**Third Generation Partnership Project (3GPP™)**

**Meeting Report  
for  
TSG SA WG3  
meeting: 119**

**Orlando, US, 11/11/2024 to 15/11/2024**

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## 1 Agenda and Meeting Objectives

Mike Loushine (AT&T) welcomed the delegates to Orlando on behalf of ATIS.He presented some slides with practical tips.

The attention of the delegates to the meeting of this Technical Specification Group was drawn to the fact that 3GPP Individual Members have the obligation under the IPR Policies of their respective Organizational Partners to inform their respective Organizational Partners of Essential IPRs they become aware of.

The delegates were asked to take note that they were thereby invited:

to investigate whether their organization or any other organization owns IPRs which were, or were likely to become Essential in respect of the work of 3GPP.

to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Information Statement and the Licensing declaration forms.

The attention of the delegates to the meeting was drawn to the fact that 3GPP activities were subject to all applicable antitrust and competition laws and that compliance with said laws was therefore required by any participant of the meeting, including the Chairman and Vice-Chairmen and were invited to seek any clarification needed with their legal counsel. The leadership would conduct the present meeting with impartiality and in the interests of 3GPP.

Delegates were reminded that timely submission of work items in advance of TSG/WG meetings was important to allow for full and fair consideration of such matters.

**S3-244600 Agenda**

*Type: agenda For: (not specified)  
 Source: SA WG3 Chair*

**Discussion:**

It was pointed out that agenda 5.15 needed to be added.

**Decision:** The document was **revised to S3-245134**.

**S3-245134 Agenda**

*Type: agenda For: -  
 Source: SA WG3 Chair*

(Replaces S3-244600)

**Decision:** The document was **approved**.

**S3-244602 Process for SA3#119**

*Type: other For: (not specified)  
 Source: SA WG3 Chair*

**Decision:** The document was **noted**.

**S3-244603 Detailed agenda planning**

*Type: other For: (not specified)  
 Source: SA WG3 Chair*

**Decision:** The document was **revised to S3-245135**.

**S3-245135 Detailed agenda planning**

*Type: other For: -  
 Source: SA WG3 Chair*

(Replaces S3-244603)

**Decision:** The document was **noted**.

## 2 Meeting Reports

### 2.1 Previous SA3 meeting report/s and SA report

**S3-244601 Report from last SA3 meeting**

*Type: report For: (not specified)  
 Source: MCC*

**Discussion:**

Ericsson commented that the January meeting was not confirmed and the number of agenda items either.

**Decision:** The document was **approved**.

### 2.2 SA3-LI Report

Alex Leadbeater (MakethSEcure) gave an update of the last SA3-LI meeting:

SA3-LI last meet in Las Vegas. 29th Oct to 1st Nov.

Focus topics included NTNs, IMS Data and completion of remaining R18 stage 3 open items.

Significant additions to TR 33.929.

A 6G LI workshop has been scheduled for Aug 2025 (likely with support from with ETSI TC LI).

A similar PQTN migration session is being considered for H2 2025.

CRs out for email approval until 15th Nov on SA3 email reflector.

Ericsson: why LI is ahead of SA3 Release-wise?Alex replied that SA3-LI aligns with all the 3 stages including ASN.1. Some parts they are ahead some parts they are behind.

## 3 Reports and Liaisons from other Groups

### 3.1 Reports and Liaisons

**S3-244628 LS on including the HPLMN ID in the PC5 discovery messages for 5G ProSe UE-to-UE relay**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-244647*

**Decision:** The document was **postponed**.

**S3-244961 reply LS on including the HPLMN ID in the PC5 discovery messages for 5G ProSe UE-to-UE relay**

*Type: LS out For: Approval  
 to CT1  
 Source: Qualcomm Incorporated*

**Decision:** The document was **merged**.

**S3-245128 Reply LS on including HPLMN ID in the PC5 discovery messages for 5G ProSe UE-to-UE relay**

*Type: LS out For: Approval  
 to CT1  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-245136**.

**S3-245136 Reply LS on including HPLMN ID in the PC5 discovery messages for 5G ProSe UE-to-UE relay**

*Type: LS out For: Approval  
 to CT1  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-245128)

**Decision:** The document was **noted**.

**S3-245127 Support cleartext HPLMN ID in PC5 U2U relay discovery**

*Type: CR For: Agreement  
 33.503 v18.4.0 CR-0210 Cat: F (Rel-18)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

Qualcomm: this CR is not needed.

Ericsson supported having this CR after some work.

**Decision:** The document was **not pursued**.

**S3-244629 LS on UE behaviour in case of SUCI calculation failure**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-245039*

**Discussion:**

DT: if there is no LTE at all, the user should go to the customer service.This is a very rare case.

Alf (NTT-Docomo): I don’t get this error case.

The Chair asked: For 5G, UE using a NULL scheme to recover from the error at least once? Ericsson, Apple, Verizon, T-Mobile, AT&T, Google, ORANGE, ZTE, Thales, DT,MITRE, BSI, TNO.The Chair asked these companies whether this could be made optional. DT said that this was an UE implementation.

GSMA agreed that this case was rather rare: Besides, if the operator view is better not to risk this, we should probably go that way. As for customer service, new UE will have eSIMs, so this would push the subscription down which is easy to do.

Huawei: this is not error in USIM but a error when the SUCI is transferred.

Vivo: the privacy issue should be a decision made by the user and not the operator. The user can know there is something wrong in the USIM and it’s up to them to decide whether to protect their privacy.

China Mobile: keep the connection even if there are security issues.

ORANGE: some USIM update services are out of scope of 3GPP.

Huawei: dropping the connection is one option, we don’t understand why this should be an UE implementation solution.

Samsung:exposed SUPI is gone if we reprogram it.

BSI: there can be other errors when procisioning the USIM.If there is something wrong we just lose connectivity, that's it.

Thales: this is very rare, no need to have a special handling of this.

The Chair cprposed to respond that reducing the privacy was not agreeable in SA3. How the UE recovers, will not be specified but SA3 may be open for further discussions on that.

Qualcomm: stop using 5G in this case.

**Decision:** The document was **replied to in S3-245137**.

**S3-244711 Discussion paper on SUCI calculation failure**

*Type: discussion For: (not specified)  
 Source: Apple*

**Decision:** The document was **noted**.

**S3-245045 Discussion paper on SUCI calculation failure**

*Type: discussion For: Discussion  
 Source: Samsung*

**Decision:** The document was **noted**.

**S3-244897 Discussion paper on SUCI error handling**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-244949 Discussion on incoming SUCI LS**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Decision:** The document was **noted**.

**S3-244605 Discussion paper for CT1 LS on expected UE behavior on potential SUCI computation failure**

*Type: discussion For: Discussion  
 Source: Deutsche Telekom AG*

**Abstract:**

Discussion paper for CT1 LS on expected UE behavior on potential SUCI computation failure

**Decision:** The document was **noted**.

**S3-244697 Discussion paper on SUCI calculation**

*Type: discussion For: Information  
 Source: Nokia*

**Decision:** The document was **noted**.

**S3-244712 Reply LS to CT1 on UE bahaviour in case of SUCI calculation failure**

*Type: LS out For: (not specified)  
 to CT1, cc CT6  
 Source: Apple*

**Decision:** The document was **merged**.

**S3-244950 Reply LS on UE behaviour in case of SUCI calculation failure**

*Type: LS out For: Approval  
 to CT1, cc CT6  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-245137**.

**S3-245137 Reply LS on UE behaviour in case of SUCI calculation failure**

*Type: LS out For: Approval  
 to CT1,Ct6  
 Source: Qualcomm Incorporated*

(Replaces S3-244950)

**Decision:** The document was **approved**.

**S3-245046 [draft] Reply LS on UE behaviour in case of SUCI calculation failure**

*Type: LS out For: Approval  
 to CT1, cc CT6  
 Source: Samsung*

**Decision:** The document was **merged**.

**S3-244729 Reply LS on UE behaviour in case of SUCI calculation failure**

*Type: LS out For: Approval  
 to CT1, cc CT6  
 Source: vivo*

**Decision:** The document was **merged**.

**S3-244730 UE behaviour in case of SUCI calculation failure**

*Type: CR For: Approval  
 33.501 v19.0.0 CR-2066 Cat: F (Rel-19)  
  
 Source: vivo*

**Decision:** The document was **not pursued**.

**S3-244708 New (mini) WID on SUCI calculation failure alignment**

*Type: WID new For: Approval  
 Source: Nokia*

**Decision:** The document was **noted**.

**S3-244630 Reply LS on Mitigation of Downgrade attacks**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-245048*

**Decision:** The document was **noted**.

**S3-244631 Reply-LS on GSMA CVD-2023-0069 5G Core Network Attacks**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-243671*

**Decision:** The document was **replied to in S3-244845**.

**S3-244845 Reply LS to CT4 on GSMA CVD-2023-0069 5G Core Network Attacks**

*Type: LS out For: Approval  
 to CT4, cc GSMA CVD  
 Source: Huawei, HiSilicon*

**Discussion:**

Nokia: no need to reply if we agree with CT4.

**Decision:** The document was **approved**.

**S3-244632 Reply LS on clarification on home network triggered re-authentication**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-244496*

**Discussion:**

Huawei: we don’t need a CR.

The Chair commented: next meeting will have a reply where we will point out that there is no need for a new TS in SA3.

**Decision:** The document was **postponed**.

**S3-244749 Clarifications for HONTRA procedure with respect to failure cases**

*Type: CR For: Agreement  
 33.501 v18.7.0 CR-2067 Cat: F (Rel-18)  
  
 Source: ZTE*

**Decision:** The document was **not pursued**.

**S3-244750 Clarifications for HONTRA procedure with respect to failure cases**

*Type: CR For: Agreement  
 33.501 v19.0.0 CR-2068 Cat: A (Rel-19)  
  
 Source: ZTE*

**Decision:** The document was **not pursued**.

**S3-244974 Clarification for re-authentication notification response in HONTRA procedure**

*Type: CR For: Agreement  
 33.501 v18.7.0 CR-2078 Cat: F (Rel-18)  
  
 Source: Xiaomi*

**Decision:** The document was **not pursued**.

**S3-244975 Clarification for re-authentication notification response in HONTRA procedure**

*Type: CR For: Agreement  
 33.501 v19.0.0 CR-2079 Cat: A (Rel-19)  
  
 Source: Xiaomi*

**Decision:** The document was **not pursued**.

**S3-245075 HONTRA Error Handling**

*Type: CR For: Agreement  
 33.501 v18.7.0 CR-2084 Cat: F (Rel-18)  
  
 Source: Ericsson*

**Decision:** The document was **not pursued**.

**S3-245076 HONTRA Error Handling**

*Type: CR For: Agreement  
 33.501 v19.0.0 CR-2085 Cat: A (Rel-19)  
  
 Source: Ericsson*

**Decision:** The document was **not pursued**.

**S3-244748 draft - Reply LS on clarification on home network triggered re-authentication**

*Type: LS out For: Approval  
 to CT4  
 Source: ZTE Corporation*

**Decision:** The document was **noted**.

**S3-244973 [Draft] Reply LS on clarification on home network triggered re-authentication**

*Type: LS out For: Approval  
 to CT4  
 Source: Beijing Xiaomi Mobile Software*

**Decision:** The document was **noted**.

**S3-245077 [Draft] Reply LS on clarification on home network triggered re-authentication**

*Type: LS out For: Approval  
 to CT4  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-244633 LS on use of 3gpp-Sbi-Originating-Network-Id for Indirect Network Sharing case**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-244497*

**Decision:** The document was **postponed**.

**S3-244726 Discussion on PLMN ID setting in the 3gpp-Sbi-Originating-Network-Id header in the Indirect Network Sharing case during UE authentication**

*Type: discussion For: Discussion  
 Source: China Unicom, ZTE Corporation*

**Decision:** The document was **noted**.

**S3-244752 Security aspects for Indirect Network Sharing**

*Type: CR For: Agreement  
 33.501 v19.0.0 CR-2069 Cat: F (Rel-19)  
  
 Source: ZTE Corporation*

**Decision:** The document was **not pursued**.

**S3-244727 Reply LS to CT4 on use of 3gpp-Sbi-Originating-Network-Id for Indirect Network Sharing case**

*Type: LS out For: Approval  
 to CT4, cc SA2  
 Source: China Unicom*

**Decision:** The document was **noted**.

**S3-244707 Reply LS to CT4 on use of 3gpp-Sbi-Originating-Network-Id for Indirect Network Sharing case**

*Type: LS out For: Approval  
 to CT4, cc SA2  
 Source: Nokia*

**Decision:** The document was **noted**.

**S3-244751 reply LS to CT4 on use of 3gpp-Sbi-Originating-Network-Id for Indirect Network Sharing case**

*Type: LS out For: Approval  
 to CT4, cc SA2  
 Source: ZTE Corporation*

**Decision:** The document was **noted**.

**S3-244636 LS on AIML data collection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: RP-242389*

**Discussion:**

Ericsson: we prefer Samsung and Qualcomm's proposals.

**Decision:** The document was **replied to in S3-245138**.

**S3-244654 Reply LS on AIML Data Collection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S5-246299*

**Decision:** The document was **noted**.

**S3-244642 Reply LS on AIML data collection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2411191*

**Decision:** The document was **noted**.

**S3-244713 Reply LS on AIML data collection**

*Type: LS out For: (not specified)  
 to RAN, cc TSG SA, WG SA2, WG SA3, WG SA5, RAN 1, RAN 2, RAN 3  
 Source: Apple*

**Decision:** The document was **merged**.

**S3-244728 Reply LS on AIML data collection**

*Type: LS out For: Approval  
 to RAN, RAN2, SA2, cc SA, SA1, SA2, SA5  
 Source: vivo*

**Decision:** The document was **merged**.

**S3-244947 Discussion on RAN plenary LS on AIML**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated*

**Decision:** The document was **noted**.

**S3-244948 Reply LS on AIML data collection**

*Type: LS out For: Approval  
 to RAN, cc SA, SA2, SA3, SA5, RAN1, RAN2, RAN3  
 Source: Qualcomm Incorporated*

**Decision:** The document was **merged**.

**S3-245038 [draft] Reply LS on AIML data collection**

*Type: LS out For: Approval  
 to RAN, cc RAN2, SA, SA1, SA2, SA5  
 Source: Samsung*

**Decision:** The document was **revised to S3-245138**.

**S3-245138 Reply LS on AIML data collection**

*Type: LS out For: Approval  
 to RAN, cc RAN2, SA2,SA, SA1,SA2, SA5  
 Source: Samsung*

(Replaces S3-245038)

**Decision:** The document was **approved**.

**S3-244638 LS Reply to Issues related to Analytics context transfer between AnLF(s)**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2409441*

**Decision:** The document was **postponed**.

**S3-245055 LS reply on Issues related to Analytics context transfer between AnLF(s)**

*Type: LS out For: Approval  
 to SA2  
 Source: Ericsson*

**Discussion:**

CATT didn’t agree with this reply.

Vivo preferred Huawei's answer for question 1.

**Decision:** The document was **noted**.

**S3-244875 Reply LS on Issues related to Analytics context transfer between AnLF(s)**

*Type: LS out For: Approval  
 to SA2  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-244990 Reply LS on Issues related to Analytics context transfer between AnLF(s)**

*Type: LS out For: Approval  
 to SA2  
 Source: CATT*

**Decision:** The document was **noted**.

**S3-244641 LS on security aspects of Ambient IoT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2411049*

**Decision:** The document was **postponed**.

**S3-244800 Reply LS on security aspects of Ambient IoT**

*Type: LS out For: Approval  
 to SA2, cc RAN2  
 Source: OPPO*

**Decision:** The document was **revised to S3-245139**.

**S3-245139 LS on security aspects of Ambient IoT**

*Type: LS out For: Approval  
 to SA2, cc RAN2  
 Source: OPPO*

(Replaces S3-244800)

**Decision:** The document was **approved**.

**S3-244805 [draft] Reply LS to SA2 on on security aspects of Ambient IoT**

*Type: LS out For: Approval  
 to SA2, cc RAN2  
 Source: Sony*

**Abstract:**

Reply to SA2 LS on Privacy Protection

**Decision:** The document was **merged**.

**S3-244803 KI#3 Discussion related to SA2 LS S2-2411049**

*Type: discussion For: Discussion  
 33.713 v..  
 Source: Sony*

**Abstract:**

Discussion related to the SA2 question on Privacy protection

**Decision:** The document was **noted**.

**S3-244861 Discission paper concerning RAN agreements**

*Type: discussion For: Discussion  
 Source: Nokia*

**Discussion:**

Huawei: the original LS was noted.There was no feedback required.

**Decision:** The document was **noted**.

**S3-244864 LS reply to LS on RAN2 agreements and assumptions for Ambient IoT**

*Type: LS out For: Approval  
 to RAN2, cc SA2  
 Source: Nokia*

**Decision:** The document was **noted**.

**S3-244863 LS reply to LS on security aspects of Ambient IoT**

*Type: LS out For: Approval  
 to SA2, cc RAN2  
 Source: Nokia*

**Decision:** The document was **merged**.

**S3-244925 reply LS on security aspects of Ambient IoT**

*Type: LS out For: Approval  
 to SA2, cc RAN2  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-244944 Reply LS on security aspects of Ambient IoT**

*Type: LS out For: Approval  
 to SA2, cc RAN2  
 Source: China Mobile*

**Decision:** The document was **merged**.

**S3-244958 reply LS on security aspects of Ambient IoT**

*Type: LS out For: Approval  
 to SA2  
 Source: Qualcomm Incorporated*

**Decision:** The document was **merged**.

**S3-244967 [Draft] Reply LS on security aspects of Ambient IoT**

*Type: LS out For: Approval  
 to SA2  
 Source: Beijing Xiaomi Mobile Software*

**Decision:** The document was **merged**.

**S3-245012 Draft\_LS reply to LS on security aspects of Ambient IoT**

*Type: LS out For: (not specified)  
 to SA2, cc RAN2  
 Source: Ericsson*

**Decision:** The document was **merged**.

**S3-244643 Reply LS on Clarification regarding definition of 5G NR femto ownership**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2411241*

**Decision:** The document was **noted**.

**S3-244646 LS on enhancement to the protocol stack of IMS Data Channel**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S4-241373*

**Decision:** The document was **replied to in S3-245140**.

**S3-244854 LS on request for IMS Data Channel related clarifications**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: s3i240707*

**Decision:** The document was **noted**.

**S3-244855 Reply LS on enhancement to the protocol stack of IMS Data Channel**

*Type: LS out For: Approval  
 to SA4, cc SA3-LI  
 Source: China Mobile*

**Decision:** The document was **revised to S3-245140**.

**S3-245140 Reply LS on enhancement to the protocol stack of IMS Data Channel**

*Type: LS out For: Approval  
 to SA4, cc SA3-LI,SA2  
 Source: China Mobile*

(Replaces S3-244855)

**Decision:** The document was **approved**.

**S3-245073 IMS Data Channel and LI**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Discussion:**

China Mobile: we need to coordinate with SA4, we cannot solve this alone.

Nokia: SA3,SA4 and SA2 need to work together.

**Decision:** The document was **noted**.

**S3-245074 [Draft] Reply LS on enhancement to the protocol stack of IMS Data Channel**

*Type: LS out For: Approval  
 to SA4, cc SA3-LI  
 Source: Ericsson*

**Decision:** The document was **merged**.

**S3-244650 LS on SA5 MonStra work progress**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S5-246296*

**Decision:** The document was **noted**.

**S3-244651 LS on Clarification related to Internal 5G Core information expose to trusted AF**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-242714*

**Decision:** The document was **replied to in S3-245141**.

**S3-244844 draft reply LS to SA6 Internal 5G Core information expose to trusted AF**

*Type: LS out For: Approval  
 to SA6, cc SA2, CT3, SA5  
 Source: Huawei, HiSilicon*

**Discussion:**

Nokia: not fine with the second answer.

**Decision:** The document was **revised to S3-245141**.

**S3-245141 Reply LS to SA6 Internal 5G Core information expose to trusted AF**

*Type: LS out For: Approval  
 to SA6, cc SA2, CT3, SA5  
 Source: Huawei, HiSilicon*

(Replaces S3-244844)

**Decision:** The document was **approved**.

**S3-244607 TCG progress - report from TCG rapporteur**

*Type: report For: Information  
 Source: InterDigital Belgium. LLC*

**Abstract:**

This contribution provides a brief incremental summary of the progress in TCG Working Groups as of November 2024.

**Decision:** The document was **noted**.

**S3-244634 LS on PWS support for NB-IoT NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2409243*

**Decision:** The document was **noted**.

**S3-244635 Response LS on Newly published data channel GSMA PRD TS.66**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R5-245464*

**Decision:** The document was **noted**.

**S3-244637 LS on Completion of 5WWC\_Ph2 (R18) work**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2409022*

**Decision:** The document was **noted**.

**S3-244639 Reply LS on LCS user plane connection binding to the UE**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2409544*

**Decision:** The document was **noted**.

**S3-244640 Further LS Reply on Internal 5G Core information expose to trusted AF**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2410813*

**Decision:** The document was **noted**.

**S3-244644 Reply to Reply LS on CEN's requirements for eCall over IMS**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2411246*

**Decision:** The document was **noted**.

**S3-244647 LS Reply on Newly Published data channel GSMA PRD TS.66**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S4-241684*

**Decision:** The document was **noted**.

**S3-244648 LS reply to IETF Traffic Engineering Architecture and Signaling Working Group on ""A Realization of Network Slices for 5G Networks Using Current IP/MPLS Technologies""**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S5-244662*

**Decision:** The document was **noted**.

**S3-244649 LS Reply on Internal 5G Core information expose to trusted AF**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S5-245162*

**Decision:** The document was **noted**.

**S3-244652 LS on SA6 Answer to GSMA LS on Newly published data channel GSMA PRD TS.66**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-243763*

**Decision:** The document was **noted**.

**S3-244653 Reply LS on Newly published data channel GSMA PRD TS.66**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: SP-241404*

**Decision:** The document was **noted**.

**S3-244627 LS to 3GPP CT4 on recursively defined JSON structures and reply to LS C4-241343**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: GSMA*

**Decision:** The document was **noted**.

**S3-244850 RCS lawful intercept requirements**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: s3i240708*

**Decision:** The document was **noted**.

**S3-244851 Reply LS on UE-Satellite-UE Communication Architectures**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: s3i240752*

**Decision:** The document was **noted**.

**S3-245133 LS on draft-ietf-raw-technologies, "Reliable and Available Wireless Technologies**

*Type: LS in For: discussion  
 Original outgoing LS: -, to -, cc -  
 Source: IETF*

**Discussion:**

It was commented that comments could be gathered in the IETF mail list.Huawei asked to keep it open to have more time to see it.

**Decision:** The document was **noted**.

### 3.2 Follow up topics from LSs

**S3-244619 Coverpage for TR Skeleton for 3GPP Cryprographic Inventory**

*Type: other For: (not specified)  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Brief description of document content.

**Decision:** The document was **noted**.

**S3-244620 Scope of TR on 3GPP cryptographic inventory**

*Type: other For: (not specified)  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Brief description of document content.

**Decision:** The document was **noted**.

**S3-244846 Inventory of protocols and algorithms for PQC migration**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-244621 Technical Content for 3GPP Cryptographic Inventory**

*Type: other For: (not specified)  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Brief description of document content.

**Decision:** The document was **revised to S3-245362**.

**S3-245362 Technical Content for 3GPP Cryptographic Inventory**

*Type: other For: -  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-244621)

**Decision:** The document was **noted**.

**S3-244847 Analysis of GSMA PQC guidelines related to SA3 specifications**

*Type: discussion For: Information  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-244927 Input to SA for Reply LS on clarifications on consent management**

*Type: LS out For: (not specified)  
 to SA, cc SA2,SA6,CT3,CT4  
 Source: Nokia*

**Decision:** The document was **revised to S3-245363**.

**S3-245363 Input to SA for Reply LS on clarifications on consent management**

*Type: LS out For: -  
 to SA  
 Source: Nokia*

(Replaces S3-244927)

**Decision:** The document was **approved**.

## 4 Work areas

### 4.1 Maintenance (Rel-15/16/17/18)

#### 4.1.1 Security Assurance

**S3-244623 Discussion on SCAS for Containerized applications**

*Type: discussion For: (not specified)  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Brief description of document content.

**Discussion:**

Huawei considered that ETSI NFV SEC was a more appropriate group for this.

Ericsson supported this document. BSI also supported it.

**Decision:** The document was **noted**.

**S3-244660 Clarification on TC\_BVT\_PORT\_SCANNING**

*Type: draftCR For: (not specified)  
 33.117 v18.3.0  
 Source: BSI (DE)*

**Discussion:**

This was kept open to be discussed with Ericsson.

Nokia didn’t agree with this as it seemed out of scope of the SCAS procedure.

**Decision:** The document was **noted**.

**S3-244661 Add UDM SCAS test case for checking the authentication verification of a synchronization failure message**

*Type: other For: (not specified)  
 33.514 v..  
 Source: BSI (DE)*

**Discussion:**

This was kept open, Huawei, Ericsson and Nokia needed more time.

**Decision:** The document was **noted**.

**S3-244662 Living Document to TS 33.518 NRF SCAS**

*Type: draftCR For: (not specified)  
 33.518 v18.0.0  
 Source: BSI (DE)*

**Decision:** The document was **revised to S3-245364**.

**S3-245364 Living Document to TS 33.518 NRF SCAS**

*Type: draftCR For: -  
 33.518 v18.0.0  
 Source: BSI (DE)*

(Replaces S3-244662)

**Decision:** The document was **approved**.

**S3-244663 Add threat description about the implications of the AUSF confirming an authentication with the SUPI while the authentication was started with the SUCI**

*Type: other For: (not specified)  
 33.926 v..  
 Source: BSI (DE)*

**Discussion:**

Kept open, concerns from Nokia,Ericsson and Huawei.

No final agreement, it was noted.

**Decision:** The document was **noted**.

**S3-244664 Add test case TC\_AUSF\_CONFIRMATION\_WITH\_SUPI that check whether the AUSF is vulnerable to a confirmation attack**

*Type: draftCR For: (not specified)  
 33.516 v18.0.0  
 Source: BSI (DE), Radix Security*

**Decision:** The document was **noted**.

**S3-244665 Add threat description about the implications of the AUSF not validating RES\* correctly**

*Type: other For: (not specified)  
 33.926 v..  
 Source: BSI (DE)*

**Decision:** The document was **noted**.

**S3-244666 Add test case that verifies if the AUSF processes RES\* failures correctly**

*Type: draftCR For: (not specified)  
 33.516 v18.0.0  
 Source: BSI (DE), Radix Security*

**Decision:** The document was **noted**.

**S3-244667 Correction and clarification of TC\_AMF\_NAS\_INTEGRITY\_FAILURE**

*Type: draftCR For: (not specified)  
 33.512 v18.2.0  
 Source: BSI (DE)*

**Discussion:**

MCC: remove the use of "must".

**Decision:** The document was **revised to S3-245328**.

**S3-245328 Correction and clarification of TC\_AMF\_NAS\_INTEGRITY\_FAILURE**

*Type: draftCR For: -  
 33.512 v18.2.0  
 Source: BSI (DE)*

(Replaces S3-244667)

**Decision:** The document was **noted**.

**S3-244685 MnF User session timeout**

*Type: draftCR For: Approval  
 33.526 v18.1.0  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

Clarified the applicability of the test case. The test case is applicable, but the clause related with he maximum lifetime is not.

**Discussion:**

Huawei didn’t agree with the change, maybe a note could be added instead.

Nokia commented that this could be reworded to simplify it.

**Decision:** The document was **noted**.

**S3-245329 MnF User session timeout**

*Type: draftCR For: Approval  
 33.526 v18.1.0  
 Source: Keysight Technologies UK Ltd*

**Decision:** The document was **withdrawn**.

**S3-245062 Remove normative language from test cases**

*Type: draftCR For: Approval  
 33.117 v18.3.0  
 Source: Keysight Technologies UK Ltd*

**Decision:** The document was **approved**.

#### 4.1.2 Service Based Architecture

**S3-245006 Discussion on the NF consumer PLMN ID check**

*Type: discussion For: (not specified)  
 Source: Ericsson*

**Discussion:**

BSI: is this the only option?

Huawei didn’t agree with this.

**Decision:** The document was **noted**.

**S3-245007 Checking PLMNID of NF Service Consumer in interconnect scenario**

*Type: CR For: (not specified)  
 33.501 v17.14.0 CR-2080 Cat: F (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **not pursued**.

**S3-245008 Checking PLMNID of NF Service Consumer in interconnect scenario**

*Type: CR For: (not specified)  
 33.501 v18.7.0 CR-2081 Cat: A (Rel-18)  
  
 Source: Ericsson*

**Decision:** The document was **not pursued**.

**S3-245009 Checking PLMNID of NF Service Consumer in interconnect scenario**

*Type: CR For: (not specified)  
 33.501 v19.0.0 CR-2082 Cat: A (Rel-19)  
  
 Source: Ericsson*

**Decision:** The document was **not pursued**.

**S3-245010 Draft\_LS on Checking PLMNID of NFc in interconnect scenario**

*Type: LS out For: (not specified)  
 to CT4, cc CT3  
 Source: Ericsson*

**Decision:** The document was **noted**.

#### 4.1.3 Security Aspects of Proximity based services in 5GS ProSe

**S3-244879 Update to TS 33.503 to fix the referred clause and table of services**

*Type: CR For: Agreement  
 33.503 v17.9.0 CR-0208 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **agreed**.

**S3-244880 Update to TS 33.503 to fix the referred clause and table of services - Mirror**

*Type: CR For: Agreement  
 33.503 v18.4.0 CR-0209 Cat: A (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **agreed**.

#### 4.1.4 Mission Critical

#### 4.1.5 Authentication and key management for applications based on 3GPP credential in 5G

**S3-244904 Notification about AKMA service disabling via NEF**

*Type: CR For: Agreement  
 33.535 v18.5.0 CR-0221 Cat: F (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

Kept open. Ericsson had issues.

**Decision:** The document was **not pursued**.

**S3-245279 Notification about AKMA service disabling via NEF**

*Type: CR For: Agreement  
 33.535 v18.5.0 CR-0221 rev 1 Cat: F (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **withdrawn**.

**S3-244905 Correction to AAnF response without UE Identity**

*Type: CR For: Agreement  
 33.535 v18.5.0 CR-0222 Cat: F (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **agreed**.

#### 4.1.6 Enhancements to User Plane Integrity Protection Support in 5GS

#### 4.1.7 Security Aspects of Enhancements for 5G Multicast-Broadcast Services

#### 4.1.8 Security for enhanced support of Industrial IoT

#### 4.1.9 Security Aspects of eNPN

**S3-244867 Redundant text in Annex I.**

*Type: CR For: Approval  
 33.501 v18.7.0 CR-2072 Cat: F (Rel-18)  
  
 Source: Nokia*

**Discussion:**

Huawei: this is clearly editorial, it should be D.

MCC: cat-D not allowed in Rel-18 anymore.

It was decided to do it only in Rel-19.

**Decision:** The document was **not pursued**.

**S3-244868 Redundant text in Annex I.**

*Type: CR For: Approval  
 33.501 v19.0.0 CR-2073 Cat: F (Rel-19)  
  
 Source: Nokia*

**Decision:** The document was **revised to S3-245146**.

**S3-245146 Redundant text in Annex I.**

*Type: CR For: Approval  
 33.501 v19.0.0 CR-2073 rev 1 Cat: D (Rel-19)  
  
 Source: Nokia*

(Replaces S3-244868)

**Decision:** The document was **agreed**.

**S3-244915 Corrections to Nudm\_UEAuthentication\_ResultConfirmation**

*Type: CR For: Agreement  
 33.501 v18.7.0 CR-2075 Cat: F (Rel-18)  
  
 Source: Ericsson*

**Abstract:**

Adding NSWO indicator as optional input to Nudm\_UEAuthentication\_ResultConfirmation service operation.

**Decision:** The document was **agreed**.

**S3-244917 Corrections to Nudm\_UEAuthentication\_ResultConfirmation**

*Type: CR For: Agreement  
 33.501 v19.0.0 CR-2076 Cat: A (Rel-19)  
  
 Source: Ericsson*

**Abstract:**

Adding NSWO indicator as optional input to Nudm\_UEAuthentication\_ResultConfirmation service operation.

**Decision:** The document was **agreed**.

#### 4.1.10 Security Aspects of Enhancement of Support for Edge Computing in 5GC

#### 4.1.11 Security aspects of Uncrewed Aerial Systems

#### 4.1.12 Security Aspects of Ranging Based Services and Sidelink Positioning

**S3-244979 Terminology Alignment and Consistency for Target UE**

*Type: CR For: Approval  
 33.533 v18.4.0 CR-0077 Cat: F (Rel-18)  
  
 Source: Xiaomi*

**Decision:** The document was **agreed**.

#### 4.1.13 Security Aspects of eNA.

#### 4.1.14 Modified PRINS for roaming service providers in 5G

**S3-244668 Trust anchoring for N32-f/PRINS**

*Type: CR For: Approval  
 33.501 v19.0.0 CR-2053 Cat: F (Rel-19)  
  
 Source: BSI (DE), Nokia, Nokia Shanghai Bell*

**Abstract:**

Specify trust anchoring for N32-f/PRINS as well as PLMN-ID crosschecks for N32-f (both TLS and PRINS).

**Decision:** The document was **revised to S3-245147**.

**S3-245147 Trust anchoring for N32-f/PRINS**

*Type: CR For: Approval  
 33.501 v19.0.0 CR-2053 rev 1 Cat: F (Rel-19)  
  
 Source: BSI (DE), Nokia, Nokia Shanghai Bell*

(Replaces S3-244668)

**Decision:** The document was **agreed**.

#### 4.1.15 All other maintenance topics (not listed above)

**S3-244692 Discussion paper reauthentication via untrusted non 3GPP access**

*Type: discussion For: Information  
 33.501 v..  
 Source: Nokia*

**Decision:** The document was **noted**.

**S3-244693 Reauthentication aspect for IPSec in non 3GPP access**

*Type: CR For: Agreement  
 33.501 v18.7.0 CR-2054 Cat: F (Rel-18)  
  
 Source: Nokia*

**Discussion:**

Huawei: only Rel-19 is needed, otherwise we go back to Rel-15.

Ericsson: no need to specify this.

