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

**Meeting Report  
for  
TSG SA WG3  
meeting: 104-e**

**Electronic meeting, Online, 16/08/2021 to 27/08/2021**

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## 1 Agenda and Meeting Objectives

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.

**S3-212400 Agenda**

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

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

**S3-212402 Process for SA3#104e meeting**

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

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

**S3-212460 Process and agenda for SA3#104-e**

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

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

## 2 Meeting Reports

**S3-212401 Report from SA3#103e**

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

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

**S3-212403 Report from last SA**

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

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

**S3-212404 Meeting notes from SA3 leadership**

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

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

## 3 Reports and Liaisons from other Groups

**S3-212461 TCG progress - report from TCG rapporteur**

*Type: report For: Information  
 Source: InterDigital, Inc.*

**Abstract:**

This contribution provides a brief incremental summary of the progress in TCG Working Groups as of August 2021.

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

**S3-212409 LS on OAuth2 misalignments between SA3 and CT4 specifications**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: CP-211326*

**Decision:** The document was **replied to in S3-213193**.

**S3-212410 Misalignment on usage of OAuth within 3GPP 29.510**

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

**Decision:** The document was **replied to in S3-213192**.

**S3-212413 LS reply on SDP attribute a=key-mgmt:mikey**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-213548*

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

**S3-212425 256-bit algorithms based on SNOW 3G or SNOW V**

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

**Decision:** The document was **replied to in S3-213267**.

**S3-212686 Response LS on 256-bit algorithms based on SNOW 3G or SNOW V**

*Type: LS out For: Approval  
 to ETSI SAGE  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-213267**.

**S3-213014 Comment on 256-bit algorithms based on Snow-V**

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

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

**S3-212676 Discussion paper on 256-bit algorithms based on ZUC-256**

*Type: discussion For: Endorsement  
 Source: CAICT, China Mobile, China Unicom, China Telecom, CBN*

**Abstract:**

Endorse to request SAGE to go ahead and prepare 256-bit algorithms for confidentiality and integrity based on ZUC-256, as one of the proposed 256-bit algorithm sets for future consideration by SA3.

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

**S3-212428 LS to SA3 on Small data transmissions**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2104401*

**Decision:** The document was **replied to in S3-213034**.

**S3-212524 Discussion on security of Small data transmissions**

*Type: discussion For: Endorsement  
 Source: ZTE Corporation*

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

**S3-212525 Reply LS on Small data transmissions**

*Type: LS out For: Approval  
 to RAN2  
 Source: ZTE Corporation*

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

**S3-212685 Reply LS on Small data transmission**

*Type: LS out For: Approval  
 to RAN2  
 Source: Intel Corporation (UK) Ltd*

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

**S3-212698 Reply LS for Small Data Transfer**

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

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

**S3-212724 Reply LS on Small data transmissions**

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

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

**S3-212794 Draft reply LS to RAN2 on SDT security**

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

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

**S3-212429 LS for clarification on managing expired or multiple Protection Scheme and Home Network keys used for SUCI calculation.**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C6-210180*

**Decision:** The document was **replied to in S3-213218**.

**S3-212723 [draft] Reply LS for clarification on managing expired or multiple Protection Scheme and Home Network keys used for SUCI calculation.**

*Type: LS out For: (not specified)  
 to CT6, cc SA1  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **revised to S3-213218**.

**S3-212431 LS on broadcast of NTN GW or gNB position**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R1-2106332*

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

**S3-212432 New LS on UE location aspects in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2106543*

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

**S3-212725 Reply LS on UE location aspects in NTN**

*Type: LS out For: Approval  
 to RAN2, cc RAN3, SA2, SA3-LI, CT1  
 Source: CATT*

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

**S3-212726 Replay LS on UE location aspects in NTN**

*Type: LS out For: Approval  
 to RAN2, RAN3, SA2, SA3-LI, CT1  
 Source: Huawei, HiSilicon*

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

**S3-213027 [Draft] Reply LS on UE location aspects in NTN**

*Type: LS out For: Approval  
 to RAN2, cc SA3-LI, SA2, RAN3, CT1  
 Source: Xiaomi Technology*

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

**S3-212433 Reply LS on UE location aspects in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-212917*

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

**S3-212434 LS to SA3 on SLIC**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2106516*

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

**S3-212435 S on QoE report handling at QoE pause**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2106775*

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

**S3-213002 Evaluation of the potential security issue in QoE report handling at QoE pause**

*Type: discussion For: Endorsement  
 Source: Lenovo, Motorola Mobility*

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

**S3-213004 [DRAFT] Reply LS on QoE report handling at QoE pause**

*Type: LS out For: Approval  
 to RAN2, cc SA4, SA5  
 Source: Lenovo, Motorola Mobility*

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

**S3-212439 LS on 5G capabilities exposure for factories of the future**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2104794*

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

**S3-212440 LS on 5G capabilities exposure for factories of the future**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-211497*

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

**S3-212441 Reply LS to SA4 on UE Data Collection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2104864*

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

**S3-212442 Reply LS to SA2 on UE Data Collection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S4-210961*

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

**S3-212443 LS on progress of study items for security on management aspect**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S5-213456*

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

**S3-212444 LS on new SID on Application Enablement for Data Integrity Verification Service in IOT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-211496*

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

**S3-212477 Reply LS to SA6 on new SID on Application Enablement for Data Integrity Verification Service in IoT**

*Type: LS out For: Approval  
 to SA6  
 Source: China Unicom*

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

**S3-212681 LS on reply to SA6 about new SID on Application Enablement for Data Integrity Verification Service in IOT**

*Type: LS out For: Decision  
 to 3GPP TSG SA WG6, cc 3GPP TSG SA WG1, 3GPP TSG SA  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

SA3 informs SA6 that it has no own information and insights related to a data integration verification service and advises SA6 to clarify intent, use cases and requirements of such a service with SA1 before starting a study on this subject.

**Decision:** The document was **revised to S3-213185**.

**S3-212445 LS on ITU-T SG17 new work item X.5Gsec-message: Security requirements for 5G message service**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: ITU-T SG17*

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

**S3-212446 LS on ITU-T SG17 new work item X.sa-ec ‘Security architecture for edge cloud’**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: ITU-T SG17*

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

**S3-212448 Reply LS on the conclusion of FS\_MINT-CT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: SP-210581*

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

**S3-213034 Reply LS on Small data transmissions**

*Type: LS out For: Agreement  
 to RAN2, cc SA2  
 Source: InterDigital, Inc.*

**Abstract:**

This Reply LS has been discussed at SA3#104-e and approved as draft\_S3-212724-r8. It replies to the original LS from RAN2 in S3-212428/R2-2104401.

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

**S3-213040 Reply LS on Header Enrichment for HTTPS in PFCP**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-214531*

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

**S3-213149 LS on 256-bit algorithms based on ZUC-256**

*Type: LS out For: (not specified)  
 to ETSI SAGE  
 Source: CAICT*

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

**S3-213150 Reply to LS on broadcast of NTN GW or gNB position**

*Type: LS out For: (not specified)  
 to RAN1, cc SA1, SA3-LI  
 Source: Ericsson Hungary Ltd*

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

**S3-213168 LS Reply to SA3 on security protection on RRCResumeRequest message**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2109121*

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

**S3-213169 Reply LS on Storage of KAUSF**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-214800*

**Decision:** The document was **replied to in S3-213172**.

**S3-213185 LS on reply to SA6 about new SID on Application Enablement for Data Integrity Verification Service in IOT**

*Type: LS out For: (not specified)  
 to 3GPP TSG SA WG6, 3GPP TSG SA WG1, cc 3GPP TSG SA  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212681)

**Abstract:**

SA3 informs SA6 and SA1 that it has no own information and insights related to a data integration verification service and suggest that SA6 study waits for clarification.

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

**S3-213193 Reply LS on OAuth2 misalignments between SA3 and CT4 specifications**

*Type: LS out For: Approval  
 to CT, CT4, cc SA  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-213218 Reply LS for clarification on managing expired or multiple Protection Scheme and Home Network keys used for SUCI calculation.**

*Type: LS out For: (not specified)  
 to CT6, cc SA1  
 Source: NTT DOCOMO INC.*

(Replaces S3-212723)

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

**S3-213267 Response LS on 256-bit algorithms based on SNOW 3G or SNOW V**

*Type: LS out For: Approval  
 to ETSI SAGE  
 Source: VODAFONE Group Plc*

(Replaces S3-212686)

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

### 4.1 Integration of GBA into 5GC (Rel-17)

**S3-212500 Living document for GBA\_5G: draftCR to TS 33.220: SBA support for Zh and Zn interfaces**

*Type: draftCR For: Approval  
 33.220 v17.1.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213245**.

**S3-212501 Living document for GBA\_5G: draftCR to TS 33.223: SBA support for Zpn**

*Type: draftCR For: Approval  
 33.223 v17.0.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213246**.

**S3-212502 pCR to living document for TS 33.220: Support of GBA in UDM**

*Type: other For: Approval  
 Source: Ericsson*

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

**S3-212503 pCR to living document for TS 33.223: Support for GBA in UDM**

*Type: other For: Approval  
 Source: Ericsson*

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

**S3-212504 DRAFT LS on SBA for GBA**

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

**Decision:** The document was **revised to S3-213215**.

**S3-212505 pCR to living document for TS 33.220: Correction of references**

*Type: other For: Approval  
 Source: Ericsson*

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

**S3-212668 Comparison of services for providing GBA 5G AV**

*Type: discussion For: Endorsement  
 33.220 v..  
 Source: Huawei, HiSilicon*

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

**S3-212669 New service on 5G GBA AV**

*Type: draftCR For: Approval  
 33.220 v17.1.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213230**.

**S3-213215 LS on SBA for GBA**

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

(Replaces S3-212504)

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

**S3-213230 New service on 5G GBA AV**

*Type: draftCR For: Approval  
 33.220 v17.1.0  
 Source: Huawei, HiSilicon, Ericsson, Thales*

(Replaces S3-212669)

**Decision:** The document was **revised to S3-213234**.

**S3-213234 New service on 5G GBA AV**

*Type: other For: Approval  
 33.220 v..  
 Source: Huawei, HiSilicon, Ericsson, Thales*

(Replaces S3-213230)

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

**S3-213245 Living document for GBA\_5G: draftCR to TS 33.220: SBA support for Zh and Zn interfaces**

*Type: draftCR For: Approval  
 33.220 v17.1.0  
 Source: Ericsson*

(Replaces S3-212500)

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

**S3-213246 Living document for GBA\_5G: draftCR to TS 33.223: SBA support for Zpn**

*Type: draftCR For: Approval  
 33.223 v17.0.0  
 Source: Ericsson*

(Replaces S3-212501)

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

### 4.2 Security Assurance Specification for IMS (Rel-17)

### 4.3 Security Assurance Specification Enhancements for 5G (Rel-17)

**S3-212426 LS re Penetration Testing of SCAS**

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

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

**S3-212606 add reference to TS 33.512**

*Type: CR For: Approval  
 33.512 v17.0.0 CR-0013 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-212838 Discussion on adding SCAS for the various split gNB cases**

*Type: discussion For: Discussion  
 Source: Qualcomm Incorporated, Deutsche Telekom AG*

(Replaces S3-211792)

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

**S3-212839 Adding SCAS for the various split gNB cases**

*Type: CR For: Agreement  
 33.511 v17.0.0 CR-0025 Cat: B (Rel-17)  
  
 Source: Qualcomm Incorporated, Deutsche Telekom AG*

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

**S3-212872 Alignment of requirements with specification updates**

*Type: CR For: Agreement  
 33.117 v16.7.0 CR-0071 rev 3 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212395)

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

### 4.4 Security Assurance Specification for Service Communication Proxy (SECOP) (Rel-17)

**S3-212871 Alignment of requirements with specification updates**

*Type: CR For: Agreement  
 33.117 v16.7.0 CR-0071 rev 2 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211935)

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

### 4.5 Security Assurance Specification for 5G NWDAF (Rel-17)

**S3-212697 Clarification on Finding the right NF instance are serving the UE**

*Type: CR For: Approval  
 33.521 v17.0.0 CR-0001 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-212821 Clarification on Data Masking on Integration Analysis**

*Type: CR For: Agreement  
 33.521 v17.0.0 CR-0002 Cat: F (Rel-17)  
  
 Source: China Mobile*

**Decision:** The document was **revised to S3-213257**.

**S3-213257 Clarification on Data Masking on Integration Analysis**

*Type: CR For: Agreement  
 33.521 v17.0.0 CR-0002 rev 1 Cat: F (Rel-17)  
  
 Source: China Mobile*

(Replaces S3-212821)

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

### 4.6 Security Assurance Specification for Non-3GPP InterWorking Function (N3IWF) (Rel- 17)

### 4.7 Security Assurance Specification for Inter PLMN UP Security (Rel-17)

**S3-212526 Living document for SCAS\_5G\_IPUPS draftCR to TR 33.926**

*Type: draftCR For: Approval  
 33.926 v17.1.0  
 Source: ZTE Corporation*

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

**S3-212527 Living document for SCAS\_5G\_IPUPS draftCR to TS 33.513**

*Type: draftCR For: Approval  
 33.513 v16.2.0  
 Source: ZTE Corporation*

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

**S3-213183 SCAS\_5G\_IPUPS: New threats to IPUPS to TR 33.926**

*Type: CR For: Agreement  
 33.926 v17.1.0 CR-0047 Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-213184 SCAS\_5G\_IPUPS: New test cases of IPUPS to TS 33.513**

*Type: CR For: Agreement  
 33.513 v16.2.0 CR-0004 Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-213213 SCAS\_5G\_IPUPS: New threats to IPUPS to TR 33.926**

*Type: CR For: Agreement  
 33.926 v17.1.0 CR-0048 Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-213214 SCAS\_5G\_IPUPS: New test cases of IPUPS to TS 33.513**

*Type: CR For: Agreement  
 33.513 v16.2.0 CR-0005 Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

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

### 4.8 eSCAS\_5G for Network Slice-Specific Authentication and Authorization Function (NSSAAF) (Rel-17)

**S3-212595 A new testcase to NSSAAF SCAS**

*Type: pCR For: Approval  
 33.326 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213249**.

**S3-212601 NSSAAF SCAS cleanup**

*Type: pCR For: Approval  
 33.326 v0.2.0  
 Source: Huawei, HiSilicon*

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

**S3-212602 CR to 33.926 threat analysis on select AAA-P and AAA-S**

*Type: CR For: Approval  
 33.926 v17.1.0 CR-0046 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213251**.

**S3-212666 Adding for NSSAAF network product class description and assets and critical assets**

*Type: draftCR For: Approval  
 33.926 v17.1.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213228**.

**S3-212667 New threat related to unauthorized slice-specific authorization revocatoin**

*Type: draftCR For: Approval  
 33.926 v17.1.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213229**.

**S3-213228 Adding for NSSAAF network product class description and assets and critical assets**

*Type: draftCR For: Approval  
 33.926 v17.1.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212666)

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

**S3-213229 New threat related to unauthorized slice-specific authorization revocatoinsue #1.2**

*Type: draftCR For: Approval  
 33.926 v17.1.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212667)

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

**S3-213247 Draft TS 33.326**

*Type: draft TS For: (not specified)  
 33.326 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-213248 Coversheet for TS 33.326**

*Type: TS or TR cover For: (not specified)  
 33.326 v-  
 Source: Huawei, Hisilicon*

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

**S3-213249 A new testcase to NSSAAF SCAS**

*Type: pCR For: Approval  
 33.326 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212595)

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

**S3-213251 CR to 33.926 threat analysis on select AAA-P and AAA-S**

*Type: CR For: Approval  
 33.926 v17.1.0 CR-0046 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-212602)

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

### 4.9 Mission critical security enhancements phase 2 (Rel-17)

**S3-212467 [33.180] R17 Group subscription**

*Type: CR For: Agreement  
 33.180 v17.3.0 CR-0173 Cat: F (Rel-17)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

Implicit affiliation does not support “automatic subscription”.

**Decision:** The document was **revised to S3-213179**.

**S3-212468 [33.180] R17 Preconfigured group clarification**

*Type: CR For: Agreement  
 33.180 v17.3.0 CR-0174 Cat: B (Rel-17)  
  
 Source: Motorola Solutions Danmark A/S*

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

**S3-212621 Security solution for temporary group call**

*Type: CR For: Approval  
 33.180 v17.3.0 CR-0175 Cat: B (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**S3-212945 Discussion on Mission Critical Security over 5G System**

*Type: discussion For: Discussion  
 Source: Ericsson*

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

**S3-212976 Security for temporary calls**

*Type: CR For: Agreement  
 33.180 v17.3.0 CR-0176 Cat: B (Rel-17)  
  
 Source: CATT*

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

**S3-213179 [33.180] R17 Group subscription**

*Type: CR For: Agreement  
 33.180 v17.3.0 CR-0173 rev 1 Cat: F (Rel-17)  
  
 Source: Motorola Solutions Danmark A/S*

(Replaces S3-212467)

**Abstract:**

Implicit affiliation does not support “automatic subscription”.

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

### 4.10 Enhancements to User Plane Integrity Protection Support in 5GS (Rel-17)

### 4.11 Adapting BEST for use in 5G networks (Rel-17)

**S3-212458 Living document for BEST\_5G: draftCR to TS 33.163**

*Type: draftCR For: Approval  
 33.163 v16.2.0  
 Source: KPN N.V.*

**Decision:** The document was **revised to S3-213207**.

**S3-212684 pCR to Living doc on addition of 5G to BEST - addition of EMSDP updates**

*Type: other For: Agreement  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-213263**.

