  | pCR  | Approval  |    |
|    |    | S3‑250093 | Evaluation update for solution#22  | Samsung  | pCR  | Approval  |    |
|    |    | S3‑250094 | Resolving EN in solution #38  | Samsung  | pCR  | Approval  |    |
|    |    | S3‑250095 | Evaluation to solution #38  | Samsung  | pCR  | Approval  |    |
|    |    | S3‑250120 | Solution#1 update: Addressing ENs  | Philips International B.V.  | pCR  | Approval  |    |
|    |    | S3‑250121 | Solution#1 evaluation update  | Philips International B.V.  | pCR  | Approval  |    |
|    |    | S3‑250135 | Sol#10 update  | vivo  | pCR  | Approval  |   [Thales]: proposes change. |
|    |    | S3‑250136 | Sol#40 update  | vivo  | pCR  | Approval  |   [Thales]: proposes change. |
|    |    | S3‑250137 | Sol#41 update  | vivo  | pCR  | Approval  |   [Thales]: proposes change. |
|    |    | S3‑250141 | Solution#3 update  | OPPO  | pCR  | Approval  |    |
|    |    | S3‑250142 | Solution#18 update  | OPPO  | pCR  | Approval  |    |
|    |    | S3‑250143 | Solution#19 update  | OPPO  | pCR  | Approval  |    |
|    |    | S3‑250010 | New KI: Reader Authorization for 5G Ambient IoT Services  | InterDigital, Inc.  | pCR  | Approval  |   [Qualcomm]: asks clarifications and revisions before approval[Nokia]: Support the view of Qualcomm and request further clarification.[Lenovo]: Supports Qualcomm and Nokia view. |
|    |    | S3‑250080 | New key issue for secure storage in AIoT devices  | Ericsson, Thales  | pCR  | Approval  |   [Interdigital]: Requires clarifications.[Qualcomm]: asks clarifications before approval[vivo]: asks clarifications before approval |
|    |    | S3‑250081 | New Key Issue on Amplification of resource exhaustion by exploiting AIoT paging messages  | Ericsson  | pCR  | Approval  |   [Qualcomm]: asks clarifications and/or revision before approval[Huawei]: proposes a way forward to capture but close the issue in the TR[Lenovo]: asks clarifications, disagrees to the KI[Deutsche Telekom]: supports the proposed a way forward (of Huawei) or a modification of the requirement. |
|    |    | S3‑250082 | New key issue for Authenticated and authorized access to devices in Ambient IoT via 3GPP core  | Ericsson  | pCR  | Approval  |   [Qualcomm]: asks clarifications and revisions before approval[vivo]: asks clarifications before approval[Lenovo]: asks clarifications |
|    |    | S3‑250144 | Authorization of external AF for Inventory  | NTT DOCOMO INC.  | pCR  | Approval  | [Qualcomm]: proposes a revision before approval[vivo]: proposes revision before approval |
|    |    | S3‑250145 | KI on attacking via external carrier wave  | NTT DOCOMO INC.  | pCR  |    | Chair: Noted, since the contribution is not aligned with agenda |
|    |    | S3‑250158 | Comments on S3-250145, “KI on attacking via external carrier wave”  | InterDigital, Inc.  | pCR  | Approval  | Chair: Noted, since the contribution is not aligned with agenda |
|    |    | S3‑250060 | pCR to TR33.713 New solution AIoT command message security protection procedure  | CATT  | pCR  | Approval  | Chair: Noted, since the contribution is not aligned with agenda |
|    |    | S3‑250079 | New Solution to KI#5  | Ericsson  | pCR  | Approval  |  Chair: Included in the agenda[Qualcomm]: asks clarifications and/or revision before approval |
|    |    | S3‑250085 | Pseudo-CR on New solution on AIoT privacy  | China mobile  | pCR  |    |  Chair: Noted, since the contribution is not aligned with agenda |
| 5.16  | Study on 5GS enhancements for Energy Saving  | S3‑250049 | Conclusion for KI#1  | Huawei, HiSilicon  | pCR  | Approval  |   [Nokia]: Propose to merge the contribution into S3-250062.[Huawei]: We are ok to merge S3-250049 into S3-250062, though we have comments on S3-250062 and will provide the respective comments in S3-250062 email thread.[Nokia]: Close discussion in this thread and continues in S3-250062. |