**Decision:** The document was **not pursued**.

**S3-244694 Reauthentication aspect for IPSec in non 3GPP access**

*Type: CR For: Agreement  
 33.501 v19.0.0 CR-2055 Cat: F (Rel-19)  
  
 Source: Nokia*

**Decision:** The document was **revised to S3-245143**.

**S3-245143 Reauthentication aspect for IPSec in non 3GPP access**

*Type: CR For: Agreement  
 33.501 v19.0.0 CR-2055 rev 1 Cat: F (Rel-19)  
  
 Source: Nokia*

(Replaces S3-244694)

**Decision:** The document was **agreed**.

**S3-244695 Discussion paper of UPU implementation gaps**

*Type: discussion For: Information  
 33.501 v..  
 Source: Nokia*

**Decision:** The document was **noted**.

**S3-244696 Enhancement in UPU procedure to protect UPU header**

*Type: CR For: Agreement  
 33.501 v18.7.0 CR-2056 Cat: F (Rel-18)  
  
 Source: Nokia*

**Discussion:**

To be discussed offline before next meeting.

**Decision:** The document was **not pursued**.

**S3-244698 NSWO AN and SNN related update**

*Type: CR For: Agreement  
 33.501 v18.7.0 CR-2057 Cat: F (Rel-18)  
  
 Source: Nokia*

**Discussion:**

Nokia: this starts in Rel-17, though,

Huawei didn’t agree with this CR.This causes to have two IE, it is not a clarification but a new feature. Rel-17 is frozen.

**Decision:** The document was **not pursued**.

**S3-244699 NSWO AN and SNN related update**

*Type: CR For: Agreement  
 33.501 v19.0.0 CR-2058 Cat: A (Rel-19)  
  
 Source: Nokia*

**Decision:** The document was **not pursued**.

**S3-244700 Kamf definition alignment for NAS count**

*Type: CR For: Agreement  
 33.501 v16.18.0 CR-2059 Cat: F (Rel-16)  
  
 Source: Nokia*

**Discussion:**

Ericsson: not needed. Huawei also thought this wasn't needed.

**Decision:** The document was **not pursued**.

**S3-244701 Kamf definition alignment for NAS count**

*Type: CR For: Agreement  
 33.501 v17.14.0 CR-2060 Cat: A (Rel-17)  
  
 Source: Nokia*

**Decision:** The document was **not pursued**.

**S3-244702 Kamf definition alignment for NAS count**

*Type: CR For: Agreement  
 33.501 v18.7.0 CR-2061 Cat: A (Rel-18)  
  
 Source: Nokia*

**Decision:** The document was **not pursued**.

**S3-244703 Kamf definition alignment for NAS count**

*Type: CR For: Agreement  
 33.501 v19.0.0 CR-2062 Cat: A (Rel-19)  
  
 Source: Nokia*

**Decision:** The document was **not pursued**.

**S3-244704 Home control for NSWO**

*Type: CR For: Agreement  
 33.501 v18.7.0 CR-2063 Cat: F (Rel-18)  
  
 Source: Nokia*

**Discussion:**

Huawei: note is not needed. Step 16 is saying exactly the same thing. Ericsson had the same comment.

**Decision:** The document was **not pursued**.

**S3-244705 Home control for NSWO**

*Type: CR For: Agreement  
 33.501 v19.0.0 CR-2064 Cat: A (Rel-19)  
  
 Source: Nokia*

**Decision:** The document was **not pursued**.

**S3-244706 AUSF requirement for the case of Indirect Network Sharing:**

*Type: CR For: Approval  
 33.501 v19.0.0 CR-2065 Cat: F (Rel-19)  
  
 Source: Nokia*

**Discussion:**

Discussions were postponed for the next meeting.

**Decision:** The document was **not pursued**.

**S3-244716 SERP - Discussion paper**

*Type: discussion For: (not specified)  
 Source: Apple*

**Discussion:**

Nokia: not acceptable.

Qualcomm: we didn’t support this when we planned Rel-19 back in Chicago, so we still don’t support this.

**Decision:** The document was **noted**.

**S3-244717 SERP - revised WID**

*Type: WID new For: (not specified)  
 Source: Apple*

**Discussion:**

Qualcomm didn’t support this. Apple pointed out that there was only one company objecting this.

Nokia didn’t support this contribution.

Ericsson supported this contribution.

**Decision:** The document was **noted**.

**S3-244718 SERP - CR on security protection on RRCResumeRequest message**

*Type: draftCR For: (not specified)  
 33.501 v19.0.0  
 Source: Ericsson, Apple*

**Decision:** The document was **noted**.

**S3-244719 SERP - LS to RAN on SERP**

*Type: LS out For: (not specified)  
 to RAN 2, RAN 3  
 Source: Apple*

**Decision:** The document was **noted**.

**S3-244804 Proposal for changing the description of SN counter in SCPAC**

*Type: CR For: (not specified)  
 33.501 v19.0.0 CR-2070 Cat: F (Rel-19)  
  
 Source: Apple Computer Trading Co. Ltd*

**Discussion:**

Nokia didn’t agree: this is changing the meaning of the requirement, it is not editorial.

**Decision:** The document was **not pursued**.

**S3-244807 Removing MRF from IMS data channel architecture**

*Type: CR For: Approval  
 33.328 v18.2.0 CR-0080 Cat: F (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **agreed**.

**S3-244876 Discussion Paper for using MPQUIC in ATSSS scenario**

*Type: discussion For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-244877 Update to MPQUIC TLS Annex**

*Type: CR For: Approval  
 33.501 v18.7.0 CR-2074 Cat: F (Rel-18)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

Intel didn’t agree with this.Ericsson didn’t agree either.

Nokia: this is a note, hence informative.We support the CR.

CableLabs agreed with the CR.

NTT-Docomo: too early to put this note, this needs to be studied with a SID. Huawei clarified that it's an option to improve the performance.

**Decision:** The document was **not pursued**.

**S3-244989 Adding initial trust in CMPv2 initialization request**

*Type: CR For: (not specified)  
 33.310 v18.5.0 CR-0205 Cat: F (Rel-18)  
  
 Source: Nokia*

**Decision:** The document was **revised to S3-245144**.

**S3-245144 Adding initial trust in CMPv2 initialization request**

*Type: CR For: -  
 33.310 v18.5.0 CR-0205 rev 1 Cat: F (Rel-18)  
  
 Source: Nokia*

(Replaces S3-244989)

**Decision:** The document was **agreed**.

**S3-244992 Adding initial trust in CMPv2 initialization request**

*Type: CR For: (not specified)  
 33.310 v19.2.0 CR-0206 Cat: A (Rel-19)  
  
 Source: Nokia*

**Decision:** The document was **revised to S3-245145**.

**S3-245145 Adding initial trust in CMPv2 initialization request**

*Type: CR For: -  
 33.310 v19.2.0 CR-0206 rev 1 Cat: A (Rel-19)  
  
 Source: Nokia*

(Replaces S3-244992)

**Decision:** The document was **agreed**.

### 4.2 WID on 5G Security Assurance Specification (SCAS) for the Unified Data Repository (UDR).

**S3-244792 Add specific UDR SCAS test cases for TS 33.530**

*Type: pCR For: Approval  
 33.530 v0.1.0  
 Source: BSI (DE)*

(Replaces S3-244310)

**Discussion:**

Nokia didn’t agree: how to test these requiirements?

This was kept open.

**Decision:** The document was **revised to S3-245275**.

**S3-245275 Add specific UDR SCAS test cases for TS 33.530**

*Type: pCR For: Approval  
 33.530 v0.1.0  
 Source: BSI (DE)*

(Replaces S3-244792)

**Decision:** The document was **approved**.

**S3-244793 Cover Sheet for TS 33.530 SCAS\_5G\_UDR**

*Type: TS or TR cover For: Agreement  
 33.530 v0.1.0  
 Source: BSI (DE)*

**Abstract:**

TS 33.530 Cover Sheet for 3GPP TSG-SA #106 plenary

**Decision:** The document was **approved**.

**S3-245330 Draft TS 33.530**

*Type: draft TS For: Approval  
 33.530 v0.2.0  
 Source: BSI*

**Decision:** The document was **eapproved**.

### 4.3 WID on SCAS for Rel-18 features on existing functions.

### 4.4 WID on 5G Security Assurance Specification (SCAS) for the Short Message Service Function (SMSF).

### 4.5 WID on Addition of 256-bit security Algorithms.

### 4.6 WID on mission critical security enhancements for release 19

**S3-244655 [33.180] Additions to access token for recording authorization**

*Type: CR For: Agreement  
 33.180 v18.1.0 CR-0214 Cat: B (Rel-19)  
  
 Source: Motorola Solutions, Airbus*

**Abstract:**

Add recording authorizations to the access token

**Discussion:**

Nokia was fine with this.

**Decision:** The document was **revised to S3-245148**.

**S3-245148 [33.180] Additions to access token for recording authorization**

*Type: CR For: Agreement  
 33.180 v18.1.0 CR-0214 rev 1 Cat: B (Rel-19)  
  
 Source: Motorola Solutions, Airbus*

(Replaces S3-244655)

**Decision:** The document was **agreed**.

**S3-244906 [33.180] MCRec ID Introduction**

*Type: CR For: Decision  
 33.180 v18.1.0 CR-0215 Cat: B (Rel-19)  
  
 Source: Airbus*

**Abstract:**

Introducing MCRec ID for the ID Token and Access Token.

**Decision:** The document was **revised to S3-245149**.

**S3-245149 [33.180] MCRec ID Introduction**

*Type: CR For: Decision  
 33.180 v18.1.0 CR-0215 rev 1 Cat: B (Rel-19)  
  
 Source: Airbus*

(Replaces S3-244906)

**Decision:** The document was **agreed**.

### 4.7 WID on Addition of Milenage-256 algorithm

**S3-245101 TR 35.937 skeleton**

*Type: draft TR For: Approval  
 35.937 v0.0.0  
 Source: THALES*

**Abstract:**

TR 35.937 skeleton

**Decision:** The document was **approved**.

**S3-245102 Changes to TS 35.234**

*Type: pCR For: Approval  
 35.234 v0.2.0  
 Source: THALES*

**Abstract:**

Changes to TS 35.234

**Decision:** The document was **approved**.

**S3-245103 Changes to TS 35.235**

*Type: pCR For: Approval  
 35.235 v0.2.0  
 Source: THALES*

**Abstract:**

Changes to TS 35.235

**Decision:** The document was **approved**.

**S3-245104 Content for TS 35.236**

*Type: pCR For: Approval  
 35.236 v0.2.0  
 Source: THALES*

**Abstract:**

Content for TS 35.236

**Decision:** The document was **approved**.

**S3-245105 Content for TR 35.937**

*Type: pCR For: Approval  
 35.937 v1.0.0  
 Source: THALES*

**Abstract:**

Content for TR 35.937

**Discussion:**

MCC: remove references to ETSI SAGE.

Some style corrections and 3GPP drafting rules compliance was needed here.

The changes will be incorporated into the draft specifications.

**Decision:** The document was **approved**.

**S3-245154 Draft TS 35.234**

*Type: draft TS For: discussion  
 35.234 v0.3.0  
 Source: Thales*

**Decision:** The document was **approved**.

**S3-245155 Draft TS 35.235**

*Type: draft TS For: discussion  
 35.235 v0.3.0  
 Source: Thales*

**Decision:** The document was **approved**.

**S3-245156 Draft TS 35.236**

*Type: draft TS For: discussion  
 35.236 v0.3.0  
 Source: Thales*

**Decision:** The document was **approved**.

**S3-245157 Draft TR 35.937**

*Type: draft TR For: discussion  
 35.937 v0.1.0  
 Source: Thales*

**Decision:** The document was **approved**.

**S3-245293 Cover sheet draft TR 35.234**

*Type: TS or TR cover For: Approval  
 35.234 v..  
 Source: Thales*

**Decision:** The document was **approved**.

**S3-245294 Cover sheet draft TR 35.235**

*Type: TS or TR cover For: discussion  
 35.235 v..  
 Source: Thales*

**Decision:** The document was **approved**.

**S3-245295 Cover sheet draft TR 35.236**

*Type: TS or TR cover For: discussion  
 35.236 v..  
 Source: Thales*

**Decision:** The document was **approved**.

**S3-245331 Cover sheet TR 35.937**

*Type: TS or TR cover For: discussion  
 35.937 v..  
 Source: Thales*

**Decision:** The document was **approved**.

### 4.8 WID on 3GPP profiles for cryptographic algorithms and security protocols

**S3-245019 Living document for CryptoSP: draftCR to TS 33.501, Updates to cryptographic profiles**

*Type: draftCR For: (not specified)  
 33.501 v19.0.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

**S3-245150 Updates to cryptographic profiles**

*Type: CR For: -  
 33.501 v19.0.0 CR-2087 Cat: B (Rel-19)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Discussion:**

Changes on the cover sheet to remove reference to

**Decision:** The document was **agreed**.

**S3-245020 Living document for CryptoSP: draftCR to TS 33.210, Updates to cryprographic profiles**

*Type: draftCR For: (not specified)  
 33.210 v18.1.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

**S3-245151 Updates to cryprographic profiles**

*Type: CR For: -  
 33.210 v18.1.0 CR-0084 Cat: B (Rel-19)  
  
 Source: Ericsson, Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

**Decision:** The document was **agreed**.

**S3-245021 Living document for CryptoSP: draftCR to TS 33.310, Updates to cryptographic profiles**

*Type: draftCR For: (not specified)  
 33.310 v19.2.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

**S3-245152 Updates to cryptographic profiles**

*Type: CR For: -  
 33.310 v19.2.0 CR-0207 Cat: B (Rel-19)  
  
 Source: Huawei, HiSilicon, Ericsson*

**Discussion:**

Cover sheet changes,

**Decision:** The document was **agreed**.

**S3-245022 Living document for CryptoSP: draftCR to TS 33.203, Updates to cryptographic profiles**

*Type: draftCR For: (not specified)  
 33.203 v18.1.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

**S3-245153 Updates to cryptographic profiles**

*Type: CR For: -  
 33.203 v18.1.0 CR-0284 Cat: B (Rel-19)  
  
 Source: Deutsche Telekom AG, Huawei, HiSilicon, Ericsson*

**Decision:** The document was **agreed**.

### 4.9 WID on security aspects of the 5GMSG Service phase 3

### 4.10 R19 SCAS WID

**S3-244893 Draft CR TS 33.511**

*Type: draftCR For: Approval  
 33.511 v18.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **approved**.

**S3-244894 Draft CR TS 33.117**

*Type: draftCR For: Approval  
 33.117 v18.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245332**.

**S3-245332 Draft CR TS 33.117**

*Type: draftCR For: Approval  
 33.117 v18.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244894)

**Decision:** The document was **approved**.

**S3-244895 Draft CR TR33.926**

*Type: draftCR For: Approval  
 33.926 v19.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245333**.

**S3-245333 Draft CR TR33.926**

*Type: draftCR For: Approval  
 33.926 v19.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244895)

**Decision:** The document was **approved**.

**S3-244896 Draft CR TS 33.514**

*Type: draftCR For: Approval  
 33.514 v18.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **approved**.

**S3-244952 Certificate threats for split gNB**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-245158**.

**S3-245158 Certificate threats for split gNB**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

(Replaces S3-244952)

**Decision:** The document was **approved**.

**S3-244953 Adding certificate handling tests to SCAS for split gNB**

*Type: CR For: Approval  
 33.523 v18.2.0 CR-0009 Cat: B (Rel-19)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-245093**.

**S3-245093 Adding certificate handling tests to SCAS for split gNB**

*Type: CR For: Approval  
 33.523 v18.2.0 CR-0009 rev 1 Cat: B (Rel-19)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-244953)

**Decision:** The document was **revised to S3-245159**.

**S3-245159 Adding certificate handling tests to SCAS for split gNB**

*Type: CR For: Approval  
 33.523 v18.2.0 CR-0009 rev 2 Cat: B (Rel-19)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-245093)

**Decision:** The document was **agreed**.

**S3-245358 Adding certificate test cases to TS 33.511**

*Type: CR For: Agreement  
 33.511 v18.3.0 CR-0072 Cat: B (Rel-19)  
  
 Source: Huawei; HiSilicon, CAICT, CTCC, Nokia*

**Decision:** The document was **agreed**.

**S3-245359 Adding threat about certificate verification to TR 33.926**

*Type: CR For: Agreement  
 33.926 v19.2.0 CR-0102 Cat: B (Rel-19)  
  
 Source: Huawei; HiSilicon, CAICT, CTCC, Nokia*

**Decision:** The document was **agreed**.

**S3-245360 Corrections and test case updating to TS 33.117**

*Type: CR For: Agreement  
 33.117 v18.3.0 CR-0198 Cat: B (Rel-19)  
  
 Source: Huawei; HiSilicon, CAICT, CTCC, Nokia*

**Decision:** The document was **agreed**.

**S3-245361 Updating test case about authentication status of UE by UDM**

*Type: CR For: Agreement  
 33.514 v18.3.0 CR-0032 Cat: F (Rel-19)  
  
 Source: Huawei; HiSilicon, CAICT, CTCC, Nokia*

**Decision:** The document was **agreed**.

### 4.11 TEI19 topics (restricted to agreed topics only)

**S3-244817 Retrieval of public key used for token verification**

*Type: CR For: Approval  
 33.501 v19.0.0 CR-2071 Cat: F (Rel-19)  
  
 Source: Huawei, HiSilicon*

**Discussion:**

Content will go to draft CR in S3-245334,

**Decision:** The document was **not pursued**.

**S3-244918 Authorization of a service request when the discovery is delegated to the target PLMN**

*Type: CR For: (not specified)  
 33.501 v19.0.0 CR-2077 Cat: B (Rel-19)  
  
 Source: Nokia*

**Discussion:**

Huawei: we need to check this in CT4 and SA2. More time is needed. Ericsson also wanted more time and proposed to start the draft CR in the next meeting.

**Decision:** The document was **not pursued**.

**S3-244919 DP SBA Rel-19 public key retrieval for access token verification**

*Type: discussion For: (not specified)  
 Source: Nokia*

**Discussion:**

Concerns from NCSC.

Huawei proposed to send an LS to CT4.

**Decision:** The document was **noted**.

**S3-244926 DRAFT CR SBA Rel-19 public key or cert retrieval for access token verification**

*Type: draftCR For: (not specified)  
 33.501 v19.0.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245334**.

**S3-245334 DRAFT CR SBA Rel-19 public key or cert retrieval for access token verification**

*Type: draftCR For: -  
 33.501 v19.0.0  
 Source: Ericsson, Deutsche Telekom, AT&T, Samsung, BT PLC, KDDI, Huawei, NCSC, Nokia*

(Replaces S3-244926)

**Discussion:**

Incorporates cotnent of S3-245011.

**Decision:** The document was **approved**.

**S3-245011 Public key distribution and Issuer claim verification of the Access Token**

*Type: CR For: (not specified)  
 33.501 v19.0.0 CR-2083 Cat: B (Rel-19)  
  
 Source: Ericsson, Deutsche Telekom, AT&T, Samsung, BT PLC*

**Discussion:**

Content will go to draft CR in S3-245334.

**Decision:** The document was **not pursued**.

### 4.12 WID on Security aspects of NR mobility enhancement Phase 4

**S3-244980 LTM: Requirement on AS Security Context Synchronization**

*Type: other For: Approval  
 33.501 v..  
 Source: Xiaomi EV Technology*

**Discussion:**

Qualcomm: some rewording is needed.

**Decision:** The document was **revised to S3-245160**.

**S3-245160 LTM: Requirement on AS Security Context Synchronization**

*Type: other For: Approval  
 33.501 v..  
 Source: Xiaomi EV Technology*

(Replaces S3-244980)

**Decision:** The document was **approved**.

**S3-244624 Analysis on Solution 2**

*Type: other For: (not specified)  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **approved**.

**S3-244753 Resolve the EN in Sol#3**

*Type: other For: Approval  
 Source: ZTE Corporation*

**Discussion:**

Vivo: make the second editor's note a note saying that it is not addressed in the solution.

**Decision:** The document was **revised to S3-245161**.

**S3-245161 Resolve the EN in Sol#3**

*Type: other For: Approval  
 Source: ZTE Corporation*

(Replaces S3-244753)

**Decision:** The document was **approved**.

**S3-245099 Editorial updates for solution #6**

*Type: other For: Approval  
 Source: LG Electronics*

**Decision:** The document was **approved**.

**S3-244983 LTM: Further Evaluation to Solution 7**

*Type: other For: Approval  
 33.501 v..  
 Source: Xiaomi EV Technology*

**Discussion:**

Huawei: this is not relevant for SA3. Samsung supported this comment, They didn’t agree either.

It was clarified that this needed input from RAN3.

**Decision:** The document was **noted**.

**S3-244981 LTM: Further Update to Solution 8**

*Type: other For: Approval  
 33.501 v..  
 Source: Xiaomi EV Technology*

**Discussion:**

Vivo: issue with the solution part.

**Decision:** The document was **revised to S3-245162**.

**S3-245162 LTM: Further Update to Solution 8**

*Type: other For: Approval  
 33.501 v..  
 Source: Xiaomi EV Technology*

(Replaces S3-244981)

**Decision:** The document was **approved**.

**S3-244731 New solution on Mismatch of UE security context**

*Type: other For: Approval  
 Source: vivo*

**Decision:** The document was **revised to S3-245163**.

**S3-245163 New solution on Mismatch of UE security context**

*Type: other For: Approval  
 Source: vivo*

(Replaces S3-244731)

**Decision:** The document was **approved**.

**S3-244732 Conclusion on mismatch of UE security context**

*Type: other For: Approval  
 Source: vivo*

**Decision:** The document was **merged**.

**S3-244924 conclusion assuming the PDCP anchor changing**

*Type: other For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-244982 LTM: Partial Conclusion on Key Issue 1**

*Type: other For: Approval  
 33.501 v..  
 Source: Xiaomi EV Technology*

**Decision:** The document was **revised to S3-245335**.

**S3-245335 LTM: Partial Conclusion on Key Issue 1**

*Type: other For: Approval  
 33.501 v..  
 Source: Xiaomi EV Technology*

(Replaces S3-244982)

**Decision:** The document was **approved**.

**S3-244714 LTM - way forward discussion - leave the final decision to RAN**

*Type: other For: (not specified)  
 Source: Apple*

**Decision:** The document was **noted**.

**S3-245106 Discussion on Impact Analysis for Inter-CU LTM**

*Type: discussion For: (not specified)  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Brief description of document content.

**Decision:** The document was **noted**.

**S3-244914 Discussion on security of LTM cell switch command MAC CE**

*Type: discussion For: Discussion  
 Source: OPPO*

**Discussion:**

The Chair commented that there weren't much time for this topic and the number of contributions needed to be limited. He asked the companies to try to restrict themselves.

**Decision:** The document was **noted**.

**S3-244916 Security analysis of LTM cell switch command MAC CE**

*Type: other For: Approval  
 Source: OPPO*

**Decision:** The document was **revised to S3-245336**.

**S3-245336 Security analysis of LTM cell switch command MAC CE**

*Type: other For: Approval  
 Source: OPPO*

(Replaces S3-244916)

**Discussion:**

Huawei asked to be minuted: the MAC CE protection will not be addressed in Rel-19 in this topic.

It was agreed to add a note on this.

**Decision:** The document was **approved**.

**S3-244984 LTM: Update to Overall Summary**

*Type: other For: Approval  
 33.501 v..  
 Source: Xiaomi EV Technology*

**Discussion:**

Vivo didn’t agree with the document.

Kept open: concerns from Samsung, Qualcomm.

**Decision:** The document was **revised to S3-245337**.

**S3-245337 LTM: Update to Overall Summary**

*Type: other For: Approval  
 33.501 v..  
 Source: Xiaomi EV Technology*

(Replaces S3-244984)

**Decision:** The document was **approved**.

**S3-244715 LTM - WID revision**

*Type: WID new For: (not specified)  
 Source: Apple*

**Discussion:**

NTT-Docomo: include the TUs that we have spent already.

There was no agreement.

**Decision:** The document was **noted**.

**S3-245025 Living document on NR mobility enhancement**

*Type: draftCR For: Information  
 33.501 v19.0.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-245164**.

**S3-245164 Living document on NR mobility enhancement**

*Type: draftCR For: Information  
 33.501 v19.0.0  
 Source: Samsung*

(Replaces S3-245025)

**Decision:** The document was **approved**.

### 4.13 WID on Security for mobility over non-3GPP access to avoid full primary authentication

**S3-244686 Living document of the Non3GPPMobEnh study**

*Type: draftCR For: Approval  
 33.501 v19.0.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245166**.

**S3-245166 Living document of the Non3GPPMobEnh study**

*Type: draftCR For: Approval  
 33.501 v19.0.0  
 Source: Nokia*

(Replaces S3-244686)

**Decision:** The document was **approved**.

**S3-245338 Non3GPPMobEnh enhancement**

*Type: CR For: Approval  
 33.501 v19.0.0 CR-2088 Cat: B (Rel-19)  
  
 Source: Nokia*

**Decision:** The document was **agreed**.

**S3-244687 TNGF solution alignment**

*Type: other For: Approval  
 33.501 v..  
 Source: Nokia, CableLabs*

**Decision:** The document was **approved**.

**S3-244688 TWIF solution**

*Type: other For: Approval  
 33.501 v..  
 Source: Nokia, Lenovo, Charter Communications*

**Decision:** The document was **revised to S3-245165**.

**S3-245165 TWIF solution**

*Type: other For: Approval  
 33.501 v..  
 Source: Nokia, Lenovo, Charter Communications*

(Replaces S3-244688)

**Decision:** The document was **approved**.

**S3-244689 LS on Non3GPPMob\_Sec update**

*Type: LS out For: Approval  
 to SA2, cc CT1  
 Source: Nokia*

**Discussion:**

Qualcomm: not needed. Huawei agreed, there was no need to report to SA2.

**Decision:** The document was **noted**.

**S3-244951 Adding TWIF related text to the non-3GPP living document**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **merged**.

### 4.14 WID on WID on Security for MonStra

**S3-244675 Living document for MonStra: draftCR to TS 33.501, Signalling Monitoring**

*Type: draftCR For: Approval  
 33.501 v19.0.0  
 Source: Vodafone*

**Abstract:**

This contains the living document for MonStra-Sec

**Decision:** The document was **revised to S3-245168**.

**S3-245168 Living document for MonStra: draftCR to TS 33.501, Signalling Monitoring**

*Type: draftCR For: Approval  
 33.501 v19.0.0  
 Source: Vodafone*

(Replaces S3-244675)

**Decision:** The document was **approved**.

**S3-245339 Security of Signalling Traffic monitoring**

*Type: CR For: Approval  
 33.501 v19.0.0 CR-2089 Cat: B (Rel-19)  
  
 Source: Vodafone*

**Discussion:**

t was pointed out that Vodafone needed to revise this CR in Plenary since it was referring to a TS that didn’t have a number yet (TS 28.abc).

MCC: is TS 28.abc sent for one shot approval in Plenary?

**Decision:** The document was **agreed**.

**S3-244853 Updating living Draft CR for MonSTra**

*Type: other For: Agreement  
 Source: Vodafone, Nokia, Nokia Shanghai Bell*

**Decision:** The document was **approved**.

**S3-245129 MonSTra Security Solution**

*Type: other For: Approval  
 Source: Ericsson, Vodafone, Nokia, Nokia Shanghai Bell, NSA, BT, Verizon*

**Discussion:**

NTT-Docomo: some wording issues in X.2 as the note seems to contradict the text.

Vodafone wanted to finalise this document during the current meeitng.

**Decision:** The document was **revised to S3-245167**.

**S3-245167 MonSTra Security Solution**

*Type: other For: Approval  
 Source: Ericsson, Vodafone, Nokia, Nokia Shanghai Bell, NSA, BT, Verizon*

(Replaces S3-245129)

**Decision:** The document was **approved**.

## 5 Rel-19 Studies

### 5.1 Study on enablers for Zero Trust Security

Forward steps for Zero Trust discussions:

The Chair commented the following:

- TS 33.501 is very large, some laptops crash. Not ideal to add a new annex.

- Type of document:

Its objective is to be a guideline for regulators, like SCAS. A 900 series TR would be convenient for this. This activity is expected to continue.

China Mobile: 900 series TR, guidance for 5G networks. This was supported by Huawei, CATT.

Ericsson: we woild like to see normative work in the form of requirements.We had an example of a draft CR in this meeting.

T-Mobile: 900 series will not reflect the normative text we want, it would be a recommendation. In SCAS we have test descriptions against normative specificaitons.

Lenovo: requirements in a 900 series TR?

Alex (GSMA): there is substantial material that can be informative and some small amount of material that needs to be normative. We can put informative stuff in normative documents not the other way around. There is key material that must be normative. A standalone spec doesn’t compel to implement the capability.

The Chair commented that regulators could make mandatory to follow the 900 series TR.

ORANGE: in SCAS we have three procedure documents, that can introduce recommendations. We can have a framework for this like it’s done in NESAS.

Verizon: we want capabilities that can be made normative.

The Chair asked MCC how to maintain a spec like TS 33.501 that it becomes so large that it is harder to handle in laptops. MCC replied that this was solved in other groups by splitting the document in several parts inside the zip file.

Nokia: new TS doesn’t make much sense.

Vodafone: we want a separate TS. It’s easier for the regulator to point to a specific document than point to a clause if a big document like TS 33.501.

Nokia: the whole normative content occupies half a page, doest it make sense to have a standalone spec? The Chair replied that future work would grow this document.

Huawei: we understand that regulators need a reference that can be used to ask for determined implementations.

OTD: here the operators want normative work

Alex (GSMA): if we go the normative route I propose a drafting session to decide what part should be normative.

AT&T: we want a normative TS with mandatory text related to key issue 1.

Verizon, T-Mobile reiterated that they wanted to have a normative specification. DT, Vodafone, Telecom Italia supported this.

China Telecom, China Mobile, ZTE: 900 series TR.

BT: normative specification.

Huawei: no new interfaces, no new services here, why a TS then.

NSA: if it's in a TS, it can be still decided to use it or not.

NTT-Docomo: if we go for a TS we will need a new WID.

Alex (GSMA): if we put it in a TS, there is no requirement for an operator like China Mobile to implement it.

Huawei: it's about the content. It doesn’t qualify as normative, it's all left to implementation.

**S3-245078 Resolution of EN in Solution #8 (Using security log events, counters and protocol signaling monitoring)**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

**S3-244678 KI 1 Conclusion Clarification on Replay Use Case**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: MITRE-FFRDC, US National Security Agency, Johns Hopkins University APL*

**Abstract:**

This contribution clarifies the use case on replay attacks on the SBA layer and removes the EN in KI 1 conclusions

**Discussion:**

Ericsson: not clear what fraudulent means here. The rational has more text than what is actually addressed here.

Huawei: this change makes it a sub case of bullet C.

China Mobile: It reduces the scope of the replay attack.

**Decision:** The document was **revised to S3-245180**.

**S3-245180 KI 1 Conclusion Clarification on Replay Use Case**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: MITRE-FFRDC, US National Security Agency, Johns Hopkins University APL*

(Replaces S3-244678)

**Decision:** The document was **approved**.

**S3-244722 Confidentiality and Integrity for KI 1 Conclusion**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: U.S. National Security Agency, MITRE-FFRDC, Johns Hopkins University APL, OTD\_US, Deutsche Telekom AG*

**Abstract:**

This submission is an update to KI#1 conclusion in TR 33.794 and clarifies that security event logs are to be confidential, and integrity protected during transit.

**Decision:** The document was **approved**.

**S3-244721 Clarifications to Conclusion 1**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: U.S. National Security Agency, OTD\_US, MITRE-FFRDC, Johns Hopkins University APL, Deutsche Telekom AG*

**Abstract:**

This submission provides some minor edits to the conclusion to provide additional clarification and corrects a typo.

**Decision:** The document was **revised to S3-245181**.

**S3-245181 Clarifications to Conclusion 1**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: U.S. National Security Agency, OTD\_US, MITRE-FFRDC, Johns Hopkins University APL, Deutsche Telekom AG*

(Replaces S3-244721)

**Decision:** The document was **approved**.

**S3-245082 Editorial update of conclusions for KI#1 (Data exposure for security evaluation and monitoring)**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **merged**.

**S3-244609 Updates and Clean-up of KI#1 Conclusion**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Motorola Mobility [Rapporteur]*

**Decision:** The document was **revised to S3-245182**.

**S3-245182 Updates and Clean-up of KI#1 Conclusion**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Motorola Mobility [Rapporteur],Ericsson*

(Replaces S3-244609)

**Decision:** The document was **approved**.

**S3-245079 Resolution of EN in conclusions for KI#1 (Data exposure for security evaluation and monitoring)**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **merged**.

**S3-244626 New annex for security event data records**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Johns Hopkins University APL*

**Abstract:**

Propose to add a new annex in TR 33.794 to specify the content of security event data records.

**Discussion:**

Ericsson: put this in a solution.Huawei supported this.

John Hopkins: we got comments that this wasn’t appropriate for a conclusion so we put it in an annex.

NSA: I prefer to have this in an Annex. It applies to different solutions. They withdrew their comment in order to male progress.

MCC: there are a lot of references missing.

Alex (GSMA): Cyber Resilience act is now in the works for TC CYBER. Network information systems and management systems are impacted by this. ETSI will start work on this and it will impact on the products making some of these capabilities mandatory. The preference for TC CYBER is to reference 3GPP material. If there is nothing normative to reference in 3GPP TC CYBER will have to write it themselves. Alex encouraged SA3 to produce normative work on this field as this kind of work is what the European Union expects in the next two years.

**Decision:** The document was **revised to S3-245183**.

**S3-245183 New annex for security event data records**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Johns Hopkins University APL*

(Replaces S3-244626)

**Discussion:**

Putting it in solution format.

**Decision:** The document was **approved**.

**S3-244610 Updates and Clean-up of KI#2 Conclusion**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Motorola Mobility [Rapporteur]*

**Discussion:**

Ericsson: what is this policy we are trying to specify?

Huawei didn’t agree with this document.

**Decision:** The document was **merged**.

**S3-244723 General Recommendations for Conclusion 2 Policy Enforcement**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: U.S. National Security Agency,OTD\_US, Johns Hopkins University APL, MITRE-FFRDC*

**Abstract:**

This submission provides additions to conclusion 2 including some general recommendations.

**Decision:** The document was **revised to S3-245184**.

**S3-245184 General Recommendations for Conclusion 2 Policy Enforcement**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: U.S. National Security Agency,OTD\_US, Johns Hopkins University APL, MITRE-FFRDC*

(Replaces S3-244723)

**Decision:** The document was **approved**.

**S3-245081 Resolution of EN in conclusions for KI#2 (Security mechanisms for policy enforcement at the 5G SBA)**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Ericsson*

**Discussion:**

Nokia objected to this contribution.