**S3-213207 Living document for BEST\_5G: draftCR to TS 33.163**

*Type: draftCR For: Approval  
 33.163 v16.2.0  
 Source: KPN N.V.*

(Replaces S3-212458)

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

**S3-213263 pCR to Living doc on addition of 5G to BEST - addition of EMSDP updates**

*Type: other For: Agreement  
 Source: VODAFONE Group Plc*

(Replaces S3-212684)

**Abstract:**

based on r3

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

### 4.12 Authentication and key management for applications based on 3GPP credential in 5G (Rel-17)

**S3-212529 Resolution of EN on other parameter in clause 6.3**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0085 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-212869 Sending UE identifier to the AKMA AF**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0078 rev 1 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-211817)

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

**S3-212530 Resolve the Kaf update issue**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0086 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-212534 Discussion on refresh of KAF and no Kakma in AAn**

*Type: discussion For: Endorsement  
 Source: ZTE Corporation*

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

**S3-212633 Add a new procedure to enable the AF to refresh the Kaf**

*Type: CR For: Approval  
 33.535 v17.2.1 CR-0095 Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Abstract:**

Mirror CR

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

**S3-212825 KAF refresh**

*Type: CR For: Approval  
 33.535 v17.2.1 CR-0097 Cat: B (Rel-17)  
  
 Source: China Mobile*

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

**S3-212901 Discussion on Refresh of KAKMA and KAF**

*Type: discussion For: Endorsement  
 33.535 v..  
 Source: Samsung, China Mobile*

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

**S3-212902 [CR] Refresh of KAF and KAKMA**

*Type: CR For: Agreement  
 33.535 v17.2.0 CR-0100 Cat: B (Rel-17)  
  
 Source: Samsung*

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

**S3-212903 [CR] HN triggering Primary (Re)Authentication**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1195 Cat: B (Rel-17)  
  
 Source: Samsung*

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

**S3-212528 Add Routing indicator in Authentication response**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1151 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-212531 UDM notifies AAnF AKMA context removal and performs AAnF selection**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0087 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-212532 Update clause 6.1 about RID**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0088 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-212533 Update clause 6.1 refer to Kausf stored in AUSF**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0089 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-212600 Clarification on AAnF selection**

*Type: CR For: Approval  
 33.535 v17.2.1 CR-0093 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213252**.

**S3-212822 Deleting the NOTE of roaming**

*Type: CR For: Approval  
 33.535 v17.2.1 CR-0096 Cat: F (Rel-17)  
  
 Source: China Mobile*

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

**S3-212624 Correction to Deriving AKMA Application Key for a specific AF**

*Type: CR For: Approval  
 33.535 v17.2.1 CR-0094 Cat: F (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**S3-212607 Add a new procedure to enable the AF to refresh the Kaf**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1161 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-213252 Clarification on AAnF selection**

*Type: CR For: Approval  
 33.535 v17.2.1 CR-0093 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-212600)

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

### 4.13 User Plane Integrity Protection for LTE (Rel-17)

**S3-212436 Reply LS to LS on User Plane Integrity Protection for eUTRA connected to EPC**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-212812*

**Decision:** The document was **replied to in S3-213258**.

**S3-212694 UP Security Activation Mechanism in LTE**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213221**.

**S3-212695 UP Security Policy Handling for Option 3**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Huawei, HiSilicon*

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

**S3-212696 Clarification on UP IP indication based on RAN3 LS**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Huawei, HiSilicon*

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

**S3-212730 Living CR for UPIP for LTE**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213266**.

**S3-212771 User Plane Integrity Protection Policy Handling in EN-DC**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213253**.

**S3-212772 User Plane Integrity Protection Policy Handling in IW handover from 5GS to EPS**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213254**.

**S3-212773 User Plane Integrity Protection Policy Handling in DC**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213255**.

**S3-212774 User Plane Integrity Protection Policy Handling in IW handover from EPS to 5GS**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213256**.

**S3-212775 User Plane Integrity Protection**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Ericsson*

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

**S3-212776 User Plane Integrity Protection: Correction to A.7**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Ericsson*

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

**S3-212777 Add details of UPIP algorithms to be supported**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Ericsson*

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

**S3-212778 [DRAFT] LS on use of LTE algorithms or NR algorithms for UP integrity protection with NR PDCP**

*Type: LS out For: Approval  
 to RAN2, RAN3  
 Source: Ericsson*

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

**S3-213025 draft CR to 33.401 - addition of UPIP requirements (NEA and NIA based)**

*Type: draftCR For: Agreement  
 33.401 v16.3.0  
 Source: VODAFONE Group Plc*

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

**S3-213026 draft CR to 33.401 - addition of UPIP requirements (EEA and EIA based)**

*Type: draftCR For: Agreement  
 33.401 v16.3.0  
 Source: VODAFONE Group Plc*

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

**S3-213031 Clarification on UP IP indication based on RAN3 LS**

*Type: draftCR For: (not specified)  
 33.401 v16.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213231**.

**S3-213171 LS on use of 4G algorithm identifier in NR-PDCP for UP IP**

*Type: LS out For: (not specified)  
 to RAN2  
 Source: Huawei Technologies Sweden AB*

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

**S3-213221 UP Security Activation Mechanism in LTE**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212694)

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

**S3-213222 Clarification on UP IP indication based on RAN3 LS**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Huawei, HiSilicon*

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

**S3-213231 Clarification on UP IP indication based on RAN3 LS**

*Type: draftCR For: (not specified)  
 33.401 v16.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-213031)

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

**S3-213253 User Plane Integrity Protection Policy Handling in EN-DC**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Ericsson*

(Replaces S3-212771)

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

**S3-213254 User Plane Integrity Protection Policy Handling in IW handover from 5GS to EPS**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Ericsson*

(Replaces S3-212772)

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

**S3-213255 User Plane Integrity Protection Policy Handling in DC**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Ericsson*

(Replaces S3-212773)

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

**S3-213256 User Plane Integrity Protection Policy Handling in IW handover from EPS to 5GS**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Ericsson*

(Replaces S3-212774)

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

**S3-213266 Living CR for UPIP for LTE**

*Type: draftCR For: Approval  
 33.401 v16.3.0  
 Source: Vodafone*

(Replaces S3-212730)

**Abstract:**

Living document incorporated docs agreed at SA3#104-e

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

### 4.14 Enhancements of 3GPP profiles for cryptographic algorithms and security protocols (Rel- 17)

**S3-212636 Editorial change in SIP digest**

*Type: draftCR For: Approval  
 33.203 v16.1.0  
 Source: Huawei, HiSilicon*

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

**S3-212842 Correction to the GBA TLS 1.3 specification**

*Type: CR For: Agreement  
 33.222 v17.0.0 CR-0055 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

**S3-213020 eCryptPr 01 CR 33.310 R17 Security updates for algorithms and protocols**

*Type: CR For: Agreement  
 33.310 v16.8.0 CR-0120 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-213021 eCryptPr 02 CR 33.203 R17 Security updates for algorithms and protocols**

*Type: CR For: Agreement  
 33.203 v16.1.0 CR-0259 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-213022 Security updates for algorithms and protocols for 33.310**

*Type: draftCR For: Approval  
 33.310 v16.8.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213264**.

**S3-213023 Security updates for algorithms and protocols for 33.210**

*Type: draftCR For: Approval  
 33.210 v16.4.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213265**.

**S3-213187 eCryptPr 02 CR 33.203 R17 Security updates for algorithms and protocols**

*Type: draftCR For: Approval  
 33.203 v16.1.0  
 Source: Ericsson*

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

**S3-213264 Security updates for algorithms and protocols for 33.310**

*Type: draftCR For: Approval  
 33.310 v16.8.0  
 Source: Ericsson*

(Replaces S3-213022)

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

**S3-213265 Security updates for algorithms and protocols for 33.210**

*Type: draftCR For: Approval  
 33.210 v16.4.0  
 Source: Ericsson*

(Replaces S3-213023)

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

### 4.15 Security Aspects of Enhancements for 5G Multicast-Broadcast Services (Rel-17)

**S3-212715 skeleton for the new annex**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Huawei, HiSilicon*

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

**S3-212716 Security protection between AF and 5GC**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Huawei, HiSilicon*

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

**S3-213270 Living document for 5BMS**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Huawei*

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

### 4.16 Security for enhanced support of Industrial IoT (Rel-17)

### 4.17 Security Aspects of eNPN (Rel-17)

**S3-212634 Discussion on UE capabilities indication in UPU**

*Type: discussion For: Endorsement  
 33.857 v..  
 Source: Huawei, HiSilicon*

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

**S3-212635 reply LS on UE capabilities indication in UPU**

*Type: LS out For: Approval  
 to SA2, CT1, cc CT4  
 Source: Huawei, HiSilicon*

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

**S3-212411 LS on UE capabilities indication in UPU**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2101072*

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

**S3-212412 Reply LS on UE capabilities indication in UPU**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-212599*

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

**S3-212736 Discussion on protection of UE capabilities indication in UPU and "ME support of SOR-CMCI" indicator in SoR**

*Type: discussion For: Agreement  
 Source: Ericsson*

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

**S3-212737 UE parameters update data set types supported by the UE**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1172 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-212740 draft reply LS on UE capabilities indication in UPU**

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

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

**S3-212564 Annex X on EAP\_TTLS for SNPN**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: CableLabs, Ericsson, Charter Communications, Intel*

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

**S3-212637 roaming-related security mechanisms**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213235**.

**S3-212734 Change request to living document: EAP flow**

*Type: other For: Approval  
 33.501 v..  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213203**.

**S3-212735 Change request to living document: Key hierarchy**

*Type: other For: Approval  
 33.501 v..  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213201**.

**S3-212752 Security aspects of eNPN (skeleton for living document)**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213204**.

**S3-212753 Change request to living document: Credentials holder using AUSF and UDM for primary authentication**

*Type: other For: Approval  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213205**.

**S3-213201 Change request to living document: Key hierarchy**

*Type: other For: Approval  
 33.501 v..  
 Source: Ericsson*

(Replaces S3-212735)

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

**S3-213203 Change request to living document: EAP flow**

*Type: other For: Approval  
 33.501 v..  
 Source: Ericsson*

(Replaces S3-212734)

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

**S3-213204 Security aspects of eNPN (skeleton for living document)**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Ericsson*

(Replaces S3-212752)

**Decision:** The document was **revised to S3-213206**.

**S3-213205 Change request to living document: Credentials holder using AUSF and UDM for primary authentication**

*Type: other For: Approval  
 Source: Ericsson*

(Replaces S3-212753)

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

**S3-213206 Security aspects of eNPN (living document)**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Ericsson, Huawei, HiSilicon*

(Replaces S3-213204)

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

**S3-213235 roaming-related security mechanisms**

*Type: other For: Approval  
 33.501 v..  
 Source: Huawei, HiSilicon*

(Replaces S3-212637)

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

### 4.18 Security Aspects of Enhancement of Support for Edge Computing in 5GC (Rel-17)

**S3-212647 EC: Skeleton for the new TS 33.558**

*Type: draft TS For: Approval  
 33.558 v0.0.0  
 Source: Huawei, HiSilicon*

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

**S3-212648 TS 33.558: Security requirements**

*Type: pCR For: Approval  
 33.558 v0.0.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213225**.

**S3-212649 TS 33.558: Security for the EDGE interfaces**

*Type: pCR For: Approval  
 33.558 v0.0.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213226**.

**S3-212650 TS 33.558: adding the scope**

*Type: pCR For: Approval  
 33.558 v0.0.0  
 Source: Huawei, HiSilicon*

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

**S3-213225 TS 33.558: Security requirements**

*Type: pCR For: Approval  
 33.558 v0.0.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212648)

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

**S3-213226 TS 33.558: Security for the EDGE interfaces**

*Type: pCR For: Approval  
 33.558 v0.0.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212649)

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

**S3-213227 draft TS 33.558: Edge computing security**

*Type: draft TS For: Approval  
 33.558 v0.1.0  
 Source: Huawei, HiSilicon*

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

### 4.19 TLS protocols profiles for AKMA (Rel-17)

**S3-212535 Add step 4 in annex B.1.2.2**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0090 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-213268**.

**S3-213268 Add step 4 in annex B.1.2.2**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0090 rev 1 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

(Replaces S3-212535)

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

**S3-212536 Add TLS1.3 to annex B.1.3**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0091 Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-212537 Delete the GBA\_Digest in annex B.1.2.2**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0092 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-212840 Corrections to the TLS with AKMA specification**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0098 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

**S3-212841 Adding TLS 1.3 with AKMA keys**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0099 Cat: B (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

### 4.20 Security aspects of Uncrewed Aerial Systems (Rel-17)

**S3-212589 Skeloton for clause UAA**

*Type: pCR For: Approval  
 33.256 v0.0.0  
 Source: Huawei, HiSilicon*

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

**S3-212834 TS 33.256 skeleton**

*Type: draft TS For: Approval  
 33.256 v0.0.0  
 Source: Qualcomm Incorporated*

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

**S3-212835 Proposed text for scope and overview of UAS TS**

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

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

**S3-212582 Overview on UAV authentication and authorization (UAA)**

*Type: pCR For: Approval  
 33.256 v0.0.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213219**.

**S3-212583 UAA procedure at registration (5G)**

*Type: pCR For: Approval  
 33.256 v0.0.0  
 Source: Huawei, HiSilicon*

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

**S3-212584 UAA procedure at PDU session establsihment (5G)**

*Type: pCR For: Approval  
 33.256 v0.0.0  
 Source: Huawei, HiSilicon*

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

**S3-212585 UAA re-authentication procedure (5G)**

*Type: pCR For: Approval  
 33.256 v0.0.0  
 Source: Huawei, HiSilicon*

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

**S3-212586 Revocation of UAA**

*Type: pCR For: Approval  
 33.256 v0.0.0  
 Source: Huawei, HiSilicon*

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

**S3-212587 Pairing authorizaiton of UAS and UAV**

*Type: pCR For: Approval  
 33.256 v0.0.0  
 Source: Huawei, HiSilicon*

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

**S3-212836 Proposed text on UUAA for UAS TS**

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

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

**S3-212618 UAV location information verification**

*Type: pCR For: Approval  
 33.256 v0.0.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213220**.

**S3-212837 Proposed text on location security for UAS TS**

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

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

**S3-213219 Overview on UAV authentication and authorization (UUAA)**

*Type: pCR For: Approval  
 33.256 v0.0.0  
 Source: Huawei, HiSilicon, Qualcomm, InterDigital, Lenovo, Motorola Mobility*

(Replaces S3-212582)

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

**S3-213220 UAV location information verification**

*Type: pCR For: Approval  
 33.256 v0.0.0  
 Source: Huawei, HiSilicon, Qualcomm Incorporated, InterDigitalal*

(Replaces S3-212618)

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

**S3-213260 Draft TS 33.256**

*Type: draft TS For: Approval  
 33.256 v0.1.0  
 Source: Qualcomm CDMA Technologies*

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

### 4.21 Security Assurance Specification for 5G (Rel-16)

**S3-212454 Correction of message name in SMF**

*Type: CR For: (not specified)  
 33.515 v16.3.0 CR-0007 Cat: D (Rel-16)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

Correction in a message name (typo)

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

**S3-212455 AMF – NAS NULL integrity protection clarifications (Rel-16)**

*Type: CR For: (not specified)  
 33.512 v16.5.0 CR-0011 Cat: F (Rel-16)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

The preconditions and execution steps for the test case TC\_NAS\_NULL\_INT\_AMF, do not cover the Requirement Reference. According requirement description and threat references, the test case in 4.2.2.3.2 is to verify that NIA0 can be disabled in AMF (if not

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

**S3-212456 AMF – NAS NULL integrity protection clarifications (Rel-17)**

*Type: CR For: (not specified)  
 33.512 v17.0.0 CR-0012 Cat: A (Rel-17)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

The preconditions and execution steps for the test case TC\_NAS\_NULL\_INT\_AMF, do not cover the Requirement Reference. According requirement description and threat references, the test case in 4.2.2.3.2 is to verify that NIA0 can be disabled in AMF (if not

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

**S3-212459 Correction of message name in SMF**

*Type: CR For: Approval  
 33.515 v16.3.0 CR-0008 Cat: F (Rel-16)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

In the test case TC\_UP\_SECURITY\_POLICY\_SMF there is a wrong message name. The message Nsmf\_PDUSession\_SMContextUpdate does not exists. The correct name is Nsmf\_PDUSession\_UpdateSMContext

**Decision:** The document was **revised to S3-213186**.

**S3-212596 An editoral change to TS 33.216**

*Type: CR For: Approval  
 33.216 v16.6.0 CR-0023 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-213186 Correction of message name in SMF**

*Type: CR For: Approval  
 33.515 v16.3.0 CR-0008 rev 1 Cat: F (Rel-16)  
  
 Source: Keysight Technologies UK Ltd*

(Replaces S3-212459)

**Abstract:**

In the test case TC\_UP\_SECURITY\_POLICY\_SMF there is a wrong message name. The message Nsmf\_PDUSession\_SMContextUpdate does not exists. The correct name is Nsmf\_PDUSession\_UpdateSMContext

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

### 4.22 Security Aspects of the 5G Service Based Architecture (Rel-16)

**S3-212760 Misalignment between TS 33.501 and TS 29.500 on audience claim of CCAs**

*Type: discussion For: Discussion  
 Source: Ericsson*

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

**S3-212622 Correction to Authorization for indirect communication with delegated discovery procedure in rel16**

*Type: CR For: Approval  
 33.501 v16.7.1 CR-1162 Cat: F (Rel-16)  
  
 Source: Huawei,HiSilicon*

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

**S3-212623 Correction to Authorization for indirect communication with delegated discovery procedure in rel17**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1163 Cat: A (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**S3-212755 Source PLMN-ID solution when using same N32 connection for multiple PLMN-IDs belonging to same PLMN**

*Type: discussion For: Discussion  
 Source: Ericsson*

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

**S3-212756 SEPP to verify the source PLMN-ID**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1177 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-212757 SEPP to verify the source PLMN-ID**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1178 Cat: A (Rel-17)  
  
 Source: Ericsson*

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

**S3-212758 NF to always insert PLMN-ID enabling roaming scenario**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1179 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-212759 NF to always insert PLMN-ID enabling roaming scenario**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1180 Cat: A (Rel-17)  
  
 Source: Ericsson*

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

**S3-212877 LS on N32 and multiple PLMN IDs**

*Type: LS out For: Approval  
 to GSMA NG 5GJA  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212891 NRF service definition R15**

*Type: CR For: Agreement  
 33.501 v15.13.0 CR-1185 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213196**.