|    |    | S3‑250062 | Proposal for a conclusion to KI#1  | Nokia, Deutsche Telekom, BMWK, IIT Bombay  | pCR  | Approval  |   [Ericsson]: S3-250062 requires revision before approval.[Nokia]: Request clarification to comment provided by Ericsson and provide alternative way forward.[Deutsche Telekom]: Comments/update on the alternative way forward[Nokia]: Propose R1 including merge information and the NOTE proposed by Deutsche Telekom.[Ericsson]: r1 requires revision[Nokia]: Provides clarifications[Ericsson]: Provides clarifications[CC1]: 062r1Bo presentsE//: state the EIF is enforcement point, how it is done is not decided yet, inform SA2, as well as CT groups, but need to capture this sentence in SA3, options new spec, new annex to 33.501, or in annex V, not update annex V.Nokia: prefer not to have new specs or new Annexes, so prefer a section in Annex V with a table.chair: document in SA2Nokia: prefer update to annex VHuawei: not in scope of study to update annex V, prefer not to do thischair: what preferredHuawei: prefer separate AnnexNokia: why not considered in scope to add something to the Annex?Huawei: need separate discussion how handling of Annex V looks like.Nokia: need normative text in stage 2E//: Annex V should not be feature level. Could be added to SA2 spec.Nokia: similar to Annex X.7, E//: could also discuss a new placeholder DCM: maybe send LS and take the decision on how to document it in the nesxt meeting.[CC1] |
|    |    | S3‑250128 | Conclusion for KI#1  | Ericsson  | pCR  | Approval  |   [Nokia]: Propose to merge the contribution into S3-250062.[Ericsson]: Ok to merge the document into S3-250062, but S3-250062 requires revision.[Nokia]: Close discussion in this thread and continues in S3-250062. |
|    |    | S3‑250050 | conclusion to KI#2  | Huawei, HiSilicon  | pCR  | Approval  |   [Nokia]: Propose to merge the contribution into S3-250063.[Ericsson]: Propose to merge the contribution into S3-250063 and provides comment on S3-250050.[Huawei]: Acknowledge the Propose merger of S3-250050 into S3-250063 with comments.[Nokia]: Close discussion in this thread and continues in S3-250063. |
|    |    | S3‑250063 | Proposal for a conclusion to KI#2  | Nokia, Deutsche Telekom, IIT Bombay  | pCR  | Approval  |   [Nokia]: Propose r1, The merger of S3-250063 and S3-250129. Including Ericsson as source.[Deutsche Telekom]: fine with r1[Nokia]: Propose r2, The merger of S3-250063 and S3-250050. Including Huawei and HiSilicon as sources. Request further clarification based on comment provided.[Ericsson]: r2 is fine[Huawei]: Respond to S3-250063r2[CC1]: 063r2Nokia: what are the different levels of granularity?Huawei: mostly use existing authentication part, SA2 has defined multiple level of information gathering, single shot authorization won't help, need finer grained control on type of information being requested, QoS, UE, PDU level, Nokia: similar challenges in NWDAF and exposure, E//: NEF authorization issuer and verifier of token is the same, so no interop issue, so it is not needed to specify, support r2Huawei: single shot authorization can not necessarily handle everything, disagree with last sentence, try on email to fix thisNokia: HW could point out what exactly needs to be changed in the specs[CC1] |
|    |    | S3‑250129 | Conclusion for KI#2  | Ericsson  | pCR  | Approval  |   [Nokia]: Propose to merge the contribution into S3-250063.[Ericsson]: Ok to merge the contribution into S3-250063.[Nokia]: Close discussion in this thread and continues in S3-250063. |
|    |    | S3‑250048 | Resolve various EN's for KI#1  | Huawei, HiSilicon  | pCR  | Approval  |   [Nokia]: Propose to merge the contribution into S3-250064.[Nokia]: Close discussion in this thread and continues in S3-250048.[Nokia]: Correction, discussion continues in S3-250064. |