**Decision:** The document was **merged**.

**S3-244611 Cleanup of TR 33.794**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Motorola Mobility [Rapporteur]*

**Decision:** The document was **revised to S3-245185**.

**S3-245185 Cleanup of TR 33.794**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Motorola Mobility [Rapporteur]*

(Replaces S3-244611)

**Decision:** The document was **approved**.

**S3-245080 Data collection for security monitoring**

*Type: draftCR For: Discussion  
 33.501 v19.0.0  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-244858 Discussion about way forward for zero trust study and beyond**

*Type: discussion For: Discussion  
 33.794 v..  
 Source: China Mobile*

**Decision:** The document was **noted**.

**S3-244903 Way forward**

*Type: discussion For: Discussion  
 33.794 v..  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-244993 Proposal way forward for eZTS**

*Type: discussion For: Approval  
 33.794 v..  
 Source: CATT, China Unicom, China Telecom*

**Decision:** The document was **noted**.

**S3-244612 Presentation of Specification/Report to TSG for TR 33.794**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Motorola Mobility [Rapporteur]*

**Decision:** The document was **revised to S3-245365**.

**S3-245365 Presentation of Specification/Report to TSG for TR 33.794**

*Type: TS or TR cover For: Approval  
 33.794 v0.5.0  
 Source: Motorola Mobility [Rapporteur]*

(Replaces S3-244612)

**Decision:** The document was **approved**.

**S3-245179 Draft TR 33.794**

*Type: draft TR For: Approval  
 33.794 v0.6.0  
 Source: Motorola Mobility*

**Decision:** The document was **approved**.

**S3-245280 Add standardized format for security event logs into conclusion of KI#1**

*Type: pCR For: Approval  
 33.794 v0.5.0  
 Source: Johnn Hopkina*

**Decision:** The document was **approved**.

### 5.2 Study on the security support for the Next Generation Real Time Communication services phase 2

**S3-245120 Remove ENs of solution#3 for KI#1**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **approved**.

**S3-245083 Conclusion for KI#1: Third party specific user identities**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **merged**.

**S3-245122 Conclusion of KI#1**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

Ericsson: we would like to use TS 33.203 but it's unfortunate that the spec title refers to 3G.

**Decision:** The document was **revised to S3-245188**.

**S3-245188 Conclusion of KI#1**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-245122)

**Decision:** The document was **approved**.

**S3-244808 Addressing the ENs on Avatar ID determination and token details of Solution#5**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245190**.

**S3-245190 Addressing the ENs on Avatar ID determination and token details of Solution#5**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244808)

**Decision:** The document was **approved**.

**S3-245042 Resolving EN in solution #6**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-245191**.

**S3-245191 Resolving EN in solution #6**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Samsung*

(Replaces S3-245042)

**Decision:** The document was **approved**.

**S3-244810 Conclusion to KI#2 of NG\_RTC**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Huawei, HiSilicon*

**Discussion:**

Ericsson: too early to finish this key issue, we have two contributions for this meeting related to this. SA2 is preparing CRs for their next meeting about this. We don’t think we can conclude in the current meeting.

**Decision:** The document was **noted**.

**S3-245084 Discussion about the KI#2: Security of IMS based Avatar Communication**

*Type: discussion For: Discussion  
 33.790 v..  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-245085 LS on IMS avatar communication**

*Type: LS out For: Approval  
 to SA2  
 Source: Ericsson*

**Discussion:**

Qualcomm: we are not comfortable sending this LS. Samsung supported this as well.

Vodafone: add SA in copy.

Nokia SA4 as well.

**Decision:** The document was **noted**.

**S3-245121 Remove ENs of solution#9 for KI#3**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

Ericsson: SA2 has not concluded, don’t remove the editor's note.

**Decision:** The document was **revised to S3-245355**.

**S3-245355 Remove ENs of solution#9 for KI#3**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-245121)

**Decision:** The document was **approved**.

**S3-244809 Addressing the ENs on user interaction of Solution#10**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **approved**.

**S3-244811 Conclusion to KI#3 of NG\_RTC**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-245086 Conclusion for KI#3: Security and privacy aspects of IMS DC capability exposure**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245196**.

**S3-245196 Conclusion for KI#3: Security and privacy aspects of IMS DC capability exposure**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Ericsson*

(Replaces S3-245086)

**Decision:** The document was **noted**.

**S3-245123 Conclusion of KI#3**

*Type: pCR For: Approval  
 33.790 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **merged**.

**S3-245087 Presentation of Report to TSG:**

**TR 33.790, Study on the security support for the next generation real time communication services phase 2, Version 0.6.0**

*Type: TS or TR cover For: Approval  
 33.790 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245357**.

**S3-245357 Presentation of Report to TSG:**

**TR 33.790, Study on the security support for the next generation real time communication services phase 2, Version 0.6.0**

*Type: TS or TR cover For: Approval  
 33.790 v0.5.0  
 Source: Ericsson*

(Replaces S3-245087)

**Decision:** The document was **approved**.

**S3-245186 Draft TR 33.790**

*Type: draft TR For: Approval  
 33.790 v0.6.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

### 5.3 Study on security for PLMN hosting a NPN

**S3-244625 Correction of terms in Overview of TR 33.757**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Johns Hopkins University APL*

**Abstract:**

Correct the Terms for PLMN and PNI-NPN Operational Domain in the Overview clause.

**Decision:** The document was **approved**.

**S3-244797 Removing EN in Sol#2**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: China Telecomunication Corp.*

**Decision:** The document was **revised to S3-245200**.

**S3-245200 Removing EN in Sol#2**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: China Telecomunication Corp.*

(Replaces S3-244797)

**Decision:** The document was **approved**.

**S3-244613 Updates to Solution#11**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Lenovo*

**Decision:** The document was **revised to S3-245201**.

**S3-245201 Updates to Solution#11**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Lenovo*

(Replaces S3-244613)

**Decision:** The document was **noted**.

**S3-244884 Evaluation to solution 11**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-245029 [TR 33.757] Update to solution#20**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Samsung*

**Decision:** The document was **noted**.

**S3-245202 [TR 33.757] Update to solution#20**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Samsung*

**Decision:** The document was **withdrawn**.

**S3-244883 Evaluation to solution 20**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Huawei, HiSilicon*

**Discussion:**

John Hopkins: I can’t agree unless the terminology is corrected.

Samsung objected to the SEAF co-located with the AMF.

**Decision:** The document was **noted**.

**S3-244796 Conclusion to KI#2**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: China Telecomunication Corp., ZTE, China Unicom, CATT*

**Decision:** The document was **revised to S3-245206**.

**S3-245206 Conclusion to KI#2**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: China Telecomunication Corp., ZTE, China Unicom, CATT*

(Replaces S3-244796)

**Discussion:**

Nokia and Ericsson asked if it was the understanding that the new proxy entity will not be standardised. China Mobile didn’t agree on this understanding because they wanted to standardise it.

It was asked to be minuted in the meeting report: NOKIA TO PROVIDE MINUTES HERE

Show of hands:

Support: Samsung, Ericsson, China Mobile, Huawei,NSA, ZTE, China Telecom,John Hopkins,Nokia

No support: Xiaomi.

It was agreed finally to add an editor's note.

**Decision:** The document was **approved**.

**S3-244865 Conclusion to KI#2**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell, Ericsson, Samsung*

**Decision:** The document was **merged**.

**S3-245027 Conclusion update for KI#2 for DNS messages protection**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-245207**.

**S3-245207 Conclusion update for KI#2 for DNS messages protection**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Samsung*

(Replaces S3-245027)

**Decision:** The document was **approved**.

**S3-245028 Conclusion update for KI#2 in TR 33.757**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Samsung*

**Decision:** The document was **merged**.

**S3-245119 Update conclusion for KI#2**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Xiaomi communications*

**Decision:** The document was **merged**.

**S3-244754 Conclusion to KI#3**

*Type: pCR For: Approval  
 33.757 v0.3.0  
 Source: ZTE Corporation*

**Decision:** The document was **merged**.

**S3-244866 Conclusion to KI#3**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **merged**.

**S3-244882 conclusion on key issue#3**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245208**.

**S3-245208 conclusion on key issue#3**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244882)

**Decision:** The document was **approved**.

**S3-245026 Conclusion for key issue#3**

*Type: pCR For: Approval  
 33.757 v0.5.0  
 Source: Samsung, Lenovo*

**Decision:** The document was **merged**.

**S3-245187 Draft TR 33.757**

*Type: draft TR For: Approval  
 33.757 v0.6.0  
 Source: China Telecom*

**Decision:** The document was **approved**.

### 5.4 Study of ACME for Automated Certificate Management in SBA

**S3-244673 Pre-authorization solution for ACME**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: NCSC*

**Abstract:**

ACME account and certificate issuance solution based on pre-authorization.

**Decision:** The document was **revised to S3-245366**.

**S3-245366 Pre-authorization solution for ACME**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: NCSC*

(Replaces S3-244673)

**Decision:** The document was **approved**.

**S3-244720 Using mTLS with ACME**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: NCSC*

**Decision:** The document was **noted**.

**S3-244679 Address ENs in Solution #8: Supporting all 5G SBA certificate types**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Cisco Systems*

**Decision:** The document was **approved**.

**S3-244656 Evaluation update for solution #9 (Using ACME protocol for certificate renewal)**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Google Ireland Limited*

**Discussion:**

Huawei didn’t agree. The editor's note was not addressed yet.

**Decision:** The document was **revised to S3-245367**.

**S3-245367 Evaluation update for solution #9 (Using ACME protocol for certificate renewal)**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Google Ireland Limited*

(Replaces S3-244656)

**Decision:** The document was **approved**.

**S3-244680 Conclusion for KI#1: ACME initial trust framework**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Cisco Systems*

**Decision:** The document was **revised to S3-245209**.

**S3-245209 Conclusion for KI#1: ACME initial trust framework**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Cisco Systems*

(Replaces S3-244680)

**Decision:** The document was **approved**.

**S3-244659 Conclusion for KI#2 (Secure Transport of Messages)**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Google Ireland Limited*

**Decision:** The document was **revised to S3-245210**.

**S3-245210 Conclusion for KI#2 (Secure Transport of Messages)**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Google Ireland Limited*

(Replaces S3-244659)

**Decision:** The document was **approved**.

**S3-244657 Conclusion for KI#4 (Certificate enrolment)**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Google Ireland Limited*

**Discussion:**

Huaweii: we already have a related solution, we don’t need another one. This is redundant.

Cisco agreed that the other solutions addressed enrolment, but this one addressed the key issue more clearly.

**Decision:** The document was **revised to S3-245211**.

**S3-245211 Conclusion for KI#4 (Certificate enrolment)**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Google Ireland Limited*

(Replaces S3-244657)

**Decision:** The document was **approved**.

**S3-244658 Conclusion for KI#5 (Certificate Renewal)**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Google Ireland Limited*

**Decision:** The document was **revised to S3-245368**.

**S3-245368 Conclusion for KI#5 (Certificate Renewal)**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Google Ireland Limited*

(Replaces S3-244658)

**Decision:** The document was **approved**.

**S3-244681 Conclusion for KI#7: Supporting all 5G SBA certificate types**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Cisco Systems*

**Decision:** The document was **revised to S3-245317**.

**S3-245317 Conclusion for KI#7: Supporting all 5G SBA certificate types**

*Type: pCR For: Approval  
 33.776 v0.5.0  
 Source: Cisco Systems*

(Replaces S3-244681)

**Decision:** The document was **approved**.

**S3-244682 Presentation of Specification/Report to TSG: TR 33.776, Version 1.0.0**

*Type: TS or TR cover For: Approval  
 33.776 v0.5.0  
 Source: Cisco Systems*

**Discussion:**

Huawei and Ericsson had comments on the abstract.

**Decision:** The document was **revised to S3-245318**.

**S3-245318 Presentation of Specification/Report to TSG: TR 33.776, Version 1.0.0**

*Type: TS or TR cover For: Approval  
 33.776 v0.5.0  
 Source: Cisco Systems*

(Replaces S3-244682)

**Decision:** The document was **approved**.

**S3-245189 Draft TR 33.776**

*Type: draft TR For: Approval  
 33.776 v0.6.0  
 Source: Cisco*

**Decision:** The document was **approved**.

### 5.5 Study on enabling a cryptographic algorithm transition to 256-bits

### 5.6 Study on mitigations against bidding down attacks

### 5.7 Study on security Aspects of 5G Satellite Access Phase 2

**S3-244998 Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions**

*Type: LS out For: Approval  
 to SA2  
 Source: CATT*

**Decision:** The document was **revised to S3-245340**.

**S3-245340 Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions**

*Type: LS out For: Approval  
 to SA2  
 Source: CATT*

(Replaces S3-244998)

**Decision:** The document was **approved**.

**S3-244794 Reply LS to Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions**

*Type: LS out For: Approval  
 to SA2, cc RAN2, SA3-LI  
 Source: Nokia*

**Decision:** The document was **merged**.

**S3-244878 Discussion about mitigating the Security risk of Unprotected NAS Reject**

*Type: discussion For: Discussion  
 33.700-29 v..  
 Source: Huawei, HiSilicon*

**Discussion:**

Samsung didn’t agree with this paper. We cannot leave it to UE implementation as there is vulnerability to DoS attacks.

Vivo: UE implementation is not clear.

Nokia: it cannot be left for UE implementation.

Phillips didn’t agree either that this could be left for UE implementation.

**Decision:** The document was **noted**.

**S3-245039 Discussion on security procedure on S&F operation for a split MME architecture**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Samsung*

**Discussion:**

Interdigital: what is meant by legacy here?

**Decision:** The document was **noted**.

**S3-244608 Additional conclusions for KI#1**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: InterDigital Belgium. LLC*

**Abstract:**

This contribution proposes additional text explaining the approach for enhancements to provide protection against DoS attacks before a security context is established.

**Decision:** The document was **revised to S3-245212**.

**S3-245212 Additional conclusions for KI#1**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: InterDigital Belgium. LLC*

(Replaces S3-244608)

**Decision:** The document was **approved**.

**S3-244791 Updates to conclusions for split MME architecture**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Nokia*

**Decision:** The document was **noted**.

**S3-244814 Update of conclusions KI#1**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245341**.

**S3-245341 Update of conclusions KI#1**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244814)

**Decision:** The document was **approved**.

**S3-244955 Proposed addition to the split MME conclusion for key issue #1**

*Type: pCR For: Approval  
 33.700-29 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-245213**.

**S3-245213 Proposed addition to the split MME conclusion for key issue #1**

*Type: pCR For: Approval  
 33.700-29 v0.4.0  
 Source: Qualcomm Incorporated*

(Replaces S3-244955)

**Decision:** The document was **approved**.

**S3-244976 Update to the conclusion for KI#1 in TR 33.700.29**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Beijing Xiaomi Mobile Software*

**Decision:** The document was **revised to S3-245214**.

**S3-245214 Update to the conclusion for KI#1 in TR 33.700.29**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Beijing Xiaomi Mobile Software*

(Replaces S3-244976)

**Decision:** The document was **approved**.

**S3-244996 pCR to TR33.700-29 Update conclusion#1**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: CATT*

**Discussion:**

Nokia: we prefer not to endorse specific solutions.

Qualcomm was against this.

**Decision:** The document was **merged**.

**S3-244756 Conclusion on KI#2 for split MME architecture**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: ZTE Corporation*

**Discussion:**

Phillips supported this.

**Decision:** The document was **noted**.

**S3-244815 Update of Conclusions KI#2**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-244954 Proposed privacy conclusion for split MME case**

*Type: pCR For: Approval  
 33.700-29 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-245215**.

**S3-245215 Proposed privacy conclusion for split MME case**

*Type: pCR For: Approval  
 33.700-29 v0.4.0  
 Source: Qualcomm Incorporated*

(Replaces S3-244954)

**Discussion:**

Lenovo supported this.

Xiaomi supported this.

CATT: this is inherited from 4G.

Phillips, ZTE and Nokia didn’t support this.

Phillips: there is a privacy issue in here.

**Decision:** The document was **noted**.

**S3-244977 Update to the conclusion for KI#2 in TR 33.700.29**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Beijing Xiaomi Mobile Software*

**Decision:** The document was **merged**.

**S3-244997 pCR to TR33.700-29 Update conclusion#2**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: CATT*

**Decision:** The document was **merged**.

**S3-245072 K#2 conclusion**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Philips International B.V.*

**Decision:** The document was **noted**.

**S3-244733 Address EN in solution 31**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: vivo*

**Decision:** The document was **revised to S3-245216**.

**S3-245216 Address EN in solution 31**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: vivo*

(Replaces S3-244733)

**Decision:** The document was **approved**.

**S3-244816 Update on solution 28**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **approved**.

**S3-244956 Further additions to the enhancement of IOPs in solution #3**

*Type: pCR For: Approval  
 33.700-29 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-245343**.

**S3-245343 Further additions to the enhancement of IOPs in solution #3**

*Type: pCR For: Approval  
 33.700-29 v0.4.0  
 Source: Qualcomm Incorporated*

(Replaces S3-244956)

**Decision:** The document was **approved**.

**S3-244755 Adding solution to KI#2**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-245217**.

**S3-245217 Adding solution to KI#2**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: ZTE Corporation*

(Replaces S3-244755)

**Decision:** The document was **approved**.

**S3-245040 Update on KI#1**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Samsung*

**Discussion:**

Supported by Phillips.

Huawei: this kind of threat is not in the scope of 3GPP. It’s similar to false base stations.

Nokia supported this comtribution.

**Decision:** The document was **revised to S3-245218**.

**S3-245218 Update on KI#1**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Samsung*

(Replaces S3-245040)

**Decision:** The document was **approved**.

**S3-244790 Updates to Overall Summary of solutions**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245219**.

**S3-245219 Updates to Overall Summary of solutions**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Nokia*

(Replaces S3-244790)

**Decision:** The document was **approved**.

**S3-245041 Update on overall summary**

*Type: pCR For: Approval  
 33.700-29 v0.5.0  
 Source: Samsung*

**Decision:** The document was **merged**.

**S3-244645 Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2411250*

**Decision:** The document was **replied to in S3-245340**.

**S3-244852 Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: s3i240703*

**Decision:** The document was **noted**.

**S3-245192 Draft TR 33.700-29**

*Type: draft TR For: Approval  
 33.700-29 v0.6.0  
 Source: CATT*

**Decision:** The document was **approved**.

### 5.8 Study on security for mobility over non-3GPP access to avoid full primary authentication

### 5.9 Study on security Aspect of Ambient IoT Services in 5G

**S3-244789 General Principle for Conclusion**

*Type: discussion For: Endorsement  
 Source: OPPO*

**Discussion:**

ORANGE: let's see the proposed solutions before going to this conclusion.

CableLabs supported this.

KPN: categorize the solutions could be a good way forward.

Thales: exsiting many solutions without a technical evaluation. This makes it difficult.

Huawei: we don’t need to solve every editor's note or evaluate every solution to agree on some principles. We did this in the past.

**Decision:** The document was **noted**.

**S3-244902 General conclusion proposal**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Huawei, HiSilicon*

**Discussion:**

Ericsson: not enough arguments here to support this.

**Decision:** The document was **noted**.

**S3-244911 Conclusion of Device Power Constrain Consideration**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO*

**Discussion:**

ORANGE: this shouldn’t be in the conclusion but somewhere else.NTT-Docomo agreed with this.

**Decision:** The document was **noted**.

**S3-244922 conclusion on key issue#1**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-244972 Conclusion for KI#2 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Beijing Xiaomi Mobile Software*

**Discussion:**

Interdigital, Huawei supported this.

Concerns from ORANGE and NTT-Docomo.

**Decision:** The document was **revised to S3-245170**.

**S3-245170 Conclusion for KI#2 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Beijing Xiaomi Mobile Software*

(Replaces S3-244972)

**Decision:** The document was **noted**.

**S3-244830 KI#3 Conclusion**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Sony*

**Abstract:**

Discuss the solution in v0.4.0 and propose initial conclusions

**Discussion:**

ORANGE: this is not a conclusion, it looks like something belonging to a key issue section.

Apple: conflicting text.

Ericsson agreed with ORANGE and Apple. The editor's note mentions something that needs to be done in the Study, not belonging to a conclusion.

There was no support for this.

**Decision:** The document was **noted**.

**S3-245004 pCR to TR33.713 Conclusion#3**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: CATT*

**Discussion:**

ORANGE: I don’t see the selected solution for the normative work here.

**Decision:** The document was **noted**.

**S3-245005 pCR to TR33.713 Conclusion#4**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: CATT*

**Decision:** The document was **noted**.

**S3-244921 conclusion on key issue#5**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Huawei, HiSilicon*

**Discussion:**

ORANGE: too premature to have this conclusion now. Solutions need to be discussed first.

Lenovo supported this contribution.

Nokia had issues with the challenge-response solution. KPN and Ericsson had also concerns on this bullet point..

China Mobile supported the second bullet.

Qualcomm: we need further discussions on the solutions.

**Decision:** The document was **noted**.

**S3-245171 conclusion on key issue#5**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **withdrawn**.

**S3-245049 pCR to TR33.713 Conclusion#5**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: CATT*

**Discussion:**

ORANGE: premature.

Lenovo: premature and some parts are confusing.

**Decision:** The document was **noted**.

**S3-245131 Conclusion for Key Issue #5**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: THALES*

**Abstract:**

Conclusion for Key Issue #5

**Decision:** The document was **noted**.

**S3-244862 Solution to KI#3, KI#4 and KI#5**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Nokia*

**Discussion:**

Huawei: this could work with the group paging solution. There may be a big impact on the UE as well.

KPN: the feasibility of this solution should be part of the evaluation.

ORANGE: evaluation should be FFS.

Ericsson and Xiaomi: how to maintain the counter should be studied.

**Decision:** The document was **revised to S3-245172**.

**S3-245172 Solution to KI#3, KI#4 and KI#5**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Nokia*

(Replaces S3-244862)

**Decision:** The document was **approved**.

**S3-244669 New solution on combined authentication and data protection for Ambient IoT services**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: KPN N.V.*

**Decision:** The document was **revised to S3-245344**.

**S3-245344 New solution on combined authentication and data protection for Ambient IoT services**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: KPN N.V.*

(Replaces S3-244669)

**Decision:** The document was **approved**.

**S3-244912 Authentication Using L1 Parameter**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO*

**Discussion:**

Ericsson: evaluation needs more justification on why this is used, otherwise remove it.

China Mobile: not sure whether this will work, it doesn’t satisfy the requirement in the key issue.

Nokia suggested to add an editor's note.

Huawei: we have reservations about this approach and we doubt this is feasible.

The Chair commented that if RAN was involved the work should be done in RAN instead of relying on LS exchanges.

**Decision:** The document was **revised to S3-245173**.

**S3-245173 Authentication Using L1 Parameter**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO*

(Replaces S3-244912)

**Decision:** The document was **approved**.

**S3-244945 New solution for authentication in Ambient IoT service**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: China Mobile*

**Discussion:**

ORANGE: Device and reader don’t need to be in the same security domain as the network function.

Inerdigital: more a security architecture than a solution, I'd rather see a key issue about this.

Qualcomm: not sure what security threats are being addressed here.

**Decision:** The document was **revised to S3-245174**.

**S3-245174 New solution for authentication in Ambient IoT service**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: China Mobile*

(Replaces S3-244945)

**Decision:** The document was **approved**.

**S3-245002 Mutual Authentication Using AEAD for Inventory and Command case**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Xidian, OPPO*

**Discussion:**

Sony: iit looks like an nventoyr request that triggers authentication.

Huawei: not clear that AKA is being used here. It should be clarified.

**Decision:** The document was **revised to S3-245175**.

**S3-245175 Mutual Authentication Using AEAD for Inventory and Command case**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Xidian, OPPO*

(Replaces S3-245002)

**Decision:** The document was **approved**.

**S3-245016 New Solution to KI#5**

*Type: pCR For: (not specified)  
 33.713 v0.4.0  
 Source: Ericsson*

**Discussion:**

Interdigital: the figure needs better explanation.

Huawei: how to avoid the hash collision needs to be clarified. Resource exhaustion attack is not prevent here either.

Qualcomm: not sure what problem this solution addresses.

China Mobile: I have a problem with involving 5GC here.

**Decision:** The document was **noted**.

**S3-245176 New Solution to KI#5**

*Type: pCR For: -  
 33.713 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **withdrawn**.

**S3-245044 New solution on authentication and privacy of AIoT device**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Samsung*

**Discussion:**

ORANGE: how do you protect from replay attacks here?

Lenovo: add an editor's note on encrypted paging identities.

Huawei: how does this work for group paging?

Sony: I support Lenovo's comment and it should be added to the evaluation.

Interdigital: identity spoofing possible in step 5. Add editor's note.

ORANGE: remove evaluation.

**Decision:** The document was **revised to S3-245177**.

**S3-245177 New solution on authentication and privacy of AIoT device**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Samsung*

(Replaces S3-245044)

**Decision:** The document was **approved**.

**S3-245107 New solution**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: THALES*

**Abstract:**

New solution

**Decision:** The document was **revised to S3-245178**.

**S3-245178 New solution**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: THALES*

(Replaces S3-245107)

**Decision:** The document was **approved**.

**S3-244736 KI#4, New Sol Communication Security of intermediate UE interacting with AIoT device**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: vivo*

**Discussion:**

ORANGE: keep just one sentence in evaluation.

Sony:clarify step 3.

**Decision:** The document was **revised to S3-245296**.

**S3-245296 KI#4, New Sol Communication Security of intermediate UE interacting with AIoT device**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: vivo*

(Replaces S3-244736)

**Decision:** The document was **approved**.

**S3-244909 Security Key Generation Using L1 Parameter**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO*

**Decision:** The document was **revised to S3-245297**.

**S3-245297 Security Key Generation Using L1 Parameter**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO*

(Replaces S3-244909)

**Decision:** The document was **approved**.

**S3-245001 pCR to TR33.713 New solution general AIoT Device operation message protection procedure**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: CATT*

**Discussion:**

ORANGE: not clear how this works.

Interdigital: exhaustion attack possible due to encryption/decryption in steps 2 and 4.

**Decision:** The document was **noted**.

**S3-244738 KI#3, New Sol Privacy protection based on anonymous AIoT device ID**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: vivo*

**Discussion:**

Lenovo: broadast paging is a concern. I don’t think this is a good solution.

Interdigital: anonymous ID use by TLS handshake, so it assumes that the device supports TLS handshake and this is a big assumption.

NTT-Docomo wasn’t a fan of this.

**Decision:** The document was **noted**.

**S3-244908 Solution on PHY key based protecting AIoT device identifiers**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO*

**Decision:** The document was **revised to S3-245298**.

**S3-245298 Solution on PHY key based protecting AIoT device identifiers**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO*

(Replaces S3-244908)

**Decision:** The document was **approved**.

**S3-244737 KI#1, New Sol Disable AIoT device**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: vivo*

**Decision:** The document was **revised to S3-245299**.

**S3-245299 KI#1, New Sol Disable AIoT device**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: vivo*

(Replaces S3-244737)

**Decision:** The document was **approved**.

**S3-244788 Resolving EN from Sol#5**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO, Xidian*

**Discussion:**

Nokia: the picture needs fixing.

**Decision:** The document was **revised to S3-245300**.

**S3-245300 Resolving EN from Sol#5**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO, Xidian*

(Replaces S3-244788)

**Decision:** The document was **approved**.

**S3-244968 Update to solution #16 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Beijing Xiaomi Mobile Software*

**Decision:** The document was **revised to S3-245301**.

**S3-245301 Update to solution #16 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Beijing Xiaomi Mobile Software*

(Replaces S3-244968)

**Decision:** The document was **approved**.

**S3-244969 Add evaluation for solution #16 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Beijing Xiaomi Mobile Software*

**Decision:** The document was **revised to S3-245302**.

**S3-245302 Add evaluation for solution #16 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Beijing Xiaomi Mobile Software*

(Replaces S3-244969)

**Decision:** The document was **approved**.

**S3-245070 Solution#1 update - Addressing EN**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Philips International B.V.*

**Decision:** The document was **approved**.

**S3-245071 Solution#1 evaluation update**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Philips International B.V.*

**Decision:** The document was **approved**.

**S3-244757 Add the evaluation for the Sol#2 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **approved**.

**S3-244970 Update to solution #18 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Beijing Xiaomi Mobile Software*

**Decision:** The document was **approved**.

**S3-244971 Add evaluation for solution #18 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Beijing Xiaomi Mobile Software*

**Decision:** The document was **revised to S3-245303**.

**S3-245303 Add evaluation for solution #18 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Beijing Xiaomi Mobile Software*

(Replaces S3-244971)

**Decision:** The document was **approved**.

**S3-244671 Resolution of ENs in Solution #21**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: InterDigital Belgium. LLC*

**Abstract:**

This contribution resolves Editor’s Notes in Solutions #21 by adding content and expanding the Evaluation.

**Decision:** The document was **revised to S3-245304**.

**S3-245304 Resolution of ENs in Solution #21**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: InterDigital Belgium. LLC*

(Replaces S3-244671)

**Decision:** The document was **approved**.

**S3-244672 Resolution of ENs in Solution #20**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: InterDigital Belgium. LLC*

**Abstract:**

This contribution resolves Editor’s Notes in Solutions #20 by adding content and expanding the Evaluation.

**Decision:** The document was **revised to S3-245305**.

**S3-245305 Resolution of ENs in Solution #20**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: InterDigital Belgium. LLC*

(Replaces S3-244672)

**Decision:** The document was **approved**.

**S3-244709 Ambient IoT solution on privacy revision**

*Type: pCR For: (not specified)  
 33.713 v0.3.0  
 Source: Apple*

**Discussion:**

Qualcomm: not sure that the document is addressing the editor's notes that were removed.

**Decision:** The document was **revised to S3-245306**.

**S3-245306 Ambient IoT solution on privacy revision**

*Type: pCR For: -  
 33.713 v0.3.0  
 Source: Apple*

(Replaces S3-244709)

**Decision:** The document was **approved**.

**S3-244761 Resolving ENs in sol#25 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-245307**.

**S3-245307 Resolving ENs in sol#25 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: ZTE Corporation*

(Replaces S3-244761)

**Decision:** The document was **approved**.

**S3-244762 Adding evaluation to sol#25 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-245308**.

**S3-245308 Adding evaluation to sol#25 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: ZTE Corporation*

(Replaces S3-244762)

**Decision:** The document was **approved**.

**S3-244795 Resolve ENs in sol#23**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO*

**Decision:** The document was **approved**.

**S3-244806 Solution 26 Update and Evaluation**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Sony*

**Abstract:**

Updates related to out-of-synch handling in the device, address EN and provide an evaluation.

**Decision:** The document was **revised to S3-245309**.

**S3-245309 Solution 26 Update and Evaluation**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Sony*

(Replaces S3-244806)

**Decision:** The document was **approved**.

**S3-244960 Addressing the EN in solution #27**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **approved**.

**S3-245000 pCR to TR33.713 Update solution#30 to remove EN**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: CATT*

**Discussion:**

NTT-Docomo: keep the editor's note for the evaluation.

**Decision:** The document was **revised to S3-245310**.

**S3-245310 pCR to TR33.713 Update solution#30 to remove EN**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: CATT*

(Replaces S3-245000)

**Decision:** The document was **approved**.

**S3-245017 Addressing ENs in Solution#29 to KI#3**

*Type: pCR For: (not specified)  
 33.713 v0.4.0  
 Source: Ericsson*

**Discussion:**

KPN: reformulate note 2.

MCC refer to SA2 specification, not the WG.

Nokia didn’t agree with note 4.

Sony: paging message is not specified in SA2, but in SA3.

**Decision:** The document was **revised to S3-245311**.

**S3-245311 Addressing ENs in Solution#29 to KI#3**

*Type: pCR For: -  
 33.713 v0.4.0  
 Source: Ericsson*

(Replaces S3-245017)

**Decision:** The document was **approved**.

**S3-245018 Evaluation of Solution#29 to KI#3**

*Type: pCR For: (not specified)  
 33.713 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

**S3-245043 Resolving EN in solution #22**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Samsung*

**Decision:** The document was **approved**.

**S3-245063 Resolution of ENs on Authentication Result, Encryption and Command Protection**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Lenovo*

**Decision:** The document was **approved**.

**S3-245064 Resolution of EN on Temporary ID synchronization**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Lenovo*

**Decision:** The document was **approved**.

**S3-245065 Resolution of EN on group of devices**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Lenovo*

**Decision:** The document was **approved**.

**S3-245066 Update of solution#13 for key mismatch handling**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Lenovo*

**Decision:** The document was **approved**.

**S3-245067 Evaluation of Solution#13**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Lenovo*

**Decision:** The document was **approved**.

**S3-245068 Solution#31 update - Addressing EN**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Philips International B.V.*

**Decision:** The document was **approved**.

**S3-245069 Solution#31 update**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Philips International B.V.*

**Decision:** The document was **approved**.

**S3-244819 Solution 14 Update and Evaluation**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Sony*

**Abstract:**

Updates alternative IA, address EN and provide an evaluation.

**Decision:** The document was **revised to S3-245312**.

**S3-245312 Solution 14 Update and Evaluation**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Sony*

(Replaces S3-244819)

**Decision:** The document was **approved**.

**S3-244913 Remove ENs and add evaluation in Solution #17**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO*

**Decision:** The document was **revised to S3-245313**.

**S3-245313 Remove ENs and add evaluation in Solution #17**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO*

(Replaces S3-244913)

**Decision:** The document was **approved**.

**S3-244959 Addressing the EN in solution #15**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-245314**.

**S3-245314 Addressing the EN in solution #15**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Qualcomm Incorporated*

(Replaces S3-244959)

**Decision:** The document was **approved**.

**S3-244710 Ambient IoT solution on mutual authentication revision**

*Type: pCR For: (not specified)  
 33.713 v0.3.0  
 Source: Apple*

**Discussion:**

KPN: the new figure is not aliigned with RAN.

**Decision:** The document was **revised to S3-245315**.

**S3-245315 Ambient IoT solution on mutual authentication revision**

*Type: pCR For: -  
 33.713 v0.3.0  
 Source: Apple*

(Replaces S3-244710)

**Decision:** The document was **approved**.

**S3-244735 KI#5, Solution update on AIoT device authentication**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: vivo*

**Decision:** The document was **revised to S3-245316**.

**S3-245316 KI#5, Solution update on AIoT device authentication**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: vivo*

(Replaces S3-244735)

**Decision:** The document was **approved**.

**S3-244759 Resolving ENs in sol#6 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**S3-244760 Evaluation for solution 6**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**S3-244831 Updating Solution #7**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: OPPO, Xidian*

**Decision:** The document was **not treated**.

**S3-244920 addressing the editor's note in solution#4**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **not treated**.