**S3-212892 NRF service definition R16**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1186 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213197**.

**S3-212893 NRF service definition R17**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1187 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213199**.

**S3-212894 SBA NRF roaming clarification**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1188 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212898 Alignment for Oauth2.0 validation R15**

*Type: CR For: Agreement  
 33.501 v15.13.0 CR-1192 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212899 Alignment for Oauth2.0 validation R16**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1193 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212900 Alignment for Oauth2.0 validation R17**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1194 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-213177 OAuth2.0 misalignmnet**

*Type: CR For: Approval  
 33.501 v16.7.0 CR-1145 rev 1 Cat: A (Rel-16)  
  
 Source: Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung, Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility*

(Replaces S3-212450)

**Abstract:**

A proposal for fixing the OAuth2.0 misalignment between SA3 TS33.501 and CT4 TS29.510

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

**S3-213196 NRF service definition R15**

*Type: CR For: Agreement  
 33.501 v15.13.0 CR-1185 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212891)

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

**S3-213197 NRF service definition R16**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1186 rev 1 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212892)

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

**S3-213198 Alignment for Oauth2.0 validation R15**

*Type: CR For: Agreement  
 33.501 v15.13.0 CR-1192 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212898)

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

**S3-213199 NRF service definition R17**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1187 rev 1 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212893)

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

### 4.23 Evolution of Cellular IoT security for the 5G System (Rel-16)

**S3-212693 Clarification on RRCConnectionRe-establishment Procedure in Control Plane CIoT 5GS Optimization**

*Type: CR For: Approval  
 33.501 v16.7.1 CR-1171 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

### 4.24 Security of the Wireless and Wireline Convergence for the 5G system architecture (Rel-16)

### 4.25 Security aspects of Enhancement of Network Slicing (Rel-16)

**S3-212420 Prevention of attacks on sliced core network**

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

**Decision:** The document was **replied to in S3-213209**.

**S3-212463 Reply LS to GSMA on prevention of attacks on sliced core network**

*Type: LS out For: Approval  
 to GSMA, cc SA2  
 Source: CableLabs*

(Replaces S3-211527)

**Decision:** The document was **revised to S3-213209**.

**S3-212950 EAP ID Request in NSSAA Procedure (Rel-16)**

*Type: CR For: Approval  
 33.501 v16.7.1 CR-1196 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The EAP ID request within the NSSAA procedure is made mandatory.

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

**S3-212974 EAP ID Request in NSSAA Procedure (Rel-17)**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1197 Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

The EAP ID request within the NSSAA procedure is made mandatory.

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

**S3-212977 LS on EAP ID Request in NSSAA Procedure**

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

**Abstract:**

SA3 kindly requests SA2 to update TS 23.502 regarding the EAP ID request in NSSAA procedure (i.e. to make it mandatory).

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

**S3-212573 Clarification on optional EAP ID Request in NSSAA Procedure**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1157 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-213012 Recovering NSSAI and ENSI mapping (Rel-16)**

*Type: CR For: Approval  
 33.501 v16.7.1 CR-1199 Cat: F (Rel-16)  
  
 Source: Samsung*

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

**S3-213013 Recovering NSSAI and ENSI mapping (Rel-17)**

*Type: CR For: (not specified)  
 33.501 v17.2.1 CR-1200 Cat: A (Rel-17)  
  
 Source: Samsung*

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

**S3-212571 Serving network ID in NSSAA**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1155 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-212572 Validity peirod of NSSAA result**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1156 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-213209 Reply LS to GSMA on prevention of attacks on sliced core network**

*Type: LS out For: Approval  
 to GSMA, cc SA2, CT4  
 Source: CableLabs, Huawei, HiSilicon, Ericsson, Nokia, Nokia Shanghai Bell*

(Replaces S3-212463)

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

### 4.26 Security Aspects of 3GPP support for Advanced V2X Services (Rel-16)

**S3-212430 LS on new work item on draft Recommendation ITU-T F.VG-VMA "Architecture of vehicular multimedia systems" [to various organizations]**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: ITU-T Focus Group on Vehicular Multimedia (FG-VM)*

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

### 4.27 New work item proposals (from ongoing Rel-17 studies only)

**S3-212475 New WID on Authentication enhancements in 5GS**

*Type: WID new For: Agreement  
 Source: Ericsson*

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

**S3-212489 New WID on IETF OSCORE Ua\* protocol profile for AKMA**

*Type: WID new For: Agreement  
 Source: Ericsson*

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

**S3-212497 New WID on the security of AMF re-allocation**

*Type: WID new For: Agreement  
 Source: Ericsson*

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

**S3-212515 New WID on Non-Seamless WLAN offload Authentication in 5GS**

*Type: WID new For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

New WID proposal for NSWO

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

**S3-212705 New WID for UC3S**

*Type: WID new For: Approval  
 Source: Huawei, HiSilicon, China Mobile, China Unicom, China Telecom, Nokia, Nokia Shanghai Bell*

**Discussion:**

Huawei asked to have minuted:

"The following has been agreed as a way forward for the user consent work for the specific use cases: eNA Huawei asked to have minuted: " The WID may need to be updated to cover the objective about eNA consent architecture. MEC WID may need to be updated as well once the user consent solution is concluded.”

**Decision:** The document was **revised to S3-213223**.

**S3-212706 Draft skeleton for UC3S WID**

*Type: draftCR For: Approval  
 33.501 v17.2.1  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

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

**S3-212727 New WID on Security Aspects of Proximity based Services (ProSe) in the 5G**

*Type: WID new For: Agreement  
 Source: CATT*

**Decision:** The document was **revised to S3-213236**.

**S3-212779 New WID on 5GFBS**

*Type: WID new For: Approval  
 Source: Apple, AT&T, Deutsche Telekom, Charter Communication, China Telecom, China Unicom, NIST, CableLabs, Interdigital, Ericsson, Samsung, CAICT, CATT, Intel, vivo, MITRE, Philips*

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

**S3-212799 New WID on security aspects of MSGin5G**

*Type: WID new For: Approval  
 Source: China Mobile, Samsung, Huawei, Hisilicon*

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

**S3-212800 draftCR for the skeleton for MSGin5G\_SEC**

*Type: draftCR For: Approval  
 33.862 v0.5.0  
 Source: China Mobile*

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

**S3-212810 New WID on security aspects of eNA**

*Type: WID new For: Approval  
 Source: China Mobile*

**Decision:** The document was **revised to S3-213232**.

**S3-212811 Draft\_skeleton\_for\_draft\_CR\_eNA\_SEC**

*Type: other For: Approval  
 Source: China Mobile*

**Decision:** The document was **revised to S3-213269**.

**S3-213269 Draft\_skeleton\_for\_draft\_CR\_eNA\_SEC**

*Type: other For: Approval  
 Source: China Mobile*

(Replaces S3-212811)

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

**S3-212881 WID eSBA**

*Type: WID new For: Agreement  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-213223 New WID for UC3S**

*Type: WID new For: Approval  
 Source: Huawei, HiSilicon, China Mobile, China Unicom, China Telecom, Nokia, Nokia Shanghai Bell, FutureWei*

(Replaces S3-212705)

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

**S3-213232 New WID on security aspects of eNA**

*Type: WID new For: Approval  
 Source: China Mobile*

(Replaces S3-212810)

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

**S3-213236 New WID on Security Aspects of Proximity based Services (ProSe) in the 5G**

*Type: WID new For: Agreement  
 Source: CATT*

(Replaces S3-212727)

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

### 4.28 Other work areas (no release restrictions)

**S3-212451 OAuth2.0 misalignmnet**

*Type: CR For: Approval  
 33.501 v15.13.0 CR-1146 Cat: F (Rel-15)  
  
 Source: Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung*

**Abstract:**

A proposal for fixing the OAuth2.0 misalignment between SA3 TS33.501 and CT4 TS29.510

**Decision:** The document was **revised to S3-213178**.

**S3-212450 OAuth2.0 misalignmnet**

*Type: CR For: Approval  
 33.501 v16.7.0 CR-1145 Cat: A (Rel-16)  
  
 Source: Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung*

**Abstract:**

A proposal for fixing the OAuth2.0 misalignment between SA3 TS33.501 and CT4 TS29.510

**Decision:** The document was **revised to S3-213177**.

**S3-212895 OAuth misalignment - R15**

*Type: CR For: Agreement  
 33.501 v15.13.0 CR-1189 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility*

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

**S3-212896 OAuth misalignment - R16**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1190 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility*

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

**S3-212897 OAuth misalignment - R17**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1191 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility*

**Decision:** The document was **revised to S3-213189**.

**S3-212490 IETF OSCORE as AKMA Ua\* protocol**

*Type: CR For: Agreement  
 33.535 v17.2.1 CR-0084 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-212491 Extending the Ua security protocol namespace to include the AKMA OSCORE Ua\* protocol**

*Type: CR For: Agreement  
 33.220 v17.1.0 CR-0213 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-212495 Rel16 Clarification about multiple horizontal key derivations upon AMF re-allocation via direct NAS reroute**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1147 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-212496 Rel17 Clarification about multiple horizontal key derivations upon AMF re-allocation via direct NAS reroute**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1148 Cat: A (Rel-17)  
  
 Source: Ericsson*

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

**S3-212506 Rel16 Align KAUSF handling for 5G AKA and EAP-AKA'**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1149 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213261**.

**S3-212507 Rel17 Align KAUSF handling for 5G AKA and EAP-AKA' for Release 17**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1150 Cat: A (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213262**.

**S3-212538 Correct the description of KAUSF handling upon successful primary authentication-R16**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1152 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-212539 Correct the description of KAUSF handling upon successful primary authentication-R17**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1153 Cat: A (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-212565 Storage of Kausf**

*Type: CR For: (not specified)  
 33.501 v17.2.1 CR-1154 Cat: F (Rel-17)  
  
 Source: NEC Corporation*

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

**S3-212597 Clarification on AS key generation after runing NAS SMC**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1158 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213250**.

**S3-212598 Clarification on Kausf storage in multi-NAS connection**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1159 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213191**.

**S3-212599 Clarification on Kausf storage in multi-NAS connection**

*Type: CR For: Approval  
 33.501 v16.7.1 CR-1160 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213194**.

**S3-212627 Add the missing references**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1164 Cat: A (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**S3-212628 Add the missing references for Rel 16**

*Type: CR For: Approval  
 33.501 v16.7.1 CR-1165 Cat: A (Rel-16)  
  
 Source: Huawei,HiSilicon*

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

**S3-212629 Add the missing references for Rel 15**

*Type: CR For: Approval  
 33.501 v15.13.0 CR-1166 Cat: F (Rel-15)  
  
 Source: Huawei,HiSilicon*

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

**S3-212654 Clarification on SoR transparent container**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1168 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-212797 CR on TS 33.501 on SOR-MAC calculation**

*Type: CR For: Endorsement  
 33.501 v17.2.1 CR-1183 Cat: F (Rel-17)  
  
 Source: Apple*

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

**S3-212738 Protection of “ME support of SOR-CMCI” indication**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1173 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-212739 Clarification on AMF transparency for UPU**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1174 Cat: F (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213200**.

**S3-212683 Editorial Clarifications for Trusted non-3GPP Access using TNGF**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1170 Cat: F (Rel-17)  
  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S3-213237**.

**S3-212692 Clarification on RRCConnectionRe-establishment Procedure in Control Plane CIoT EPS Optimization**

*Type: CR For: Approval  
 33.401 v14.6.0 CR-0699 Cat: F (Rel-14)  
  
 Source: Huawei, HiSilicon*

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

**S3-212741 UDM Service correction**

*Type: CR For: Approval  
 33.501 v16.7.1 CR-1175 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-212742 UDM Service correction**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1176 Cat: A (Rel-17)  
  
 Source: Ericsson*

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

**S3-212795 Discussion paper on the security context handling in IRAT**

*Type: discussion For: Endorsement  
 Source: Apple*

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

**S3-212796 CR on TS 33.501 on the security context handling in IRAT**

*Type: CR For: Endorsement  
 33.501 v17.2.1 CR-1182 Cat: F (Rel-17)  
  
 Source: Apple*

**Decision:** The document was **revised to S3-213239**.

**S3-212798 New WID on Security Assurance Specification for Management Function**

*Type: WID new For: Approval  
 Source: Huawei, HiSilicon*

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

**S3-212823 Prevention of attacks on slice core by CCA modifications - Rel-16**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1131 rev 1 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211985)

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

**S3-212824 Prevention of attacks on slice core by CCA modifications - Rel-17**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1132 rev 1 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211986)

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

**S3-212826 IPUPS overload control**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1184 Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212846 Adding MACS as an input parameter to the calculation of AK\* to provide freshness**

*Type: CR For: Agreement  
 33.102 v16.0.0 CR-0277 rev 3 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated, Thales*

(Replaces S3-201936)

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

**S3-212847 Discussion on proposed response to RAN3 LS on User Plane Integrity Protection for eUTRA connected to EPC**

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

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

**S3-212848 LS on User Plane Integrity Protection for eUTRA connected to EPC**

*Type: LS out For: Approval  
 to RAN3, cc RAN2, CT1, CT4, SA2  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-213258**.

**S3-212642 UP Security policy requirement on the IMS data network**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1167 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-212670 Claifications on SoR enablement**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1169 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-213170 LS on Home Network triggered re-authentication**

*Type: LS out For: (not specified)  
 to CT4, cc CT1  
 Source: Samsung R&D Institute UK*

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

**S3-213172 Reply LS on Storage of KAUSF**

*Type: LS out For: (not specified)  
 to CT1  
 Source: Samsung R&D Institute UK*

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

**S3-213178 OAuth2.0 misalignmnet**

*Type: CR For: Approval  
 33.501 v15.13.0 CR-1146 rev 1 Cat: F (Rel-15)  
  
 Source: Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung, Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility*

(Replaces S3-212451)

**Abstract:**

A proposal for fixing the OAuth2.0 misalignment between SA3 TS33.501 and CT4 TS29.510

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

**S3-213180 Mirror for Rel-16 Editorial Clarifications for Trusted non-3GPP Access using TNGF**

*Type: CR For: (not specified)  
 33.501 v16.7.1 CR-1201 Cat: F (Rel-16)  
  
 Source: Intel Corporation (UK) Ltd*

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

**S3-213189 OAuth misalignment - R17**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1191 rev 1 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility, Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung*

(Replaces S3-212897)

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

**S3-213191 Clarification on Kausf storage in multi-NAS connection**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1159 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-212598)

**Decision:** The document was **revised to S3-213195**.

**S3-213194 Clarification on Kausf storage in multi-NAS connection**

*Type: CR For: Approval  
 33.501 v16.7.1 CR-1160 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-212599)

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

**S3-213195 Clarification on Kausf storage in multi-NAS connection**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1159 rev 2 Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-213191)

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

**S3-213200 Clarification on AMF transparency for UPU**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1174 rev 1 Cat: F (Rel-17)  
  
 Source: Ericsson*

(Replaces S3-212739)

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

**S3-213237 Editorial Clarifications for Trusted non-3GPP Access using TNGF**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1170 rev 1 Cat: A (Rel-17)  
  
 Source: Intel Corporation (UK) Ltd*

(Replaces S3-212683)

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

**S3-213239 CR on TS 33.501 on the security context handling in IRAT**

*Type: CR For: Endorsement  
 33.501 v17.2.1 CR-1182 rev 1 Cat: F (Rel-17)  
  
 Source: Apple*

(Replaces S3-212796)

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

**S3-213250 Clarification on AS key generation after runing NAS SMC**

*Type: CR For: Approval  
 33.501 v17.2.1 CR-1158 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-212597)

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

**S3-213258 LS on User Plane Integrity Protection for eUTRA connected to EPC**

*Type: LS out For: Approval  
 to RAN3, cc RAN2, CT1, CT4, SA2  
 Source: Qualcomm Incorporated*

(Replaces S3-212848)

**Decision:** The document was **revised to S3-213272**.

**S3-213272 LS on User Plane Integrity Protection for eUTRA connected to EPC**

*Type: LS out For: Approval  
 to RAN3, cc RAN2, CT1, CT4, SA2  
 Source: Qualcomm Incorporated*

(Replaces S3-213258)

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

**S3-213261 Rel16 Align KAUSF handling for 5G AKA and EAP-AKA'**

*Type: CR For: Agreement  
 33.501 v16.7.1 CR-1149 rev 1 Cat: F (Rel-16)  
  
 Source: Ericsson*

(Replaces S3-212506)

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

**S3-213262 Rel17 Align KAUSF handling for 5G AKA and EAP-AKA' for Release 17**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1150 rev 1 Cat: A (Rel-17)  
  
 Source: Ericsson*

(Replaces S3-212507)

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

### 5.1 Study on 5G security enhancement against false base stations

**S3-212677 Updates to solution #17 capability negotiation**

*Type: pCR For: (not specified)  
 33.809 v0.15.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S3-213259**.