|    |    | S3‑250064 | TR cleanup  | Nokia  | pCR  | Approval  |   [Nokia]: Provides R1 containing the merger.[CC1]: 064r1, no comments |
|    |    | S3‑250065 | Presentation of Report to TSG: TR 33.766, Version 1.0.0  | Nokia  | TS or TR cover  | Information  |  [CC1]: plan is to conclude the TR in the next meeting, please check the cover sheet and let know any comments. |
| 5.18  | Study on security aspects of 5G Mobile Metaverse services  | S3‑250146 | Evaluation for Sol2 Authorization supporting spatial localization service with CCF  | Nokia, Nokia Shanghai Bell  | pCR  | Approval  |    |
|    |    | S3‑250147 | Update Sol3 Authorization supporting spatial localization service with CCF  | Nokia, Nokia Shanghai Bell  | pCR  | Approval  |   [Ericsson]: Requests for clarifications before approval. |
|    |    | S3‑250148 | Update Sol5 Privacy protection during metaverse service discovery  | Nokia, Nokia Shanghai Bell  | pCR  | Approval  |   [Ericsson]: Changes are needed before aproval.[Huawei, HiSilicon]: Revision is needed before aproval. |
|    |    | S3‑250113 | 33.721: Update to Conclusion on Key Issue #2  | Xiaomi EV Technology  | pCR  | Approval  |   [Nokia]: We don't agree to remove the change.[Xiaomi]: provide clarification/response to the comments |
|    |    | S3‑250051 | Update on Solution #6-Digital asset request validation  | Huawei, HiSilicon  | pCR  | Approval  |   [Ericsson]: Proposes changes before approval[Nokia]: Provide comments[Xiaomi]: provide comments and ask questions for clarification |
|    |    | S3‑250088 | [TR 33.721] Update to solution#6  | Samsung  | pCR  | Approval  |   [Ericsson]: Maybe merge with 0051 to make it easier to follow the changes?[Huawei, HiSilicon]: Replies to Ericsson.[Nokia]: Question for clarification.[Samsung]: Provides clarification. Prefers not to merge into 0051 to avoid confusion.[Xiaomi]: provide comments and ask questions for clarification |
|    |    | S3‑250150 | Update Sol8 authenticate and authorize DA client to create a digital asset  | Nokia, Nokia Shanghai Bell  | pCR  | Approval  |   [Ericsson]: Requests for clarifications about the removal of the GPSI as an example |
|    |    | S3‑250151 | Update Sol9 authenticate and authorize DA client to access a digital asset  | Nokia, Nokia Shanghai Bell  | pCR  | Approval  |   [Ericsson]: Requests clarifications before approval. |
|    |    | S3‑250034 | Conclusion for KI#3  | ZTE Corporation  | pCR  | Approval  |   [Ericsson]: Proposes this as a baseline but no strong preference.[ZTE]: OK to merge and use this document as baseline.[Huawei, HiSiliocn]: Fine to merge 0052 into this but with no strong preference for the baseline. Propose some update to the text.[Samsung]: S3-250034 is considered as baseline for conclusion of KI#3.[ZTE]: initial merger document r1 has been uploaded[Xiaomi]: provide comments and ask question for clarification |
|    |    | S3‑250052 | Conclusion to KI#3 in TR 33.721  | Huawei, HiSilicon  | pCR  | Approval  |   [Ericsson]: Proposes to merge this document with other relevant documents, e.g. 0034 but no strong preference for the baseline. Comments on the document.[Huawei, HiSiliocn]: Fine to merge with other relevant tdocs with no strong preference for the baseline. Replies to Ericsson.[Samsung] : Proposes to merge this into S3-250034. Move the discussion under 0034. This thread is closed |
|    |    | S3‑250152 | Conclusion for KI3 Security aspects of digital asset container in 5G  | Nokia, Nokia Shanghai Bell  | pCR  | Approval  |   [Samsung] : Proposes to merge S3-250034 and S3-250052 into S3-250152 and use S3-250152 as baseline for conclusion for key issue#3.[Ericsson] provides comments, proposes another baseline (0034) but no strong preference.[Samsung] : Proposes to merge this into S3-250034. Move the discussion under 0034. This thread is closed. |