**S3-244999 pCR to TR33.713 Update solution#9 to remove EN**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: CATT*

**Decision:** The document was **not treated**.

**S3-244763 Update the KI#1 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**S3-244764 Update the KI#3 in TR 33.713**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**S3-244734 Update on Key Issue#6**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: vivo*

**Decision:** The document was **not treated**.

**S3-244670 New KI: Reader Authorization for 5G Ambient IoT Services**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: InterDigital Belgium. LLC*

**Abstract:**

This contribution proposes a new Key Issue #X: Reader Authorization for 5G Ambient IoT Services to study attacks from adversarial Readers initiating inventory or command procedures.

**Decision:** The document was **not treated**.

**S3-244758 New key issue on secure data transfer between UE and AIOTF**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **not treated**.

**S3-245013 New key issue for secure storage in AIoT devices**

*Type: pCR For: (not specified)  
 33.713 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **not treated**.

**S3-245014 New Key Issue on Amplification of resource exhaustion by exploiting AIoT paging messages**

*Type: pCR For: (not specified)  
 33.713 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **not treated**.

**S3-245015 New key issue for Authenticated and authorized access to devices in Ambient IoT via 3GPP core**

*Type: pCR For: (not specified)  
 33.713 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **not treated**.

**S3-245132 Authorization of external AF for Inventory**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **not treated**.

**S3-245169 Draft TR 33.713**

*Type: draft TR For: Approval  
 33.713 v0.5.0  
 Source: OPPO*

**Decision:** The document was **approved**.

### 5.10 Study on security aspects of Usage of User Identities

**S3-244676 Cover Sheet TR 33.700-32**

*Type: TS or TR cover For: Approval  
 33.700-32 v0.4.0  
 Source: InterDigital France R&D, SAS*

**Decision:** The document was **revised to S3-245369**.

**S3-245369 Cover Sheet TR 33.700-32**

*Type: TS or TR cover For: Approval  
 33.700-32 v0.4.0  
 Source: InterDigital France R&D, SAS*

(Replaces S3-244676)

**Decision:** The document was **approved**.

**S3-244677 TR 33.700-32 Conclusion for Key Issue#3, Cablelabs, Lenovo**

*Type: pCR For: Approval  
 33.700-32 v0.4.0  
 Source: InterDigital France R&D, SAS*

**Decision:** The document was **revised to S3-245268**.

**S3-245268 TR 33.700-32 Conclusion for Key Issue#3, Cablelabs, Lenovo**

*Type: pCR For: Approval  
 33.700-32 v0.4.0  
 Source: InterDigital France R&D, SAS*

(Replaces S3-244677)

**Decision:** The document was **approved**.

**S3-244690 concluding KI3**

*Type: pCR For: Approval  
 33.700-32 v0.4.0  
 Source: Nokia*

**Decision:** The document was **merged**.

**S3-244843 Additional conclusions for KI#3**

*Type: pCR For: Approval  
 33.700-32 v0.4.0  
 Source: Huawei, HiSilicon, China Telecomunication Corp.*

**Decision:** The document was **merged**.

**S3-245056 Conclusion on authorization of non-3GPP devices behind gateway UE or 5G-RG (KI#3)**

*Type: pCR For: Approval  
 33.700-32 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **merged**.

**S3-245193 Draft TR 33.700-32**

*Type: draft TR For: Approval  
 33.700-32 v0.5.0  
 Source: Interdigital*

**Decision:** The document was **approved**.

### 5.11 Study on UAS security enhancement

**S3-244840 New solution for UAV triggered UUAA**

*Type: pCR For: Approval  
 33.759 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245256**.

**S3-245256 New solution for UAV triggered UUAA**

*Type: pCR For: Approval  
 33.759 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244840)

**Decision:** The document was **approved**.

**S3-244841 New solution for USS triggered UUAA**

*Type: pCR For: Approval  
 33.759 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245257**.

**S3-245257 New solution for USS triggered UUAA**

*Type: pCR For: Approval  
 33.759 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244841)

**Decision:** The document was **approved**.

**S3-244842 Solution 7 updates to address ENs**

*Type: pCR For: Approval  
 33.759 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **approved**.

**S3-244957 Enhancing the conclusion of KI#1**

*Type: pCR For: Approval  
 33.759 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-245258**.

**S3-245258 Enhancing the conclusion of KI#1**

*Type: pCR For: Approval  
 33.759 v0.4.0  
 Source: Qualcomm Incorporated*

(Replaces S3-244957)

**Decision:** The document was **noted**.

**S3-245048 Presentation of Report to TSG: TR 33.759 'Study on security enhancements of Uncrewed Aerial Systems (UAS) Phase 3', Version 1.0.0**

*Type: TS or TR cover For: Approval  
 33.759 v0.4.0  
 Source: Ericsson*

**Abstract:**

cover page of UAS3 TR

**Decision:** The document was **revised to S3-245370**.

**S3-245370 Presentation of Report to TSG: TR 33.759 'Study on security enhancements of Uncrewed Aerial Systems (UAS) Phase 3', Version 1.0.0**

*Type: TS or TR cover For: Approval  
 33.759 v0.4.0  
 Source: Ericsson*

(Replaces S3-245048)

**Decision:** The document was **approved**.

**S3-244869 Updates to Terms, Abbreviations and Overview**

*Type: draftCR For: Approval  
 33.256 v18.2.0  
 Source: Ericsson*

**Abstract:**

Updates to Terms, Abbreviations and Overview

**Decision:** The document was **noted**.

**S3-244966 UUAA in 5GS updates**

*Type: draftCR For: Agreement  
 33.256 v18.2.0  
 Source: Ericsson*

**Abstract:**

Updates to USS changeover procedure.

**Decision:** The document was **noted**.

**S3-245023 pCR to TR33.713 Conclusion#5**

*Type: pCR For: Approval  
 33.713 v0.4.0  
 Source: CATT*

**Decision:** The document was **withdrawn**.

**S3-245194 Draft TR 33.759**

*Type: draft TR For: Approval  
 33.759 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

### 5.12 Study on security Aspects of Enhancement for Proximity Based Services in 5GS Phase 3

**S3-244674 LS on Multi-hop U2N Relay Architecture Aspects**

*Type: LS out For: Approval  
 to SA2, cc CT1  
 Source: InterDigital France R&D, SAS*

**Decision:** The document was **revised to S3-245259**.

**S3-245259 LS on Multi-hop U2N Relay Architecture Aspects**

*Type: LS out For: Approval  
 to SA2, cc CT1  
 Source: InterDigital France R&D, SAS*

(Replaces S3-244674)

**Decision:** The document was **approved**.

**S3-245091 Update Solution #2**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245260**.

**S3-245260 Update Solution #2**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Ericsson*

(Replaces S3-245091)

**Decision:** The document was **approved**.

**S3-244962 Addressing Ens in solution #16**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-245261**.

**S3-245261 Addressing Ens in solution #16**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Qualcomm Incorporated*

(Replaces S3-244962)

**Decision:** The document was **approved**.

**S3-245092 Update Solution#4**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245262**.

**S3-245262 Update Solution#4**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Ericsson*

(Replaces S3-245092)

**Decision:** The document was **approved**.

**S3-244963 Conclusion of multi-hop U2N relay discovery security in KI#1**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-245263**.

**S3-245263 Conclusion of multi-hop U2N relay discovery security in KI#1**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Qualcomm Incorporated*

(Replaces S3-244963)

**Decision:** The document was **approved**.

**S3-244887 Conclude to KI#1 of TR 33.743 - U2NW discovery security**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Huawei, HiSilicon, Interdigital*

**Decision:** The document was **merged**.

**S3-244978 Conclusion for KI#1 in TR 33.743**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Beijing Xiaomi Mobile Software*

**Decision:** The document was **merged**.

**S3-245090 Conclusion to KI#1 – multi-hop U2NW discovery**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **merged**.

**S3-245024 pCR to TR33.743 Conclusion#1**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: CATT*

**Decision:** The document was **merged**.

**S3-244888 Conclude to KI#1 of TR 33.743 - U2NW security setup**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Huawei, HiSilicon, Interdigital, China Telecom, Xiaomi*

**Decision:** The document was **revised to S3-245264**.

**S3-245264 Conclude to KI#1 of TR 33.743 - U2NW security setup**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Huawei, HiSilicon, Interdigital, China Telecom, Xiaomi*

(Replaces S3-244888)

**Decision:** The document was **approved**.

**S3-244964 Conclusion of multi-hop U2N relay communication security in KI#1**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **merged**.

**S3-245089 Conclusion for Key Issue#1 - Communication setup**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **merged**.

**S3-244886 Update to KI#2 conclusion of TR 33.743**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245265**.

**S3-245265 Update to KI#2 conclusion of TR 33.743**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244886)

**Decision:** The document was **approved**.

**S3-244892 New solution about Multi-hop U2U Model A discovery in non-IP scenario**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245266**.

**S3-245266 New solution about Multi-hop U2U Model A discovery in non-IP scenario**

*Type: pCR For: Approval  
 33.743 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244892)

**Decision:** The document was **approved**.

**S3-245195 Draft TR 33.743**

*Type: draft TR For: Approval  
 33.743 v0.5.0  
 Source: Huawei*

**Decision:** The document was **approved**.

**S3-245267 Cover sheet Draft TR 33.743**

*Type: TS or TR cover For: Approval  
 33.743 v..  
 Source: Huawei*

**Decision:** The document was **approved**.

### 5.13 Study on security aspects of AIML enhancements

**S3-244740 KI1 update**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: vivo*

**Discussion:**

Huawei didn’t agree.Ericsson supported this.

OPPO supported to update the key issue 1.

It was mentioned that SA2 had left an editor's note for SA3 working on this new solution in 741.

**Decision:** The document was **merged**.

**S3-244849 Update KI #1 of TR 33.784**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: OPPO*

**Decision:** The document was **revised to S3-245271**.

**S3-245271 Update KI #1 of TR 33.784**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: OPPO*

(Replaces S3-244849)

**Decision:** The document was **approved**.

**S3-244741 New sol: User consent for LCS**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: vivo*

**Decision:** The document was **noted**.

**S3-245108 A user consent mechanism for data collection related to AIML-based positioning**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Xiaomi communications*

**Decision:** The document was **noted**.

**S3-244907 Authorization of direct AI/ML based Positioning UE data collection**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: OPPO*

**Discussion:**

Huawei: privacy profile is irrelevant in this use case. Ericsson supported this.

**Decision:** The document was **noted**.

**S3-244873 Solution 1 update to address ENs**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **approved**.

**S3-244988 Resolution of ENs and updates in Solution#16**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

**S3-244871 Update of Conclusion on Key issue #1**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Huawei, HiSilicon*

**Discussion:**

Ericsson didn’t agree with this.

**Decision:** The document was **revised to S3-245346**.

**S3-245346 Update of Conclusion on Key issue #1**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244871)

**Decision:** The document was **approved**.

**S3-244991 Conclusion update for KI#1**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245345**.

**S3-245345 Conclusion update for KI#1**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Ericsson*

(Replaces S3-244991)

**Decision:** The document was **approved**.

**S3-244742 Additional Conclusion for key issue#1**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: vivo*

**Decision:** The document was **noted**.

**S3-244987 New conclusion for KI#1**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

**S3-244739 Address EN in solution 4**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: vivo*

**Decision:** The document was **approved**.

**S3-244994 Resolution of Editor's Note in Solution#5 (Authorization of VFL participants involving NWDAF and AF)**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

**S3-244743 Additional Conclusion for key issue#2**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: vivo, Nokia, Nokia Shanghai Bell, China Mobile, China Telecom, China Unicom, Xiaomi*

**Decision:** The document was **revised to S3-245269**.

**S3-245269 Additional Conclusion for key issue#2**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: vivo, Nokia, Nokia Shanghai Bell, China Mobile, China Telecom, China Unicom, Xiaomi*

(Replaces S3-244743)

**Discussion:**

Ericsson asked to be minuted: Ericsson provided a compromise. Ericsson not satisfied with S3-245269 but for the sake of progression of the study and to focus on other more important questions, Ericsson accepts S3-245269.

**Decision:** The document was **approved**.

**S3-244881 Update to Conclusion on Key issue #2**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-244995 Conclusion for KI#2 for the case that the NWDAF is the VFL Server**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **merged**.

**S3-244874 Solution 9 update to address ENs**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **approved**.

**S3-244691 KI3 conclusion**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Nokia*

**Decision:** The document was **merged**.

**S3-244744 Additional Conclusion for key Issue#3**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: vivo, China Mobile, China Telecom, China Unicom*

**Discussion:**

Ericsson: thiis is not supported by many companies in SA2 and it is still under discussion there. We shouldn’t influence SA2 discussions, this is within their scope.

Huawei supported the contribution. China Mobile supported this as well.

Vivo: no impact on SA2, this is high level.

Ericsson: this would give guidance to SA2 and influence their work.

The Chair commented that this wasn't in SA3's scope.

**Decision:** The document was **revised to S3-245270**.

**S3-245270 Additional Conclusion for key Issue#3**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: vivo, China Mobile, China Telecom, China Unicom*

(Replaces S3-244744)

**Discussion:**

Support (on 270r1. IF ANOTHER REVISION IS UPLOADED THE SHOW OF HANDS BELOW IS TO BE DELETED).

China Mobile, Vivo, China Telecom, Huawei, CATT, ZTE.

No support: Ericsson, Interdigital, Nokia, Xiaomi, OPPO,KDDI.

**Decision:** The document was **approved**.

**S3-244872 Update of Conclusion on Key issue #3**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-244745 TR clean up**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: vivo*

**Decision:** The document was **revised to S3-245347**.

**S3-245347 TR clean up**

*Type: pCR For: Approval  
 33.784 v0.4.0  
 Source: vivo*

(Replaces S3-244745)

**Decision:** The document was **approved**.

**S3-244857 Presentation of Report to TSG:**

*Type: other For: Approval  
 33.784 v..  
 Source: China Mobile*

**Decision:** The document was **approved**.

**S3-245197 Draft TR 33.784**

*Type: draft TR For: Approval  
 33.784 v0.5.0  
 Source: China Mobile*

**Decision:** The document was **approved**.

### 5.14 Study on EdgeComputing

**S3-244813 Solving the problem of generating and forwarding the salt to the BSF**

*Type: pCR For: Approval  
 33.749 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245348**.

**S3-245348 Solving the problem of generating and forwarding the salt to the BSF**

*Type: pCR For: Approval  
 33.749 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244813)

**Decision:** The document was **approved**.

**S3-245052 Resolving ENs in Solution #6**

*Type: pCR For: Approval  
 33.749 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245272**.

**S3-245272 Resolving ENs in Solution #6**

*Type: pCR For: Approval  
 33.749 v0.4.0  
 Source: Ericsson*

(Replaces S3-245052)

**Decision:** The document was **approved**.

**S3-245053 Resolving ENs in Solution #9**

*Type: pCR For: Approval  
 33.749 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245273**.

**S3-245273 Resolving ENs in Solution #9**

*Type: pCR For: Approval  
 33.749 v0.4.0  
 Source: Ericsson*

(Replaces S3-245053)

**Decision:** The document was **approved**.

**S3-244812 conclusion to KI#2.1 of eEDGE**

*Type: pCR For: Approval  
 33.749 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-244942 Conclusion for KI#2.1**

*Type: pCR For: (not specified)  
 33.749 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-245274**.

**S3-245274 Conclusion for KI#2.1**

*Type: pCR For: -  
 33.749 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-244942)

**Decision:** The document was **approved**.

**S3-245054 Conclusion for KI#2.1**

*Type: pCR For: Approval  
 33.749 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **merged**.

**S3-244943 Conclusion for KI#1.1**

*Type: pCR For: (not specified)  
 33.749 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

Ericsson: not needed.

**Decision:** The document was **revised to S3-245349**.

**S3-245349 Conclusion for KI#1.1**

*Type: pCR For: -  
 33.749 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-244943)

**Decision:** The document was **approved**.

**S3-244936 Informative annex for N6 delay measurement protocols**

*Type: pCR For: (not specified)  
 33.749 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **noted**.

**S3-244965 LS on security aspects related to protocols used in N6 delay measurements**

*Type: LS out For: (not specified)  
 to SA2  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

Apple: no need, it is implied that we recommend these kind of protocols.

Nokia replied that SA2 should remove references to insecure protocols.

Ericsson: not sure if this is needed, it can be done directly in SA2.

Nokia: SA2 is meeting next week and finalising the normative work then.

**Decision:** The document was **revised to S3-245276**.

**S3-245276 LS on security aspects related to protocols used in N6 delay measurements**

*Type: LS out For: -  
 to SA2  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-244965)

**Decision:** The document was **approved**.

**S3-245198 Draft TR 33.749**

*Type: draft TR For: Approval  
 33.749 v0.5.0  
 Source: China Unicom*

**Decision:** The document was **approved**.

### 5.15 Study on security aspects for Multi-Access

**S3-244787 Cover Sheet for TR 33.754**

*Type: TS or TR cover For: (not specified)  
 33.754 v1.1.0  
 Source: Intel Corporation (UK) Ltd*

**Discussion:**

Qualcomm: concluding that there is no normaitve work envisioned is a conclusion.

Revised to change the outstanding issues.

**Decision:** The document was **revised to S3-245277**.

**S3-245277 Cover Sheet for TR 33.754**

*Type: TS or TR cover For: -  
 33.754 v1.1.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S3-244787)

**Decision:** The document was **approved**.

**S3-245003 Presentation of Report to TSG: TR 33.754 Study on security aspects for multi-access (DualSteer + Access Traffic Steering, Switch and Splitting support in the 5G system architecture phase 4 (ATSSS Ph-4), Version 1.1.0**

*Type: TS or TR cover For: Approval  
 33.754 v1.1.0  
 Source: Ericsson*

**Decision:** The document was **noted**.

### 5.16 Study on 5GS enhancements for Energy Saving

**S3-244606 Discussion paper on user consent for energy information collection and energy information exposure**

*Type: discussion For: Discussion  
 Source: Deutsche Telekom AG*

**Abstract:**

Discussion paper on user consent for energy information collection and energy information exposure

**Decision:** The document was **noted**.

**S3-244859 Resolution of ENs concerning compliance to regional legislation when collecting and exposing user energy consumption information.**

*Type: pCR For: Approval  
 33.766 v0.4.0  
 Source: Nokia, Deutsche Telekom*

**Discussion:**

Huawei: the way the requirements are written are very unusual. We don’t need these requirements.

AT&T: reword requirements, something like "support compliance".

**Decision:** The document was **revised to S3-245278**.

**S3-245278 Resolution of ENs concerning compliance to regional legislation when collecting and exposing user energy consumption information.**

*Type: pCR For: Approval  
 33.766 v0.4.0  
 Source: Nokia, Deutsche Telekom*

(Replaces S3-244859)

**Decision:** The document was **approved**.

**S3-244860 Regional legislation compliance in relation to collection of user information.**

*Type: pCR For: Approval  
 33.766 v0.4.0  
 Source: Nokia, Deutsche Telekom*

**Decision:** The document was **revised to S3-245350**.

**S3-245350 Regional legislation compliance in relation to collection of user information.**

*Type: pCR For: Approval  
 33.766 v0.4.0  
 Source: Nokia, Deutsche Telekom*

(Replaces S3-244860)

**Decision:** The document was **approved**.

**S3-244885 resolve EN for K1 and KI2**

*Type: pCR For: Approval  
 33.766 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-245050 New solution for security aspects on user consent for policy update based on energy information**

*Type: pCR For: Approval  
 33.766 v0.4.0  
 Source: IIT Bombay*

**Abstract:**

It is proposed to approve the new solution for Key Issue 1 of TR 33.766 related to security aspects on user consent for energy information collection and its analysis.

**Decision:** The document was **noted**.

**S3-245051 New solution for security aspects on user consent for energy information exposure/retrieval**

*Type: pCR For: Approval  
 33.766 v0.4.0  
 Source: IIT Bombay*

**Abstract:**

It is proposed to approve the new solution for Key Issue 2 of TR 33.766 related to security aspects on user consent for energy information exposure/retrieval.

**Decision:** The document was **noted**.

**S3-245199 Draft TR 33.766**

*Type: draft TR For: Approval  
 33.766 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

### 5.17 Study on security aspects of 5G NR Femto

**S3-245100 Teminology updates regarding NR Femto Hosting Party**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: LG Electronics*

**Decision:** The document was **merged**.

**S3-244765 Update to KI#9**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **merged**.

**S3-244898 Addressing EN in KI#9**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245281**.

**S3-245281 Addressing EN in KI#9**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244898)

**Decision:** The document was **approved**.

**S3-244766 Address the EN in Sol#3**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **approved**.

**S3-244725 Add evaluation to solution#3**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Charter Communications, Inc*

**Abstract:**

Add evaluation to solution#3

**Decision:** The document was **approved**.

**S3-244799 EN Removal for solution #5**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Nokia*

**Discussion:**

Huawei: replace SA2 with a reference to the TR number. This will be fixed by the Rapporteur in the draft TR.

**Decision:** The document was **approved**.

**S3-244801 EN Removal for solution #6**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Nokia*

**Discussion:**

MCC: reference to the SA2 spec is missing. Replace SA2 with reference to their TR.

This will be fixed by the Rapporteur.

**Decision:** The document was **approved**.

**S3-244802 Updates and EN Removal for solution #7**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Nokia*

**Decision:** The document was **approved**.

**S3-244946 New solution for key issue 3**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: China Mobile*

**Discussion:**

Nokia: not OK with this solution.Impact on the security gateway.

Charter: security gateway has no protocol awareness, we wouldn’t know how to implement this in there.

**Decision:** The document was **revised to S3-245351**.

**S3-245351 New solution for key issue 3**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: China Mobile*

(Replaces S3-244946)

**Decision:** The document was **approved**.

**S3-244768 Update conclusions to KI#1**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **merged**.

**S3-244798 Updates to conclusions for Key Issue #1**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Nokia*

**Discussion:**

Huawei: the last sentence of the note is new, never been discussed before. Remove this.

**Decision:** The document was **revised to S3-245282**.

**S3-245282 Updates to conclusions for Key Issue #1**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Nokia*

(Replaces S3-244798)

**Decision:** The document was **approved**.

**S3-244818 Updates to conclusions for Key Issue #3**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Nokia*

**Discussion:**

China Mobile didn’t agree with ths.

**Decision:** The document was **revised to S3-245352**.

**S3-245352 Updates to conclusions for Key Issue #3**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Nokia*

(Replaces S3-244818)

**Decision:** The document was **approved**.

**S3-244900 Updating conclusion#5**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245283**.

**S3-245283 Updating conclusion#5**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244900)

**Decision:** The document was **approved**.

**S3-244901 Updating conclusion#6**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245284**.

**S3-245284 Updating conclusion#6**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244901)

**Decision:** The document was **approved**.

**S3-244767 Add conclusions to KI#9**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **merged**.

**S3-244899 Adding conclusion to KI#9**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Huawei, HiSilicon*

**Discussion:**

Charter: security gateway doesn’t have awareness of protocols.

Huawei: the SGW is ahead of the core network, so it doesn’t have a knowlledge of the topology.

**Decision:** The document was **revised to S3-245285**.

**S3-245285 Adding conclusion to KI#9**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244899)

**Decision:** The document was **approved**.

**S3-244769 Remove the EN in stable conclusions**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-245353**.

**S3-245353 Remove the EN in stable conclusions**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: ZTE Corporation*

(Replaces S3-244769)

**Decision:** The document was **approved**.

**S3-244724 Update solution mapping to incorporate KI#9**

*Type: pCR For: Approval  
 33.745 v0.4.0  
 Source: Charter Communications, Inc*

**Abstract:**

Update solution mapping to incorporate KI#9

**Decision:** The document was **approved**.

**S3-245203 Draft TR 33.745**

*Type: draft TR For: Approval  
 33.745 v0.5.0  
 Source: ZTE*

**Decision:** The document was **approved**.

**S3-245286 Cover sheet draft TR 33.745 for approval**

*Type: TS or TR cover For: Approval  
 33.745 v..  
 Source: ZTE*

**Decision:** The document was **approved**.

### 5.18 Study on security aspects of 5G Mobile Metaverse services

**S3-244770 Conclusion on KI#1**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **merged**.

**S3-244890 Conclude KI#1 in TR 33.721**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-245034 [TR 33.721] Conclusion for Key issue#1**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-245287**.

**S3-245287 [TR 33.721] Conclusion for Key issue#1**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Samsung*

(Replaces S3-245034)

**Decision:** The document was **approved**.

**S3-244771 Conclusion on KI#2**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **merged**.

**S3-244891 Conclude KI#2 in TR 33.721**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245288**.

**S3-245288 Conclude KI#2 in TR 33.721**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244891)

**Decision:** The document was **approved**.

**S3-244986 33.721: Conclusion for Key Issue 2**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Xiaomi EV Technology*

**Discussion:**

Ericsson argued against the use of Annex V of TS 33.501 in the conclusions. This was considered new information, not clear.

**Decision:** The document was **merged**.

**S3-245035 [TR 33.721] Conclusion for Key issue#2**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Samsung*

**Decision:** The document was **merged**.

**S3-245033 [TR 33.721] Update to solution#6**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-245289**.

**S3-245289 [TR 33.721] Update to solution#6**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Samsung*

(Replaces S3-245033)

**Decision:** The document was **approved**.

**S3-245124 Solution for KI#3 to authorize DA client to create digital asset**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-245290**.

**S3-245290 Solution for KI#3 to authorize DA client to create digital asset**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-245124)

**Decision:** The document was **approved**.

**S3-245125 olution for KI#3 to authorize VAL-S or VAL\_C to access digital asset**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-245291**.

**S3-245291 olution for KI#3 to authorize VAL-S or VAL\_C to access digital asset**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-245125)

**Decision:** The document was **approved**.

**S3-245036 [TR 33.721] Conclusion for Key issue#3**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Samsung*

**Decision:** The document was **noted**.

**S3-244985 33.721: New Solution for Key Issue 4**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Xiaomi EV Technology*

**Decision:** The document was **revised to S3-245354**.

**S3-245354 33.721: New Solution for Key Issue 4**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Xiaomi EV Technology*

(Replaces S3-244985)

**Decision:** The document was **approved**.

**S3-245126 Solution for KI#4 to authorize avatar by metaverse service provider**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-245292**.

**S3-245292 Solution for KI#4 to authorize avatar by metaverse service provider**

*Type: pCR For: Approval  
 33.721 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-245126)

**Decision:** The document was **approved**.

**S3-245204 Draft TR 33.721**

*Type: draft TR For: Approval  
 33.721 v0.5.0  
 Source: Samsung*

**Decision:** The document was **approved**.

### 5.19 Study on security aspects of CAPIF Phase 3

**S3-244773 Add evaluation to Sol#1**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: ZTE Corporation*

**Decision:** The document was **approved**.

**S3-244832 Solution 2 updates to address ENs**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-244833 Adding evaluation to Solution 2**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245220**.

**S3-245220 Adding evaluation to Solution 2**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244833)

**Decision:** The document was **approved**.

**S3-244617 Updates to Solution #5**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Lenovo*

**Decision:** The document was **revised to S3-245221**.

**S3-245221 Updates to Solution #5**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Lenovo*

(Replaces S3-244617)

**Decision:** The document was **approved**.

**S3-244747 Evaluation to solution #4 in TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecomunication Corp.*

**Decision:** The document was **noted**.

**S3-244774 Conclusion on KI#1.1**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: ZTE Corporation*

**Decision:** The document was **merged**.

**S3-244837 Conclusion to KI#1.1**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245222**.

**S3-245222 Conclusion to KI#1.1**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244837)

**Decision:** The document was **approved**.

**S3-244779 Update and evaluate solution #6 in TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecomunication Corp.*

**Decision:** The document was **revised to S3-245223**.

**S3-245223 Update and evaluate solution #6 in TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecomunication Corp.*

(Replaces S3-244779)

**Decision:** The document was **approved**.

**S3-244784 Evaluation to solution #9 in TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecomunication Corp.*

**Decision:** The document was **merged**.

**S3-245110 Add evaluation for solution #9 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

**Decision:** The document was **revised to S3-245224**.

**S3-245224 Add evaluation for solution #9 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

(Replaces S3-245110)

**Decision:** The document was **approved**.

**S3-245116 Resolve ENs for solution #9 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

**Decision:** The document was **revised to S3-245225**.

**S3-245225 Resolve ENs for solution #9 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

(Replaces S3-245116)

**Decision:** The document was **approved**.

**S3-244928 Addressing ENs on KI1.2 RO permission management in solution 7**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245226**.

**S3-245226 Addressing ENs on KI1.2 RO permission management in solution 7**

*Type: pCR For: -  
 33.700-22 v0.2.0  
 Source: Nokia*

(Replaces S3-244928)

**Decision:** The document was **approved**.

**S3-245058 Resolving ENs and evaluation of Solution #11**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245227**.

**S3-245227 Resolving ENs and evaluation of Solution #11**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Ericsson*

(Replaces S3-245058)

**Decision:** The document was **approved**.

**S3-244781 Evaluation to solution #4 in TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecomunication Corp.*

**Decision:** The document was **noted**.

**S3-244834 Solution 4 updates to address ENs**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-244835 Adding evaluation to Solution 4**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245228**.

**S3-245228 Adding evaluation to Solution 4**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244835)

**Decision:** The document was **approved**.

**S3-244783 Evaluation to solution #8 in TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecomunication Corp.*

**Decision:** The document was **merged**.

**S3-245109 Add evaluation for solution #8 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

**Decision:** The document was **revised to S3-245229**.

**S3-245229 Add evaluation for solution #8 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

(Replaces S3-245109)

**Decision:** The document was **approved**.

**S3-245115 Resolve ENs for solution #8 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

**Decision:** The document was **revised to S3-245230**.

**S3-245230 Resolve ENs for solution #8 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

(Replaces S3-245115)

**Decision:** The document was **approved**.

**S3-244775 Conclusion on KI#1.2**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: ZTE Corporation*

**Decision:** The document was **merged**.

**S3-244780 Conclusion on key issue #1.2 in TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecomunication Corp.*

**Decision:** The document was **merged**.

**S3-244838 Conclusion to KI#1.2**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245231**.

**S3-245231 Conclusion to KI#1.2**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244838)

**Decision:** The document was **approved**.

**S3-245057 Update to KI#1.2**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245232**.

**S3-245232 Update to KI#1.2**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Ericsson*

(Replaces S3-245057)

**Decision:** The document was **noted**.

**S3-244836 Adding evaluation to Solution 10**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245233**.

**S3-245233 Adding evaluation to Solution 10**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244836)

**Decision:** The document was **approved**.

**S3-244929 Update to KI1.3 Solution 29 on scope enhancing**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245234**.

**S3-245234 Update to KI1.3 Solution 29 on scope enhancing**

*Type: pCR For: -  
 33.700-22 v0.2.0  
 Source: Nokia*

(Replaces S3-244929)

**Decision:** The document was **approved**.

**S3-244839 Conclusion to KI#1.3**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245235**.

**S3-245235 Conclusion to KI#1.3**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-244839)

**Decision:** The document was **approved**.

**S3-244616 Updates to Solution #21**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Lenovo*

**Decision:** The document was **revised to S3-245236**.

**S3-245236 Updates to Solution #21**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Lenovo*

(Replaces S3-244616)

**Decision:** The document was **approved**.

**S3-244826 Evaluation for sol#21**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecom*

**Decision:** The document was **merged**.

**S3-244772 Evaluation for the Solution 23**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-245237**.

**S3-245237 Evaluation for the Solution 23**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: ZTE Corporation*

(Replaces S3-244772)

**Decision:** The document was **approved**.

**S3-244821 Evaluation for sol#13**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecom*

**Decision:** The document was **merged**.

**S3-244931 Update to KI2 Solution 13 on authentication aspect in CAPIF interconnect requesting security information from another CCF**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245238**.

**S3-245238 Update to KI2 Solution 13 on authentication aspect in CAPIF interconnect requesting security information from another CCF**

*Type: pCR For: -  
 33.700-22 v0.2.0  
 Source: Nokia*

(Replaces S3-244931)

**Decision:** The document was **approved**.

**S3-244822 Evaluation for sol#14**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecom*

**Decision:** The document was **merged**.

**S3-244932 Update to KI2 Solution 14 on authentication aspect in CAPIF interconnect when API invoker has not included CCF information**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245239**.

**S3-245239 Update to KI2 Solution 14 on authentication aspect in CAPIF interconnect when API invoker has not included CCF information**

*Type: pCR For: -  
 33.700-22 v0.2.0  
 Source: Nokia*

(Replaces S3-244932)

**Decision:** The document was **approved**.

**S3-244823 Evaluation for sol#15**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecom*

**Decision:** The document was **merged**.

**S3-244933 Update to KI2 Solution 15 on authorization token request handling in CAPIF interconnect**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245240**.

**S3-245240 Update to KI2 Solution 15 on authorization token request handling in CAPIF interconnect**

*Type: pCR For: -  
 33.700-22 v0.2.0  
 Source: Nokia*

(Replaces S3-244933)

**Decision:** The document was **approved**.

**S3-244824 Evaluation for sol#18**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecom*

**Decision:** The document was **merged**.

**S3-245111 Add evaluation for solution #18 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

**Decision:** The document was **revised to S3-245241**.

**S3-245241 Add evaluation for solution #18 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

(Replaces S3-245111)

**Decision:** The document was **approved**.

**S3-244825 Evaluation for sol#19**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecom*

**Decision:** The document was **merged**.

**S3-245112 Add evaluation for solution #19 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

**Decision:** The document was **revised to S3-245242**.

**S3-245242 Add evaluation for solution #19 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

(Replaces S3-245112)

**Decision:** The document was **approved**.

**S3-244827 Evaluation for sol#22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecom*

**Decision:** The document was **merged**.

**S3-245059 Resolving ENs and evaluation of Solution #22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245243**.

**S3-245243 Resolving ENs and evaluation of Solution #22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Ericsson*

(Replaces S3-245059)

**Decision:** The document was **approved**.

**S3-244828 Evaluation for sol#24**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecom*

**Decision:** The document was **merged**.

**S3-245030 [TR 33.700-22] Update to solution#24**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-245244**.

**S3-245244 [TR 33.700-22] Update to solution#24**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Samsung*

(Replaces S3-245030)

**Decision:** The document was **approved**.

**S3-244829 Update sol#17**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecom*

**Decision:** The document was **revised to S3-245245**.

**S3-245245 Update sol#17**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecom*

(Replaces S3-244829)

**Decision:** The document was **approved**.

**S3-244930 Update to KI2 Solution 12 on security method retrieval in CAPIF interconnect**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245246**.