**S3-212780 5GFBS-Update of solution#17**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Apple, CableLabs, Intel*

**Decision:** The document was **revised to S3-213238**.

**S3-212782 5GFBS-Conclusion on key issue#1 on solution#17**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Apple*

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

**S3-212523 Short-lived public key-based solution for KI#2**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: CableLabs,Deutsche Telekom AG, InterDigital, Johns Hopkins University APL, US National Security Agency*

**Decision:** The document was **revised to S3-213210**.

**S3-212744 FBS - Clarification quantum-resistance**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-213240**.

**S3-212748 FBS - Discussion about the stealthy FBSMitM attack and minor modifications in Solution 14 to deal with it**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Philips International B.V.*

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

**S3-212781 5GFBS-Conclusion on key issue#2**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Apple*

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

**S3-212568 Update to solution #25**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Huawei, HiSilicon*

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

**S3-212569 Evaluation of solution #4**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Huawei, HiSilicon*

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

**S3-212570 Conclusion for KI#3**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Huawei, HiSilicon*

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

**S3-212743 FBS - Clarification in Solution 4**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-213241**.

**S3-212746 FBS - Conclusions Solution 23**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-213242**.

**S3-212747 FBS - Conclusions Solution 24**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-213243**.

**S3-212866 Solution #4 Evaluation (Enriched MR)**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Qualcomm Incorporated*

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

**S3-212520 pCR: updating annex B in TR 33.809**

*Type: pCR For: (not specified)  
 33.809 v0.15.0  
 Source: CableLabs*

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

**S3-213210 Short-lived public key-based solution for KI#2**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: CableLabs,Deutsche Telekom AG, InterDigital, Johns Hopkins University APL, US National Security Agency*

(Replaces S3-212523)

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

**S3-213238 5GFBS-Update of solution#17**

*Type: pCR For: Approval  
 33.809 v0.15.0  
 Source: Apple, CableLabs, Intel*

(Replaces S3-212780)

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

**S3-213240 FBS - Clarification quantum-resistance**

*Type: pCR For: (not specified)  
 33.809 v0.15.0  
 Source: Philips International B.V.*

(Replaces S3-212744)

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

**S3-213241 Clarification in Solution 4**

*Type: pCR For: (not specified)  
 33.809 v0.15.0  
 Source: Philips International B.V.*

(Replaces S3-212743)

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

**S3-213242 FBS - Evaluation Solution 23**

*Type: pCR For: (not specified)  
 33.809 v0.15.0  
 Source: Philips International B.V.*

(Replaces S3-212746)

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

**S3-213243 FBS - Evaluation Solution 24**

*Type: pCR For: (not specified)  
 33.809 v0.15.0  
 Source: Philips International B.V.*

(Replaces S3-212747)

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

**S3-213244 TR 33.809-5GFBS**

*Type: draft TR For: Approval  
 33.809 v0.16.0  
 Source: Apple Computer Trading Co. Ltd*

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

**S3-213259 Updates to solution #17 capability negotiation**

*Type: pCR For: (not specified)  
 33.809 v0.15.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S3-212677)

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

### 5.2 Study on SECAM and SCAS for 3GPP virtualized network products

**S3-212820 Clean up the editorial issues**

*Type: CR For: Agreement  
 33.818 v17.0.0 CR-0001 Cat: F (Rel-17)  
  
 Source: China Mobile*

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

### 5.3 Study on User Plane Integrity Protection

### 5.4 Study on Security Impacts of Virtualisation

**S3-212466 New solution: Hardware Mediated Execution Enclave (HMEE)**

*Type: pCR For: Approval  
 33.848 v0.8.0  
 Source: MITRE Corporation*

**Decision:** The document was **revised to S3-213217**.

**S3-212480 New Solution Using Attestation for Key Issue #13**

*Type: pCR For: Approval  
 33.848 v0.8.0  
 Source: Johns Hopkins University APL, US National Security Agency, CableLabs, InterDigital, AT&T, CISA ECD*

**Abstract:**

This solution addresses Key Issue #13 “Attestation at 3GPP Function level." This solution suggests using attestation at the hardware level and proceeding up the Network Function Virtualization Stack through to the VNF software to create a full attestatio

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

**S3-212973 New KI on Secrets in Container Images**

*Type: pCR For: Approval  
 33.848 v0.8.0  
 Source: Altiostar*

**Abstract:**

This KI is about impact due to secrets embedded in container images

**Decision:** The document was **revised to S3-213182**.

**S3-212975 New KI on Container breakouts**

*Type: pCR For: Approval  
 33.848 v0.8.0  
 Source: Altiostar*

**Abstract:**

This KI is about impact due to container breakouts

**Decision:** The document was **revised to S3-213188**.

**S3-213182 New KI on Secrets in Container Images**

*Type: pCR For: Approval  
 33.848 v0.8.0  
 Source: Altiostar*

(Replaces S3-212973)

**Abstract:**

This KI is about impact due to secrets embedded in container images

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

**S3-213188 New KI on Container breakouts**

*Type: pCR For: Approval  
 33.848 v0.8.0  
 Source: Altiostar*

(Replaces S3-212975)

**Abstract:**

This KI is about impact due to container breakouts

**Decision:** The document was **revised to S3-213190**.

**S3-213190 New KI on Container breakouts**

*Type: pCR For: Approval  
 33.848 v0.8.0  
 Source: Altiostar*

(Replaces S3-213188)

**Abstract:**

This KI is about impact due to container breakouts

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

**S3-213202 Draft TR 33.848**

*Type: draft TR For: Agreement  
 33.848 v0.9.0  
 Source: BT plc*

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

**S3-213217 New solution: Hardware Mediated Execution Enclave (HMEE)**

*Type: pCR For: Approval  
 33.848 v0.8.0  
 Source: MITRE Corporation*

(Replaces S3-212466)

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

### 5.5 Study on authentication enhancements in 5GS

**S3-212566 modification to the solution 6.2.10**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: NEC Corporation*

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

**S3-212540 Add evaluation for solution 3.3**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: ZTE Corporation*

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

**S3-213006 pCR to 33.846: impacts on the USIM of solution #4.6**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: THALES*

**Abstract:**

Impacts on the USIM of solution #4.6

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

**S3-212509 Update to solution#4.7**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Authentication enhancements solution updates

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

**S3-212408 New solution proposal**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: JSRPC Kryptonite*

**Abstract:**

Solution to mitigate the Identifier linkability attack, SUCI replay attack, SUPI guessing attack and attack on re-synchronization in AKA.

**Decision:** The document was **revised to S3-213216**.

**S3-212407 Observations on TR 33.846**

*Type: discussion For: Decision  
 33.846 v..  
 Source: JSRPC Kryptonite*

**Abstract:**

Observations on solutions for resilience against identifier linkability, availability aspects of SUCI usage and re-synchronisation in AKA

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

**S3-212844 Some proposed text for the assessment of attack risk table**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: Qualcomm Incorporated*

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

**S3-213007 pCR to 33.846: assessment of attack risk**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: THALES*

**Abstract:**

Assessment of attack risk

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

**S3-212845 Proposed conclusion for the linkability parts of key issues #2.1 and 2.2**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: Qualcomm Incorporated*

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

**S3-212567 conclusion to key issue 2.2**

*Type: pCR For: Agreement  
 33.846 v0.12.0  
 Source: NEC Corporation*

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

**S3-212511 Conclusion on Key issue #3.2 SUPI guessing attacks**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: Nokia, Nokia Shanghai Bell, Thales, NTT DOCOMO, NEC*

**Abstract:**

Conclusion for SUPI guessing attacks

**Decision:** The document was **revised to S3-213173**.

**S3-212541 Conclusion on key issue 3.2**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: ZTE Corporation*

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

**S3-212722 Conclusion for key issue 3.2**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213224**.

**S3-212542 Conclusion on key issue 4.1**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: ZTE Corporation*

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

**S3-212510 Conclusion to Key Issue #4.1**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

conclusion for SQN leakage key issue

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

**S3-212843 Proposed conclusion for key issue #4.1**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: Qualcomm Incorporated, Thales*

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

**S3-212419 Reply to LS on Resynchronisations**

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

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

**S3-212476 Authentication enhancements: Discussion about the WID**

*Type: discussion For: Discussion  
 Source: Ericsson*

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

**S3-212405 Observations on TR 33.846**

*Type: discussion For: Discussion  
 33.846 v..  
 Source: JSRPC Kryptonite*

**Abstract:**

Observations on solutions for resilience against identifier linkability, availability aspects of SUCI usage and re-synchronisation in AKA

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

**S3-212406 New solution proposal**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: JSRPC Kryptonite*

**Abstract:**

Solution to mitigate the Identifier linkability attack, SUCI replay attack, SUPI guessing attack and attack on re-synchronization in AKA.

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

**S3-213033 Reply LS on Security risk evaluation of using long term key for another key derivation than AKA**

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

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

**S3-213173 Conclusion on Key issue #3.2 SUPI guessing attacks**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: Nokia, Nokia Shanghai Bell, Thales, NTT DOCOMO, NEC*

(Replaces S3-212511)

**Abstract:**

Conclusion for SUPI guessing attacks

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

**S3-213216 New solution proposal**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: JSRPC Kryptonite*

(Replaces S3-212408)

**Abstract:**

The solution to mitigate the Identifier linkability attack, SUCI replay attack, SUPI guessing attack, and attack on re-synchronization in AKA

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

**S3-213224 Update to clause 7.02**

*Type: pCR For: Approval  
 33.846 v0.12.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212722)

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

**S3-213233 Draft TR 33.846 v0.13.0 Study on authentication enhancements in the 5G System (5GS)**

*Type: draft TR For: Approval  
 33.846 v0.13.0  
 Source: Ericsson Hungary Ltd*

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

### 5.6 Study on storage and transport of 5GC security parameters for ARPF authentication

### 5.7 Study on security aspects of Unmanned Aerial Systems

**S3-212421 Support of UAVs authentication/authorization in 3GPP systems and interfacing with USS/UTM**

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

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

**S3-212422 Reply LS on Support of UAVs authentication/authorization in 3GPP systems and interfacing with USS/UTM**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-214895*

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

**S3-212423 Reply LS to GSMA-ACJA: 3GPP SA1 clarifications on problematic UAV**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-214916*

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

**S3-212447 LS on UAS terminology alignment**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: SP-210579*

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

**S3-212578 Draft LS to GSMA on interfacing with USS/UTM**

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

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

**S3-212941 Update to conclusion #1**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Ericsson*

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

**S3-212486 Conclusion for Key Issue #3**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

It is proposed to add a conclusion on Key Issue #3

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

**S3-212579 Conclusion to KI#3 (TPAE AA)**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213130**.

**S3-212829 Proposed conclusion for key issue #3**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212487 Conclusion for Key Issue #5**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

It is proposed to add a conclusion on Key Issue #5

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

**S3-212580 Conclusion to KI#5 (privacy of UAS identities)**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213132**.

**S3-212830 Proposed conclusion for key issue #5**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212488 Conclusion for Key Issue #6**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

It is proposed to add a conclusion on Key Issue #6

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

**S3-212581 Conclusion to KI#6 (UAV to UTM)**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212819 Add conclusion to KI #6**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: China Mobile*

**Decision:** The document was **revised to S3-213079**.

**S3-212831 Proposed common conclusion for key issues #6 and #7**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212948 Conclusion for KI#6**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR proposes the conclusion to KI#6 in TR 33.854.

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

**S3-212827 Editorial corrections to the UAS TR**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-213067**.

**S3-212828 Resolution of EN in solutions**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-213068**.

**S3-212832 Resolution of EN in general clauses**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212833 Cover sheet**

*Type: TS or TR cover For: Approval  
 33.854 v..  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-213069**.

**S3-213067 Editorial corrections to the UAS TR**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Qualcomm Incorporated*

(Replaces S3-212827)

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

**S3-213068 Resolution of EN in solutions**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Qualcomm Incorporated*

(Replaces S3-212828)

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

**S3-213069 Cover sheet TR 33.854**

*Type: TS or TR cover For: Approval  
 33.854 v..  
 Source: Qualcomm Incorporated*

(Replaces S3-212833)

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

**S3-213079 Add conclusion to KI #6**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: China Mobile, Lenovo, Motorola Mobility, InterDigital, Europe, Ltd., Qualcomm Incorporated, Huawei, HiSilicon*

(Replaces S3-212819)

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

**S3-213130 Conclusion to KI#3 (TPAE AA)**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Huawei, HiSilicon, InterDigital Europe Ltd., Qualcomm Incorporated*

(Replaces S3-212579)

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

**S3-213132 Conclusion to KI#5 (privacy of UAS identities)**

*Type: pCR For: Approval  
 33.854 v0.6.0  
 Source: Huawei, HiSilicon, InterDigital Europe Ltd., Qualcomm Incorporated*

(Replaces S3-212580)

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

**S3-213148 Draft TR 33.854**

*Type: draft TR For: Approval  
 33.854 v0.7.0  
 Source: Qualcomm*

(Replaces S3-212247)

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

### 5.8 Study on Security Aspects of Enhancement of Support for Edge Computing in 5GC

**S3-212626 Resolving the EN about the multiple EECs issues in solution 8**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Huawei,HiSilicon*

**Decision:** The document was **revised to S3-213112**.

**S3-212638 EN romoval for solution#23**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213116**.

**S3-212678 Solution 4: Clarify and update EN related Secondary authentication**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Intel Corporation (UK) Ltd*

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

**S3-212680 Solution 4: Clarify and update EN Application Client**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Intel Corporation (UK) Ltd*

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

**S3-212911 [EDGE] Update to Solution#3**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-213131**.

**S3-212912 [EDGE] Update to evaluation of Solution#3**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-213135**.

**S3-212939 Update to Solution #17: Resolving EN on Token Usage**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Ericsson*

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

**S3-212940 LS on EAS and ECS identifiers**

*Type: LS out For: Approval  
 to SA6  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213089**.

**S3-212944 Update to Solution #17: Resolving ENs**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213090**.

**S3-212952 eEDGE: Add Clarifications for Solutions covering Application Layer**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add clarifications to the relevant solutions to keep the solutions in scope of SA3.

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

**S3-213009 pCR to 33.839: solution #27**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: THALES*

**Abstract:**

Changes to solution #27

**Decision:** The document was **revised to S3-213212**.

**S3-212543 Conclusion on key issue 1**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212643 EC: Conclusion for Key issue #1**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212849 Proposed conclusions for key issue #1 and key issue #2**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212913 [EDGE] Conclusion for KI#1**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Samsung*

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

**S3-212942 Conclusion on KI#1**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Ericsson*

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

**S3-213010 pCR to 33.839: conclusion for Key Issue #1**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: THALES*

**Abstract:**

Conclusion for KI#1

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

**S3-212784 MEC-Discussion paper on including EEC ID in the authentication procedure**

*Type: pCR For: Endorsement  
 33.839 v0.6.0  
 Source: Apple*

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

**S3-212787 MEC- Addressing the EN in solution#28 on EEC ID authentication**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Apple*

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

**S3-213008 pCR to 33.839: solution #26**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: THALES*

**Abstract:**

Change to solution #26

**Decision:** The document was **revised to S3-213211**.

**S3-212544 Conclusion on key issue 2**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212644 EC: Conclusion for Key issue #2**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212786 MEC - Conclusion on the key issue 2 on the authentication between EEC and ECS**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Apple*

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

**S3-212914 [EDGE] Conclusion for KI#2**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Samsung, Lenovo, Motorola Mobility*

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

**S3-212943 Conclusion on KI#2**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Ericsson*

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

**S3-213011 pCR to 33.839: Conclusion for Key Issue #2**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: THALES*

**Abstract:**

Conclusion for KI#2

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

**S3-212951 eEDGE: Corrections in Solution #13**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to make corrections to the EDGE-4, EDGE-5, EDGE-7 and EDGE-8 described in solution #13 of TR 33.839, which is already selected for normative work in the conclusion for key issue #6.

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

**S3-212545 Conclusion on key issue 7**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212645 EC : Conclusion for Key issue #7**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213117**.