|    |    | S3‑250112 | 33.721: Evaluation of Solution 10  | Xiaomi EV Technology  | pCR  | Approval  |   [Nokia]: provide comments |
|    |    | S3‑250149 | Update Sol7 authorize avatar by metaverse service provider  | Nokia, Nokia Shanghai Bell  | pCR  | Approval  |    |
|    |    | S3‑250114 | 33.721: Conclusion on Key Issue #4  | Xiaomi EV Technology  | pCR  | Approval  |   [Samsung] : Proposes to merge S3-250153 into S3-250114 and use S3-250114 as baseline for conclusion for key issue#4.[Ericsson] provides comments, proposes another baseline (0034) but no strong preference.[Ericsson] Withdraws the previous proposal for merging this document with 0034. This comment was meant for another documents.[Xiaomi]: provide merged version in r1[Nokia]: provide r2 for the merged version. |
|    |    | S3‑250153 | Conclusion for KI4 Authentication and authorization of digital representation  | Nokia, Nokia Shanghai Bell  | pCR  | Approval  |    |
| 5.19  | Study on security aspects of CAPIF Phase 3  | S3‑250017 | KI#1.1-Further conclusions on ROF authentication  | Huawei, HiSilicon  | pCR  | Approval  |   [Huawei]: r1 is provided to merge S3-250017, S3-250102, S3-250116, and S3-250160.[Xiaomi]: provides r2 |
|    |    | S3‑250102 | Further conclusion for key issue #1.1  | Ericsson  | pCR  | Approval  |   [Ericsson]: S3-250102 is merged into S3-250017. |
|    |    | S3‑250116 | TR 33.700-22KI#1.1 conclusion update  | Xiaomi communications  | pCR  | Approval  |   [Xiaomi]: merged into S3-250017. |
|    |    | S3‑250160 | KI1.1 ROF authentication conclusion  | Nokia  | pCR  |    |   [Nokia]: merged into S3-250017. |
|    |    | S3‑250018 | KI#1.2-Further conclusions on authorization information  | Huawei, HiSilicon  | pCR  | Approval  |    |
|    |    | S3‑250035 | Update to the conclusion for KI#1.2  | ZTE Corporation  | pCR  | Approval  |    |
|    |    | S3‑250053 | Conclusion on key issue #1.2 in TR 33.700-22  | China Telecom  | pCR  | Approval  |    |
|    |    | S3‑250103 | Further conclusion for key issue #1.2  | Ericsson  | pCR  | Approval  |   [Ericsson]: initial merger document r1 has been uploaded[Xiaomi]: provides r2.[Ericsson]: provides r3 and clarification.[Huawei]: revisions are required, either r1 or r2.Detailed comments are provided in the email thread. |
|    |    | S3‑250101 | Conclusion reformulation for key issue #1.2  | Ericsson  | pCR  | Approval  |   [Ericsson]: S3- 250101 is merged into S3- 250103. |
|    |    | S3‑250117 | TR 33.700-22KI#1.2 conclusion update  | Xiaomi communications  | pCR  | Approval  |   [Xiaomi]: merged into S3-250103. |
|    |    | S3‑250019 | KI#1.3-Further conclusions on granularity  | Huawei, HiSilicon  | pCR  | Approval  |   [Xiaomi ]: Provides comments. |
|    |    | S3‑250118 | TR 33.700-22KI#1.3 conclusion update  | Xiaomi communications  | pCR  | Approval  |   [Xiaomi]: merged into S3-250164. |
|    |    | S3‑250164 | KI1.3 conclusion  | Nokia  | pCR  |    |   [Nokia]: baseline for merger of S3-250019, S3-250118, S3-250164[Nokia]: -r1 uploaded[Xiaomi] provides r2.[Xiaomi] provides comment.[Huawei] provides comments to r1 and r2. |
|    |    | S3‑250036 | Update to the conclusion for KI#2  | ZTE Corporation  | pCR  | Approval  |    |
|    |    | S3‑250039 | Conclusion for KI#2  | China Telecom  | pCR  | Approval  |    |
|    |    | S3‑250087 | Updates to conclusion for key issue#2  | Samsung  | pCR  | Approval  |   [Samsung] : Based on offline call S3-250087 is taken as baseline for conclusion of KI#2. draft\_S3-250087-r1 is available n draft folder for review.[Xiaomi] : provides r2.[Chinatelecom] : provides r3.[ZTE ]: Provide r4.[Lenovo] : Provides r5 to correct clarifications and to align with existing SA6 and SA3 specifications.Asks clarifications with suitable updates for the term learns used in TLS-PSK/PKI conclusions. |