**S3-245246 Update to KI2 Solution 12 on security method retrieval in CAPIF interconnect**

*Type: pCR For: -  
 33.700-22 v0.2.0  
 Source: Nokia*

(Replaces S3-244930)

**Decision:** The document was **approved**.

**S3-244934 Update to KI2 Solution 16 on mapping an API invoker authorization request to the correct CCF in CAPIF interconnect**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245247**.

**S3-245247 Update to KI2 Solution 16 on mapping an API invoker authorization request to the correct CCF in CAPIF interconnect**

*Type: pCR For: -  
 33.700-22 v0.2.0  
 Source: Nokia*

(Replaces S3-244934)

**Decision:** The document was **approved**.

**S3-245113 Add evaluation for solution #20 of TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

**Decision:** The document was **approved**.

**S3-244776 Conclusion on KI#2**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-245248**.

**S3-245248 Conclusion on KI#2**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: ZTE Corporation*

(Replaces S3-244776)

**Decision:** The document was **approved**.

**S3-244820 Conclusion for KI#2**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecom*

**Decision:** The document was **merged**.

**S3-245117 Conclusion for CAPIF 6 and CAPIF 6e security**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

**Decision:** The document was **merged**.

**S3-245060 Update to Solution #25 and evaluation**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245249**.

**S3-245249 Update to Solution #25 and evaluation**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Ericsson*

(Replaces S3-245060)

**Decision:** The document was **approved**.

**S3-244937 KI4 Sol on Authentication of the origin API invoker in nested API invocation**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245250**.

**S3-245250 KI4 Sol on Authentication of the origin API invoker in nested API invocation**

*Type: pCR For: -  
 33.700-22 v0.2.0  
 Source: Nokia*

(Replaces S3-244937)

**Decision:** The document was **approved**.

**S3-245031 [TR 33.700-22] Update to solution#27**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-245251**.

**S3-245251 [TR 33.700-22] Update to solution#27**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Samsung*

(Replaces S3-245031)

**Decision:** The document was **approved**.

**S3-245061 Resolving EN and evaluation of Solution #26**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245252**.

**S3-245252 Resolving EN and evaluation of Solution #26**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Ericsson*

(Replaces S3-245061)

**Decision:** The document was **approved**.

**S3-245114 Authorization mechanism for nested API invocation**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

**Decision:** The document was **revised to S3-245253**.

**S3-245253 Authorization mechanism for nested API invocation**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

(Replaces S3-245114)

**Decision:** The document was **approved**.

**S3-245032 [TR 33.700-22] Conclusion for Key issue#4**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Samsung*

**Decision:** The document was **noted**.

**S3-244935 Update to KI5 Solution on authenticating multiple API invokers of the same RO**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245254**.

**S3-245254 Update to KI5 Solution on authenticating multiple API invokers of the same RO**

*Type: pCR For: -  
 33.700-22 v0.2.0  
 Source: Nokia*

(Replaces S3-244935)

**Decision:** The document was **approved**.

**S3-244938 New KI on Onboarding security issue**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245255**.

**S3-245255 New KI on Onboarding security issue**

*Type: pCR For: -  
 33.700-22 v0.2.0  
 Source: Nokia*

(Replaces S3-244938)

**Decision:** The document was **approved**.

**S3-244939 Solution on validation of correct GPSI in API invoker information**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **revised to S3-245371**.

**S3-245371 Solution on validation of correct GPSI in API invoker information**

*Type: pCR For: -  
 33.700-22 v0.2.0  
 Source: Nokia*

(Replaces S3-244939)

**Decision:** The document was **approved**.

**S3-244940 Correction of implementation mistake**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **approved**.

**S3-244941 Update of mapping table**

*Type: pCR For: (not specified)  
 33.700-22 v0.2.0  
 Source: Nokia*

**Decision:** The document was **approved**.

**S3-244778 Evaluation to solution #5 in TR 33.700-22**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: China Telecomunication Corp.*

**Decision:** The document was **withdrawn**.

**S3-244870 Conclusion for KI#3**

*Type: pCR For: Approval  
 33.700-32 v0.4.0  
 Source: China Telecomunication Corp.*

**Decision:** The document was **withdrawn**.

**S3-245118 New WID on security aspects of CAPIF Phase3**

*Type: pCR For: Approval  
 33.700-22 v0.2.0  
 Source: Xiaomi communications*

**Decision:** The document was **withdrawn**.

**S3-245205 Draft TR 33.700-22**

*Type: draft TR For: Approval  
 33.700-22 v0.3.0  
 Source: Ericsson*

**Decision:** The document was **approved**.

## 6 New Study/Work item proposals

**S3-244614 Discussion Paper on eZTS SBA WID Proposal**

*Type: discussion For: Discussion  
 33.794 v..  
 Source: Motorola Mobility [Rapporteur]*

**Decision:** The document was **noted**.

**S3-244615 New WID on enablers for Zero Trust Security in SBA**

*Type: WID new For: Approval  
 Source: Motorola Mobility [Rapporteur]*

**Decision:** The document was **revised to S3-245319**.

**S3-245319 New WID on enablers for Zero Trust Security in SBA**

*Type: WID new For: Approval  
 Source: Motorola Mobility [Rapporteur]*

(Replaces S3-244615)

**Decision:** The document was **noted**.

**S3-244618 New Study on 3GPP Cryptographic Inventory**

*Type: SID new For: (not specified)  
 Source: Nokia, Nokia Shanghai Bell*

**Discussion:**

Nokia cadded that there were comments for which Release this SID would go for. They proposed to start in Rel-19 and continue in Rel-20. The Chair added that this was being done in other SDOs already.

DT supported this and preferred to have it in Rel-19.

Apple supported this and agreed to start in Rel-19. LTE inventory could be done later on.

CableLabs supported this as well.

Alex (GSMA): good thing to do, but this is not a study, it’s a report (so change the title).

NCSC: why going back to 4G? This is about migration. GSMA replied that all generations apply, to know what crypto is available and how strong it is. Surely it can be found that 2G and 3G may be found to be not possible to protect.

Vivo supported this SID, no preference for Release.

Huawei: concerned about Release 19, there is no time for this.Let's leave it for Rel-20.

NIST supported this SID.

The Chair clarified that there was no normative work expected from here. The understanding is that TUs would not be needed.

Qualcomm: we disagree. These crypto algorithms may change every Release so we have to update the TR every time. PQC is not going to happen in one Release.

Ericsson was fine with the study but wanted to rephrase the objectives.

Huawei: questionable for Rel-19. No rush, let's discuss it in Rel-20.

NIST: snapshot, not new features here.

ORANGE: ndoing nothing is not giving a good image for 3GPP when other bodies have started sdoing the same.

NTT-Docomo: scope can be 5G specs only, by using the flag that is in the Portal for these.

The Chair clarified that this SID would not be approved if it appeared as Rel-20 in Plenary. Huawei answered that this would have no impact if it didn’t have any TUs. The Chair answered that this would keep it aside anyway.

Verizon: other organizations have started, we need to be proactive.

T-Mobile: let’s do it Rel-19.

Motorola Solutions: Rel-19 and extend it, there is no normative impact.

**Decision:** The document was **revised to S3-245142**.

**S3-245142 New Study on 3GPP Cryptographic Inventory**

*Type: SID new For: -  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-244618)

**Decision:** The document was **agreed**.

**S3-244622 New SID on 5G Security Assurance Specification (SCAS) for the Container-based Products**

*Type: SID new For: Agreement  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Abstract:**

SID on 5G Security Assurance Specification (SCAS) for the Container-based Products

**Discussion:**

It was clarified that there was only one meeting left for Rel-19.

Huawei: 3GPP is not the right place to deal with containers.

Alex (GSMA) commented that the Industry needs to do this somewhere. The implications on the security of products in the market should be at least studied, leading to something normative is a different question.

Nokia: we have a gap about containers in our specifications.

NTT-Docomo supported this work.

Huawei:

**Decision:** The document was **noted**.

**S3-244683 New WID on Automatic Certificate Management Environment (ACME) for the Service Based Architecture (SBA)**

*Type: WID new For: Approval  
 Source: Cisco Systems*

**Decision:** The document was **revised to S3-245372**.

**S3-245372 New WID on Automatic Certificate Management Environment (ACME) for the Service Based Architecture (SBA)**

*Type: WID new For: Approval  
 Source: Cisco Systems*

(Replaces S3-244683)

**Decision:** The document was **agreed**.

**S3-244684 Use of AEAD in Next-Generation 3GPP System**

*Type: discussion For: Endorsement  
 Source: KDDI Corporation*

**Discussion:**

Qualcomm: we will need RAN groups to get involved here.

CableLabs: we support the study but we cannot endorse this. Better to discuss the SID. SA3 needs to iniitiate this.

Nokia wanted to endorse the document.

**Decision:** The document was **noted**.

**S3-244777 WID on security aspects of 5G NR Femto**

*Type: WID new For: Agreement  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-245325**.

**S3-245325 WID on security aspects of 5G NR Femto**

*Type: WID new For: Agreement  
 Source: ZTE Corporation*

(Replaces S3-244777)

**Decision:** The document was **agreed**.

**S3-244782 New WID on Security Aspects of Enhancement of Support for Edge Computing in 5GC — phase 3**

*Type: WID new For: Agreement  
 Source: China Unicom, Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245342**.

**S3-245342 New WID on Security Aspects of Enhancement of Support for Edge Computing in 5GC — phase 3**

*Type: WID new For: Agreement  
 Source: China Unicom, Huawei, HiSilicon*

(Replaces S3-244782)

**Decision:** The document was **agreed**.

**S3-244785 New WID on Security Aspects of Enhancement for Proximity Based Services in 5GS Phase 3**

*Type: WID new For: Agreement  
 Source: China Telecom Corporation Ltd.*

**Decision:** The document was **merged**.

**S3-244786 New WID on Security Aspects of Enhancement for Proximity Based Services in 5GS Phase 3**

*Type: WID new For: Agreement  
 Source: China Telecom Corporation Ltd.*

**Decision:** The document was **withdrawn**.

**S3-244848 New WID on UAS security enhancements**

*Type: WID new For: Agreement  
 Source: Ericsson*

**Abstract:**

WID on UAS security enhancements

**Decision:** The document was **revised to S3-245321**.

**S3-245321 New WID on UAS security enhancements**

*Type: WID new For: Agreement  
 Source: Ericsson*

(Replaces S3-244848)

**Decision:** The document was **agreed**.

**S3-244856 New WID on Security aspects of Core Network Enhanced Support for AIML**

*Type: WID new For: Approval  
 Source: China Mobile, vivo*

**Decision:** The document was **revised to S3-245322**.

**S3-245322 New WID on Security aspects of Core Network Enhanced Support for AIML**

*Type: WID new For: Approval  
 Source: China Mobile, vivo*

(Replaces S3-244856)

**Decision:** The document was **agreed**.

**S3-244889 New WID on ProSe Ph3 security**

*Type: WID new For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-245320**.

**S3-245320 New WID on ProSe Ph3 security**

*Type: WID new For: Approval  
 Source: Huawei, HiSilicon*

(Replaces S3-244889)

**Decision:** The document was **agreed**.

**S3-244910 New WID on Security for PLMN hosting a NPN**

*Type: WID new For: Agreement  
 Source: China Telecomunication Corp., ZTE*

**Decision:** The document was **revised to S3-245373**.

**S3-245373 New WID on Security for PLMN hosting a NPN**

*Type: WID new For: Agreement  
 Source: China Telecomunication Corp., ZTE*

(Replaces S3-244910)

**Decision:** The document was **agreed**.

**S3-244923 New WID on Ambient IoT security**

*Type: WID new For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-245037 New WID on security aspects of 5G Mobile Metaverse services**

*Type: WID new For: Approval  
 Source: Samsung*

**Decision:** The document was **revised to S3-245323**.

**S3-245323 New WID on security aspects of 5G Mobile Metaverse services**

*Type: WID new For: Approval  
 Source: Samsung*

(Replaces S3-245037)

**Decision:** The document was **agreed**.

**S3-245047 New WID on Security Aspects of 5G Satellite Access Phase 3**

*Type: WID new For: Approval  
 Source: CATT*

**Discussion:**

Ericsson clarified that the content had to go to 401 and 501 given the nature of the changes.

**Decision:** The document was **revised to S3-245356**.

**S3-245356 New WID on Security Aspects of 5G Satellite Access Phase 3**

*Type: WID new For: Approval  
 Source: CATT*

(Replaces S3-245047)

**Decision:** The document was **agreed**.

**S3-245088 New WID on security support for the Next Generation Real Time Communication services Phase 2**

*Type: WID new For: Agreement  
 Source: Ericsson*

**Decision:** The document was **revised to S3-245326**.

**S3-245326 New WID on security support for the Next Generation Real Time Communication services Phase 2**

*Type: WID new For: Agreement  
 Source: Ericsson,China Mobile*

(Replaces S3-245088)

**Decision:** The document was **agreed**.

**S3-245094 Protection of XRM metadata**

*Type: discussion For: Endorsement  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-245095 New WID on MOBIKE for NTN 3GPP backhaul over the feeder link**

*Type: WID new For: Agreement  
 Source: Ericsson*

**Discussion:**

The Chair recommended to take this WID directly to Plenary.

**Decision:** The document was **noted**.

**S3-245096 New WID on Protection of XRM Metadata**

*Type: WID new For: Agreement  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Discussion:**

China Mobile: premature to have this WID at this meeting.

Lenovo: there are issues that we havent looked at before or studied properly.

Nokia supported the WID. We will get into the situation that there will be mechanims defined in SA2 that have no security solution.

**Decision:** The document was **noted**.

**S3-245097 MOBIKE for NTN 3GPP backhaul over feeder link**

*Type: CR For: Agreement  
 33.501 v19.0.0 CR-2086 Cat: B (Rel-19)  
  
 Source: Ericsson*

**Decision:** The document was **not pursued**.

**S3-245098 Protecting XRM Metadata in QUIC aware forwarding**

*Type: draftCR For: Agreement  
 33.501 v19.0.0  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-245130 New WID on security aspects of CAPIF Phase3**

*Type: WID new For: Agreement  
 Source: Xiaomi commnications*

**Decision:** The document was **revised to S3-245324**.

**S3-245324 New WID on security aspects of CAPIF Phase3**

*Type: WID new For: Agreement  
 Source: Xiaomi communications*

(Replaces S3-245130)

**Decision:** The document was **agreed**.

## 7 CVD and research

## 8 Any Other Business

Alex (GSMA) warned the delegates that the work on SCAS/NESAS had't progressed much. It was commented that most comments received in the Chicago meeting had been addressed already.

Nokia: Rel-19 SCAS covered this.

Huawei: there was no report from SA3 on why certain things weren't addressed. Some topics were not agreed. This was to be prepared by Huawei.

**S3-244604 SA3 meeting calendar**

*Type: other For: (not specified)  
 Source: SA WG3 Chair*

**Discussion:**

Online meeting in January 2025. Reduced agenda and limited conference calls.The Chair will provided more information in time.

**Decision:** The document was **noted**.

**S3-244746 R20 Security Planning - vivo's views**

*Type: discussion For: Discussion  
 Source: vivo*

**Decision:** The document was **noted**.

**S3-245327 Release 20 Planning**

*Type: other For: Presentation  
 Source: WG Chair*

**Discussion:**

It was commented that coordination and cooperation with SA2 needed to be more efficient.

- Joint conference calls or workshops for 6G architecture.

ORANGE: prioritization of WIDs happen every Release in SA3 because we have less time than SA2. The prioritization should be done at SA2+SA3 level.

Vodafone: we disagree with a 6G joint workshop SA2-SA3. Let's use that time to work. SA is doing its prioritization at SA level, not SA2 level. 5G Advance will have WIDs and 6G will have SIDs, let's focus on the normative work.

NTT-Docomo: joint sessions with SA2 didn’t work.