**S3-212938 Conclusions for KI#7 "Security of Network Information Provisioning to Local Applications with low latency procedure"**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Ericsson*

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

**S3-212646 EC: Conclusion for Key issue #10**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212937 Conclusions for KI#10 "Authorization during Edge Data Network change"**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Ericsson*

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

**S3-212783 MEC- Discussion paper on the privacy issue EEC ID**

*Type: pCR For: Endorsement  
 33.839 v0.6.0  
 Source: Apple*

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

**S3-212785 MEC- New solution on EEC ID privacy protection**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Apple*

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

**S3-213089 LS on EAS and ECS identifiers**

*Type: LS out For: Approval  
 to SA6  
 Source: Ericsson*

(Replaces S3-212940)

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

**S3-213090 Update to Solution #17: Resolving ENs**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Ericsson*

(Replaces S3-212944)

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

**S3-213112 Resolving the EN about the multiple EECs issues in solution 8**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Huawei,HiSilicon*

(Replaces S3-212626)

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

**S3-213115 TR 33.839for Edge computing security**

*Type: draft TR For: Approval  
 33.839 v0.7.0  
 Source: Huawei, HiSilicon*

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

**S3-213116 EN romoval for solution#23**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212638)

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

**S3-213117 EC : Conclusion for Key issue #7**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Huawei, HiSilicon, Ericsson, ZTE*

(Replaces S3-212645)

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

**S3-213118 EC: Conclusion for Key issue #1**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-213119 EC: Conclusion for Key issue #2**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-213131 [EDGE] Update to Solution#3**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Samsung*

(Replaces S3-212911)

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

**S3-213135 [EDGE] Update to evaluation of Solution#3**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: Samsung*

(Replaces S3-212912)

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

**S3-213211 pCR to 33.839: solution #26**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: THALES*

(Replaces S3-213008)

**Abstract:**

Change to solution #26

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

**S3-213212 pCR to 33.839: solution #27**

*Type: pCR For: Approval  
 33.839 v0.6.0  
 Source: THALES*

(Replaces S3-213009)

**Abstract:**

Changes to solution #27

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

### 5.9 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS

**S3-212424 LS on Layer-3 UE-to-Network Relay authentication and authorization**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2101623*

**Decision:** The document was **replied to in S3-212424**.

**S3-212465 Update to KI #17**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: MITRE Corporation*

**Decision:** The document was **revised to S3-213176**.

**S3-212470 Clean-up for KI#1**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: LG Electronics Inc.*

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

**S3-212550 Update the key issue#2**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212453 Evaluation of Solution #22: Representation of identities during broadcast**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: KPN N.V.*

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

**S3-212464 New solution: Keying procedures for Group Member and Relay discovery: public safety case**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: MITRE Corporation*

**Decision:** The document was **revised to S3-213175**.

**S3-212472 Evaluation for sol#13**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: LG Electronics Inc.*

**Decision:** The document was **revised to S3-213087**.

**S3-212473 Editorial corrections for sol#10**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: LG Electronics Inc.*

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

**S3-212478 TR 33.847 Update for solution #10**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

The contribution proposes to address ENs and adds text to the evaluation:

**Decision:** The document was **revised to S3-213059**.

**S3-212479 TR 33.847 Update for solution #24**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

The contribution addresses an EN and adds text to the evaluation

**Decision:** The document was **revised to S3-213060**.

**S3-212481 TR 33.847 Update for solution #25**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

The contribution proposes to add text to the evaluation.

**Decision:** The document was **revised to S3-213062**.

**S3-212516 Updates on sol#13**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: LG Electronics Inc.*

**Decision:** The document was **revised to S3-213088**.

**S3-212547 Update to Solution #5**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-213081**.

**S3-212549 Solution for key issue #17**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212551 Update the solution#36**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212608 Resolve EN in Sol#27**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213107**.

**S3-212609 Resolve EN in Sol#28**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213108**.

**S3-212610 New solution for one-to-one communication**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212619 New solution to avoid policy mismatch**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213110**.

**S3-212620 Discussion on the bidding down attack during one-to-one communication establishment**

*Type: pCR For: Endorsement  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212625 New solution on UE-to-network relay Key management based on primary authentication**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei,HiSilicon*

**Decision:** The document was **revised to S3-213111**.

**S3-212766 pCR to TR33.847- Update Solution#29**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: CATT*

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

**S3-212809 Update and evaluation of solution #32**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-213074**.

**S3-212853 EN resolution of Solution #34**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212854 Evaluation of Solution #34**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-213076**.

**S3-212855 Evaluation of Solution #24**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212856 EN resolution of Solution #18**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212859 Update of solution #18 to support privacy protection**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212860 Update an evaluation for solution #10**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212909 [ProSe] Updates to Solution#1**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-213137**.

**S3-212910 [ProSe] Updates to evaluation of solution#1**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-213138**.

**S3-212935 Update to solution #21**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Ericsson*

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

**S3-212953 ProSe: Addional Evaluation for Solution #9**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR mainly proposes to add more evaluation for the user plane based approach in solution #9.

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

**S3-212954 ProSe: Addional Evaluation for Solution #10**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add more evaluation for solution #10 in TR 33.847.

**Decision:** The document was **revised to S3-213158**.

**S3-212955 ProSe: Addional Evaluation for Solution #14**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add more evaluation for solution #14 in TR 33.847.

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

**S3-212956 ProSe: Addional Evaluation for Solution #15**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add more evaluation for solution #15 in TR 33.847.

**Decision:** The document was **revised to S3-213159**.

**S3-212957 ProSe: Addional Evaluation for Solution #18**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add more evaluation for solution #18 in TR 33.847.

**Decision:** The document was **revised to S3-213160**.

**S3-212958 ProSe: Addional Evaluation for Solution #22**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add some Editor’s Notes and additional evaluation for solution #22 in TR 33.847.

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

**S3-212959 ProSe: Add Evaluation for Solution #27**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add evaluation for solution #27 in TR 33.847.

**Decision:** The document was **revised to S3-213161**.

**S3-212960 ProSe: Add Evaluation for Solution #28**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add evaluation for solution #28 in TR 33.847.

**Decision:** The document was **revised to S3-213162**.

**S3-212961 ProSe: Addional Evaluation for Solution #30**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add more evaluation for solution #30 in TR 33.847.

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

**S3-212965 ProSe: New Solution for Key Issue #17**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a solution for key issues #17 in TR 33.847.

**Decision:** The document was **revised to S3-213164**.

**S3-212967 ProSe: New Solution for Key Issue #3**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a solution to addresses the security protection requirement for both control plane traffic and user plane traffic between the remote UE and the 3GPP network.

**Decision:** The document was **revised to S3-213165**.

**S3-212457 Conclusion on Key Issue #11: UE identity protection during ProSe discover**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: KPN N.V.*

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

**S3-212469 Conclusion on Key Issue #12: Security of one-to-one communication over PC5**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: KPN N.V.*

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

**S3-212485 Conclusions for U2N relay Key Issues**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: InterDigital, Europe, Ltd., Samsung, LG Electronics, Nokia, Nokia Shanghai Bell*

**Abstract:**

Proposal for U2N related KIs conclusions

**Decision:** The document was **revised to S3-213063**.

**S3-212546 Conclusion of Key Issue #1**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212548 Conclusion for UE to UE relay**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212603 conclusion to KI#2**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213105**.

**S3-212604 conclusion to KI#5 to KI#8**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213106**.

**S3-212605 conclusion to KI#11**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212611 Add conclusion to Key Issue #1**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213109**.

**S3-212612 Add conclusion to Key Issue #3**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212613 Add conclusion to key Issue #9**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212614 Add conclusion to Key Issue #12**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212615 Add conclusion to key Issue #16**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212728 pCR to TR33.847- Conclusion of KI#1**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: CATT*

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

**S3-212729 pCR to TR33.847- Conclusion of KI#2**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: CATT*

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

**S3-212731 pCR to TR33.847- Conclusion of KI#3**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: CATT*

**Decision:** The document was **revised to S3-213092**.

**S3-212732 pCR to TR33.847- Conclusion of KI#6-KI#8**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: CATT*

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

**S3-212745 pCR to TR33.847- Conclusion of KI#12**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: CATT*

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

**S3-212751 pCR to TR33.847- Conclusion of KI#13**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: CATT*

**Decision:** The document was **revised to S3-213093**.

**S3-212851 Conclusion on KI #3, KI #4 and KI #9 related to security for the Layer-3 UE-to-Network relay scenario**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated, MITRE, AT&T*

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

**S3-212852 Conclusion of KI #1**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212857 Conclusion of KI #3**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212858 Conclusion of KI #4**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212861 Conclusion of security and privacy of groupcast communication**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212934 Conclusion on key issue #3 and key issue #4**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Ericsson*

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

**S3-212962 ProSe: Conclusions for Key Issues #6, #7, #8**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to make conclusions accordingly for key issues #6, #7, #8 in TR 33.847 which are related to UE-to-UE relay.

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

**S3-212963 ProSe: Conclusion for Key Issue #13**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to make a conclusion for key issues #13 in TR 33.847.

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

**S3-212964 ProSe: Conclusion for Key Issue #16**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to make a conclusion on privacy protection of PDU session-related parameters in case of a L2 U2N relay for key issues #16 in TR 33.847.

**Decision:** The document was **revised to S3-213163**.

**S3-212966 ProSe: Conclusion for Key Issue #17**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to make a conclusion for key issue #17 in TR 33.847.

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

**S3-212968 ProSe: Conclusion for Key Issue #3**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to make a conclusion on one of the requirements in key issue #3 of TR 33.847.

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

**S3-212484 Way forward for L3 U2N Relay Authorization and security conclusions**

*Type: discussion For: Endorsement  
 33.847 v..  
 Source: InterDigital, Europe, Ltd., Samsung, LG Electronics, Nokia, Nokia Shanghai Bell*

**Abstract:**

Way forward proposal for U2N related KIs conclusions

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

**S3-212471 Updates on sol#10**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: LG Electronics Inc.*

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

**S3-213059 TR 33.847 Update for solution #10**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: InterDigital, Europe, Ltd.*

(Replaces S3-212478)

**Abstract:**

The contribution proposes to address ENs and adds text to the evaluation:

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

**S3-213060 TR 33.847 Update for solution #24**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: InterDigital, Europe, Ltd.*

(Replaces S3-212479)

**Abstract:**

The contribution addresses an EN and adds text to the evaluation

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

**S3-213062 TR 33.847 Update for solution #25**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: InterDigital, Europe, Ltd.*

(Replaces S3-212481)

**Abstract:**

The contribution proposes to add text to the evaluation.

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

**S3-213063 Conclusions for U2N relay Key Issues**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: InterDigital, Europe, Ltd., Samsung, LG Electronics, Nokia, Nokia Shanghai Bell, Huawei, HiSilicon , Qualcomm Incorporated, MITRE, AT&T, Ericsson*

(Replaces S3-212485)

**Abstract:**

Proposal for U2N related KIs conclusions

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

**S3-213074 Update and evaluation of solution #32**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Philips International B.V.*

(Replaces S3-212809)

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

**S3-213076 Evaluation of Solution #34**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Qualcomm Incorporated*

(Replaces S3-212854)

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

**S3-213081 Update to Solution #5**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: ZTE Corporation*

(Replaces S3-212547)

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

**S3-213087 Evaluation for sol#13**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: LG Electronics Inc.*

(Replaces S3-212472)

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

**S3-213088 Updates on sol#13**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: LG Electronics Inc.*

(Replaces S3-212516)

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

**S3-213092 pCR to TR33.847- Conclusion of KI#3**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: CATT*

(Replaces S3-212731)

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

**S3-213093 pCR to TR33.847- Conclusion of KI#13**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: CATT*

(Replaces S3-212751)

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

**S3-213105 conclusion to KI#2**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon, CATT*

(Replaces S3-212603)

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

**S3-213106 conclusion to KI#5 to KI#8**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon, ZTE Corporation, CATT, Xiaomi Technology*

(Replaces S3-212604)

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

**S3-213107 Resolve EN in Sol#27**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212608)

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

**S3-213108 Resolve EN in Sol#28**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212609)

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

**S3-213109 Add conclusion to Key Issue #1**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon, ZTE Corporation, CATT, Qualcomm Incorporated*

(Replaces S3-212611)

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

**S3-213110 New solution to avoid policy mismatch**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212619)

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

**S3-213111 New solution on UE-to-network relay Key management based on primary authentication**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei,HiSilicon*

(Replaces S3-212625)

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

**S3-213128 Reply LS on Layer-3 UE-to-Network Relay authentication and authorization**

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

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

**S3-213129 Draft TR 33.847 v0.7.0 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS**

*Type: draft TR For: Approval  
 33.847 v0.7.0  
 Source: CATT*

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

**S3-213137 [ProSe] Updates to Solution#1**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Samsung*

(Replaces S3-212909)

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

**S3-213138 [ProSe] Updates to evaluation of solution#1**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Samsung*

(Replaces S3-212910)

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

**S3-213157 conclusion to KI#5 to KI#8**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Huawei, HiSilicon, ZTE Corporation, CATT, Xiaomi Technology*

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

**S3-213158 ProSe: Addional Evaluation for Solution #10**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

(Replaces S3-212954)

**Abstract:**

This pCR proposes to add more evaluation for solution #10 in TR 33.847.

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

**S3-213159 ProSe: Addional Evaluation for Solution #15**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

(Replaces S3-212956)

**Abstract:**

This pCR proposes to add more evaluation for solution #15 in TR 33.847.

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

**S3-213160 ProSe: Addional Evaluation for Solution #18**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

(Replaces S3-212957)

**Abstract:**

This pCR proposes to add more evaluation for solution #18 in TR 33.847.

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

**S3-213161 ProSe: Add Evaluation for Solution #27**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

(Replaces S3-212959)

**Abstract:**

This pCR proposes to add evaluation for solution #27 in TR 33.847.

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

**S3-213162 ProSe: Add Evaluation for Solution #28**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

(Replaces S3-212960)

**Abstract:**

This pCR proposes to add evaluation for solution #28 in TR 33.847.

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

**S3-213163 ProSe: Conclusion for Key Issue #16**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

(Replaces S3-212964)

**Abstract:**

This pCR proposes to make a conclusion on privacy protection of PDU session-related parameters in case of a L2 U2N relay for key issues #16 in TR 33.847.

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

**S3-213164 ProSe: New Solution for Key Issue #17**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

(Replaces S3-212965)

**Abstract:**

This pCR proposes a solution for key issues #17 in TR 33.847.

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

**S3-213165 ProSe: New Solution for Key Issue #3**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: Xiaomi Technology*

(Replaces S3-212967)

**Abstract:**

This pCR proposes a solution to addresses the security protection requirement for both control plane traffic and user plane traffic between the remote UE and the 3GPP network.

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

**S3-213175 New solution: Keying procedures for Group Member and Relay discovery: public safety case**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: MITRE Corporation*

(Replaces S3-212464)

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

**S3-213176 Update to KI #17**

*Type: pCR For: Approval  
 33.847 v0.6.0  
 Source: MITRE Corporation*

(Replaces S3-212465)

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

**S3-213181 Way forward for U2N Relay authentication and authorization**

*Type: discussion For: Discussion  
 33.847 v..  
 Source: CATT*

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

### 5.10 Study on security for enhanced support of Industrial IoT

### 5.11 Study on Security Aspects of Enhancements for 5G Multicast-Broadcast Services

**S3-212556 Update the solution #6**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-213085**.

**S3-212552 Add the evaluation of the solution #6**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-213084**.

**S3-212553 Conclusion for the key issue 1**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212655 MBS:Discussion paper on Authentication and authorization for multicast service**

*Type: discussion For: Endorsement  
 33.850 v..  
 Source: Huawei, HiSilicon*

**Decision:** The document was **endorsed**.

**S3-212656 Conclusion on authentication and authorization for multicast service**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213123**.

**S3-212512 Editor note removal and update for solution#10**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

MBS Solution updates

**Decision:** The document was **revised to S3-213038**.

**S3-212921 [MBS] Solution#13 Evaluation**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-213136**.

**S3-212721 addressing the EN in solution#12**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213104**.

**S3-212555 Update the solution #12**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212863 Update of Solution #12**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-213077**.

**S3-212864 Evaluation of Solution #12**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212554 Conclusion for the key issue 2**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212717 Discussion paper on MBS traffic protection**

*Type: discussion For: Endorsement  
 33.850 v..  
 Source: Huawei, HiSilicon*

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

**S3-212718 Conclusion for key issue 2**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212862 Way forward for the 5G MBS security**

*Type: discussion For: Discussion  
 33.850 v..  
 Source: Qualcomm Incorporated*

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

**S3-212865 Conclusion for the KI#2**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-213078**.

**S3-212920 Discussion on MBS Security**

*Type: discussion For: Endorsement  
 33.850 v..  
 Source: Samsung*

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

**S3-212720 addressing the EN in solution#11**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212719 Conclusion for key issue 3**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212765 MBS - Update Solution 11**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-213127**.

**S3-212749 MBS - Conclusions KI 3**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Philips International B.V.*

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

**S3-212750 MBS - Conclusions Solution 9**

*Type: pCR For: (not specified)  
 33.850 v0.6.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-213126**.