|    |    | S3‑250105 | Further conclusion for key issue #2  | Ericsson  | pCR  | Approval  |   [Ericsson]: S3-250105 is merged into S3-250087. |
|    |    | S3‑250119 | TR 33.700-22KI#2 conclusion update  | Xiaomi communications  | pCR  | Approval  |   [Xiaomi]: merged into S3-250087. |
|    |    | S3‑250165 | KI2 interconnect conclusion  | Nokia  | pCR  |    |   [Nokia]: merged into S3-250087. |
|    |    | S3‑250106 | Conclusion for key issue #3  | Ericsson  | pCR  | Approval  |   [Ericsson]: initial merger document r1 has been uploaded[Xiaomi]: provides comments.[Ericsson]: provides clarification[Lenovo]: The document needs revision before approval. |
|    |    | S3‑250166 | KI3 conclusion  | Nokia  | pCR  |    |   [Nokia]: merged into S3-250106. |
|    |    | S3‑250107 | Conclusion for key issue #4  | Ericsson  | pCR  | Approval  |   [Ericsson]: S3-250107 is merged into S3-250167. |
|    |    | S3‑250167 | KI4 Nested API invocation conclusion  | Nokia  | pCR  |    |   [Nokia]: S3-250167 will be the baseline document for merging S3-250107 and S3-250167.[Nokia]: S3-250167-r1 uploaded.[Xiaomi]: provides comments |
|    |    | S3‑250108 | Conclusion for key issue #5  | Ericsson  | pCR  | Approval  |   [Ericsson]: S3-250108 is merged into S3-250168. |
|    |    | S3‑250168 | KI5 muliple API infovoker same RO conclusion  | Nokia  | pCR  |    |   [Nokia]: S3-250168 will be the baseline document for merging S3-250108 and S3-250168.[Nokia]: -r1 uploaded. Contradicting conclusion needs to be addressed.[Xiaomi]: provide comments. |
|    |    | S3‑250109 | Conclusion for key issue #6  | Ericsson  | pCR  | Approval  |    |
|    |    | S3‑250020 | remove EN for KI#1.1  | Huawei, HiSilicon  | pCR  | Approval  |    |
|    |    | S3‑250021 | remove EN for KI#1.2  | Huawei, HiSilicon  | pCR  | Approval  |    |
|    |    | S3‑250097 | Resolving EN in key issue #1.2  | Ericsson  | pCR  | Approval  |   [Ericsson]: initial merger document r1 has been uploaded[Xiaomi]: provides comments[Huawei]: provides comments[Lenovo]: The document requires revision before approval. |
|    |    | S3‑250022 | remove EN in clause 6.4  | Huawei, HiSilicon  | pCR  | Approval  |    |
|    |    | S3‑250023 | editorial corrections in clauses 6.2 and 6.10  | Huawei, HiSilicon  | pCR  | Approval  |    |
|    |    | S3‑250037 | Updates to Solution#21  | Lenovo  | pCR  | Approval  |    |
|    |    | S3‑250040 | Update sol#17 to resolve EN  | China Telecom  | pCR  | Approval  |    |
|    |    | S3‑250086 | Update to solution#27  | Samsung  | pCR  | Approval  |    |
|    |    | S3‑250098 | Resolving ENs and evaluation of solution #11  | Ericsson  | pCR  | Approval  |   [Lenovo]: Ask clarifications.The document needs revision before approval. |
|    |    | S3‑250099 | Resolving ENs and evaluation of solution #22  | Ericsson  | pCR  | Approval  |    |
|    |    | S3‑250100 | Resolving ENs and evaluation of solution #26  | Ericsson  | pCR  | Approval  |    |
|    |    | S3‑250161 | KI1.1 ROF authentication  | Nokia  | pCR  |    |    |
|    |    | S3‑250038 | Solution to address KI#6  | Lenovo  | pCR  | Approval  |   [Xiaomi]: provides comments. |
|    |    | S3‑250162 | KI1.1 Solution 3 update  | Nokia  | pCR  |    |    |
|    |    | S3‑250163 | KI1.2 EN resolution in solution 7  | Nokia  | pCR  |    |    |
|    |    | S3‑250169 | TR correction  | Nokia  | pCR  |    |    |
|    |    | S3‑250008 | Reply LS on terminology alignment between SA6 and SA3  | S6-245644  | LS in  |    |   [Huawei]: proposes to note it, no action for SA3. |
|    |    | S3‑250115 | Draft CR on TS 33.122  | Xiaomi communications  | draftCR  | Approval  |    |
|    |    | S3‑250096 | New solution for Authorization of API invoker on one UE accessing resources related to another UE  | Ericsson  | pCR  | Approval  |   [Xiaomi]: provides comments. |
|    |    | S3‑250104 | Further conclusion for key issue #1.3  | Ericsson  | pCR  | Approval  |    |