**Decision:** The document was **noted**.

## Annex A: Contribution documents and status

### A1: List of TDocs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| S3-244600 | Agenda | SA WG3 Chair | revised |  | S3-245134 |
| S3-244601 | Report from last SA3 meeting | MCC | approved |  |  |
| S3-244602 | Process for SA3#119 | SA WG3 Chair | noted |  |  |
| S3-244603 | Detailed agenda planning | SA WG3 Chair | revised |  | S3-245135 |
| S3-244604 | SA3 meeting calendar | SA WG3 Chair | noted |  |  |
| S3-244605 | Discussion paper for CT1 LS on expected UE behavior on potential SUCI computation failure | Deutsche Telekom AG | noted |  |  |
| S3-244606 | Discussion paper on user consent for energy information collection and energy information exposure | Deutsche Telekom AG | noted |  |  |
| S3-244607 | TCG progress - report from TCG rapporteur | InterDigital Belgium. LLC | noted |  |  |
| S3-244608 | Additional conclusions for KI#1 | InterDigital Belgium. LLC | revised |  | S3-245212 |
| S3-244609 | Updates and Clean-up of KI#1 Conclusion | Motorola Mobility [Rapporteur] | revised |  | S3-245182 |
| S3-244610 | Updates and Clean-up of KI#2 Conclusion | Motorola Mobility [Rapporteur] | merged |  | S3-245184 |
| S3-244611 | Cleanup of TR 33.794 | Motorola Mobility [Rapporteur] | revised |  | S3-245185 |
| S3-244612 | Presentation of Specification/Report to TSG for TR 33.794 | Motorola Mobility [Rapporteur] | revised |  | S3-245365 |
| S3-244613 | Updates to Solution#11 | Lenovo | revised |  | S3-245201 |
| S3-244614 | Discussion Paper on eZTS SBA WID Proposal | Motorola Mobility [Rapporteur] | noted |  |  |
| S3-244615 | New WID on enablers for Zero Trust Security in SBA | Motorola Mobility [Rapporteur] | revised |  | S3-245319 |
| S3-244616 | Updates to Solution #21 | Lenovo | revised |  | S3-245236 |
| S3-244617 | Updates to Solution #5 | Lenovo | revised |  | S3-245221 |
| S3-244618 | New Study on 3GPP Cryptographic Inventory | Nokia, Nokia Shanghai Bell | revised |  | S3-245142 |
| S3-244619 | Coverpage for TR Skeleton for 3GPP Cryprographic Inventory | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-244620 | Scope of TR on 3GPP cryptographic inventory | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-244621 | Technical Content for 3GPP Cryptographic Inventory | Nokia, Nokia Shanghai Bell | revised |  | S3-245362 |
| S3-244622 | New SID on 5G Security Assurance Specification (SCAS) for the Container-based Products | Ericsson, Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-244623 | Discussion on SCAS for Containerized applications | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-244624 | Analysis on Solution 2 | Nokia, Nokia Shanghai Bell | approved |  |  |
| S3-244625 | Correction of terms in Overview of TR 33.757 | Johns Hopkins University APL | approved |  |  |
| S3-244626 | New annex for security event data records | Johns Hopkins University APL | revised |  | S3-245183 |
| S3-244627 | LS to 3GPP CT4 on recursively defined JSON structures and reply to LS C4-241343 | GSMA | noted |  |  |
| S3-244628 | LS on including the HPLMN ID in the PC5 discovery messages for 5G ProSe UE-to-UE relay | C1-244647 | postponed |  |  |
| S3-244629 | LS on UE behaviour in case of SUCI calculation failure | C1-245039 | replied to |  |  |
| S3-244630 | Reply LS on Mitigation of Downgrade attacks | C1-245048 | noted |  |  |
| S3-244631 | Reply-LS on GSMA CVD-2023-0069 5G Core Network Attacks | C4-243671 | replied to |  |  |
| S3-244632 | Reply LS on clarification on home network triggered re-authentication | C4-244496 | postponed |  |  |
| S3-244633 | LS on use of 3gpp-Sbi-Originating-Network-Id for Indirect Network Sharing case | C4-244497 | postponed |  |  |
| S3-244634 | LS on PWS support for NB-IoT NTN | R2-2409243 | noted |  |  |
| S3-244635 | Response LS on Newly published data channel GSMA PRD TS.66 | R5-245464 | noted |  |  |
| S3-244636 | LS on AIML data collection | RP-242389 | replied to |  |  |
| S3-244637 | LS on Completion of 5WWC\_Ph2 (R18) work | S2-2409022 | noted |  |  |
| S3-244638 | LS Reply to Issues related to Analytics context transfer between AnLF(s) | S2-2409441 | postponed |  |  |
| S3-244639 | Reply LS on LCS user plane connection binding to the UE | S2-2409544 | noted |  |  |
| S3-244640 | Further LS Reply on Internal 5G Core information expose to trusted AF | S2-2410813 | noted |  |  |
| S3-244641 | LS on security aspects of Ambient IoT | S2-2411049 | postponed |  |  |
| S3-244642 | Reply LS on AIML data collection | S2-2411191 | noted |  |  |
| S3-244643 | Reply LS on Clarification regarding definition of 5G NR femto ownership | S2-2411241 | noted |  |  |
| S3-244644 | Reply to Reply LS on CEN's requirements for eCall over IMS | S2-2411246 | noted |  |  |
| S3-244645 | Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions | S2-2411250 | replied to |  |  |
| S3-244646 | LS on enhancement to the protocol stack of IMS Data Channel | S4-241373 | replied to |  |  |
| S3-244647 | LS Reply on Newly Published data channel GSMA PRD TS.66 | S4-241684 | noted |  |  |
| S3-244648 | LS reply to IETF Traffic Engineering Architecture and Signaling Working Group on ""A Realization of Network Slices for 5G Networks Using Current IP/MPLS Technologies"" | S5-244662 | noted |  |  |
| S3-244649 | LS Reply on Internal 5G Core information expose to trusted AF | S5-245162 | noted |  |  |
| S3-244650 | LS on SA5 MonStra work progress | S5-246296 | noted |  |  |
| S3-244651 | LS on Clarification related to Internal 5G Core information expose to trusted AF | S6-242714 | replied to |  |  |
| S3-244652 | LS on SA6 Answer to GSMA LS on Newly published data channel GSMA PRD TS.66 | S6-243763 | noted |  |  |
| S3-244653 | Reply LS on Newly published data channel GSMA PRD TS.66 | SP-241404 | noted |  |  |
| S3-244654 | Reply LS on AIML Data Collection | S5-246299 | noted |  |  |
| S3-244655 | [33.180] Additions to access token for recording authorization | Motorola Solutions, Airbus | revised |  | S3-245148 |
| S3-244656 | Evaluation update for solution #9 (Using ACME protocol for certificate renewal) | Google Ireland Limited | revised |  | S3-245367 |
| S3-244657 | Conclusion for KI#4 (Certificate enrolment) | Google Ireland Limited | revised |  | S3-245211 |
| S3-244658 | Conclusion for KI#5 (Certificate Renewal) | Google Ireland Limited | revised |  | S3-245368 |
| S3-244659 | Conclusion for KI#2 (Secure Transport of Messages) | Google Ireland Limited | revised |  | S3-245210 |
| S3-244660 | Clarification on TC\_BVT\_PORT\_SCANNING | BSI (DE) | noted |  |  |
| S3-244661 | Add UDM SCAS test case for checking the authentication verification of a synchronization failure message | BSI (DE) | noted |  |  |
| S3-244662 | Living Document to TS 33.518 NRF SCAS | BSI (DE) | revised |  | S3-245364 |
| S3-244663 | Add threat description about the implications of the AUSF confirming an authentication with the SUPI while the authentication was started with the SUCI | BSI (DE) | noted |  |  |
| S3-244664 | Add test case TC\_AUSF\_CONFIRMATION\_WITH\_SUPI that check whether the AUSF is vulnerable to a confirmation attack | BSI (DE), Radix Security | noted |  |  |
| S3-244665 | Add threat description about the implications of the AUSF not validating RES\* correctly | BSI (DE) | noted |  |  |
| S3-244666 | Add test case that verifies if the AUSF processes RES\* failures correctly | BSI (DE), Radix Security | noted |  |  |
| S3-244667 | Correction and clarification of TC\_AMF\_NAS\_INTEGRITY\_FAILURE | BSI (DE) | revised |  | S3-245328 |
| S3-244668 | Trust anchoring for N32-f/PRINS | BSI (DE), Nokia, Nokia Shanghai Bell | revised |  | S3-245147 |
| S3-244669 | New solution on combined authentication and data protection for Ambient IoT services | KPN N.V. | revised |  | S3-245344 |
| S3-244670 | New KI: Reader Authorization for 5G Ambient IoT Services | InterDigital Belgium. LLC | not treated |  |  |
| S3-244671 | Resolution of ENs in Solution #21 | InterDigital Belgium. LLC | revised |  | S3-245304 |
| S3-244672 | Resolution of ENs in Solution #20 | InterDigital Belgium. LLC | revised |  | S3-245305 |
| S3-244673 | Pre-authorization solution for ACME | NCSC | revised |  | S3-245366 |
| S3-244674 | LS on Multi-hop U2N Relay Architecture Aspects | InterDigital France R&D, SAS | revised |  | S3-245259 |
| S3-244675 | Living document for MonStra: draftCR to TS 33.501, Signalling Monitoring | Vodafone | revised |  | S3-245168 |
| S3-244676 | Cover Sheet TR 33.700-32 | InterDigital France R&D, SAS | revised |  | S3-245369 |
| S3-244677 | TR 33.700-32 Conclusion for Key Issue#3, Cablelabs, Lenovo | InterDigital France R&D, SAS | revised |  | S3-245268 |
| S3-244678 | KI 1 Conclusion Clarification on Replay Use Case | MITRE-FFRDC, US National Security Agency, Johns Hopkins University APL | revised |  | S3-245180 |
| S3-244679 | Address ENs in Solution #8: Supporting all 5G SBA certificate types | Cisco Systems | approved |  |  |
| S3-244680 | Conclusion for KI#1: ACME initial trust framework | Cisco Systems | revised |  | S3-245209 |
| S3-244681 | Conclusion for KI#7: Supporting all 5G SBA certificate types | Cisco Systems | revised |  | S3-245317 |
| S3-244682 | Presentation of Specification/Report to TSG: TR 33.776, Version 1.0.0 | Cisco Systems | revised |  | S3-245318 |
| S3-244683 | New WID on Automatic Certificate Management Environment (ACME) for the Service Based Architecture (SBA) | Cisco Systems | revised |  | S3-245372 |
| S3-244684 | Use of AEAD in Next-Generation 3GPP System | KDDI Corporation | noted |  |  |
| S3-244685 | MnF User session timeout | Keysight Technologies UK Ltd | noted |  | - |
| S3-244686 | Living document of the Non3GPPMobEnh study | Nokia | revised |  | S3-245166 |
| S3-244687 | TNGF solution alignment | Nokia, CableLabs | approved |  |  |
| S3-244688 | TWIF solution | Nokia, Lenovo, Charter Communications | revised |  | S3-245165 |
| S3-244689 | LS on Non3GPPMob\_Sec update | Nokia | noted |  |  |
| S3-244690 | concluding KI3 | Nokia | merged |  | S3-245268 |
| S3-244691 | KI3 conclusion | Nokia | merged |  | S3-245270 |
| S3-244692 | Discussion paper reauthentication via untrusted non 3GPP access | Nokia | noted |  |  |
| S3-244693 | Reauthentication aspect for IPSec in non 3GPP access | Nokia | not pursued |  |  |
| S3-244694 | Reauthentication aspect for IPSec in non 3GPP access | Nokia | revised |  | S3-245143 |
| S3-244695 | Discussion paper of UPU implementation gaps | Nokia | noted |  |  |
| S3-244696 | Enhancement in UPU procedure to protect UPU header | Nokia | not pursued |  |  |
| S3-244697 | Discussion paper on SUCI calculation | Nokia | noted |  |  |
| S3-244698 | NSWO AN and SNN related update | Nokia | not pursued |  |  |
| S3-244699 | NSWO AN and SNN related update | Nokia | not pursued |  |  |
| S3-244700 | Kamf definition alignment for NAS count | Nokia | not pursued |  |  |
| S3-244701 | Kamf definition alignment for NAS count | Nokia | not pursued |  |  |
| S3-244702 | Kamf definition alignment for NAS count | Nokia | not pursued |  |  |
| S3-244703 | Kamf definition alignment for NAS count | Nokia | not pursued |  |  |
| S3-244704 | Home control for NSWO | Nokia | not pursued |  |  |
| S3-244705 | Home control for NSWO | Nokia | not pursued |  |  |
| S3-244706 | AUSF requirement for the case of Indirect Network Sharing: | Nokia | not pursued |  |  |
| S3-244707 | Reply LS to CT4 on use of 3gpp-Sbi-Originating-Network-Id for Indirect Network Sharing case | Nokia | noted |  |  |
| S3-244708 | New (mini) WID on SUCI calculation failure alignment | Nokia | noted |  |  |
| S3-244709 | Ambient IoT solution on privacy revision | Apple | revised |  | S3-245306 |
| S3-244710 | Ambient IoT solution on mutual authentication revision | Apple | revised |  | S3-245315 |
| S3-244711 | Discussion paper on SUCI calculation failure | Apple | noted |  |  |
| S3-244712 | Reply LS to CT1 on UE bahaviour in case of SUCI calculation failure | Apple | merged |  | S3-245137 |
| S3-244713 | Reply LS on AIML data collection | Apple | merged |  | S3-245138 |
| S3-244714 | LTM - way forward discussion - leave the final decision to RAN | Apple | noted |  |  |
| S3-244715 | LTM - WID revision | Apple | noted |  |  |
| S3-244716 | SERP - Discussion paper | Apple | noted |  |  |
| S3-244717 | SERP - revised WID | Apple | noted |  |  |
| S3-244718 | SERP - CR on security protection on RRCResumeRequest message | Ericsson, Apple | noted |  |  |
| S3-244719 | SERP - LS to RAN on SERP | Apple | noted |  |  |
| S3-244720 | Using mTLS with ACME | NCSC | noted |  |  |
| S3-244721 | Clarifications to Conclusion 1 | U.S. National Security Agency, OTD\_US, MITRE-FFRDC, Johns Hopkins University APL, Deutsche Telekom AG | revised |  | S3-245181 |
| S3-244722 | Confidentiality and Integrity for KI 1 Conclusion | U.S. National Security Agency, MITRE-FFRDC, Johns Hopkins University APL, OTD\_US, Deutsche Telekom AG | approved |  |  |
| S3-244723 | General Recommendations for Conclusion 2 Policy Enforcement | U.S. National Security Agency,OTD\_US, Johns Hopkins University APL, MITRE-FFRDC | revised |  | S3-245184 |
| S3-244724 | Update solution mapping to incorporate KI#9 | Charter Communications, Inc | approved |  |  |
| S3-244725 | Add evaluation to solution#3 | Charter Communications, Inc | approved |  |  |
| S3-244726 | Discussion on PLMN ID setting in the 3gpp-Sbi-Originating-Network-Id header in the Indirect Network Sharing case during UE authentication | China Unicom, ZTE Corporation | noted |  |  |
| S3-244727 | Reply LS to CT4 on use of 3gpp-Sbi-Originating-Network-Id for Indirect Network Sharing case | China Unicom | noted |  |  |
| S3-244728 | Reply LS on AIML data collection | vivo | merged |  | S3-245138 |
| S3-244729 | Reply LS on UE behaviour in case of SUCI calculation failure | vivo | merged |  |  |
| S3-244730 | UE behaviour in case of SUCI calculation failure | vivo | not pursued |  |  |
| S3-244731 | New solution on Mismatch of UE security context | vivo | revised |  | S3-245163 |
| S3-244732 | Conclusion on mismatch of UE security context | vivo | merged |  | S3-245335 |
| S3-244733 | Address EN in solution 31 | vivo | revised |  | S3-245216 |
| S3-244734 | Update on Key Issue#6 | vivo | not treated |  |  |
| S3-244735 | KI#5, Solution update on AIoT device authentication | vivo | revised |  | S3-245316 |
| S3-244736 | KI#4, New Sol Communication Security of intermediate UE interacting with AIoT device | vivo | revised |  | S3-245296 |
| S3-244737 | KI#1, New Sol Disable AIoT device | vivo | revised |  | S3-245299 |
| S3-244738 | KI#3, New Sol Privacy protection based on anonymous AIoT device ID | vivo | noted |  |  |
| S3-244739 | Address EN in solution 4 | vivo | approved |  |  |
| S3-244740 | KI1 update | vivo | merged |  | S3-245271 |
| S3-244741 | New sol: User consent for LCS | vivo | noted |  |  |
| S3-244742 | Additional Conclusion for key issue#1 | vivo | noted |  |  |
| S3-244743 | Additional Conclusion for key issue#2 | vivo, Nokia, Nokia Shanghai Bell, China Mobile, China Telecom, China Unicom, Xiaomi | revised |  | S3-245269 |
| S3-244744 | Additional Conclusion for key Issue#3 | vivo, China Mobile, China Telecom, China Unicom | revised |  | S3-245270 |
| S3-244745 | TR clean up | vivo | revised |  | S3-245347 |
| S3-244746 | R20 Security Planning - vivo's views | vivo | noted |  |  |
| S3-244747 | Evaluation to solution #4 in TR 33.700-22 | China Telecomunication Corp. | noted |  |  |
| S3-244748 | draft - Reply LS on clarification on home network triggered re-authentication | ZTE Corporation | noted |  |  |
| S3-244749 | Clarifications for HONTRA procedure with respect to failure cases | ZTE | not pursued |  |  |
| S3-244750 | Clarifications for HONTRA procedure with respect to failure cases | ZTE | not pursued |  |  |
| S3-244751 | reply LS to CT4 on use of 3gpp-Sbi-Originating-Network-Id for Indirect Network Sharing case | ZTE Corporation | noted |  |  |
| S3-244752 | Security aspects for Indirect Network Sharing | ZTE Corporation | not pursued |  |  |
| S3-244753 | Resolve the EN in Sol#3 | ZTE Corporation | revised |  | S3-245161 |
| S3-244754 | Conclusion to KI#3 | ZTE Corporation | merged |  | S3-245208 |
| S3-244755 | Adding solution to KI#2 | ZTE Corporation | revised |  | S3-245217 |
| S3-244756 | Conclusion on KI#2 for split MME architecture | ZTE Corporation | noted |  |  |
| S3-244757 | Add the evaluation for the Sol#2 in TR 33.713 | ZTE Corporation | approved |  |  |
| S3-244758 | New key issue on secure data transfer between UE and AIOTF | ZTE Corporation | not treated |  |  |
| S3-244759 | Resolving ENs in sol#6 in TR 33.713 | ZTE Corporation | not treated |  |  |
| S3-244760 | Evaluation for solution 6 | ZTE Corporation | not treated |  |  |
| S3-244761 | Resolving ENs in sol#25 in TR 33.713 | ZTE Corporation | revised |  | S3-245307 |
| S3-244762 | Adding evaluation to sol#25 in TR 33.713 | ZTE Corporation | revised |  | S3-245308 |
| S3-244763 | Update the KI#1 in TR 33.713 | ZTE Corporation | not treated |  |  |
| S3-244764 | Update the KI#3 in TR 33.713 | ZTE Corporation | not treated |  |  |
| S3-244765 | Update to KI#9 | ZTE Corporation | merged |  | S3-245281 |
| S3-244766 | Address the EN in Sol#3 | ZTE Corporation | approved |  |  |
| S3-244767 | Add conclusions to KI#9 | ZTE Corporation | merged |  | S3-245285 |
| S3-244768 | Update conclusions to KI#1 | ZTE Corporation | merged |  | S3-245282 |
| S3-244769 | Remove the EN in stable conclusions | ZTE Corporation | revised |  | S3-245353 |
| S3-244770 | Conclusion on KI#1 | ZTE Corporation | merged |  | S3-245287 |
| S3-244771 | Conclusion on KI#2 | ZTE Corporation | merged |  | S3-245288 |
| S3-244772 | Evaluation for the Solution 23 | ZTE Corporation | revised |  | S3-245237 |
| S3-244773 | Add evaluation to Sol#1 | ZTE Corporation | approved |  |  |
| S3-244774 | Conclusion on KI#1.1 | ZTE Corporation | merged |  | S3-245222 |
| S3-244775 | Conclusion on KI#1.2 | ZTE Corporation | merged |  | S3-245231 |
| S3-244776 | Conclusion on KI#2 | ZTE Corporation | revised |  | S3-245248 |
| S3-244777 | WID on security aspects of 5G NR Femto | ZTE Corporation | revised |  | S3-245325 |
| S3-244778 | Evaluation to solution #5 in TR 33.700-22 | China Telecomunication Corp. | withdrawn |  |  |
| S3-244779 | Update and evaluate solution #6 in TR 33.700-22 | China Telecomunication Corp. | revised |  | S3-245223 |
| S3-244780 | Conclusion on key issue #1.2 in TR 33.700-22 | China Telecomunication Corp. | merged |  | S3-245231 |
| S3-244781 | Evaluation to solution #4 in TR 33.700-22 | China Telecomunication Corp. | noted |  |  |
| S3-244782 | New WID on Security Aspects of Enhancement of Support for Edge Computing in 5GC — phase 3 | China Unicom, Huawei, HiSilicon | revised |  | S3-245342 |
| S3-244783 | Evaluation to solution #8 in TR 33.700-22 | China Telecomunication Corp. | merged |  | S3-245229 |
| S3-244784 | Evaluation to solution #9 in TR 33.700-22 | China Telecomunication Corp. | merged |  | S3-245224 |
| S3-244785 | New WID on Security Aspects of Enhancement for Proximity Based Services in 5GS Phase 3 | China Telecom Corporation Ltd. | merged |  | S3-245320 |
| S3-244786 | New WID on Security Aspects of Enhancement for Proximity Based Services in 5GS Phase 3 | China Telecom Corporation Ltd. | withdrawn |  |  |
| S3-244787 | Cover Sheet for TR 33.754 | Intel Corporation (UK) Ltd | revised |  | S3-245277 |
| S3-244788 | Resolving EN from Sol#5 | OPPO, Xidian | revised |  | S3-245300 |
| S3-244789 | General Principle for Conclusion | OPPO | noted |  |  |
| S3-244790 | Updates to Overall Summary of solutions | Nokia | revised |  | S3-245219 |
| S3-244791 | Updates to conclusions for split MME architecture | Nokia | noted |  |  |
| S3-244792 | Add specific UDR SCAS test cases for TS 33.530 | BSI (DE) | revised | S3-244310 | S3-245275 |
| S3-244793 | Cover Sheet for TS 33.530 SCAS\_5G\_UDR | BSI (DE) | approved |  |  |
| S3-244794 | Reply LS to Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions | Nokia | merged |  | S3-245340 |
| S3-244795 | Resolve ENs in sol#23 | OPPO | approved |  |  |
| S3-244796 | Conclusion to KI#2 | China Telecomunication Corp., ZTE, China Unicom, CATT | revised |  | S3-245206 |
| S3-244797 | Removing EN in Sol#2 | China Telecomunication Corp. | revised |  | S3-245200 |
| S3-244798 | Updates to conclusions for Key Issue #1 | Nokia | revised |  | S3-245282 |
| S3-244799 | EN Removal for solution #5 | Nokia | approved |  |  |
| S3-244800 | Reply LS on security aspects of Ambient IoT | OPPO | revised |  | S3-245139 |
| S3-244801 | EN Removal for solution #6 | Nokia | approved |  |  |
| S3-244802 | Updates and EN Removal for solution #7 | Nokia | approved |  |  |
| S3-244803 | KI#3 Discussion related to SA2 LS S2-2411049 | Sony | noted |  |  |
| S3-244804 | Proposal for changing the description of SN counter in SCPAC | Apple Computer Trading Co. Ltd | not pursued |  |  |
| S3-244805 | [draft] Reply LS to SA2 on on security aspects of Ambient IoT | Sony | merged |  | S3-245139 |
| S3-244806 | Solution 26 Update and Evaluation | Sony | revised |  | S3-245309 |
| S3-244807 | Removing MRF from IMS data channel architecture | Huawei, HiSilicon | agreed |  |  |
| S3-244808 | Addressing the ENs on Avatar ID determination and token details of Solution#5 | Huawei, HiSilicon | revised |  | S3-245190 |
| S3-244809 | Addressing the ENs on user interaction of Solution#10 | Huawei, HiSilicon | approved |  |  |
| S3-244810 | Conclusion to KI#2 of NG\_RTC | Huawei, HiSilicon | noted |  |  |
| S3-244811 | Conclusion to KI#3 of NG\_RTC | Huawei, HiSilicon | merged |  | S3-245196 |
| S3-244812 | conclusion to KI#2.1 of eEDGE | Huawei, HiSilicon | merged |  | S3-245274 |
| S3-244813 | Solving the problem of generating and forwarding the salt to the BSF | Huawei, HiSilicon | revised |  | S3-245348 |
| S3-244814 | Update of conclusions KI#1 | Huawei, HiSilicon | revised |  | S3-245341 |
| S3-244815 | Update of Conclusions KI#2 | Huawei, HiSilicon | merged |  | S3-245215 |
| S3-244816 | Update on solution 28 | Huawei, HiSilicon | approved |  |  |
| S3-244817 | Retrieval of public key used for token verification | Huawei, HiSilicon | not pursued |  |  |
| S3-244818 | Updates to conclusions for Key Issue #3 | Nokia | revised |  | S3-245352 |
| S3-244819 | Solution 14 Update and Evaluation | Sony | revised |  | S3-245312 |
| S3-244820 | Conclusion for KI#2 | China Telecom | merged |  | S3-245248 |
| S3-244821 | Evaluation for sol#13 | China Telecom | merged |  | S3-245238 |
| S3-244822 | Evaluation for sol#14 | China Telecom | merged |  | S3-245239 |
| S3-244823 | Evaluation for sol#15 | China Telecom | merged |  | S3-245240 |
| S3-244824 | Evaluation for sol#18 | China Telecom | merged |  | S3-245241 |
| S3-244825 | Evaluation for sol#19 | China Telecom | merged |  | S3-245242 |
| S3-244826 | Evaluation for sol#21 | China Telecom | merged |  | S3-245236 |
| S3-244827 | Evaluation for sol#22 | China Telecom | merged |  | S3-245243 |
| S3-244828 | Evaluation for sol#24 | China Telecom | merged |  | S3-245244 |
| S3-244829 | Update sol#17 | China Telecom | revised |  | S3-245245 |
| S3-244830 | KI#3 Conclusion | Sony | noted |  |  |
| S3-244831 | Updating Solution #7 | OPPO, Xidian | not treated |  |  |
| S3-244832 | Solution 2 updates to address ENs | Huawei, HiSilicon | merged |  | S3-245220 |
| S3-244833 | Adding evaluation to Solution 2 | Huawei, HiSilicon | revised |  | S3-245220 |
| S3-244834 | Solution 4 updates to address ENs | Huawei, HiSilicon | merged |  | S3-245228 |
| S3-244835 | Adding evaluation to Solution 4 | Huawei, HiSilicon | revised |  | S3-245228 |
| S3-244836 | Adding evaluation to Solution 10 | Huawei, HiSilicon | revised |  | S3-245233 |
| S3-244837 | Conclusion to KI#1.1 | Huawei, HiSilicon | revised |  | S3-245222 |
| S3-244838 | Conclusion to KI#1.2 | Huawei, HiSilicon | revised |  | S3-245231 |
| S3-244839 | Conclusion to KI#1.3 | Huawei, HiSilicon | revised |  | S3-245235 |
| S3-244840 | New solution for UAV triggered UUAA | Huawei, HiSilicon | revised |  | S3-245256 |
| S3-244841 | New solution for USS triggered UUAA | Huawei, HiSilicon | revised |  | S3-245257 |
| S3-244842 | Solution 7 updates to address ENs | Huawei, HiSilicon | approved |  |  |
| S3-244843 | Additional conclusions for KI#3 | Huawei, HiSilicon, China Telecomunication Corp. | merged |  | S3-245268 |
| S3-244844 | draft reply LS to SA6 Internal 5G Core information expose to trusted AF | Huawei, HiSilicon | revised |  | S3-245141 |
| S3-244845 | Reply LS to CT4 on GSMA CVD-2023-0069 5G Core Network Attacks | Huawei, HiSilicon | approved |  |  |
| S3-244846 | Inventory of protocols and algorithms for PQC migration | Huawei, HiSilicon | noted |  |  |
| S3-244847 | Analysis of GSMA PQC guidelines related to SA3 specifications | Huawei, HiSilicon | noted |  |  |
| S3-244848 | New WID on UAS security enhancements | Ericsson | revised |  | S3-245321 |
| S3-244849 | Update KI #1 of TR 33.784 | OPPO | revised |  | S3-245271 |
| S3-244850 | RCS lawful intercept requirements | s3i240708 | noted |  |  |
| S3-244851 | Reply LS on UE-Satellite-UE Communication Architectures | s3i240752 | noted |  |  |
| S3-244852 | Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions | s3i240703 | noted |  |  |
| S3-244853 | Updating living Draft CR for MonSTra | Vodafone, Nokia, Nokia Shanghai Bell | approved |  |  |
| S3-244854 | LS on request for IMS Data Channel related clarifications | s3i240707 | noted |  |  |
| S3-244855 | Reply LS on enhancement to the protocol stack of IMS Data Channel | China Mobile | revised |  | S3-245140 |
| S3-244856 | New WID on Security aspects of Core Network Enhanced Support for AIML | China Mobile, vivo | revised |  | S3-245322 |
| S3-244857 | Presentation of Report to TSG: | China Mobile | approved |  |  |
| S3-244858 | Discussion about way forward for zero trust study and beyond | China Mobile | noted |  |  |
| S3-244859 | Resolution of ENs concerning compliance to regional legislation when collecting and exposing user energy consumption information. | Nokia, Deutsche Telekom | revised |  | S3-245278 |
| S3-244860 | Regional legislation compliance in relation to collection of user information. | Nokia, Deutsche Telekom | revised |  | S3-245350 |
| S3-244861 | Discission paper concerning RAN agreements | Nokia | noted |  |  |
| S3-244862 | Solution to KI#3, KI#4 and KI#5 | Nokia | revised |  | S3-245172 |
| S3-244863 | LS reply to LS on security aspects of Ambient IoT | Nokia | merged |  | S3-245139 |
| S3-244864 | LS reply to LS on RAN2 agreements and assumptions for Ambient IoT | Nokia | noted |  |  |
| S3-244865 | Conclusion to KI#2 | Nokia, Nokia Shanghai Bell, Ericsson, Samsung | merged |  | S3-245206 |
| S3-244866 | Conclusion to KI#3 | Nokia, Nokia Shanghai Bell | merged |  | S3-245208 |
| S3-244867 | Redundant text in Annex I. | Nokia | not pursued |  |  |
| S3-244868 | Redundant text in Annex I. | Nokia | revised |  | S3-245146 |
| S3-244869 | Updates to Terms, Abbreviations and Overview | Ericsson | noted |  |  |
| S3-244870 | Conclusion for KI#3 | China Telecomunication Corp. | withdrawn |  |  |
| S3-244871 | Update of Conclusion on Key issue #1 | Huawei, HiSilicon | revised |  | S3-245346 |
| S3-244872 | Update of Conclusion on Key issue #3 | Huawei, HiSilicon | merged |  | S3-245270 |
| S3-244873 | Solution 1 update to address ENs | Huawei, HiSilicon | approved |  | - |
| S3-244874 | Solution 9 update to address ENs | Huawei, HiSilicon | approved |  |  |
| S3-244875 | Reply LS on Issues related to Analytics context transfer between AnLF(s) | Huawei, HiSilicon | noted |  |  |
| S3-244876 | Discussion Paper for using MPQUIC in ATSSS scenario | Huawei, HiSilicon | noted |  |  |
| S3-244877 | Update to MPQUIC TLS Annex | Huawei, HiSilicon | not pursued |  |  |
| S3-244878 | Discussion about mitigating the Security risk of Unprotected NAS Reject | Huawei, HiSilicon | noted |  |  |
| S3-244879 | Update to TS 33.503 to fix the referred clause and table of services | Huawei, HiSilicon | agreed |  |  |
| S3-244880 | Update to TS 33.503 to fix the referred clause and table of services - Mirror | Huawei, HiSilicon | agreed |  |  |
| S3-244881 | Update to Conclusion on Key issue #2 | Huawei, HiSilicon | merged |  | S3-245269 |
| S3-244882 | conclusion on key issue#3 | Huawei, HiSilicon | revised |  | S3-245208 |
| S3-244883 | Evaluation to solution 20 | Huawei, HiSilicon | noted |  |  |
| S3-244884 | Evaluation to solution 11 | Huawei, HiSilicon | merged |  | S3-245201 |
| S3-244885 | resolve EN for K1 and KI2 | Huawei, HiSilicon | merged |  | S3-245278 |
| S3-244886 | Update to KI#2 conclusion of TR 33.743 | Huawei, HiSilicon | revised |  | S3-245265 |
| S3-244887 | Conclude to KI#1 of TR 33.743 - U2NW discovery security | Huawei, HiSilicon, Interdigital | merged |  | S3-245263 |
| S3-244888 | Conclude to KI#1 of TR 33.743 - U2NW security setup | Huawei, HiSilicon, Interdigital, China Telecom, Xiaomi | revised |  | S3-245264 |
| S3-244889 | New WID on ProSe Ph3 security | Huawei, HiSilicon | revised |  | S3-245320 |
| S3-244890 | Conclude KI#1 in TR 33.721 | Huawei, HiSilicon | merged |  | S3-245287 |
| S3-244891 | Conclude KI#2 in TR 33.721 | Huawei, HiSilicon | revised |  | S3-245288 |
| S3-244892 | New solution about Multi-hop U2U Model A discovery in non-IP scenario | Huawei, HiSilicon | revised |  | S3-245266 |
| S3-244893 | Draft CR TS 33.511 | Huawei, HiSilicon | approved |  |  |
| S3-244894 | Draft CR TS 33.117 | Huawei, HiSilicon | revised |  | S3-245332 |
| S3-244895 | Draft CR TR33.926 | Huawei, HiSilicon | revised |  | S3-245333 |
| S3-244896 | Draft CR TS 33.514 | Huawei, HiSilicon | approved |  |  |
| S3-244897 | Discussion paper on SUCI error handling | Huawei, HiSilicon | noted |  |  |
| S3-244898 | Addressing EN in KI#9 | Huawei, HiSilicon | revised |  | S3-245281 |
| S3-244899 | Adding conclusion to KI#9 | Huawei, HiSilicon | revised |  | S3-245285 |
| S3-244900 | Updating conclusion#5 | Huawei, HiSilicon | revised |  | S3-245283 |
| S3-244901 | Updating conclusion#6 | Huawei, HiSilicon | revised |  | S3-245284 |
| S3-244902 | General conclusion proposal | Huawei, HiSilicon | noted |  |  |
| S3-244903 | Way forward | Huawei, HiSilicon | noted |  |  |
| S3-244904 | Notification about AKMA service disabling via NEF | Huawei, HiSilicon | not pursued |  | - |
| S3-244905 | Correction to AAnF response without UE Identity | Huawei, HiSilicon | agreed |  |  |
| S3-244906 | [33.180] MCRec ID Introduction | Airbus | revised |  | S3-245149 |
| S3-244907 | Authorization of direct AI/ML based Positioning UE data collection | OPPO | noted |  |  |
| S3-244908 | Solution on PHY key based protecting AIoT device identifiers | OPPO | revised |  | S3-245298 |
| S3-244909 | Security Key Generation Using L1 Parameter | OPPO | revised |  | S3-245297 |
| S3-244910 | New WID on Security for PLMN hosting a NPN | China Telecomunication Corp., ZTE | revised |  | S3-245373 |
| S3-244911 | Conclusion of Device Power Constrain Consideration | OPPO | noted |  |  |
| S3-244912 | Authentication Using L1 Parameter | OPPO | revised |  | S3-245173 |
| S3-244913 | Remove ENs and add evaluation in Solution #17 | OPPO | revised |  | S3-245313 |
| S3-244914 | Discussion on security of LTM cell switch command MAC CE | OPPO | noted |  |  |
| S3-244915 | Corrections to Nudm\_UEAuthentication\_ResultConfirmation | Ericsson | agreed |  |  |
| S3-244916 | Security analysis of LTM cell switch command MAC CE | OPPO | revised |  | S3-245336 |
| S3-244917 | Corrections to Nudm\_UEAuthentication\_ResultConfirmation | Ericsson | agreed |  |  |
| S3-244918 | Authorization of a service request when the discovery is delegated to the target PLMN | Nokia | not pursued |  |  |
| S3-244919 | DP SBA Rel-19 public key retrieval for access token verification | Nokia | noted |  |  |
| S3-244920 | addressing the editor's note in solution#4 | Huawei, HiSilicon | not treated |  |  |
| S3-244921 | conclusion on key issue#5 | Huawei, HiSilicon | noted |  | - |
| S3-244922 | conclusion on key issue#1 | Huawei, HiSilicon | noted |  |  |
| S3-244923 | New WID on Ambient IoT security | Huawei, HiSilicon | noted |  |  |
| S3-244924 | conclusion assuming the PDCP anchor changing | Huawei, HiSilicon | merged |  | S3-245335 |
| S3-244925 | reply LS on security aspects of Ambient IoT | Huawei, HiSilicon | merged |  | S3-245139 |
| S3-244926 | DRAFT CR SBA Rel-19 public key or cert retrieval for access token verification | Nokia | revised |  | S3-245334 |
| S3-244927 | Input to SA for Reply LS on clarifications on consent management | Nokia | revised |  | S3-245363 |
| S3-244928 | Addressing ENs on KI1.2 RO permission management in solution 7 | Nokia | revised |  | S3-245226 |
| S3-244929 | Update to KI1.3 Solution 29 on scope enhancing | Nokia | revised |  | S3-245234 |
| S3-244930 | Update to KI2 Solution 12 on security method retrieval in CAPIF interconnect | Nokia | revised |  | S3-245246 |
| S3-244931 | Update to KI2 Solution 13 on authentication aspect in CAPIF interconnect requesting security information from another CCF | Nokia | revised |  | S3-245238 |
| S3-244932 | Update to KI2 Solution 14 on authentication aspect in CAPIF interconnect when API invoker has not included CCF information | Nokia | revised |  | S3-245239 |
| S3-244933 | Update to KI2 Solution 15 on authorization token request handling in CAPIF interconnect | Nokia | revised |  | S3-245240 |
| S3-244934 | Update to KI2 Solution 16 on mapping an API invoker authorization request to the correct CCF in CAPIF interconnect | Nokia | revised |  | S3-245247 |
| S3-244935 | Update to KI5 Solution on authenticating multiple API invokers of the same RO | Nokia | revised |  | S3-245254 |
| S3-244936 | Informative annex for N6 delay measurement protocols | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-244937 | KI4 Sol on Authentication of the origin API invoker in nested API invocation | Nokia | revised |  | S3-245250 |
| S3-244938 | New KI on Onboarding security issue | Nokia | revised |  | S3-245255 |
| S3-244939 | Solution on validation of correct GPSI in API invoker information | Nokia | revised |  | S3-245371 |
| S3-244940 | Correction of implementation mistake | Nokia | approved |  |  |
| S3-244941 | Update of mapping table | Nokia | approved |  |  |
| S3-244942 | Conclusion for KI#2.1 | Nokia, Nokia Shanghai Bell | revised |  | S3-245274 |
| S3-244943 | Conclusion for KI#1.1 | Nokia, Nokia Shanghai Bell | revised |  | S3-245349 |
| S3-244944 | Reply LS on security aspects of Ambient IoT | China Mobile | merged |  | S3-245139 |
| S3-244945 | New solution for authentication in Ambient IoT service | China Mobile | revised |  | S3-245174 |
| S3-244946 | New solution for key issue 3 | China Mobile | revised |  | S3-245351 |
| S3-244947 | Discussion on RAN plenary LS on AIML | Qualcomm Incorporated | noted |  |  |
| S3-244948 | Reply LS on AIML data collection | Qualcomm Incorporated | merged |  | S3-245138 |
| S3-244949 | Discussion on incoming SUCI LS | Qualcomm Incorporated | noted |  |  |
| S3-244950 | Reply LS on UE behaviour in case of SUCI calculation failure | Qualcomm Incorporated | revised |  | S3-245137 |
| S3-244951 | Adding TWIF related text to the non-3GPP living document | Qualcomm Incorporated | merged |  | S3-245165 |
| S3-244952 | Certificate threats for split gNB | Qualcomm Incorporated | revised |  | S3-245158 |
| S3-244953 | Adding certificate handling tests to SCAS for split gNB | Qualcomm Incorporated | revised |  | S3-245093 |
| S3-244954 | Proposed privacy conclusion for split MME case | Qualcomm Incorporated | revised |  | S3-245215 |
| S3-244955 | Proposed addition to the split MME conclusion for key issue #1 | Qualcomm Incorporated | revised |  | S3-245213 |
| S3-244956 | Further additions to the enhancement of IOPs in solution #3 | Qualcomm Incorporated | revised |  | S3-245343 |
| S3-244957 | Enhancing the conclusion of KI#1 | Qualcomm Incorporated | revised |  | S3-245258 |
| S3-244958 | reply LS on security aspects of Ambient IoT | Qualcomm Incorporated | merged |  | S3-245139 |
| S3-244959 | Addressing the EN in solution #15 | Qualcomm Incorporated | revised |  | S3-245314 |
| S3-244960 | Addressing the EN in solution #27 | Qualcomm Incorporated | approved |  |  |
| S3-244961 | reply LS on including the HPLMN ID in the PC5 discovery messages for 5G ProSe UE-to-UE relay | Qualcomm Incorporated | merged |  | S3-245136 |
| S3-244962 | Addressing Ens in solution #16 | Qualcomm Incorporated | revised |  | S3-245261 |
| S3-244963 | Conclusion of multi-hop U2N relay discovery security in KI#1 | Qualcomm Incorporated | revised |  | S3-245263 |
| S3-244964 | Conclusion of multi-hop U2N relay communication security in KI#1 | Qualcomm Incorporated | merged |  | S3-245264 |
| S3-244965 | LS on security aspects related to protocols used in N6 delay measurements | Nokia, Nokia Shanghai Bell | revised |  | S3-245276 |
| S3-244966 | UUAA in 5GS updates | Ericsson | noted |  |  |
| S3-244967 | [Draft] Reply LS on security aspects of Ambient IoT | Beijing Xiaomi Mobile Software | merged |  | S3-245139 |
| S3-244968 | Update to solution #16 in TR 33.713 | Beijing Xiaomi Mobile Software | revised |  | S3-245301 |
| S3-244969 | Add evaluation for solution #16 in TR 33.713 | Beijing Xiaomi Mobile Software | revised |  | S3-245302 |
| S3-244970 | Update to solution #18 in TR 33.713 | Beijing Xiaomi Mobile Software | approved |  |  |
| S3-244971 | Add evaluation for solution #18 in TR 33.713 | Beijing Xiaomi Mobile Software | revised |  | S3-245303 |
| S3-244972 | Conclusion for KI#2 in TR 33.713 | Beijing Xiaomi Mobile Software | revised |  | S3-245170 |
| S3-244973 | [Draft] Reply LS on clarification on home network triggered re-authentication | Beijing Xiaomi Mobile Software | noted |  |  |
| S3-244974 | Clarification for re-authentication notification response in HONTRA procedure | Xiaomi | not pursued |  |  |
| S3-244975 | Clarification for re-authentication notification response in HONTRA procedure | Xiaomi | not pursued |  |  |
| S3-244976 | Update to the conclusion for KI#1 in TR 33.700.29 | Beijing Xiaomi Mobile Software | revised |  | S3-245214 |
| S3-244977 | Update to the conclusion for KI#2 in TR 33.700.29 | Beijing Xiaomi Mobile Software | merged |  | S3-245215 |
| S3-244978 | Conclusion for KI#1 in TR 33.743 | Beijing Xiaomi Mobile Software | merged |  | S3-245263 |
| S3-244979 | Terminology Alignment and Consistency for Target UE | Xiaomi | agreed |  |  |
| S3-244980 | LTM: Requirement on AS Security Context Synchronization | Xiaomi EV Technology | revised |  | S3-245160 |
| S3-244981 | LTM: Further Update to Solution 8 | Xiaomi EV Technology | revised |  | S3-245162 |
| S3-244982 | LTM: Partial Conclusion on Key Issue 1 | Xiaomi EV Technology | revised |  | S3-245335 |
| S3-244983 | LTM: Further Evaluation to Solution 7 | Xiaomi EV Technology | noted |  |  |
| S3-244984 | LTM: Update to Overall Summary | Xiaomi EV Technology | revised |  | S3-245337 |
| S3-244985 | 33.721: New Solution for Key Issue 4 | Xiaomi EV Technology | revised |  | S3-245354 |
| S3-244986 | 33.721: Conclusion for Key Issue 2 | Xiaomi EV Technology | merged |  | S3-245288 |
| S3-244987 | New conclusion for KI#1 | Ericsson | approved |  |  |
| S3-244988 | Resolution of ENs and updates in Solution#16 | Ericsson | approved |  |  |
| S3-244989 | Adding initial trust in CMPv2 initialization request | Nokia | revised |  | S3-245144 |