**S3-212673 New key issue on AF authorization**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212674 New solution on AF authorization**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212675 Conclusion to key issue on unauthorized MBS session operation**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212789 MBS-new solution for key issue#2**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Apple*

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

**S3-213038 Editor note removal and update for solution#10**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212512)

**Abstract:**

MBS Solution updates

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

**S3-213077 Update of Solution #12**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Qualcomm Incorporated*

(Replaces S3-212863)

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

**S3-213078 Conclusion for the KI#2**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Qualcomm Incorporated*

(Replaces S3-212865)

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

**S3-213080 TR 33.850 for 5MBS security**

*Type: draft TR For: Approval  
 33.850 v0.7.0  
 Source: Huawei, Hisilicon*

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

**S3-213084 Add the evaluation of the solution #6**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: ZTE Corporation*

(Replaces S3-212552)

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

**S3-213085 Update the solution #6**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: ZTE Corporation*

(Replaces S3-212556)

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

**S3-213104 addressing the EN in solution#12**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212721)

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

**S3-213123 Conclusion on authentication and authorization for multicast service**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212656)

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

**S3-213126 Evaluation Solution 9**

*Type: pCR For: (not specified)  
 33.850 v0.6.0  
 Source: Philips International B.V.*

(Replaces S3-212750)

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

**S3-213127 Update Solution 11 for reduced key update overhead**

*Type: pCR For: (not specified)  
 33.850 v0.6.0  
 Source: Philips International B.V.*

(Replaces S3-212765)

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

**S3-213136 [MBS] Solution#13 Evaluation**

*Type: pCR For: Approval  
 33.850 v0.6.0  
 Source: Samsung*

(Replaces S3-212921)

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

### 5.12 Study on enhanced security support for Non-Public Networks

**S3-212414 LS on support of PWS over SNPN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S1-210368*

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

**S3-212415 Reply LS on support of PWS over SNPN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-213640*

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

**S3-212416 Reply LS on support of PWS over SNPN in R17**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-212863*

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

**S3-212417 Reply LS on support of PWS over NPN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: SP-210584*

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

**S3-212508 Addressing security threat against KAUSF derived from MSK**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: CableLabs*

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

**S3-212521 Further conclusions for KI #1**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: CableLabs,Ericsson, Charter Communications, Intel*

(Replaces S3-211521)

**Decision:** The document was **revised to S3-213066**.

**S3-212699 Evaluation on indication of key derivation**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212700 Conclusion on KI#1 for key derivation**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212733 Further conclusions for KI #1**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Ericsson, Huawei, Interdigital, Lenovo, Motorola Mobility, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated*

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

**S3-212867 eNPN: Evaluation of Solution #5**

*Type: pCR For: (not specified)  
 33.857 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212868 pCR: Additional conclusions for KI #1**

*Type: pCR For: (not specified)  
 33.857 v0.6.0  
 Source: Qualcomm Incorporated*

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

**S3-212969 eNPN: Conclusion Update for Key Issue #1**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to update the conclusion made for key issue #1.

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

**S3-212557 New solution on control plane based provisioning PS to AUSF**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-213082**.

**S3-212558 New solution on control plane based provisioning PS to UDM**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212559 Resolving ENs in Key Issue #2**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: ZTE Corporation*

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

**S3-212710 Conclusion on KI#2 for User Plane Provisioning**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212970 eNPN: New Solution for Key Issue #2**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a solution addressing the corresponding requirement in Key Issue #2, by reusing the existing mechanisms of UP security policy configuration and UP security activation defined in TS 33.501.

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

**S3-212971 eNPN: Resolution of the Editor’s Notes in Key Issue #2**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Xiaomi Technology, Lenovo, Motorola Mobility*

**Abstract:**

This pCR proposes to resolve four Editor’s Notes in key issue #2.

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

**S3-212972 eNPN: Conclusion for Key Issue #2**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Xiaomi Technology*

**Abstract:**

this pCR proposes to make a conclusion on the requirement of confidentiality, integrity and anti-replay protecting credentials during user plane provisioning in key issue #2 of TR 33.857.

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

**S3-213005 A new onboarding solution addressing KI#2**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Lenovo, Motorola Mobility*

**Decision:** The document was **revised to S3-213065**.

**S3-213028 Addressing Editor's notes of KI#2**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Philips International B.V., Lenovo, Motorola Mobility*

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

**S3-212474 New solution for UE onboarding**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: LG Electronics Inc.*

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

**S3-212688 Updates to solution 14: Removal of Editor’s notes: Security Issues**

*Type: pCR For: (not specified)  
 33.857 v0.6.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S3-213070**.

**S3-212689 Updates to solution 14: Removal of Editor’s notes: Three Authentication**

*Type: pCR For: (not specified)  
 33.857 v0.6.0  
 Source: Intel Corporation (UK) Ltd*

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

**S3-212690 Updates to solution 14: Removal of Editor’s notes: One-Way**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Intel Corporation (UK) Ltd*

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

**S3-212691 Proposal for conclusion for Key Issue 4**

*Type: pCR For: (not specified)  
 33.857 v0.6.0  
 Source: Intel Corporation (UK) Ltd*

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

**S3-212754 Conclusions for KI#4 (initial access)**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Ericsson, Huawei, InterDigital, Lenovo, Motorola Mobility, Qualcomm Incorporated*

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

**S3-212767 Proposal for a conclusion on KI#4 – one way authentication.**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212768 Proposal for a conclusion on KI#4 – OSNPN authentication.**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212769 Proposal for a solution to KI#4.**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212770 Update to solution #19 – Authorization added.**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213147**.

**S3-212947 Solution to address KI#1 and KI#4**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR provides a solution to address KI#1 and KI#4 in TR 33.857.

**Decision:** The document was **revised to S3-213042**.

**S3-213042 Solution to address KI#4**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Lenovo, Motorola Mobility*

(Replaces S3-212947)

**Abstract:**

This pCR provides a solution to address KI#4 in TR 33.857.

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

**S3-213065 A new onboarding solution addressing KI#2**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Lenovo, Motorola Mobility*

(Replaces S3-213005)

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

**S3-213066 Further conclusions for KI #1**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: CableLabs,Ericsson, Charter Communications, Intel*

(Replaces S3-212521)

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

**S3-213070 Updates to solution 14: Removal of Editor’s notes: Security Issues**

*Type: pCR For: (not specified)  
 33.857 v0.6.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S3-212688)

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

**S3-213082 New solution on control plane based provisioning PS to AUSF**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: ZTE Corporation*

(Replaces S3-212557)

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

**S3-213147 Update to solution #19 – Authorization added.**

*Type: pCR For: Approval  
 33.857 v0.6.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212770)

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

**S3-213208 draft TR 33.857 v0.7.0**

*Type: draft TR For: (not specified)  
 33.857 v0.7.0  
 Source: Ericsson*

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

### 5.13 Study on security aspects of the Disaggregated gNB Architecture

### 5.14 Study on User Consent for 3GPP services

**S3-212702 General Conclusion on UDM service for User Consent Check**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213096**.

**S3-212703 General Conclusion on Generic Requirement for the Procedures for User Consent Check**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213097**.

**S3-212704 General Conclusion on UDM service for User Consent Revocation**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213098**.

**S3-212707 General Conclusion on Generic Requirement for the Procedure for User Consent Revocation**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213099**.

**S3-212711 Skeleton for UC3S Conclusion**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

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

**S3-213000 Tracking, enforcement, and validity of user consent**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Ericsson*

**Discussion:**

Change 2: merged (along with suggestions) into S3-212713.

Change 3: merged (along with suggestions) into S3-212704.

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

**S3-212701 New solution for User Consent for 3GPP service exposure**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213095**.

**S3-212788 UC3S-User consent update**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Apple*

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

**S3-212915 [UC3S] Solution on user's consent for exposure of information to Edge Applications**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Samsung*

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

**S3-212712 Conclusion for Key Issue #1**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-212709 Solution Update and Evaluation for Solution 3**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213101**.

**S3-212874 Solution Privacy preservation of transmitted data**

*Type: pCR For: (not specified)  
 33.867 v0.5.0  
 Source: Nokia Germany*

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

**S3-212713 Conclusion for Key Issue #2**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213102**.

**S3-212708 Solution for user consent revocation**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213100**.

**S3-212714 Conclusion for Key Issue #3**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213103**.

**S3-212522 Update for Conclusion on Key Issue #4**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: China Telecommunications, Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213083**.

**S3-213024 User consent: New key issue on naming of purposes**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **revised to S3-213071**.

**S3-212563 Concept of User Consent**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: China Unicom, Huawei, HiSilicon*

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

**S3-212517 Concept of User Consent**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: China Unicom*

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

**S3-212518 Update for Conclusion on Key Issue #4**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: China Telecommunications, Huawei, HiSilicon*

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

**S3-213071 User consent: New key issue on naming of purposes**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: NTT DOCOMO INC.*

(Replaces S3-213024)

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

**S3-213083 Update for Conclusion on Key Issue #4**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: China Telecommunications, Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

(Replaces S3-212522)

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

**S3-213095 New Solution for Check of User Consent for 3GPP service Exposure**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212701)

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

**S3-213096 General Conclusion on UDM service for User Consent Check**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212702)

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

**S3-213097 General Conclusion on Generic Requirement for the Procedures for User Consent Check**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

(Replaces S3-212703)

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

**S3-213098 General Conclusion on UDM service for User Consent Revocation**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Ericssion*

(Replaces S3-212704)

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

**S3-213099 General Conclusion on Generic Requirement for the Procedure for User Consent Revocation**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

(Replaces S3-212707)

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

**S3-213100 Solution for user consent revocation**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212708)

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

**S3-213101 Solution Update and Evaluation for Solution 3**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212709)

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

**S3-213102 Conclusion for Key Issue #2**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Ericssion*

(Replaces S3-212713)

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

**S3-213103 Conclusion for Key Issue #3**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

(Replaces S3-212714)

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

**S3-213146 Draft TR 33.867**

*Type: draft TR For: (not specified)  
 33.867 v0.6.0  
 Source: Huawei; HiSilicon*

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

### 5.15 Study on security aspects of the 5GMSG Service

**S3-212801 Add conclusion to KI #1**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: China Mobile*

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

**S3-212802 Transport security of MSGin5G-1 interface**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: China Mobile*

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

**S3-212803 Solution to the transport security of MSGin5G-2 and MSGin5G-4**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: China Mobile*

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

**S3-212907 [5GMSG] Evaluation of Solution#8**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: Samsung*

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

**S3-212616 Propose evaluation to sol #1**

*Type: pCR For: Approval  
 33.862 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212904 [5GMSG] Evaluation of Solution#1**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: Samsung*

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

**S3-212617 Propose evaluation to sol #5**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-212906 [5GMSG] Evaluation of Solution#5**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: Samsung*

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

**S3-212905 [5GMSG] Evaluation of Solution#3**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: Samsung*

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

**S3-212804 Add conclusion to KI#2**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: China Mobile*

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

**S3-212808 Deleting the EN of solution#4**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: China Mobile*

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

**S3-212908 [5GMSG] Conclusion for KI#1 and KI#2**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: Samsung*

**Discussion:**

Part of this contribution is already included in tdoc 801.

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

**S3-212805 Solution to key issue#3**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: China Mobile*

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

**S3-212806 Solution to key issue#4**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: China Mobile*

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

**S3-212807 Editorial corrections for TR33.862**

*Type: pCR For: Approval  
 33.862 v0.5.0  
 Source: China Mobile*

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

**S3-213114 draft TR 33.862 0.6.0**

*Type: draft TR For: Approval  
 33.862 v0.6.0  
 Source: China Mobile Com. Corporation*

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

### 5.16 Study on security aspects of enablers for Network Automation (eNA) for the 5G system (5GS) Phase 2

**S3-212427 LS on security aspects for the method of collection of data from the UE**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-213263*

**Decision:** The document was **replied to in S3-213271**.

**S3-212679 Reply-LS on security aspects for the method of collection of data from the UE**

*Type: LS out For: Approval  
 to SA WG2  
 Source: Guangdong OPPO Mobile Telecom.*

**Abstract:**

Given the IP address is relevant to some sensitive information like network topology and user geographic location, etc., it will have security risk when providing AF in untrusted domain with multiple UE IP addresses where some of those IP addresses are us

**Decision:** The document was **revised to S3-213271**.

**S3-213271 Reply-LS on security aspects for the method of collection of data from the UE**

*Type: LS out For: Approval  
 to SA WG2  
 Source: Guangdong OPPO Mobile Telecom.*

(Replaces S3-212679)

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

**S3-212994 LS on NF Service Producer Meta Data Addition by ADRF**

*Type: LS out For: (not specified)  
 to SA2  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

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

**S3-212991 Update to KI 1.4**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

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

**S3-213015 Update\_on\_Key\_issue#1.4**

*Type: pCR For: Approval  
 33.866 v0.6.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213152**.

**S3-212995 Removal of Editor’s Note of Solution#4**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Lenovo, Motorola Mobility*

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

**S3-212996 Adding Evaluation to Solution#4**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Lenovo, Motorola Mobility*

**Decision:** The document was **revised to S3-213064**.

**S3-212997 Removal of Editor’s Note of Solution#5**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Lenovo, Motorola Mobility*

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

**S3-212998 Adding Evaluation to Solution#5**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Lenovo, Motorola Mobility*

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

**S3-213016 Update\_on\_Solution#5**

*Type: pCR For: Approval  
 33.866 v0.6.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213154**.

**S3-212990 Evaluation on Sol 5- Providing the Security protection of data via Messaging Framework**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

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

**S3-212639 Solution on Authorization of Data Consumers for data access via DCCF**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-212981 Ed Note Removal for Solution 10**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

**Decision:** The document was **revised to S3-213039**.

**S3-212984 Editorial Notes Removal for Solution 10 to address authorization mechanisms when data is sent via MFAF**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

**Decision:** The document was **revised to S3-213041**.

**S3-212983 Evaluation to the Solution 10**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

**Decision:** The document was **revised to S3-213044**.

**S3-212978 Ed Note Removal for Solution 11**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

**Decision:** The document was **revised to S3-213048**.

**S3-212979 Ed Note Removal to include mechanism when notification sent via MFAF for Solution 11**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

**Decision:** The document was **revised to S3-213052**.

**S3-212980 Evaluation to the Solution 11**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

**Decision:** The document was **revised to S3-213051**.

**S3-213017 Update\_on\_Solution#12**

*Type: pCR For: Approval  
 33.866 v0.6.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213153**.

**S3-212631 update evaluation for solution#13**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-212993 Solution on Protection of data sent via MFAF using existing SBA mechanisms**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell, Huawei, HiSilicon*

**Abstract:**

Approval

**Decision:** The document was **revised to S3-213045**.

**S3-212657 Conclusion on key issue #1.2**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213124**.

**S3-212813 Add conclusion to KI #1.2**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: China Mobile*

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

**S3-212818 Discussion on the conclusion of KI#1.3**

*Type: discussion For: Endorsement  
 33.866 v..  
 Source: China Mobile*

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

**S3-212982 Conclusion to KI 1.3**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

**Decision:** The document was **revised to S3-213050**.

**S3-213018 Conclusion on KI#1.3**

*Type: pCR For: Approval  
 33.866 v0.6.0  
 Source: Ericsson*

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

**S3-212992 Conclusion to KI 1.4**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

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

**S3-213019 Conclusion on KI#1.4**

*Type: pCR For: Approval  
 33.866 v0.6.0  
 Source: Ericsson*

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

**S3-212814 Add conclusion to KI #1.5**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: China Mobile*

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

**S3-212812 Solution to abnormal behaviour detection of IoT SIM card**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: China Mobile*

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

**S3-212985 Enhancement to the solution on Detection of anomalous NF behaviour by NWDAF**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

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

**S3-212986 Evaluation to the Solution 7**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

**Decision:** The document was **revised to S3-213047**.

**S3-212815 Add conclusion to KI #2.1**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: China Mobile*

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

**S3-212987 Conclusion to KI 2.2**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

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

**S3-212989 Update KI 3.3 - Ensuring restrictive transfer of ML models between authorized NWDAF instances**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

**Decision:** The document was **revised to S3-213046**.

**S3-212630 add evaluation for solution#3**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213113**.

**S3-212817 Add evaluation to solution #3**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: China Mobile*

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

**S3-212632 resovle EN for solution#3**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei,HiSilicon*

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

**S3-212658 Update to solution #14 to ML restrictive transfer of ML models**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-212988 Evaluation on Sol 14 - Solution to ML restrictive transfer Framework**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Approval

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

**S3-212660 Udpates to key issue #3.1 on attacker model**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-212661 Conclusion on key issue #3.2 on protection of UE data in transit**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213125**.