| S3-244990 | Reply LS on Issues related to Analytics context transfer between AnLF(s) | CATT | noted |  |  |
| S3-244991 | Conclusion update for KI#1 | Ericsson | revised |  | S3-245345 |
| S3-244992 | Adding initial trust in CMPv2 initialization request | Nokia | revised |  | S3-245145 |
| S3-244993 | Proposal way forward for eZTS | CATT, China Unicom, China Telecom | noted |  |  |
| S3-244994 | Resolution of Editor's Note in Solution#5 (Authorization of VFL participants involving NWDAF and AF) | Ericsson | approved |  |  |
| S3-244995 | Conclusion for KI#2 for the case that the NWDAF is the VFL Server | Ericsson | merged |  | S3-245269 |
| S3-244996 | pCR to TR33.700-29 Update conclusion#1 | CATT | merged |  | S3-245213 |
| S3-244997 | pCR to TR33.700-29 Update conclusion#2 | CATT | merged |  | S3-245215 |
| S3-244998 | Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions | CATT | revised |  | S3-245340 |
| S3-244999 | pCR to TR33.713 Update solution#9 to remove EN | CATT | not treated |  |  |
| S3-245000 | pCR to TR33.713 Update solution#30 to remove EN | CATT | revised |  | S3-245310 |
| S3-245001 | pCR to TR33.713 New solution general AIoT Device operation message protection procedure | CATT | noted |  |  |
| S3-245002 | Mutual Authentication Using AEAD for Inventory and Command case | Xidian, OPPO | revised |  | S3-245175 |
| S3-245003 | Presentation of Report to TSG: TR 33.754 Study on security aspects for multi-access (DualSteer + Access Traffic Steering, Switch and Splitting support in the 5G system architecture phase 4 (ATSSS Ph-4), Version 1.1.0 | Ericsson | noted |  |  |
| S3-245004 | pCR to TR33.713 Conclusion#3 | CATT | noted |  |  |
| S3-245005 | pCR to TR33.713 Conclusion#4 | CATT | noted |  |  |
| S3-245006 | Discussion on the NF consumer PLMN ID check | Ericsson | noted |  |  |
| S3-245007 | Checking PLMNID of NF Service Consumer in interconnect scenario | Ericsson | not pursued |  |  |
| S3-245008 | Checking PLMNID of NF Service Consumer in interconnect scenario | Ericsson | not pursued |  |  |
| S3-245009 | Checking PLMNID of NF Service Consumer in interconnect scenario | Ericsson | not pursued |  |  |
| S3-245010 | Draft\_LS on Checking PLMNID of NFc in interconnect scenario | Ericsson | noted |  |  |
| S3-245011 | Public key distribution and Issuer claim verification of the Access Token | Ericsson, Deutsche Telekom, AT&T, Samsung, BT PLC | not pursued |  | - |
| S3-245012 | Draft\_LS reply to LS on security aspects of Ambient IoT | Ericsson | merged |  | S3-245139 |
| S3-245013 | New key issue for secure storage in AIoT devices | Ericsson | not treated |  |  |
| S3-245014 | New Key Issue on Amplification of resource exhaustion by exploiting AIoT paging messages | Ericsson | not treated |  |  |
| S3-245015 | New key issue for Authenticated and authorized access to devices in Ambient IoT via 3GPP core | Ericsson | not treated |  |  |
| S3-245016 | New Solution to KI#5 | Ericsson | noted |  | - |
| S3-245017 | Addressing ENs in Solution#29 to KI#3 | Ericsson | revised |  | S3-245311 |
| S3-245018 | Evaluation of Solution#29 to KI#3 | Ericsson | approved |  |  |
| S3-245019 | Living document for CryptoSP: draftCR to TS 33.501, Updates to cryptographic profiles | Ericsson | approved |  | - |
| S3-245020 | Living document for CryptoSP: draftCR to TS 33.210, Updates to cryprographic profiles | Ericsson | approved |  | - |
| S3-245021 | Living document for CryptoSP: draftCR to TS 33.310, Updates to cryptographic profiles | Ericsson | approved |  | - |
| S3-245022 | Living document for CryptoSP: draftCR to TS 33.203, Updates to cryptographic profiles | Ericsson | approved |  | - |
| S3-245023 | pCR to TR33.713 Conclusion#5 | CATT | withdrawn |  |  |
| S3-245024 | pCR to TR33.743 Conclusion#1 | CATT | merged |  | S3-245263 |
| S3-245025 | Living document on NR mobility enhancement | Samsung | revised |  | S3-245164 |
| S3-245026 | Conclusion for key issue#3 | Samsung, Lenovo | merged |  | S3-245208 |
| S3-245027 | Conclusion update for KI#2 for DNS messages protection | Samsung | revised |  | S3-245207 |
| S3-245028 | Conclusion update for KI#2 in TR 33.757 | Samsung | merged |  | S3-245206 |
| S3-245029 | [TR 33.757] Update to solution#20 | Samsung | noted |  | - |
| S3-245030 | [TR 33.700-22] Update to solution#24 | Samsung | revised |  | S3-245244 |
| S3-245031 | [TR 33.700-22] Update to solution#27 | Samsung | revised |  | S3-245251 |
| S3-245032 | [TR 33.700-22] Conclusion for Key issue#4 | Samsung | noted |  |  |
| S3-245033 | [TR 33.721] Update to solution#6 | Samsung | revised |  | S3-245289 |
| S3-245034 | [TR 33.721] Conclusion for Key issue#1 | Samsung | revised |  | S3-245287 |
| S3-245035 | [TR 33.721] Conclusion for Key issue#2 | Samsung | merged |  | S3-245288 |
| S3-245036 | [TR 33.721] Conclusion for Key issue#3 | Samsung | noted |  |  |
| S3-245037 | New WID on security aspects of 5G Mobile Metaverse services | Samsung | revised |  | S3-245323 |
| S3-245038 | [draft] Reply LS on AIML data collection | Samsung | revised |  | S3-245138 |
| S3-245039 | Discussion on security procedure on S&F operation for a split MME architecture | Samsung | noted |  |  |
| S3-245040 | Update on KI#1 | Samsung | revised |  | S3-245218 |
| S3-245041 | Update on overall summary | Samsung | merged |  | S3-245219 |
| S3-245042 | Resolving EN in solution #6 | Samsung | revised |  | S3-245191 |
| S3-245043 | Resolving EN in solution #22 | Samsung | approved |  |  |
| S3-245044 | New solution on authentication and privacy of AIoT device | Samsung | revised |  | S3-245177 |
| S3-245045 | Discussion paper on SUCI calculation failure | Samsung | noted |  |  |
| S3-245046 | [draft] Reply LS on UE behaviour in case of SUCI calculation failure | Samsung | merged |  | S3-245137 |
| S3-245047 | New WID on Security Aspects of 5G Satellite Access Phase 3 | CATT | revised |  | S3-245356 |
| S3-245048 | Presentation of Report to TSG: TR 33.759 'Study on security enhancements of Uncrewed Aerial Systems (UAS) Phase 3', Version 1.0.0 | Ericsson | revised |  | S3-245370 |
| S3-245049 | pCR to TR33.713 Conclusion#5 | CATT | noted |  |  |
| S3-245050 | New solution for security aspects on user consent for policy update based on energy information | IIT Bombay | noted |  |  |
| S3-245051 | New solution for security aspects on user consent for energy information exposure/retrieval | IIT Bombay | noted |  |  |
| S3-245052 | Resolving ENs in Solution #6 | Ericsson | revised |  | S3-245272 |
| S3-245053 | Resolving ENs in Solution #9 | Ericsson | revised |  | S3-245273 |
| S3-245054 | Conclusion for KI#2.1 | Ericsson | merged |  | S3-245274 |
| S3-245055 | LS reply on Issues related to Analytics context transfer between AnLF(s) | Ericsson | noted |  |  |
| S3-245056 | Conclusion on authorization of non-3GPP devices behind gateway UE or 5G-RG (KI#3) | Ericsson | merged |  | S3-245268 |
| S3-245057 | Update to KI#1.2 | Ericsson | revised |  | S3-245232 |
| S3-245058 | Resolving ENs and evaluation of Solution #11 | Ericsson | revised |  | S3-245227 |
| S3-245059 | Resolving ENs and evaluation of Solution #22 | Ericsson | revised |  | S3-245243 |
| S3-245060 | Update to Solution #25 and evaluation | Ericsson | revised |  | S3-245249 |
| S3-245061 | Resolving EN and evaluation of Solution #26 | Ericsson | revised |  | S3-245252 |
| S3-245062 | Remove normative language from test cases | Keysight Technologies UK Ltd | approved |  |  |
| S3-245063 | Resolution of ENs on Authentication Result, Encryption and Command Protection | Lenovo | approved |  |  |
| S3-245064 | Resolution of EN on Temporary ID synchronization | Lenovo | approved |  |  |
| S3-245065 | Resolution of EN on group of devices | Lenovo | approved |  |  |
| S3-245066 | Update of solution#13 for key mismatch handling | Lenovo | approved |  |  |
| S3-245067 | Evaluation of Solution#13 | Lenovo | approved |  |  |
| S3-245068 | Solution#31 update - Addressing EN | Philips International B.V. | approved |  |  |
| S3-245069 | Solution#31 update | Philips International B.V. | approved |  |  |
| S3-245070 | Solution#1 update - Addressing EN | Philips International B.V. | approved |  |  |
| S3-245071 | Solution#1 evaluation update | Philips International B.V. | approved |  |  |
| S3-245072 | K#2 conclusion | Philips International B.V. | noted |  |  |
| S3-245073 | IMS Data Channel and LI | Ericsson | noted |  |  |
| S3-245074 | [Draft] Reply LS on enhancement to the protocol stack of IMS Data Channel | Ericsson | merged |  | S3-245140 |
| S3-245075 | HONTRA Error Handling | Ericsson | not pursued |  |  |
| S3-245076 | HONTRA Error Handling | Ericsson | not pursued |  |  |
| S3-245077 | [Draft] Reply LS on clarification on home network triggered re-authentication | Ericsson | noted |  |  |
| S3-245078 | Resolution of EN in Solution #8 (Using security log events, counters and protocol signaling monitoring) | Ericsson | approved |  |  |
| S3-245079 | Resolution of EN in conclusions for KI#1 (Data exposure for security evaluation and monitoring) | Ericsson | merged |  | S3-245182 |
| S3-245080 | Data collection for security monitoring | Ericsson | noted |  |  |
| S3-245081 | Resolution of EN in conclusions for KI#2 (Security mechanisms for policy enforcement at the 5G SBA) | Ericsson | merged |  | S3-245184 |
| S3-245082 | Editorial update of conclusions for KI#1 (Data exposure for security evaluation and monitoring) | Ericsson | merged |  | S3-245181 |
| S3-245083 | Conclusion for KI#1: Third party specific user identities | Ericsson | merged |  | S3-245188 |
| S3-245084 | Discussion about the KI#2: Security of IMS based Avatar Communication | Ericsson | noted |  |  |
| S3-245085 | LS on IMS avatar communication | Ericsson | noted |  |  |
| S3-245086 | Conclusion for KI#3: Security and privacy aspects of IMS DC capability exposure | Ericsson | revised |  | S3-245196 |
| S3-245087 | Presentation of Report to TSG:  TR 33.790, Study on the security support for the next generation real time communication services phase 2, Version 0.6.0 | Ericsson | revised |  | S3-245357 |
| S3-245088 | New WID on security support for the Next Generation Real Time Communication services Phase 2 | Ericsson | revised |  | S3-245326 |
| S3-245089 | Conclusion for Key Issue#1 - Communication setup | Ericsson | merged |  | S3-245264 |
| S3-245090 | Conclusion to KI#1 – multi-hop U2NW discovery | Ericsson | merged |  | S3-245263 |
| S3-245091 | Update Solution #2 | Ericsson | revised |  | S3-245260 |
| S3-245092 | Update Solution#4 | Ericsson | revised |  | S3-245262 |
| S3-245093 | Adding certificate handling tests to SCAS for split gNB | Qualcomm Incorporated | revised | S3-244953 | S3-245159 |
| S3-245094 | Protection of XRM metadata | Ericsson | noted |  |  |
| S3-245095 | New WID on MOBIKE for NTN 3GPP backhaul over the feeder link | Ericsson | noted |  | - |
| S3-245096 | New WID on Protection of XRM Metadata | Ericsson, Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-245097 | MOBIKE for NTN 3GPP backhaul over feeder link | Ericsson | not pursued |  |  |
| S3-245098 | Protecting XRM Metadata in QUIC aware forwarding | Ericsson | noted |  |  |
| S3-245099 | Editorial updates for solution #6 | LG Electronics | approved |  |  |
| S3-245100 | Teminology updates regarding NR Femto Hosting Party | LG Electronics | merged |  | S3-245282 |
| S3-245101 | TR 35.937 skeleton | THALES | approved |  |  |
| S3-245102 | Changes to TS 35.234 | THALES | approved |  |  |
| S3-245103 | Changes to TS 35.235 | THALES | approved |  |  |
| S3-245104 | Content for TS 35.236 | THALES | approved |  |  |
| S3-245105 | Content for TR 35.937 | THALES | approved |  |  |
| S3-245106 | Discussion on Impact Analysis for Inter-CU LTM | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-245107 | New solution | THALES | revised |  | S3-245178 |
| S3-245108 | A user consent mechanism for data collection related to AIML-based positioning | Xiaomi communications | noted |  |  |
| S3-245109 | Add evaluation for solution #8 of TR 33.700-22 | Xiaomi communications | revised |  | S3-245229 |
| S3-245110 | Add evaluation for solution #9 of TR 33.700-22 | Xiaomi communications | revised |  | S3-245224 |
| S3-245111 | Add evaluation for solution #18 of TR 33.700-22 | Xiaomi communications | revised |  | S3-245241 |
| S3-245112 | Add evaluation for solution #19 of TR 33.700-22 | Xiaomi communications | revised |  | S3-245242 |
| S3-245113 | Add evaluation for solution #20 of TR 33.700-22 | Xiaomi communications | approved |  |  |
| S3-245114 | Authorization mechanism for nested API invocation | Xiaomi communications | revised |  | S3-245253 |
| S3-245115 | Resolve ENs for solution #8 of TR 33.700-22 | Xiaomi communications | revised |  | S3-245230 |
| S3-245116 | Resolve ENs for solution #9 of TR 33.700-22 | Xiaomi communications | revised |  | S3-245225 |
| S3-245117 | Conclusion for CAPIF 6 and CAPIF 6e security | Xiaomi communications | merged |  | S3-245248 |
| S3-245118 | New WID on security aspects of CAPIF Phase3 | Xiaomi communications | withdrawn |  |  |
| S3-245119 | Update conclusion for KI#2 | Xiaomi communications | merged |  | S3-245206 |
| S3-245120 | Remove ENs of solution#3 for KI#1 | Nokia, Nokia Shanghai Bell | approved |  |  |
| S3-245121 | Remove ENs of solution#9 for KI#3 | Nokia, Nokia Shanghai Bell | revised |  | S3-245355 |
| S3-245122 | Conclusion of KI#1 | Nokia, Nokia Shanghai Bell | revised |  | S3-245188 |
| S3-245123 | Conclusion of KI#3 | Nokia, Nokia Shanghai Bell | merged |  | S3-245196 |
| S3-245124 | Solution for KI#3 to authorize DA client to create digital asset | Nokia, Nokia Shanghai Bell | revised |  | S3-245290 |
| S3-245125 | olution for KI#3 to authorize VAL-S or VAL\_C to access digital asset | Nokia, Nokia Shanghai Bell | revised |  | S3-245291 |
| S3-245126 | Solution for KI#4 to authorize avatar by metaverse service provider | Nokia, Nokia Shanghai Bell | revised |  | S3-245292 |
| S3-245127 | Support cleartext HPLMN ID in PC5 U2U relay discovery | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S3-245128 | Reply LS on including HPLMN ID in the PC5 discovery messages for 5G ProSe UE-to-UE relay | Nokia, Nokia Shanghai Bell | revised |  | S3-245136 |
| S3-245129 | MonSTra Security Solution | Ericsson, Vodafone, Nokia, Nokia Shanghai Bell, NSA, BT, Verizon | revised |  | S3-245167 |
| S3-245130 | New WID on security aspects of CAPIF Phase3 | Xiaomi commnications | revised |  | S3-245324 |
| S3-245131 | Conclusion for Key Issue #5 | THALES | noted |  |  |
| S3-245132 | Authorization of external AF for Inventory | NTT DOCOMO INC. | not treated |  |  |
| S3-245133 | LS on draft-ietf-raw-technologies, "Reliable and Available Wireless Technologies | IETF | noted | - | - |
| S3-245134 | Agenda | SA WG3 Chair | approved | S3-244600 | - |
| S3-245135 | Detailed agenda planning | SA WG3 Chair | noted | S3-244603 | - |
| S3-245136 | Reply LS on including HPLMN ID in the PC5 discovery messages for 5G ProSe UE-to-UE relay | Nokia, Nokia Shanghai Bell | noted | S3-245128 | - |
| S3-245137 | Reply LS on UE behaviour in case of SUCI calculation failure | Qualcomm Incorporated | approved | S3-244950 | - |
| S3-245138 | Reply LS on AIML data collection | Samsung | approved | S3-245038 | - |
| S3-245139 | LS on security aspects of Ambient IoT | OPPO | approved | S3-244800 | - |
| S3-245140 | Reply LS on enhancement to the protocol stack of IMS Data Channel | China Mobile | approved | S3-244855 | - |
| S3-245141 | Reply LS to SA6 Internal 5G Core information expose to trusted AF | Huawei, HiSilicon | approved | S3-244844 | - |
| S3-245142 | New Study on 3GPP Cryptographic Inventory | Nokia, Nokia Shanghai Bell | agreed | S3-244618 | - |
| S3-245143 | Reauthentication aspect for IPSec in non 3GPP access | Nokia | agreed | S3-244694 | - |
| S3-245144 | Adding initial trust in CMPv2 initialization request | Nokia | agreed | S3-244989 | - |
| S3-245145 | Adding initial trust in CMPv2 initialization request | Nokia | agreed | S3-244992 | - |
| S3-245146 | Redundant text in Annex I. | Nokia | agreed | S3-244868 | - |
| S3-245147 | Trust anchoring for N32-f/PRINS | BSI (DE), Nokia, Nokia Shanghai Bell | agreed | S3-244668 | - |
| S3-245148 | [33.180] Additions to access token for recording authorization | Motorola Solutions, Airbus | agreed | S3-244655 | - |
| S3-245149 | [33.180] MCRec ID Introduction | Airbus | agreed | S3-244906 | - |
| S3-245150 | Updates to cryptographic profiles | Ericsson, Nokia, Nokia Shanghai Bell | agreed | - | - |
| S3-245151 | Updates to cryprographic profiles | Ericsson, Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | agreed | - | - |
| S3-245152 | Updates to cryptographic profiles | Huawei, HiSilicon, Ericsson | agreed | - | - |
| S3-245153 | Updates to cryptographic profiles | Deutsche Telekom AG, Huawei, HiSilicon, Ericsson | agreed | - | - |
| S3-245154 | Draft TS 35.234 | Thales | approved | - | - |
| S3-245155 | Draft TS 35.235 | Thales | approved | - | - |
| S3-245156 | Draft TS 35.236 | Thales | approved | - | - |
| S3-245157 | Draft TR 35.937 | Thales | approved | - | - |
| S3-245158 | Certificate threats for split gNB | Qualcomm Incorporated | approved | S3-244952 | - |
| S3-245159 | Adding certificate handling tests to SCAS for split gNB | Qualcomm Incorporated | agreed | S3-245093 | - |
| S3-245160 | LTM: Requirement on AS Security Context Synchronization | Xiaomi EV Technology | approved | S3-244980 | - |
| S3-245161 | Resolve the EN in Sol#3 | ZTE Corporation | approved | S3-244753 | - |
| S3-245162 | LTM: Further Update to Solution 8 | Xiaomi EV Technology | approved | S3-244981 | - |
| S3-245163 | New solution on Mismatch of UE security context | vivo | approved | S3-244731 | - |
| S3-245164 | Living document on NR mobility enhancement | Samsung | approved | S3-245025 | - |
| S3-245165 | TWIF solution | Nokia, Lenovo, Charter Communications | approved | S3-244688 | - |
| S3-245166 | Living document of the Non3GPPMobEnh study | Nokia | approved | S3-244686 | - |
| S3-245167 | MonSTra Security Solution | Ericsson, Vodafone, Nokia, Nokia Shanghai Bell, NSA, BT, Verizon | approved | S3-245129 | - |
| S3-245168 | Living document for MonStra: draftCR to TS 33.501, Signalling Monitoring | Vodafone | approved | S3-244675 | - |
| S3-245169 | Draft TR 33.713 | OPPO | approved | - | - |
| S3-245170 | Conclusion for KI#2 in TR 33.713 | Beijing Xiaomi Mobile Software | noted | S3-244972 | - |
| S3-245171 | conclusion on key issue#5 | Huawei, HiSilicon | withdrawn | - | - |
| S3-245172 | Solution to KI#3, KI#4 and KI#5 | Nokia | approved | S3-244862 | - |
| S3-245173 | Authentication Using L1 Parameter | OPPO | approved | S3-244912 | - |
| S3-245174 | New solution for authentication in Ambient IoT service | China Mobile | approved | S3-244945 | - |
| S3-245175 | Mutual Authentication Using AEAD for Inventory and Command case | Xidian, OPPO | approved | S3-245002 | - |
| S3-245176 | New Solution to KI#5 | Ericsson | withdrawn | - | - |
| S3-245177 | New solution on authentication and privacy of AIoT device | Samsung | approved | S3-245044 | - |
| S3-245178 | New solution | THALES | approved | S3-245107 | - |
| S3-245179 | Draft TR 33.794 | Motorola Mobility | approved | - | - |
| S3-245180 | KI 1 Conclusion Clarification on Replay Use Case | MITRE-FFRDC, US National Security Agency, Johns Hopkins University APL | approved | S3-244678 | - |
| S3-245181 | Clarifications to Conclusion 1 | U.S. National Security Agency, OTD\_US, MITRE-FFRDC, Johns Hopkins University APL, Deutsche Telekom AG | approved | S3-244721 | - |
| S3-245182 | Updates and Clean-up of KI#1 Conclusion | Motorola Mobility [Rapporteur],Ericsson | approved | S3-244609 | - |
| S3-245183 | New annex for security event data records | Johns Hopkins University APL | approved | S3-244626 | - |
| S3-245184 | General Recommendations for Conclusion 2 Policy Enforcement | U.S. National Security Agency,OTD\_US, Johns Hopkins University APL, MITRE-FFRDC | approved | S3-244723 | - |
| S3-245185 | Cleanup of TR 33.794 | Motorola Mobility [Rapporteur] | approved | S3-244611 | - |
| S3-245186 | Draft TR 33.790 | Ericsson | approved | - | - |
| S3-245187 | Draft TR 33.757 | China Telecom | approved | - | - |
| S3-245188 | Conclusion of KI#1 | Nokia, Nokia Shanghai Bell | approved | S3-245122 | - |
| S3-245189 | Draft TR 33.776 | Cisco | approved | - | - |
| S3-245190 | Addressing the ENs on Avatar ID determination and token details of Solution#5 | Huawei, HiSilicon | approved | S3-244808 | - |
| S3-245191 | Resolving EN in solution #6 | Samsung | approved | S3-245042 | - |
| S3-245192 | Draft TR 33.700-29 | CATT | approved | - | - |
| S3-245193 | Draft TR 33.700-32 | Interdigital | approved | - | - |
| S3-245194 | Draft TR 33.759 | Ericsson | approved | - | - |
| S3-245195 | Draft TR 33.743 | Huawei | approved | - | - |
| S3-245196 | Conclusion for KI#3: Security and privacy aspects of IMS DC capability exposure | Ericsson | noted | S3-245086 | - |
| S3-245197 | Draft TR 33.784 | China Mobile | approved | - | - |
| S3-245198 | Draft TR 33.749 | China Unicom | approved | - | - |
| S3-245199 | Draft TR 33.766 | Ericsson | approved | - | - |
| S3-245200 | Removing EN in Sol#2 | China Telecomunication Corp. | approved | S3-244797 | - |
| S3-245201 | Updates to Solution#11 | Lenovo | noted | S3-244613 | - |
| S3-245202 | [TR 33.757] Update to solution#20 | Samsung | withdrawn | - | - |
| S3-245203 | Draft TR 33.745 | ZTE | approved | - | - |
| S3-245204 | Draft TR 33.721 | Samsung | approved | - | - |
| S3-245205 | Draft TR 33.700-22 | Ericsson | approved | - | - |
| S3-245206 | Conclusion to KI#2 | China Telecomunication Corp., ZTE, China Unicom, CATT | approved | S3-244796 | - |
| S3-245207 | Conclusion update for KI#2 for DNS messages protection | Samsung | approved | S3-245027 | - |
| S3-245208 | conclusion on key issue#3 | Huawei, HiSilicon | approved | S3-244882 | - |
| S3-245209 | Conclusion for KI#1: ACME initial trust framework | Cisco Systems | approved | S3-244680 | - |
| S3-245210 | Conclusion for KI#2 (Secure Transport of Messages) | Google Ireland Limited | approved | S3-244659 | - |
| S3-245211 | Conclusion for KI#4 (Certificate enrolment) | Google Ireland Limited | approved | S3-244657 | - |
| S3-245212 | Additional conclusions for KI#1 | InterDigital Belgium. LLC | approved | S3-244608 | - |
| S3-245213 | Proposed addition to the split MME conclusion for key issue #1 | Qualcomm Incorporated | approved | S3-244955 | - |
| S3-245214 | Update to the conclusion for KI#1 in TR 33.700.29 | Beijing Xiaomi Mobile Software | approved | S3-244976 | - |
| S3-245215 | Proposed privacy conclusion for split MME case | Qualcomm Incorporated | noted | S3-244954 | - |
| S3-245216 | Address EN in solution 31 | vivo | approved | S3-244733 | - |
| S3-245217 | Adding solution to KI#2 | ZTE Corporation | approved | S3-244755 | - |
| S3-245218 | Update on KI#1 | Samsung | approved | S3-245040 | - |
| S3-245219 | Updates to Overall Summary of solutions | Nokia | approved | S3-244790 | - |
| S3-245220 | Adding evaluation to Solution 2 | Huawei, HiSilicon | approved | S3-244833 | - |
| S3-245221 | Updates to Solution #5 | Lenovo | approved | S3-244617 | - |
| S3-245222 | Conclusion to KI#1.1 | Huawei, HiSilicon | approved | S3-244837 | - |
| S3-245223 | Update and evaluate solution #6 in TR 33.700-22 | China Telecomunication Corp. | approved | S3-244779 | - |
| S3-245224 | Add evaluation for solution #9 of TR 33.700-22 | Xiaomi communications | approved | S3-245110 | - |
| S3-245225 | Resolve ENs for solution #9 of TR 33.700-22 | Xiaomi communications | approved | S3-245116 | - |
| S3-245226 | Addressing ENs on KI1.2 RO permission management in solution 7 | Nokia | approved | S3-244928 | - |
| S3-245227 | Resolving ENs and evaluation of Solution #11 | Ericsson | approved | S3-245058 | - |
| S3-245228 | Adding evaluation to Solution 4 | Huawei, HiSilicon | approved | S3-244835 | - |
| S3-245229 | Add evaluation for solution #8 of TR 33.700-22 | Xiaomi communications | approved | S3-245109 | - |
| S3-245230 | Resolve ENs for solution #8 of TR 33.700-22 | Xiaomi communications | approved | S3-245115 | - |
| S3-245231 | Conclusion to KI#1.2 | Huawei, HiSilicon | approved | S3-244838 | - |
| S3-245232 | Update to KI#1.2 | Ericsson | noted | S3-245057 | - |
| S3-245233 | Adding evaluation to Solution 10 | Huawei, HiSilicon | approved | S3-244836 | - |
| S3-245234 | Update to KI1.3 Solution 29 on scope enhancing | Nokia | approved | S3-244929 | - |
| S3-245235 | Conclusion to KI#1.3 | Huawei, HiSilicon | approved | S3-244839 | - |
| S3-245236 | Updates to Solution #21 | Lenovo | approved | S3-244616 | - |
| S3-245237 | Evaluation for the Solution 23 | ZTE Corporation | approved | S3-244772 | - |
| S3-245238 | Update to KI2 Solution 13 on authentication aspect in CAPIF interconnect requesting security information from another CCF | Nokia | approved | S3-244931 | - |
| S3-245239 | Update to KI2 Solution 14 on authentication aspect in CAPIF interconnect when API invoker has not included CCF information | Nokia | approved | S3-244932 | - |
| S3-245240 | Update to KI2 Solution 15 on authorization token request handling in CAPIF interconnect | Nokia | approved | S3-244933 | - |
| S3-245241 | Add evaluation for solution #18 of TR 33.700-22 | Xiaomi communications | approved | S3-245111 | - |
| S3-245242 | Add evaluation for solution #19 of TR 33.700-22 | Xiaomi communications | approved | S3-245112 | - |
| S3-245243 | Resolving ENs and evaluation of Solution #22 | Ericsson | approved | S3-245059 | - |
| S3-245244 | [TR 33.700-22] Update to solution#24 | Samsung | approved | S3-245030 | - |
| S3-245245 | Update sol#17 | China Telecom | approved | S3-244829 | - |
| S3-245246 | Update to KI2 Solution 12 on security method retrieval in CAPIF interconnect | Nokia | approved | S3-244930 | - |
| S3-245247 | Update to KI2 Solution 16 on mapping an API invoker authorization request to the correct CCF in CAPIF interconnect | Nokia | approved | S3-244934 | - |
| S3-245248 | Conclusion on KI#2 | ZTE Corporation | approved | S3-244776 | - |
| S3-245249 | Update to Solution #25 and evaluation | Ericsson | approved | S3-245060 | - |
| S3-245250 | KI4 Sol on Authentication of the origin API invoker in nested API invocation | Nokia | approved | S3-244937 | - |
| S3-245251 | [TR 33.700-22] Update to solution#27 | Samsung | approved | S3-245031 | - |
| S3-245252 | Resolving EN and evaluation of Solution #26 | Ericsson | approved | S3-245061 | - |
| S3-245253 | Authorization mechanism for nested API invocation | Xiaomi communications | approved | S3-245114 | - |
| S3-245254 | Update to KI5 Solution on authenticating multiple API invokers of the same RO | Nokia | approved | S3-244935 | - |
| S3-245255 | New KI on Onboarding security issue | Nokia | approved | S3-244938 | - |
| S3-245256 | New solution for UAV triggered UUAA | Huawei, HiSilicon | approved | S3-244840 | - |
| S3-245257 | New solution for USS triggered UUAA | Huawei, HiSilicon | approved | S3-244841 | - |
| S3-245258 | Enhancing the conclusion of KI#1 | Qualcomm Incorporated | noted | S3-244957 | - |
| S3-245259 | LS on Multi-hop U2N Relay Architecture Aspects | InterDigital France R&D, SAS | approved | S3-244674 | - |
| S3-245260 | Update Solution #2 | Ericsson | approved | S3-245091 | - |
| S3-245261 | Addressing Ens in solution #16 | Qualcomm Incorporated | approved | S3-244962 | - |
| S3-245262 | Update Solution#4 | Ericsson | approved | S3-245092 | - |
| S3-245263 | Conclusion of multi-hop U2N relay discovery security in KI#1 | Qualcomm Incorporated | approved | S3-244963 | - |
| S3-245264 | Conclude to KI#1 of TR 33.743 - U2NW security setup | Huawei, HiSilicon, Interdigital, China Telecom, Xiaomi | approved | S3-244888 | - |
| S3-245265 | Update to KI#2 conclusion of TR 33.743 | Huawei, HiSilicon | approved | S3-244886 | - |
| S3-245266 | New solution about Multi-hop U2U Model A discovery in non-IP scenario | Huawei, HiSilicon | approved | S3-244892 | - |
| S3-245267 | Cover sheet Draft TR 33.743 | Huawei | approved | - | - |
| S3-245268 | TR 33.700-32 Conclusion for Key Issue#3, Cablelabs, Lenovo | InterDigital France R&D, SAS | approved | S3-244677 | - |
| S3-245269 | Additional Conclusion for key issue#2 | vivo, Nokia, Nokia Shanghai Bell, China Mobile, China Telecom, China Unicom, Xiaomi | approved | S3-244743 | - |
| S3-245270 | Additional Conclusion for key Issue#3 | vivo, China Mobile, China Telecom, China Unicom | approved | S3-244744 | - |
| S3-245271 | Update KI #1 of TR 33.784 | OPPO | approved | S3-244849 | - |
| S3-245272 | Resolving ENs in Solution #6 | Ericsson | approved | S3-245052 | - |
| S3-245273 | Resolving ENs in Solution #9 | Ericsson | approved | S3-245053 | - |
| S3-245274 | Conclusion for KI#2.1 | Nokia, Nokia Shanghai Bell | approved | S3-244942 | - |
| S3-245275 | Add specific UDR SCAS test cases for TS 33.530 | BSI (DE) | approved | S3-244792 | - |
| S3-245276 | LS on security aspects related to protocols used in N6 delay measurements | Nokia, Nokia Shanghai Bell | approved | S3-244965 | - |
| S3-245277 | Cover Sheet for TR 33.754 | Intel Corporation (UK) Ltd | approved | S3-244787 | - |
| S3-245278 | Resolution of ENs concerning compliance to regional legislation when collecting and exposing user energy consumption information. | Nokia, Deutsche Telekom | approved | S3-244859 | - |
| S3-245279 | Notification about AKMA service disabling via NEF | Huawei, HiSilicon | withdrawn | - | - |
| S3-245280 | Add standardized format for security event logs into conclusion of KI#1 | Johnn Hopkina | approved | - | - |
| S3-245281 | Addressing EN in KI#9 | Huawei, HiSilicon | approved | S3-244898 | - |
| S3-245282 | Updates to conclusions for Key Issue #1 | Nokia | approved | S3-244798 | - |
| S3-245283 | Updating conclusion#5 | Huawei, HiSilicon | approved | S3-244900 | - |
| S3-245284 | Updating conclusion#6 | Huawei, HiSilicon | approved | S3-244901 | - |
| S3-245285 | Adding conclusion to KI#9 | Huawei, HiSilicon | approved | S3-244899 | - |
| S3-245286 | Cover sheet draft TR 33.745 for approval | ZTE | approved | - | - |
| S3-245287 | [TR 33.721] Conclusion for Key issue#1 | Samsung | approved | S3-245034 | - |
| S3-245288 | Conclude KI#2 in TR 33.721 | Huawei, HiSilicon | approved | S3-244891 | - |
| S3-245289 | [TR 33.721] Update to solution#6 | Samsung | approved | S3-245033 | - |
| S3-245290 | Solution for KI#3 to authorize DA client to create digital asset | Nokia, Nokia Shanghai Bell | approved | S3-245124 | - |
| S3-245291 | olution for KI#3 to authorize VAL-S or VAL\_C to access digital asset | Nokia, Nokia Shanghai Bell | approved | S3-245125 | - |
| S3-245292 | Solution for KI#4 to authorize avatar by metaverse service provider | Nokia, Nokia Shanghai Bell | approved | S3-245126 | - |
| S3-245293 | Cover sheet draft TR 35.234 | Thales | approved | - | - |
| S3-245294 | Cover sheet draft TR 35.235 | Thales | approved | - | - |
| S3-245295 | Cover sheet draft TR 35.236 | Thales | approved | - | - |
| S3-245296 | KI#4, New Sol Communication Security of intermediate UE interacting with AIoT device | vivo | approved | S3-244736 | - |
| S3-245297 | Security Key Generation Using L1 Parameter | OPPO | approved | S3-244909 | - |
| S3-245298 | Solution on PHY key based protecting AIoT device identifiers | OPPO | approved | S3-244908 | - |
| S3-245299 | KI#1, New Sol Disable AIoT device | vivo | approved | S3-244737 | - |
| S3-245300 | Resolving EN from Sol#5 | OPPO, Xidian | approved | S3-244788 | - |
| S3-245301 | Update to solution #16 in TR 33.713 | Beijing Xiaomi Mobile Software | approved | S3-244968 | - |
| S3-245302 | Add evaluation for solution #16 in TR 33.713 | Beijing Xiaomi Mobile Software | approved | S3-244969 | - |
| S3-245303 | Add evaluation for solution #18 in TR 33.713 | Beijing Xiaomi Mobile Software | approved | S3-244971 | - |
| S3-245304 | Resolution of ENs in Solution #21 | InterDigital Belgium. LLC | approved | S3-244671 | - |
| S3-245305 | Resolution of ENs in Solution #20 | InterDigital Belgium. LLC | approved | S3-244672 | - |
| S3-245306 | Ambient IoT solution on privacy revision | Apple | approved | S3-244709 | - |
| S3-245307 | Resolving ENs in sol#25 in TR 33.713 | ZTE Corporation | approved | S3-244761 | - |
| S3-245308 | Adding evaluation to sol#25 in TR 33.713 | ZTE Corporation | approved | S3-244762 | - |
| S3-245309 | Solution 26 Update and Evaluation | Sony | approved | S3-244806 | - |
| S3-245310 | pCR to TR33.713 Update solution#30 to remove EN | CATT | approved | S3-245000 | - |
| S3-245311 | Addressing ENs in Solution#29 to KI#3 | Ericsson | approved | S3-245017 | - |
| S3-245312 | Solution 14 Update and Evaluation | Sony | approved | S3-244819 | - |
| S3-245313 | Remove ENs and add evaluation in Solution #17 | OPPO | approved | S3-244913 | - |
| S3-245314 | Addressing the EN in solution #15 | Qualcomm Incorporated | approved | S3-244959 | - |
| S3-245315 | Ambient IoT solution on mutual authentication revision | Apple | approved | S3-244710 | - |
| S3-245316 | KI#5, Solution update on AIoT device authentication | vivo | approved | S3-244735 | - |
| S3-245317 | Conclusion for KI#7: Supporting all 5G SBA certificate types | Cisco Systems | approved | S3-244681 | - |
| S3-245318 | Presentation of Specification/Report to TSG: TR 33.776, Version 1.0.0 | Cisco Systems | approved | S3-244682 | - |
| S3-245319 | New WID on enablers for Zero Trust Security in SBA | Motorola Mobility [Rapporteur] | noted | S3-244615 | - |
| S3-245320 | New WID on ProSe Ph3 security | Huawei, HiSilicon | agreed | S3-244889 | - |
| S3-245321 | New WID on UAS security enhancements | Ericsson | agreed | S3-244848 | - |
| S3-245322 | New WID on Security aspects of Core Network Enhanced Support for AIML | China Mobile, vivo | agreed | S3-244856 | - |
| S3-245323 | New WID on security aspects of 5G Mobile Metaverse services | Samsung | agreed | S3-245037 | - |
| S3-245324 | New WID on security aspects of CAPIF Phase3 | Xiaomi communications | agreed | S3-245130 | - |
| S3-245325 | WID on security aspects of 5G NR Femto | ZTE Corporation | agreed | S3-244777 | - |
| S3-245326 | New WID on security support for the Next Generation Real Time Communication services Phase 2 | Ericsson,China Mobile | agreed | S3-245088 | - |
| S3-245327 | Release 20 Planning | WG Chair | noted | - | - |
| S3-245328 | Correction and clarification of TC\_AMF\_NAS\_INTEGRITY\_FAILURE | BSI (DE) | noted | S3-244667 | - |
| S3-245329 | MnF User session timeout | Keysight Technologies UK Ltd | withdrawn | - | - |
| S3-245330 | Draft TS 33.530 | BSI | eapproved | - | - |
| S3-245331 | Cover sheet TR 35.937 | Thales | approved | - | - |
| S3-245332 | Draft CR TS 33.117 | Huawei, HiSilicon | approved | S3-244894 | - |
| S3-245333 | Draft CR TR33.926 | Huawei, HiSilicon | approved | S3-244895 | - |
| S3-245334 | DRAFT CR SBA Rel-19 public key or cert retrieval for access token verification | Ericsson, Deutsche Telekom, AT&T, Samsung, BT PLC, KDDI, Huawei, NCSC, Nokia | approved | S3-244926 | - |
| S3-245335 | LTM: Partial Conclusion on Key Issue 1 | Xiaomi EV Technology | approved | S3-244982 | - |
| S3-245336 | Security analysis of LTM cell switch command MAC CE | OPPO | approved | S3-244916 | - |
| S3-245337 | LTM: Update to Overall Summary | Xiaomi EV Technology | approved | S3-244984 | - |
| S3-245338 | Non3GPPMobEnh enhancement | Nokia | agreed | - | - |
| S3-245339 | Security of Signalling Traffic monitoring | Vodafone | agreed | - | - |
| S3-245340 | Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions | CATT | approved | S3-244998 | - |
| S3-245341 | Update of conclusions KI#1 | Huawei, HiSilicon | approved | S3-244814 | - |
| S3-245342 | New WID on Security Aspects of Enhancement of Support for Edge Computing in 5GC — phase 3 | China Unicom, Huawei, HiSilicon | agreed | S3-244782 | - |
| S3-245343 | Further additions to the enhancement of IOPs in solution #3 | Qualcomm Incorporated | approved | S3-244956 | - |
| S3-245344 | New solution on combined authentication and data protection for Ambient IoT services | KPN N.V. | approved | S3-244669 | - |
| S3-245345 | Conclusion update for KI#1 | Ericsson | approved | S3-244991 | - |
| S3-245346 | Update of Conclusion on Key issue #1 | Huawei, HiSilicon | approved | S3-244871 | - |
| S3-245347 | TR clean up | vivo | approved | S3-244745 | - |
| S3-245348 | Solving the problem of generating and forwarding the salt to the BSF | Huawei, HiSilicon | approved | S3-244813 | - |
| S3-245349 | Conclusion for KI#1.1 | Nokia, Nokia Shanghai Bell | approved | S3-244943 | - |
| S3-245350 | Regional legislation compliance in relation to collection of user information. | Nokia, Deutsche Telekom | approved | S3-244860 | - |
| S3-245351 | New solution for key issue 3 | China Mobile | approved | S3-244946 | - |
| S3-245352 | Updates to conclusions for Key Issue #3 | Nokia | approved | S3-244818 | - |
| S3-245353 | Remove the EN in stable conclusions | ZTE Corporation | approved | S3-244769 | - |
| S3-245354 | 33.721: New Solution for Key Issue 4 | Xiaomi EV Technology | approved | S3-244985 | - |
| S3-245355 | Remove ENs of solution#9 for KI#3 | Nokia, Nokia Shanghai Bell | approved | S3-245121 | - |
| S3-245356 | New WID on Security Aspects of 5G Satellite Access Phase 3 | CATT | agreed | S3-245047 | - |
| S3-245357 | Presentation of Report to TSG:  TR 33.790, Study on the security support for the next generation real time communication services phase 2, Version 0.6.0 | Ericsson | approved | S3-245087 | - |
| S3-245358 | Adding certificate test cases to TS 33.511 | Huawei; HiSilicon, CAICT, CTCC, Nokia | agreed | - | - |
| S3-245359 | Adding threat about certificate verification to TR 33.926 | Huawei; HiSilicon, CAICT, CTCC, Nokia | agreed | - | - |
| S3-245360 | Corrections and test case updating to TS 33.117 | Huawei; HiSilicon, CAICT, CTCC, Nokia | agreed | - | - |
| S3-245361 | Updating test case about authentication status of UE by UDM | Huawei; HiSilicon, CAICT, CTCC, Nokia | agreed | - | - |
| S3-245362 | Technical Content for 3GPP Cryptographic Inventory | Nokia, Nokia Shanghai Bell | noted | S3-244621 | - |
| S3-245363 | Input to SA for Reply LS on clarifications on consent management | Nokia | approved | S3-244927 | - |
| S3-245364 | Living Document to TS 33.518 NRF SCAS | BSI (DE) | approved | S3-244662 | - |
| S3-245365 | Presentation of Specification/Report to TSG for TR 33.794 | Motorola Mobility [Rapporteur] | approved | S3-244612 | - |
| S3-245366 | Pre-authorization solution for ACME | NCSC | approved | S3-244673 | - |
| S3-245367 | Evaluation update for solution #9 (Using ACME protocol for certificate renewal) | Google Ireland Limited | approved | S3-244656 | - |
| S3-245368 | Conclusion for KI#5 (Certificate Renewal) | Google Ireland Limited | approved | S3-244658 | - |
| S3-245369 | Cover Sheet TR 33.700-32 | InterDigital France R&D, SAS | approved | S3-244676 | - |
| S3-245370 | Presentation of Report to TSG: TR 33.759 'Study on security enhancements of Uncrewed Aerial Systems (UAS) Phase 3', Version 1.0.0 | Ericsson | approved | S3-245048 | - |
| S3-245371 | Solution on validation of correct GPSI in API invoker information | Nokia | approved | S3-244939 | - |
| S3-245372 | New WID on Automatic Certificate Management Environment (ACME) for the Service Based Architecture (SBA) | Cisco Systems | agreed | S3-244683 | - |
| S3-245373 | New WID on Security for PLMN hosting a NPN | China Telecomunication Corp., ZTE | agreed | S3-244910 | - |

## Annex B: List of change requests

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Spec | CR | Rev | Rel | Cat | WI | Decision |
| S3-245360 | Corrections and test case updating to TS 33.117 | Huawei; HiSilicon, CAICT, CTCC, Nokia | 33.117 | 0198 | - | Rel-19 | B | SCAS\_5G\_Maint | agreed |
| S3-244655 | [33.180] Additions to access token for recording authorization | Motorola Solutions, Airbus | 33.180 | 0214 | - | Rel-19 | B | MCXSec4 | revised |
| S3-245148 | [33.180] Additions to access token for recording authorization | Motorola Solutions, Airbus | 33.180 | 0214 | 1 | Rel-19 | B | MCXSec4 | agreed |
| S3-244906 | [33.180] MCRec ID Introduction | Airbus | 33.180 | 0215 | - | Rel-19 | B | MCXSec4 | revised |
| S3-245149 | [33.180] MCRec ID Introduction | Airbus | 33.180 | 0215 | 1 | Rel-19 | B | MCXSec4 | agreed |
| S3-245153 | Updates to cryptographic profiles | Deutsche Telekom AG, Huawei, HiSilicon, Ericsson | 33.203 | 0284 | - | Rel-19 | B | CryptoSP | agreed |
| S3-245151 | Updates to cryprographic profiles | Ericsson, Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | 33.210 | 0084 | - | Rel-19 | B | CryptoSP | agreed |
| S3-244989 | Adding initial trust in CMPv2 initialization request | Nokia | 33.310 | 0205 | - | Rel-18 | F | ACM\_SBA | revised |
| S3-245144 | Adding initial trust in CMPv2 initialization request | Nokia | 33.310 | 0205 | 1 | Rel-18 | F | ACM\_SBA | agreed |
| S3-244992 | Adding initial trust in CMPv2 initialization request | Nokia | 33.310 | 0206 | - | Rel-19 | A | ACM\_SBA | revised |
| S3-245145 | Adding initial trust in CMPv2 initialization request | Nokia | 33.310 | 0206 | 1 | Rel-19 | A | ACM\_SBA | agreed |
| S3-245152 | Updates to cryptographic profiles | Huawei, HiSilicon, Ericsson | 33.310 | 0207 | - | Rel-19 | B | CryptoSP | agreed |
| S3-244807 | Removing MRF from IMS data channel architecture | Huawei, HiSilicon | 33.328 | 0080 | - | Rel-18 | F | NG\_RTC\_SEC | agreed |
| S3-244668 | Trust anchoring for N32-f/PRINS | BSI (DE), Nokia, Nokia Shanghai Bell | 33.501 | 2053 | - | Rel-19 | F | TEI19, Roaming5G | revised |
| S3-245147 | Trust anchoring for N32-f/PRINS | BSI (DE), Nokia, Nokia Shanghai Bell | 33.501 | 2053 | 1 | Rel-19 | F | TEI19, Roaming5G | agreed |
| S3-244693 | Reauthentication aspect for IPSec in non 3GPP access | Nokia | 33.501 | 2054 | - | Rel-18 | F | TEI18 | not pursued |
| S3-244694 | Reauthentication aspect for IPSec in non 3GPP access | Nokia | 33.501 | 2055 | - | Rel-19 | F | TEI19 | revised |
| S3-245143 | Reauthentication aspect for IPSec in non 3GPP access | Nokia | 33.501 | 2055 | 1 | Rel-19 | F | TEI19 | agreed |
| S3-244696 | Enhancement in UPU procedure to protect UPU header | Nokia | 33.501 | 2056 | - | Rel-18 | F | TEI18 | not pursued |
| S3-244698 | NSWO AN and SNN related update | Nokia | 33.501 | 2057 | - | Rel-18 | F | TEI18 | not pursued |
| S3-244699 | NSWO AN and SNN related update | Nokia | 33.501 | 2058 | - | Rel-19 | A | TEI18 | not pursued |
| S3-244700 | Kamf definition alignment for NAS count | Nokia | 33.501 | 2059 | - | Rel-16 | F | TEI16 | not pursued |
| S3-244701 | Kamf definition alignment for NAS count | Nokia | 33.501 | 2060 | - | Rel-17 | A | TEI16 | not pursued |
| S3-244702 | Kamf definition alignment for NAS count | Nokia | 33.501 | 2061 | - | Rel-18 | A | TEI16 | not pursued |
| S3-244703 | Kamf definition alignment for NAS count | Nokia | 33.501 | 2062 | - | Rel-19 | A | TEI16 | not pursued |
| S3-244704 | Home control for NSWO | Nokia | 33.501 | 2063 | - | Rel-18 | F | TEI18 | not pursued |
| S3-244705 | Home control for NSWO | Nokia | 33.501 | 2064 | - | Rel-19 | A | TEI18 | not pursued |
| S3-244706 | AUSF requirement for the case of Indirect Network Sharing: | Nokia | 33.501 | 2065 | - | Rel-19 | F | TEI19 | not pursued |
| S3-244730 | UE behaviour in case of SUCI calculation failure | vivo | 33.501 | 2066 | - | Rel-19 | F | TEI19 | not pursued |
| S3-244749 | Clarifications for HONTRA procedure with respect to failure cases | ZTE | 33.501 | 2067 | - | Rel-18 | F | HN\_Auth | not pursued |
| S3-244750 | Clarifications for HONTRA procedure with respect to failure cases | ZTE | 33.501 | 2068 | - | Rel-19 | A | HN\_Auth | not pursued |
| S3-244752 | Security aspects for Indirect Network Sharing | ZTE Corporation | 33.501 | 2069 | - | Rel-19 | F | TEI19 | not pursued |
| S3-244804 | Proposal for changing the description of SN counter in SCPAC | Apple Computer Trading Co. Ltd | 33.501 | 2070 | - | Rel-19 | F | TEI19 | not pursued |
| S3-244817 | Retrieval of public key used for token verification | Huawei, HiSilicon | 33.501 | 2071 | - | Rel-19 | F | TEI19 | not pursued |
| S3-244867 | Redundant text in Annex I. | Nokia | 33.501 | 2072 | - | Rel-18 | F | eNPN\_Ph2 | not pursued |
| S3-244868 | Redundant text in Annex I. | Nokia | 33.501 | 2073 | - | Rel-19 | F | eNPN\_Ph2 | revised |
| S3-245146 | Redundant text in Annex I. | Nokia | 33.501 | 2073 | 1 | Rel-19 | D | eNPN\_Ph2 | agreed |
| S3-244877 | Update to MPQUIC TLS Annex | Huawei, HiSilicon | 33.501 | 2074 | - | Rel-18 | F | TEI18 | not pursued |
| S3-244915 | Corrections to Nudm\_UEAuthentication\_ResultConfirmation | Ericsson | 33.501 | 2075 | - | Rel-18 | F | eNPN\_Ph2 | agreed |
| S3-244917 | Corrections to Nudm\_UEAuthentication\_ResultConfirmation | Ericsson | 33.501 | 2076 | - | Rel-19 | A | eNPN\_Ph2 | agreed |
| S3-244918 | Authorization of a service request when the discovery is delegated to the target PLMN | Nokia | 33.501 | 2077 | - | Rel-19 | B | TEI19 | not pursued |
| S3-244974 | Clarification for re-authentication notification response in HONTRA procedure | Xiaomi | 33.501 | 2078 | - | Rel-18 | F | HN\_Auth | not pursued |
| S3-244975 | Clarification for re-authentication notification response in HONTRA procedure | Xiaomi | 33.501 | 2079 | - | Rel-19 | A | HN\_Auth | not pursued |
| S3-245007 | Checking PLMNID of NF Service Consumer in interconnect scenario | Ericsson | 33.501 | 2080 | - | Rel-17 | F | TEI17 | not pursued |
| S3-245008 | Checking PLMNID of NF Service Consumer in interconnect scenario | Ericsson | 33.501 | 2081 | - | Rel-18 | A | TEI17 | not pursued |
| S3-245009 | Checking PLMNID of NF Service Consumer in interconnect scenario | Ericsson | 33.501 | 2082 | - | Rel-19 | A | TEI17 | not pursued |
| S3-245011 | Public key distribution and Issuer claim verification of the Access Token | Ericsson, Deutsche Telekom, AT&T, Samsung, BT PLC | 33.501 | 2083 | - | Rel-19 | B | TEI19 | not pursued |
| S3-245075 | HONTRA Error Handling | Ericsson | 33.501 | 2084 | - | Rel-18 | F | HN\_Auth | not pursued |
| S3-245076 | HONTRA Error Handling | Ericsson | 33.501 | 2085 | - | Rel-19 | A | HN\_Auth | not pursued |
| S3-245097 | MOBIKE for NTN 3GPP backhaul over feeder link | Ericsson | 33.501 | 2086 | - | Rel-19 | B | DUMMY | not pursued |
| S3-245150 | Updates to cryptographic profiles | Ericsson, Nokia, Nokia Shanghai Bell | 33.501 | 2087 | - | Rel-19 | B | CryptoSP | agreed |
| S3-245338 | Non3GPPMobEnh enhancement | Nokia | 33.501 | 2088 | - | Rel-19 | B | Non3GPPMob\_Sec | agreed |
| S3-245339 | Security of Signalling Traffic monitoring | Vodafone | 33.501 | 2089 | - | Rel-19 | B | MonStra-Sec | agreed |
| S3-244879 | Update to TS 33.503 to fix the referred clause and table of services | Huawei, HiSilicon | 33.503 | 0208 | - | Rel-17 | F | 5G\_ProSe | agreed |
| S3-244880 | Update to TS 33.503 to fix the referred clause and table of services - Mirror | Huawei, HiSilicon | 33.503 | 0209 | - | Rel-18 | A | 5G\_ProSe | agreed |
| S3-245127 | Support cleartext HPLMN ID in PC5 U2U relay discovery | Nokia, Nokia Shanghai Bell | 33.503 | 0210 | - | Rel-18 | F | 5G\_ProSe\_Ph2 | not pursued |
| S3-245358 | Adding certificate test cases to TS 33.511 | Huawei; HiSilicon, CAICT, CTCC, Nokia | 33.511 | 0072 | - | Rel-19 | B | SCAS\_5G\_Maint | agreed |
| S3-245361 | Updating test case about authentication status of UE by UDM | Huawei; HiSilicon, CAICT, CTCC, Nokia | 33.514 | 0032 | - | Rel-19 | F | SCAS\_5G\_Maint | agreed |
| S3-244953 | Adding certificate handling tests to SCAS for split gNB | Qualcomm Incorporated | 33.523 | 0009 | - | Rel-19 | B | SCAS\_5G\_Maint | revised |
| S3-245093 | Adding certificate handling tests to SCAS for split gNB | Qualcomm Incorporated | 33.523 | 0009 | 1 | Rel-19 | B | SCAS\_5G\_Maint | revised |
| S3-245159 | Adding certificate handling tests to SCAS for split gNB | Qualcomm Incorporated | 33.523 | 0009 | 2 | Rel-19 | B | SCAS\_5G\_Maint | agreed |
| S3-244979 | Terminology Alignment and Consistency for Target UE | Xiaomi | 33.533 | 0077 | - | Rel-18 | F | Ranging\_SL\_Sec | agreed |
| S3-244904 | Notification about AKMA service disabling via NEF | Huawei, HiSilicon | 33.535 | 0221 | - | Rel-18 | F | AKMA\_Ph2 | not pursued |
| S3-245279 | Notification about AKMA service disabling via NEF | Huawei, HiSilicon | 33.535 | 0221 | 1 | Rel-18 | F | AKMA\_Ph2 | withdrawn |
| S3-244905 | Correction to AAnF response without UE Identity | Huawei, HiSilicon | 33.535 | 0222 | - | Rel-18 | F | AKMA\_Ph2 | agreed |
| S3-245359 | Adding threat about certificate verification to TR 33.926 | Huawei; HiSilicon, CAICT, CTCC, Nokia | 33.926 | 0102 | - | Rel-19 | B | SCAS\_5G\_Maint | agreed |

## Annex C: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Original | Title | From | Decision | Reply TDoc |
| S3-244627 |  | LS to 3GPP CT4 on recursively defined JSON structures and reply to LS C4-241343 | GSMA | noted | (none) |
| S3-244628 |  | LS on including the HPLMN ID in the PC5 discovery messages for 5G ProSe UE-to-UE relay | C1-244647 | postponed | ???? |
| S3-244629 |  | LS on UE behaviour in case of SUCI calculation failure | C1-245039 | replied to | S3-245137 |
| S3-244630 |  | Reply LS on Mitigation of Downgrade attacks | C1-245048 | noted | (none) |
| S3-244631 |  | Reply-LS on GSMA CVD-2023-0069 5G Core Network Attacks | C4-243671 | replied to | S3-244845 |
| S3-244632 |  | Reply LS on clarification on home network triggered re-authentication | C4-244496 | postponed | S3-244973 |
| S3-244633 |  | LS on use of 3gpp-Sbi-Originating-Network-Id for Indirect Network Sharing case | C4-244497 | postponed | ???? |
| S3-244634 |  | LS on PWS support for NB-IoT NTN | R2-2409243 | noted | (none) |
| S3-244635 |  | Response LS on Newly published data channel GSMA PRD TS.66 | R5-245464 | noted | (none) |
| S3-244636 |  | LS on AIML data collection | RP-242389 | replied to | S3-245138 |
| S3-244637 |  | LS on Completion of 5WWC\_Ph2 (R18) work | S2-2409022 | noted | (none) |
| S3-244638 |  | LS Reply to Issues related to Analytics context transfer between AnLF(s) | S2-2409441 | postponed | S3-244875 |
| S3-244639 |  | Reply LS on LCS user plane connection binding to the UE | S2-2409544 | noted | (none) |
| S3-244640 |  | Further LS Reply on Internal 5G Core information expose to trusted AF | S2-2410813 | noted | (none) |
| S3-244641 |  | LS on security aspects of Ambient IoT | S2-2411049 | postponed | ???? |
| S3-244642 |  | Reply LS on AIML data collection | S2-2411191 | noted | (none) |
| S3-244643 |  | Reply LS on Clarification regarding definition of 5G NR femto ownership | S2-2411241 | noted | (none) |
| S3-244644 |  | Reply to Reply LS on CEN's requirements for eCall over IMS | S2-2411246 | noted | (none) |
| S3-244645 |  | Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions | S2-2411250 | replied to | S3-245340 |
| S3-244646 |  | LS on enhancement to the protocol stack of IMS Data Channel | S4-241373 | replied to | S3-245140 |
| S3-244647 |  | LS Reply on Newly Published data channel GSMA PRD TS.66 | S4-241684 | noted | (none) |
| S3-244648 |  | LS reply to IETF Traffic Engineering Architecture and Signaling Working Group on ""A Realization of Network Slices for 5G Networks Using Current IP/MPLS Technologies"" | S5-244662 | noted | (none) |
| S3-244649 |  | LS Reply on Internal 5G Core information expose to trusted AF | S5-245162 | noted | (none) |
| S3-244650 |  | LS on SA5 MonStra work progress | S5-246296 | noted | (none) |
| S3-244651 |  | LS on Clarification related to Internal 5G Core information expose to trusted AF | S6-242714 | replied to | S3-245141 |
| S3-244652 |  | LS on SA6 Answer to GSMA LS on Newly published data channel GSMA PRD TS.66 | S6-243763 | noted | (none) |
| S3-244653 |  | Reply LS on Newly published data channel GSMA PRD TS.66 | SP-241404 | noted | (none) |
| S3-244654 |  | Reply LS on AIML Data Collection | S5-246299 | noted | (none) |
| S3-244850 |  | RCS lawful intercept requirements | s3i240708 | noted | (none) |
| S3-244851 |  | Reply LS on UE-Satellite-UE Communication Architectures | s3i240752 | noted | (none) |
| S3-244852 |  | Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions | s3i240703 | noted | (none) |
| S3-244854 |  | LS on request for IMS Data Channel related clarifications | s3i240707 | noted | (none) |
| S3-245133 |  | LS on draft-ietf-raw-technologies, "Reliable and Available Wireless Technologies | IETF | noted | (none) |

### C2: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| S3-244845 | Reply LS to CT4 on GSMA CVD-2023-0069 5G Core Network Attacks | CT4 | GSMA CVD | S3-244631 |
| S3-245137 | Reply LS on UE behaviour in case of SUCI calculation failure | CT1,Ct6 | - | S3-244629 |
| S3-245138 | Reply LS on AIML data collection | RAN | RAN2, SA2,SA, SA1,SA2, SA5 | S3-244636 |
| S3-245139 | LS on security aspects of Ambient IoT | SA2 | RAN2 | S3-244641 |
| S3-245140 | Reply LS on enhancement to the protocol stack of IMS Data Channel | SA4 | SA3-LI,SA2 | S3-244646 |
| S3-245141 | Reply LS to SA6 Internal 5G Core information expose to trusted AF | SA6 | SA2, CT3, SA5 | S3-244651 |
| S3-245259 | LS on Multi-hop U2N Relay Architecture Aspects | SA2 | CT1 | - |
| S3-245276 | LS on security aspects related to protocols used in N6 delay measurements | SA2 | - | - |
| S3-245340 | Reply LS on FS\_5GSAT\_Ph3\_ARCH conclusions | SA2 | - | S3-244645 |
| S3-245363 | Input to SA for Reply LS on clarifications on consent management | SA | - | - |

## Annex D: List of agreed/approved new and revised Work Items

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | Source | new/revised |
| S3-245142 | New Study on 3GPP Cryptographic Inventory | Nokia, Nokia Shanghai Bell | SID new |
| S3-245320 | New WID on ProSe Ph3 security | Huawei, HiSilicon | WID new |
| S3-245321 | New WID on UAS security enhancements | Ericsson | WID new |
| S3-245322 | New WID on Security aspects of Core Network Enhanced Support for AIML | China Mobile, vivo | WID new |
| S3-245323 | New WID on security aspects of 5G Mobile Metaverse services | Samsung | WID new |
| S3-245324 | New WID on security aspects of CAPIF Phase3 | Xiaomi communications | WID new |
| S3-245325 | WID on security aspects of 5G NR Femto | ZTE Corporation | WID new |
| S3-245326 | New WID on security support for the Next Generation Real Time Communication services Phase 2 | Ericsson,China Mobile | WID new |
| S3-245342 | New WID on Security Aspects of Enhancement of Support for Edge Computing in 5GC — phase 3 | China Unicom, Huawei, HiSilicon | WID new |
| S3-245356 | New WID on Security Aspects of 5G Satellite Access Phase 3 | CATT | WID new |
| S3-245372 | New WID on Automatic Certificate Management Environment (ACME) for the Service Based Architecture (SBA) | Cisco Systems | WID new |
| S3-245373 | New WID on Security for PLMN hosting a NPN | China Telecomunication Corp., ZTE | WID new |

## Annex E: List of draft Technical Specifications and Reports

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Spec | vers | Doc title |
| S3-245101 | 35.937 | 0.0.0 | TR 35.937 skeleton |
| S3-245154 | 35.234 | 0.3.0 | Draft TS 35.234 |
| S3-245155 | 35.235 | 0.3.0 | Draft TS 35.235 |
| S3-245156 | 35.236 | 0.3.0 | Draft TS 35.236 |
| S3-245157 | 35.937 | 0.1.0 | Draft TR 35.937 |
| S3-245169 | 33.713 | 0.5.0 | Draft TR 33.713 |
| S3-245179 | 33.794 | 0.6.0 | Draft TR 33.794 |
| S3-245186 | 33.790 | 0.6.0 | Draft TR 33.790 |
| S3-245187 | 33.757 | 0.6.0 | Draft TR 33.757 |
| S3-245189 | 33.776 | 0.6.0 | Draft TR 33.776 |
| S3-245192 | 33.700-29 | 0.6.0 | Draft TR 33.700-29 |
| S3-245193 | 33.700-32 | 0.5.0 | Draft TR 33.700-32 |
| S3-245194 | 33.759 | 0.5.0 | Draft TR 33.759 |
| S3-245195 | 33.743 | 0.5.0 | Draft TR 33.743 |
| S3-245197 | 33.784 | 0.5.0 | Draft TR 33.784 |
| S3-245198 | 33.749 | 0.5.0 | Draft TR 33.749 |
| S3-245199 | 33.766 | 0.5.0 | Draft TR 33.766 |
| S3-245203 | 33.745 | 0.5.0 | Draft TR 33.745 |
| S3-245204 | 33.721 | 0.5.0 | Draft TR 33.721 |
| S3-245205 | 33.700-22 | 0.3.0 | Draft TR 33.700-22 |
| S3-245330 | 33.530 | 0.2.0 | Draft TS 33.530 |

## Annex F: List of participants

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TITLE | Family Name | Given Name | Role | Employer Organization | Organization Represented |
| Mr. | Amerson | David | Delegate | U.S. National Security Agency | U.S. National Security Agency |
| Mr. | Andreas | Joerg | Delegate | BSI (DE) | BSI (DE) |
| Mr. | Bai | JingPeng | Delegate | China Telecomunication Corp. | China Telecomunication Corp. |
| Dr. | Baskaran | Sheeba Backia Mary | Delegate | Motorola Mobility Germany GmbH | Motorola Mobility France S.A.S |
| Mr. | Becker | Daniel | Delegate | Accenture | Accenture |
| Dr. | Ben Henda | Noamen | Delegate | Huawei Technologies Sweden AB | Huawei Technologies Sweden AB |
| Mr. | Bhatt | Rakshesh P. | Delegate | Nokia Japan | Nokia Japan |
| Mr. | Biju | Goel | Delegate | BT plc | BT plc |
| Mr. | Bilca | Michael | Delegate | OTD\_US | OTD\_US |
| Mr. | Bjerrum | Bo Holm | Delegate | Nokia Corporation | Nokia Belgium |
| Mr. | Brusilovsky | Alec | Delegate | InterDigital, Inc. | InterDigital Belgium. LLC |
| Mr. | Cano Soveri | Mirko | Secretary | ETSI | ETSI |
| Mr. | Canterbury | Mark | Delegate | Tencastle Limited | National Technical Assistance |
| Dr. | Cetinkaya | Egemen | Delegate | Verizon UK Ltd | Verizon Denmark |
| Ms. | CHAKRABARTI | SAMITA | Delegate | Verizon UK Ltd | Verizon Netherlands |
| Mr. | Chen | Fangjie | Delegate | China Telecom Corporation Ltd. | Chinatelecom Cloud |
| Mr. | Cho | Daniel | Delegate | Ericsson LM | Ericsson Canada Inc. |
| Ms. | Cho | Min Kyoung | Delegate | DTCY | KDDI Corporation |
| Mr. | Cichonski | Jeff | Delegate | NIST | NIST |
| Mr. | Diaz | Edward | Delegate | Verizon UK Ltd | Verizon France |
| Dr. | Dushchuluun | Khishigbayar | Delegate | Accenture | Accenture |
| Mr. | Eckel | Charles | Delegate | Cisco Systems Belgium | Cisco Systems Belgium |
| Dr. | Escott | Adrian | Delegate | Qualcomm Germany | Qualcomm France |
| Mr. | Ferdi | Samir | Delegate | InterDigital, Inc. | InterDigital France R&D, SAS |
| Ms. | Fitzgerald-McKay | Jessica | Delegate | U.S. National Security Agency | U.S. National Security Agency |
| Dr. | Gallo | Luigi | Delegate | TELECOM ITALIA S.p.A. | TELECOM ITALIA S.p.A. |
| Mr. | Gamishev | Todor | Delegate | Orange | Orange |
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| Mr. | Goldberg | Martin | Delegate | U.S. National Security Agency | U.S. National Security Agency |
| Ms. | Gong | Ruby | Delegate | Beijing Xiaomi Mobile Software | Xiaomi Communications |
| Dr. | Grime | Matthew | Delegate | NCSC | NCSC |
| Ms. | Guo | Ivy | Delegate | Apple Computer Trading Co. Ltd | Apple Computer Trading Co. Ltd |
| Mr. | Hanhisalo | Markus | Delegate | Ericsson LM | Ericsson Telecom S.A. de C.V. |
| Mr. | Hasselquist | David | Delegate | Sectra Communications AB | Sectra Communications AB |
| Mr. | Hawbaker | Tyler | Delegate | OTD\_US | OTD\_US |
| Mr. | Hoffpauir | Dusty | Delegate | Charter Communications, Inc | Charter Communications, Inc |
| Mr. | Hu | Li | Delegate | vivo Mobile Communication Co., | vivo Mobile Com. (Chongqing) |
| Miss | Huang | Xiaoting | Delegate | China Mobile Com. Corporation | China Mobile E-Commerce Co. |
| Mr. | Huynh | Sean | Delegate | OTD\_US | OTD\_US |
| Miss | Jerichow | Anja | Delegate | Nokia Germany | Nokia Korea |
| Mr. | Kakinada | Achari | Delegate | Charter Communications, Inc | Charter Communications, Inc |
| Dr. | Karakoc | Ferhat | Delegate | Ericsson LM | Ericsson France S.A.S |
| Dr. | Khan | Mohsin | Delegate | Ericsson LM | Ericsson Limited |
| Mr. | Khare | Saurabh | Delegate | Nokia Germany | Nokia Solutions & Networks (I) |
| Mr. | Kim | Anbin | Delegate | LG Electronics France | LG Electronics Inc. |
| Dr. | Kim | Hongil | Delegate | Qualcomm Incorporated | QUALCOMM Europe Inc. - Spain |
| Mr. | Kim | Warren | Delegate | Johns Hopkins University APL | Johns Hopkins University APL |
| Mr. | Kolekar | Abhijeet | Delegate | Intel Corporation (UK) Ltd | Intel Corporation (UK) Ltd |
| Ms. | Koser | Elizabeth | Delegate | U.S. National Security Agency | U.S. National Security Agency |
| Mr. | kukreja | Hardeep | Delegate | GSM Association | GSM Association |
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| Mr. | Laitinen | Mika | Delegate | Airbus | Airbus |
| Ms. | Lam | Maria | Delegate | Verizon Switzerland AG | Verizon Switzerland AG |
| Mr. | Leadbeater | Alex | Delegate | GSM Association | GSM Association |
| Mr. | Lee | Xiaoyang | Delegate | CISA ECD | CISA ECD |
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| Dr. | Leung | Henry(Haoran) | Delegate | Xiaomi Communications | Xiaomi Technology |
| Mr. | Li | He | Delegate | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies Japan K.K. |
| Mr. | Libunao | Gerardo | Delegate | Verizon Spain | Verizon Spain |
| Mr. | LIU | Jianning(Carry) | Delegate | Beijing Xiaomi Software Tech | Beijing Xiaomi Electronics |
| Miss | Liu | Peilin | Delegate | ZTE Corporation | ZTE |
| Mr. | Liu | Yuze | Delegate | ZTE Corporation | ZTE Corporation |
| Mr. | Lorenz | Ben | Delegate | BSI (DE) | BSI (DE) |
| Mr. | Loushine | Mike | Delegate | AT&T | AT&T |
| Ms. | Lu | Wei | Delegate | Xiaomi Technology | Xiaomi EV Technology |
| Dr. | Ma | Jinwen | Delegate | Verizon UK Ltd | Verizon Finland |
| Mr. | Manganahalli Jayaprakash | Sandesh | Delegate | TNO | KPN N.V. |
| Mr. | MAO | Yuxin | Delegate | Beijing Xiaomi Mobile Software | Xiaomi Digital Technology |
| Mr. | Nair | Suresh | Chair | Nokia Germany | Nokia |
| Dr. | Nakano | Yuto | Delegate | KDDI Corporation | KDDI Corporation |
| Dr. | Ninglekhu | Jiwan | Delegate | Google Ireland Limited | Google Ireland Limited |
| Mrs. | Nisbeth | Daphanie | Delegate | U.S. National Security Agency | U.S. National Security Agency |
| Mr. | Nord | Lars | Delegate | Sony Europe B.V. | Sony Group Corporation |
| Mr. | Orkopoulos | Stawros | Delegate | Nokia Germany | Nokia UK |
| Mr. | Parsel | Mike | Delegate | T-Mobile USA | T-Mobile USA Inc. |
| Dr. | Pashalidis | Andreas | Delegate | BSI (DE) | BSI (DE) |
| Mr. | Pätzold | Thomas | Delegate | Deutsche Telekom AG | Deutsche Telekom AG |
| Mrs. | Pauliac | Mireille | Delegate | THALES | THALES |
| Mr. | Peinado | German | Delegate | Nokia Germany | Nokia Poland |
| Miss | Ping | Jing | Delegate | Nokia Shanghai Bell | Nokia Shanghai Bell |
| Dr. | Pu | Hongyi | Delegate | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Tech.(UK) Co.. Ltd |
| Mr. | Qi | Minpeng | Delegate | China Mobile Research Inst. | China Mobile Com. Corporation |
| Mr. | Queen | Bryan | Delegate | U.S. National Security Agency | U.S. National Security Agency |
| Mr. | Rajadurai | Rajavelsamy | Delegate | Samsung R&D Institute UK | Samsung Electronics Co., Ltd |
| Ms. | Rajendran | Rohini | Delegate | Samsung R&D Institute India | Samsung R&D Institute UK |
| Mr. | Rathod | Niraj | Delegate | Ericsson LM | Ericsson (China) |
| Mr. | Sabah | Noureddine | Delegate | Philips International B.V. | Philips International B.V. |
| Ms. | Sabater | Susana | Delegate | VODAFONE Group Plc | Vodafone Romania S.A. |
| Mr. | Saleem | Imran | Delegate | Huawei Tech.(UK) Co.. Ltd | HuaWei Technologies Co., Ltd |
| Ing. | Sánchez | Antonio | Delegate | Keysight Technologies UK Ltd | Keysight Technologies UK Ltd |
| Mr. | Schumacher | Gregory | Delegate | Peraton Labs | Peraton Labs |
| Mr. | Scribano | Gino | Delegate | Johns Hopkins University APL | Johns Hopkins University APL |
| Dr. | Sedjelmaci | Hichem | Delegate | Huawei Technologies France | Huawei Technologies France |
| Miss | Shang | Zhengyi | Delegate | Beijing Xiaomi Mobile Software | Beijing Xiaomi Software Tech |
| Ms. | Shen | Jun | Delegate | China Telecommunications | China Telecomunication Corp. |
| Ms. | Shen | Yang | Delegate | Beijing Xiaomi Mobile Software | Beijing Xiaomi Mobile Software |
| Mr. | Shraga | Avishay | Delegate | Sony Europe B.V. | Sony Europe B.V. |
| Ms. | Tang | Tingfang | Delegate | Beijing Xiaomi Mobile Software | Beijing Xiaomi Mobile Software |
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| Dr. | Wan | Tao | Delegate | CableLabs | CableLabs |
| Dr. | Wang | Zhibi | Delegate | InterDigital Communications | InterDigital Finland Oy |
| Ms. | Warren | Denisha | Delegate | U.S. National Security Agency | U.S. National Security Agency |
| Mr. | Wong | Marcus | Vice Chair | OPPO | Guangdong OPPO Mobile Telecom. |
| Mr. | Woodward | Tim | Delegate | Motorola Solutions Danmark A/S | Motorola Solutions Germany |
| Mr. | Wu | Guowei | Delegate | China Telecommunications | E-surfing Digital |
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| Miss | Xiong | Lihui | Delegate | OPPO | Realme (Shenzhen) |
| Dr. | Zhang | Bo | Delegate | HUAWEI TECHNOLOGIES Co. Ltd. | HiSilicon Technologies Co. Ltd |
| Ms. | Zhang | Leyi | Delegate | ZTE FRANCE SASU | ShenZhen Zhongxing Shitong |
| Miss | Zhang | Weiyin | Delegate | China Telecommunications | CTSI |
| Mr. | Zhou | Wei | Delegate | CATT | CATT |
| Dr. | Zugenmaier | Alf | Vice Chair | NTT DOCOMO INC. | NTT DOCOMO INC. |

## Annex F: List of future meetings

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Title | Start date | End date (OP) | Town | Country | Reference |
| S3-119AdHoc-e | 13-01-2025 | 16-01-2025 | Online | Electronic meeting |  |
| S3-120 | 17-02-2025 | 21-02-2025 | Athens | Greece |  |
| S3-121 | 07-04-2025 | 11-04-2025 | Goteborg | Sweden |  |