**S3-212816 Add conclusion to KI #3.2**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: China Mobile*

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

**S3-212659 Conclusion on key issue #3.3 on restrictive transfer of ML models**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-213039 Ed Note Removal for Solution 10**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212981)

**Abstract:**

Approval

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

**S3-213041 Editorial Notes Removal for Solution 10 to address authorization mechanisms when data is sent via MFAF**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212984)

**Abstract:**

Approval

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

**S3-213044 Evaluation to the Solution 10**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212983)

**Abstract:**

Approval

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

**S3-213045 Solution on Protection of data sent via MFAF using existing SBA mechanisms**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell, Huawei, HiSilicon*

(Replaces S3-212993)

**Abstract:**

Approval

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

**S3-213046 Update KI 3.3 - Ensuring restrictive transfer of ML models between authorized NWDAF instances**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212989)

**Abstract:**

Approval

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

**S3-213047 Evaluation to the Solution 7**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212986)

**Abstract:**

Approval

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

**S3-213048 Ed Note Removal for Solution 11**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212978)

**Abstract:**

Approval

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

**S3-213050 Conclusion to KI 1.3**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell, Lenovo, Motorola Mobility*

(Replaces S3-212982)

**Abstract:**

Approval

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

**S3-213051 Evaluation to the Solution 11**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212980)

**Abstract:**

Approval

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

**S3-213052 Ed Note Removal to include mechanism when notification sent via MFAF for Solution 11**

*Type: pCR For: (not specified)  
 33.866 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212979)

**Abstract:**

Approval

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

**S3-213064 Adding Evaluation to Solution#4**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Lenovo, Motorola Mobility*

(Replaces S3-212996)

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

**S3-213094 draft TR 33.866 0.6.0**

*Type: draft TR For: Approval  
 33.866 v0.6.0  
 Source: China Mobile Com. Corporation*

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

**S3-213113 add evaluation for solution#3**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei, HiSilicon, China Mobile*

(Replaces S3-212630)

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

**S3-213124 Conclusion on key issue #1.2**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei, HiSilicon, China Mobile*

(Replaces S3-212657)

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

**S3-213125 Conclusion on key issue #3.2 on protection of UE data in transit**

*Type: pCR For: Approval  
 33.866 v0.5.0  
 Source: Huawei, HiSilicon, China Mobile*

(Replaces S3-212661)

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

**S3-213151 Update\_on\_Key\_issue#1.4**

*Type: pCR For: Approval  
 33.866 v0.6.0  
 Source: Ericsson*

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

**S3-213152 Update\_on\_Key\_issue#1.4**

*Type: pCR For: Approval  
 33.866 v0.6.0  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

(Replaces S3-213015)

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

**S3-213153 Update\_on\_Solution#12**

*Type: pCR For: Approval  
 33.866 v0.6.0  
 Source: Ericsson*

(Replaces S3-213017)

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

**S3-213154 Update\_on\_Solution#5**

*Type: pCR For: Approval  
 33.866 v0.6.0  
 Source: Ericsson, Lenovo, Motorola Mobility*

(Replaces S3-213016)

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

### 5.17 Study on the security of AMF re-allocation

**S3-212663 Discussion on registraiton request messgae being rerouted**

*Type: discussion For: Endorsement  
 33.864 v..  
 Source: Huawei, HiSilicon*

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

**S3-212664 Updates to clause #4.3**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-212494 Updates to terminology in the architecture assumptions**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213073**.

**S3-212492 Updates to solution #2**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Ericsson*

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

**S3-212662 Updates to solutoin #3**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-212936 Update to Solution#4**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR provides an update to cleanup solution #4 in TR 33.864.

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

**S3-212919 Removal of Editor’s Note in Solution #5**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Samsung*

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

**S3-212493 Updates to solution #9**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Ericsson*

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

**S3-212926 Update to Solution #10**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Samsung*

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

**S3-212561 Resolve the EN about the GUTI collision in solution #11**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: ZTE Corporation*

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

**S3-212562 Update the solution #11**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-213086**.

**S3-212946 Solution to address KI#1**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR provides a new solution to address Key Issue #1 in TR 33.864.

**Decision:** The document was **revised to S3-213049**.

**S3-212665 Discussion on exposing NAS security context to RAN**

*Type: discussion For: Endorsement  
 33.864 v..  
 Source: Huawei, HiSilicon*

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

**S3-212918 [AMF Re-alloc] Proposed Way Forward**

*Type: discussion For: Endorsement  
 33.864 v..  
 Source: Samsung*

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

**S3-212499 Conclusion for the study**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Ericsson*

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

**S3-212560 Conclusion for the key issue 1**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: ZTE Corporation*

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

**S3-212850 Proposed conclusion for AMF Re-allocation**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-212949 Conclusion to KI#1**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR provides conclusion to Key Issue #1 in TR 33.864.

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

**S3-212498 AMF re-allocation: Discussion about the WID**

*Type: discussion For: Discussion  
 Source: Ericsson*

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

**S3-213035 LS on full registration request in AMF reallocation via RAN**

*Type: LS out For: Approval  
 to SA2, cc CT1,RAN3  
 Source: Huawei, HiSilicon*

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

**S3-213049 Solution to address KI#1**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Lenovo, Motorola Mobility*

(Replaces S3-212946)

**Abstract:**

This pCR provides a new solution to address Key Issue #1 in TR 33.864.

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

**S3-213072 Draft TR 33.864 v0.6.0 Study on the security of Access and Mobility Management Function (AMF) re-allocation**

*Type: draft TR For: Approval  
 33.864 v0.6.0  
 Source: Ericsson Hungary Ltd*

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

**S3-213073 Updates to terminology in the architecture assumptions**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: Ericsson*

(Replaces S3-212494)

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

**S3-213086 Update the solution #11**

*Type: pCR For: Approval  
 33.864 v0.5.0  
 Source: ZTE Corporation*

(Replaces S3-212562)

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

### 5.18 Study on Security for NR Integrated Access and Backhaul

**S3-212922 [IAB] Add requirement to Key Issue #2.4**

*Type: pCR For: Approval  
 33.824 v0.9.0  
 Source: Samsung*

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

**S3-212923 [IAB] Solution on authenticity verification of BH-RLF indication**

*Type: pCR For: Approval  
 33.824 v0.9.0  
 Source: Samsung*

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

**S3-212924 [IAB] Solution to protect the BAP control PDU exchange**

*Type: pCR For: Approval  
 33.824 v0.9.0  
 Source: Samsung*

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

**S3-212925 [IAB] Conclusion for KI#2.4**

*Type: pCR For: Approval  
 33.824 v0.9.0  
 Source: Samsung*

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

### 5.19 Study on the security of the system enablers for devices having multiple Universal Subscriber Identity Modules

**S3-212437 Reply LS on NAS-based busy indication**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-212877*

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

**S3-212438 Reply LS on NAS-based busy indication**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2105150*

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

**S3-212682 Cleanup MUSIM TR**

*Type: draftCR For: Approval  
 33.873 v17.0.0  
 Source: Intel Corporation (UK) Ltd*

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

**S3-212687 Key issue on security aspects of Paging Cause**

*Type: draftCR For: Approval  
 33.873 v17.0.0  
 Source: Intel Corporation (UK) Ltd*

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

**S3-213155 Cleanup MUSIM TR**

*Type: CR For: (not specified)  
 33.873 v17.0.0 CR-0001 Cat: F (Rel-17)  
  
 Source: Intel Corporation (UK) Ltd*

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

**S3-213156 Key issue on security aspects of Paging Cause**

*Type: CR For: (not specified)  
 33.873 v17.0.0 CR-0002 Cat: B (Rel-17)  
  
 Source: Intel Corporation (UK) Ltd*

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

### 5.20 Study on enhanced Security Aspects of the 5G Service Based Architecture

**S3-212882 Sol 1 NFp verification – EN resolutions and evaluation**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213053**.

**S3-212927 Update on Solution 6**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-213141**.

**S3-212929 Evaluation for solution 1**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-213142**.

**S3-212932 Conclusion for KI#1**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

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

**S3-212653 Requirement of subscribe-notification key issue**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Samsung*

**Decision:** The document was **revised to S3-213122**.

**S3-212887 SCP authorization**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213054**.

**S3-212888 SCP authorization solution evaluation**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212763 Correction of implementation of S3-211046**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Ericsson*

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

**S3-212761 Update to Solution #3 "Using existing procedures for authorization of SCP to act on behalf of an NF Consumer"**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213043**.

**S3-212762 Conclusion to Key Issue #4 "Authorization of SCP to act on behalf of an NF or another SCP"**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Ericsson*

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

**S3-212889 SCP authorization conclusion**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212418 Reply LS on end-to-end protection of HTTP message for Indirect communication**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-213369*

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

**S3-212764 Update Solution #5: End-to-end integrity protection of HTTP body and method**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Ericsson*

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

**S3-212930 Evaluation for solution 4**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

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

**S3-212931 Evaluation for solution 5**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-213143**.

**S3-212928 New solution on key issue #5**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

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

**S3-212933 Conclusion for KI#5**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

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

**S3-212885 Access token request for NF Set – EN resolution**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213055**.

**S3-212886 Access token request for NF Set – RFC clarification**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213056**.

**S3-212519 Authorization of IPX by PLMN in indirect roaming**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: CableLabs*

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

**S3-212640 Discussion on NF Domain granularity authorization**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-212641 New KI on NF Domain granularity authorization**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-212651 New Key issue on authorization mechanism negotiation**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Huawei, HiSilicon; China Mobile*

**Decision:** The document was **revised to S3-213120**.

**S3-212652 New solution for the authorization mechanism negotiation**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Huawei, HiSilicon; China Mobile*

**Decision:** The document was **revised to S3-213121**.

**S3-212671 New key issue on service authorization in request redirection**

*Type: pCR For: Approval  
 33.857 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-212672 New solution on AF authorization**

*Type: pCR For: Approval  
 33.857 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-212878 KI and solution to NRF deployments**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213057**.

**S3-212879 vNRF-hNRF mutual authentication in service access authorization**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212876 Reply LS on Misalignment on usage of OAuth within 3GPP 29.510**

*Type: LS out For: Approval  
 to GSMA FASG RIFS / 5GIS  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213192**.

**S3-212890 KI and Solution for verification of NFc by NF producers**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212916 KI on Authorization for Inter-Slice Access**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-213139**.

**S3-213043 Update to Solution #3 "Using existing procedures for authorization of SCP to act on behalf of an NF Consumer"**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Ericsson*

(Replaces S3-212761)

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

**S3-213053 Sol 1 NFp verification – EN resolutions and evaluation**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212882)

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

**S3-213054 SCP authorization**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212887)

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

**S3-213055 Access token request for NF Set – EN resolution**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212885)

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

**S3-213056 Access token request for NF Set – RFC clarification**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212886)

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

**S3-213057 KI and solution to NRF deployments**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212878)

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

**S3-213058 EN resolution on trust model for SCP**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212884)

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

**S3-213061 Way forward SID eSBA**

*Type: pCR For: Endorsement  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212880)

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

**S3-212917 New Solution to KI #X: Authorization for Inter-Slice Access**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

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

**S3-213120 New Key issue on authorization mechanism negotiation**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Huawei, HiSilicon; China Mobile*

(Replaces S3-212651)

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

**S3-213121 New solution for the authorization mechanism negotiation**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Huawei, HiSilicon; China Mobile*

(Replaces S3-212652)

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

**S3-213122 Requirement of subscribe-notification key issue**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Samsung*

(Replaces S3-212653)

**Decision:** The document was **revised to S3-213166**.

**S3-213139 KI on Authorization for Inter-Slice Access**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

(Replaces S3-212916)

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

**S3-213141 Update on Solution 6**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

(Replaces S3-212927)

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

**S3-213142 Evaluation for solution 1**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung,Nokia, Nokia Shanghai Bell*

(Replaces S3-212929)

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

**S3-213143 Evaluation for solution 5**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Samsung*

(Replaces S3-212931)

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

**S3-213166 Requirement of subscribe-notification key issue**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Samsung*

(Replaces S3-213122)

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

**S3-213167 Draft TR 33.875**

*Type: draft TR For: (not specified)  
 33.875 v0.4.0  
 Source: Nokia Germany*

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

**S3-213192 Reply LS on Misalignment on usage of OAuth within 3GPP 29.510**

*Type: LS out For: Approval  
 to GSMA FASG RIFS 5GIS, cc CT4  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212876)

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

**S3-212883 Editorial update on trust clause**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212884 EN resolution on trust model for SCP**

*Type: pCR For: Approval  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213058**.

**S3-212880 Way forward SID eSBA**

*Type: pCR For: Endorsement  
 33.875 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-213061**.

### 5.21 Study on enhanced security for network slicing Phase 2

**S3-212574 Update to KI#1 (NSSAI analysis)**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213133**.

**S3-213030 Update to Key Issue #1**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR corrects the RAN TR number in Key issue #1 to TR 33.874.

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

**S3-212482 New Key Issue on Network Slice Quota DoS**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Johns Hopkins University APL, US National Security Agency, CableLabs, InterDigital, AT&T, CISA ECD, Verizon*

**Abstract:**

This contribution proposes a new key issue identifying a DoS vulnerability in the Network Slice Quota functionality as defined in TS 23.502, clause 4.2.11 on Network Slice Admission Control Function (NSACF) procedures.

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

**S3-212575 New KI on DoS to NSAC procedure**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213134**.

**S3-212576 New KI on AF authentication and authorization**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213140**.

**S3-212577 New KI on simultaneous use of network slice**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

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

**S3-213029 New KI on Compromised slice information**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR proposes a Key issue on compromised slice information to TR 33.874.

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

**S3-212483 New Solution to Network Slice Quota DoS**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Johns Hopkins University APL, US National Security Agency, CableLabs, InterDigital, AT&T, CISA ECD, Verizon*

**Abstract:**

This contribution proposes a solution to the new key issue on Network Slice Quota DoS proposed in S3-212482. The solution address a DoS vulnerability in the Network Slice Quota functionality as defined in TS 23.502, clause 4.2.11 on Network Slice Admissi

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

**S3-212588 Solution on AF authorization**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-213144**.

**S3-212590 Solution to prevent information leakage between mutual exclusive slices**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

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

**S3-212591 Solution of NSAC based on slice usage**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

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

**S3-212592 Solution to decouple NSAC and NSSAA status**

*Type: pCR For: Approval  
 33.874 v0.0.0  
 Source: Huawei, HiSilicon*

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

**S3-212593 Solution on restriction in EAC inactive modes**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

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

**S3-213036 LS on NSAC procedure**

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

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

**S3-213133 Update to KI#1 (NSSAI analysis)**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212574)

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

**S3-213134 New KI on DoS to NSAC procedure**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212575)

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

**S3-213140 New KI on AF authentication and authorization**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212576)

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

**S3-213144 Solution on AF authorization**

*Type: pCR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212588)

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

**S3-213145 draft TR 33.874-030**

*Type: draft TR For: (not specified)  
 33.874 v0.3.0  
 Source: Huawei; HiSilicon*

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

### 5.22 Study on non-seamless WLAN Offload in 5GS using 3GPP credentials

**S3-212513 LS on proposed NSWO architecture**

*Type: LS out For: Approval  
 to SA2  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

LS out to SA2 for NSWO architecture

**Decision:** The document was **revised to S3-213174**.

**S3-212514 Non-Seamless WLAN offload Authentication in 5GS**

*Type: pCR For: Approval  
 33.881 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell, AT&T*

**Abstract:**

New NSWO solution proposal

**Decision:** The document was **revised to S3-213037**.

**S3-212594 A new solution to address KI#1**

*Type: pCR For: Approval  
 33.881 v0.1.0  
 Source: Huawei, HiSilicon*

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

**S3-212870 Solution for 5G NSWO authentication**

*Type: pCR For: Approval  
 33.881 v0.1.0  
 Source: Qualcomm Incorporated*

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

**S3-212873 Solution to KI#1 (Support of EAP-AKA’ authentication for NSWO) using credentials retrieved from UDM**

*Type: pCR For: (not specified)  
 33.881 v0.1.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-213091**.

**S3-212875 Solution to KI#1 (Support of EAP-AKA’ authentication for NSWO) using credentials retrieved from UDM/ARPF via HSS**

*Type: pCR For: (not specified)  
 33.881 v0.1.0  
 Source: Ericsson*

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

**S3-212999 Solution on NSWO authentication with AAA-Server**

*Type: pCR For: Approval  
 33.881 v0.1.0  
 Source: Lenovo, Motorola Mobility*

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

**S3-213001 Solution on NSWO authentication via an interworking function**

*Type: pCR For: Approval  
 33.881 v0.1.0  
 Source: Lenovo, Motorola Mobility*

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

**S3-213037 Non-Seamless WLAN offload Authentication in 5GS**

*Type: pCR For: Approval  
 33.881 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell, AT&T,Lenovo, Motorola Mobility, Huawei, HiSilicon, Samsung, Intel, Qualcomm Incorporated, Thales*

(Replaces S3-212514)

**Abstract:**

New NSWO solution proposal

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

**S3-213075 TR 33.881 revision for NSWO**

*Type: draft TR For: Approval  
 33.881 v0.2.0  
 Source: Nokia Corporation*

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

**S3-213091 Solution to KI#1 (Support of EAP-AKA’ authentication for NSWO) using credentials retrieved from UDM**

*Type: pCR For: (not specified)  
 33.881 v0.1.0  
 Source: Ericsson*

(Replaces S3-212873)

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

**S3-213174 LS on proposed NSWO architecture**

*Type: LS out For: Approval  
 to SA2  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212513)

**Abstract:**

LS out to SA2 for NSWO architecture

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

## 6 CVD and research

**S3-212449 Attack preventing NAS procedures to succeed**

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

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

**S3-212452 Stealth Pirating Attack by RACH Rebroadcast Overwriting (SPARROW)**

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

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

**S3-212793 Discussion paper on GSMA LS of SPARROW attack**

*Type: discussion For: Endorsement  
 Source: Apple*

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

**S3-213003 Padding SUPIs in NAI format for non-null schemes**

*Type: CR For: Agreement  
 33.501 v17.2.1 CR-1198 Cat: C (Rel-17)  
  
 Source: Ericsson, AT&T, CableLabs*

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

**S3-212790 Discussion paper on the FSAG Doc 92\_003 on NAS messages attack**

*Type: discussion For: Endorsement  
 Source: Apple*

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

**S3-212791 CR on TS 33.501 on adding requirement to mitigate the attack of selectively dropping NAS messages**

*Type: CR For: Endorsement  
 33.501 v17.2.1 CR-1181 Cat: C (Rel-17)  
  
 Source: Apple*

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

**S3-212792 Reply to GSMA on FSAG Doc 92\_003 on NAS messages attack**

*Type: LS out For: Approval  
 to GSMA  
 Source: Apple*

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

## 7 Any Other Business

**S3-212462 New WID for Study of privacy of Over the Air identities**

*Type: SID new For: Discussion  
 Source: InterDigital, Inc., Apple, AT&T, CableLabs, Futurewei, Verizon Wireless*

**Abstract:**

This proposed Study is to focus on comprehensive investigation of various 3GPP identities, their privacy requirements, possible privacy attacks involving 3GPP identities, and potential attack remediations, while initially concentrating of the OTA identiti

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

**S3-213032 SA3 meeting calendar**

*Type: other For: Information  
 Source: WG Chair*

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

## Annex A: Contribution documents and status

### A1: List of TDocs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| S3-212400 | Agenda | SA WG3 Chair | approved |  |  |
| S3-212401 | Report from SA3#103e | MCC | approved |  |  |
| S3-212402 | Process for SA3#104e meeting | SA WG3 Chair | noted |  |  |
| S3-212403 | Report from last SA | SA WG3 Chair | noted |  |  |
| S3-212404 | Meeting notes from SA3 leadership | SA WG3 Chair | noted |  |  |
| S3-212405 | Observations on TR 33.846 | JSRPC Kryptonite | withdrawn |  |  |
| S3-212406 | New solution proposal | JSRPC Kryptonite | withdrawn |  |  |
| S3-212407 | Observations on TR 33.846 | JSRPC Kryptonite | noted |  |  |
| S3-212408 | New solution proposal | JSRPC Kryptonite | revised |  | S3-213216 |
| S3-212409 | LS on OAuth2 misalignments between SA3 and CT4 specifications | CP-211326 | replied to |  | - |
| S3-212410 | Misalignment on usage of OAuth within 3GPP 29.510 | GSMA | replied to |  |  |
| S3-212411 | LS on UE capabilities indication in UPU | S2-2101072 | postponed |  |  |
| S3-212412 | Reply LS on UE capabilities indication in UPU | C1-212599 | postponed |  |  |
| S3-212413 | LS reply on SDP attribute a=key-mgmt:mikey | C1-213548 | noted |  |  |
| S3-212414 | LS on support of PWS over SNPN | S1-210368 | postponed |  |  |
| S3-212415 | Reply LS on support of PWS over SNPN | C1-213640 | noted |  |  |
| S3-212416 | Reply LS on support of PWS over SNPN in R17 | R3-212863 | noted |  |  |
| S3-212417 | Reply LS on support of PWS over NPN | SP-210584 | noted |  |  |
| S3-212418 | Reply LS on end-to-end protection of HTTP message for Indirect communication | C4-213369 | noted |  |  |
| S3-212419 | Reply to LS on Resynchronisations | ETSI SAGE | postponed |  |  |
| S3-212420 | Prevention of attacks on sliced core network | GSMA | replied to |  |  |
| S3-212421 | Support of UAVs authentication/authorization in 3GPP systems and interfacing with USS/UTM | GSMA | postponed |  |  |
| S3-212422 | Reply LS on Support of UAVs authentication/authorization in 3GPP systems and interfacing with USS/UTM | S2-214895 | noted |  |  |
| S3-212423 | Reply LS to GSMA-ACJA: 3GPP SA1 clarifications on problematic UAV | S2-214916 | noted |  |  |
| S3-212424 | LS on Layer-3 UE-to-Network Relay authentication and authorization | S2-2101623 | replied to |  |  |
| S3-212425 | 256-bit algorithms based on SNOW 3G or SNOW V | ETSI SAGE | replied to |  |  |
| S3-212426 | LS re Penetration Testing of SCAS | GSMA | postponed |  |  |
| S3-212427 | LS on security aspects for the method of collection of data from the UE | S2-213263 | replied to |  |  |
| S3-212428 | LS to SA3 on Small data transmissions | R2-2104401 | replied to |  |  |
| S3-212429 | LS for clarification on managing expired or multiple Protection Scheme and Home Network keys used for SUCI calculation. | C6-210180 | replied to |  |  |
| S3-212430 | LS on new work item on draft Recommendation ITU-T F.VG-VMA "Architecture of vehicular multimedia systems" [to various organizations] | ITU-T Focus Group on Vehicular Multimedia (FG-VM) | noted |  |  |
| S3-212431 | LS on broadcast of NTN GW or gNB position | R1-2106332 | postponed |  |  |
| S3-212432 | New LS on UE location aspects in NTN | R2-2106543 | postponed |  |  |
| S3-212433 | Reply LS on UE location aspects in NTN | R3-212917 | noted |  |  |
| S3-212434 | LS to SA3 on SLIC | R2-2106516 | noted |  |  |
| S3-212435 | S on QoE report handling at QoE pause | R2-2106775 | noted |  |  |
| S3-212436 | Reply LS to LS on User Plane Integrity Protection for eUTRA connected to EPC | R3-212812 | replied to |  |  |
| S3-212437 | Reply LS on NAS-based busy indication | R3-212877 | noted |  |  |
| S3-212438 | Reply LS on NAS-based busy indication | S2-2105150 | noted |  |  |
| S3-212439 | LS on 5G capabilities exposure for factories of the future | S2-2104794 | noted |  |  |
| S3-212440 | LS on 5G capabilities exposure for factories of the future | S6-211497 | noted |  |  |
| S3-212441 | Reply LS to SA4 on UE Data Collection | S2-2104864 | noted |  |  |
| S3-212442 | Reply LS to SA2 on UE Data Collection | S4-210961 | noted |  |  |
| S3-212443 | LS on progress of study items for security on management aspect | S5-213456 | noted |  |  |
| S3-212444 | LS on new SID on Application Enablement for Data Integrity Verification Service in IOT | S6-211496 | postponed |  |  |
| S3-212445 | LS on ITU-T SG17 new work item X.5Gsec-message: Security requirements for 5G message service | ITU-T SG17 | noted |  |  |
| S3-212446 | LS on ITU-T SG17 new work item X.sa-ec ‘Security architecture for edge cloud’ | ITU-T SG17 | noted |  |  |
| S3-212447 | LS on UAS terminology alignment | SP-210579 | noted |  |  |
| S3-212448 | Reply LS on the conclusion of FS\_MINT-CT | SP-210581 | noted |  |  |
| S3-212449 | Attack preventing NAS procedures to succeed | GSMA | postponed |  |  |
| S3-212450 | OAuth2.0 misalignmnet | Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung | revised |  | S3-213177 |
| S3-212451 | OAuth2.0 misalignmnet | Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung | revised |  | S3-213178 |
| S3-212452 | Stealth Pirating Attack by RACH Rebroadcast Overwriting (SPARROW) | GSMA | postponed |  |  |
| S3-212453 | Evaluation of Solution #22: Representation of identities during broadcast | KPN N.V. | noted |  |  |
| S3-212454 | Correction of message name in SMF | Keysight Technologies UK Ltd | withdrawn |  |  |
| S3-212455 | AMF – NAS NULL integrity protection clarifications (Rel-16) | Keysight Technologies UK Ltd | not pursued |  |  |
| S3-212456 | AMF – NAS NULL integrity protection clarifications (Rel-17) | Keysight Technologies UK Ltd | not pursued |  |  |
| S3-212457 | Conclusion on Key Issue #11: UE identity protection during ProSe discover | KPN N.V. | noted |  |  |
| S3-212458 | Living document for BEST\_5G: draftCR to TS 33.163 | KPN N.V. | revised |  | S3-213207 |
| S3-212459 | Correction of message name in SMF | Keysight Technologies UK Ltd | revised |  | S3-213186 |
| S3-212460 | Process and agenda for SA3#104-e | SA WG3 Chair | noted |  |  |
| S3-212461 | TCG progress - report from TCG rapporteur | InterDigital, Inc. | noted |  |  |
| S3-212462 | New WID for Study of privacy of Over the Air identities | InterDigital, Inc., Apple, AT&T, CableLabs, Futurewei, Verizon Wireless | noted |  |  |
| S3-212463 | Reply LS to GSMA on prevention of attacks on sliced core network | CableLabs | revised | S3-211527 | S3-213209 |
| S3-212464 | New solution: Keying procedures for Group Member and Relay discovery: public safety case | MITRE Corporation | revised |  | S3-213175 |
| S3-212465 | Update to KI #17 | MITRE Corporation | revised |  | S3-213176 |
| S3-212466 | New solution: Hardware Mediated Execution Enclave (HMEE) | MITRE Corporation | revised |  | S3-213217 |
| S3-212467 | [33.180] R17 Group subscription | Motorola Solutions Danmark A/S | revised |  | S3-213179 |
| S3-212468 | [33.180] R17 Preconfigured group clarification | Motorola Solutions Danmark A/S | not pursued |  |  |
| S3-212469 | Conclusion on Key Issue #12: Security of one-to-one communication over PC5 | KPN N.V. | noted |  |  |
| S3-212470 | Clean-up for KI#1 | LG Electronics Inc. | approved |  |  |
| S3-212471 | Updates on sol#10 | LG Electronics Inc. | withdrawn |  |  |
| S3-212472 | Evaluation for sol#13 | LG Electronics Inc. | revised |  | S3-213087 |
| S3-212473 | Editorial corrections for sol#10 | LG Electronics Inc. | approved |  |  |
| S3-212474 | New solution for UE onboarding | LG Electronics Inc. | noted |  |  |
| S3-212475 | New WID on Authentication enhancements in 5GS | Ericsson | noted |  |  |
| S3-212476 | Authentication enhancements: Discussion about the WID | Ericsson | noted |  |  |
| S3-212477 | Reply LS to SA6 on new SID on Application Enablement for Data Integrity Verification Service in IoT | China Unicom | noted |  |  |
| S3-212478 | TR 33.847 Update for solution #10 | InterDigital, Europe, Ltd. | revised |  | S3-213059 |
| S3-212479 | TR 33.847 Update for solution #24 | InterDigital, Europe, Ltd. | revised |  | S3-213060 |
| S3-212480 | New Solution Using Attestation for Key Issue #13 | Johns Hopkins University APL, US National Security Agency, CableLabs, InterDigital, AT&T, CISA ECD | noted |  |  |
| S3-212481 | TR 33.847 Update for solution #25 | InterDigital, Europe, Ltd. | revised |  | S3-213062 |
| S3-212482 | New Key Issue on Network Slice Quota DoS | Johns Hopkins University APL, US National Security Agency, CableLabs, InterDigital, AT&T, CISA ECD, Verizon | noted |  |  |
| S3-212483 | New Solution to Network Slice Quota DoS | Johns Hopkins University APL, US National Security Agency, CableLabs, InterDigital, AT&T, CISA ECD, Verizon | noted |  |  |
| S3-212484 | Way forward for L3 U2N Relay Authorization and security conclusions | InterDigital, Europe, Ltd., Samsung, LG Electronics, Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212485 | Conclusions for U2N relay Key Issues | InterDigital, Europe, Ltd., Samsung, LG Electronics, Nokia, Nokia Shanghai Bell | revised |  | S3-213063 |
| S3-212486 | Conclusion for Key Issue #3 | InterDigital, Europe, Ltd. | merged |  | S3-213130 |
| S3-212487 | Conclusion for Key Issue #5 | InterDigital, Europe, Ltd. | merged |  | S3-213132 |
| S3-212488 | Conclusion for Key Issue #6 | InterDigital, Europe, Ltd. | merged |  | S3-213079 |
| S3-212489 | New WID on IETF OSCORE Ua\* protocol profile for AKMA | Ericsson | noted |  |  |
| S3-212490 | IETF OSCORE as AKMA Ua\* protocol | Ericsson | not pursued |  |  |
| S3-212491 | Extending the Ua security protocol namespace to include the AKMA OSCORE Ua\* protocol | Ericsson | not pursued |  |  |
| S3-212492 | Updates to solution #2 | Ericsson | noted |  |  |
| S3-212493 | Updates to solution #9 | Ericsson | noted |  |  |
| S3-212494 | Updates to terminology in the architecture assumptions | Ericsson | revised |  | S3-213073 |
| S3-212495 | Rel16 Clarification about multiple horizontal key derivations upon AMF re-allocation via direct NAS reroute | Ericsson | not pursued |  |  |
| S3-212496 | Rel17 Clarification about multiple horizontal key derivations upon AMF re-allocation via direct NAS reroute | Ericsson | not pursued |  |  |
| S3-212497 | New WID on the security of AMF re-allocation | Ericsson | noted |  |  |
| S3-212498 | AMF re-allocation: Discussion about the WID | Ericsson | noted |  |  |
| S3-212499 | Conclusion for the study | Ericsson | noted |  |  |
| S3-212500 | Living document for GBA\_5G: draftCR to TS 33.220: SBA support for Zh and Zn interfaces | Ericsson | revised |  | S3-213245 |
| S3-212501 | Living document for GBA\_5G: draftCR to TS 33.223: SBA support for Zpn | Ericsson | revised |  | S3-213246 |
| S3-212502 | pCR to living document for TS 33.220: Support of GBA in UDM | Ericsson | merged |  | S3-213234 |
| S3-212503 | pCR to living document for TS 33.223: Support for GBA in UDM | Ericsson | approved |  |  |
| S3-212504 | DRAFT LS on SBA for GBA | Ericsson | revised |  | S3-213215 |
| S3-212505 | pCR to living document for TS 33.220: Correction of references | Ericsson | approved |  |  |
| S3-212506 | Rel16 Align KAUSF handling for 5G AKA and EAP-AKA' | Ericsson | revised |  | S3-213261 |
| S3-212507 | Rel17 Align KAUSF handling for 5G AKA and EAP-AKA' for Release 17 | Ericsson | revised |  | S3-213262 |
| S3-212508 | Addressing security threat against KAUSF derived from MSK | CableLabs | noted |  |  |
| S3-212509 | Update to solution#4.7 | Nokia, Nokia Shanghai Bell | approved |  |  |
| S3-212510 | Conclusion to Key Issue #4.1 | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212511 | Conclusion on Key issue #3.2 SUPI guessing attacks | Nokia, Nokia Shanghai Bell, Thales, NTT DOCOMO, NEC | revised |  | S3-213173 |
| S3-212512 | Editor note removal and update for solution#10 | Nokia, Nokia Shanghai Bell | revised |  | S3-213038 |
| S3-212513 | LS on proposed NSWO architecture | Nokia, Nokia Shanghai Bell | revised |  | S3-213174 |
| S3-212514 | Non-Seamless WLAN offload Authentication in 5GS | Nokia, Nokia Shanghai Bell, AT&T | revised |  | S3-213037 |
| S3-212515 | New WID on Non-Seamless WLAN offload Authentication in 5GS | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212516 | Updates on sol#13 | LG Electronics Inc. | revised |  | S3-213088 |
| S3-212517 | Concept of User Consent | China Unicom | withdrawn |  |  |
| S3-212518 | Update for Conclusion on Key Issue #4 | China Telecommunications, Huawei, HiSilicon | withdrawn |  |  |
| S3-212519 | Authorization of IPX by PLMN in indirect roaming | CableLabs | noted |  |  |
| S3-212520 | pCR: updating annex B in TR 33.809 | CableLabs | approved |  |  |
| S3-212521 | Further conclusions for KI #1 | CableLabs,Ericsson, Charter Communications, Intel | revised | S3-211521 | S3-213066 |
| S3-212522 | Update for Conclusion on Key Issue #4 | China Telecommunications, Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | revised |  | S3-213083 |
| S3-212523 | Short-lived public key-based solution for KI#2 | CableLabs,Deutsche Telekom AG, InterDigital, Johns Hopkins University APL, US National Security Agency | revised |  | S3-213210 |
| S3-212524 | Discussion on security of Small data transmissions | ZTE Corporation | noted |  |  |
| S3-212525 | Reply LS on Small data transmissions | ZTE Corporation | merged |  | S3-213034 |
| S3-212526 | Living document for SCAS\_5G\_IPUPS draftCR to TR 33.926 | ZTE Corporation | approved |  |  |
| S3-212527 | Living document for SCAS\_5G\_IPUPS draftCR to TS 33.513 | ZTE Corporation | approved |  |  |
| S3-212528 | Add Routing indicator in Authentication response | ZTE Corporation | agreed |  |  |
| S3-212529 | Resolution of EN on other parameter in clause 6.3 | ZTE Corporation | not pursued |  |  |
| S3-212530 | Resolve the Kaf update issue | ZTE Corporation | not pursued |  |  |
| S3-212531 | UDM notifies AAnF AKMA context removal and performs AAnF selection | ZTE Corporation | not pursued |  |  |
| S3-212532 | Update clause 6.1 about RID | ZTE Corporation | agreed |  |  |
| S3-212533 | Update clause 6.1 refer to Kausf stored in AUSF | ZTE Corporation | not pursued |  |  |
| S3-212534 | Discussion on refresh of KAF and no Kakma in AAn | ZTE Corporation | noted |  |  |
| S3-212535 | Add step 4 in annex B.1.2.2 | ZTE Corporation | revised |  | S3-213268 |
| S3-212536 | Add TLS1.3 to annex B.1.3 | ZTE Corporation | not pursued |  |  |
| S3-212537 | Delete the GBA\_Digest in annex B.1.2.2 | ZTE Corporation | not pursued |  |  |
| S3-212538 | Correct the description of KAUSF handling upon successful primary authentication-R16 | ZTE Corporation | not pursued |  |  |
| S3-212539 | Correct the description of KAUSF handling upon successful primary authentication-R17 | ZTE Corporation | not pursued |  |  |
| S3-212540 | Add evaluation for solution 3.3 | ZTE Corporation | noted |  |  |
| S3-212541 | Conclusion on key issue 3.2 | ZTE Corporation | noted |  |  |
| S3-212542 | Conclusion on key issue 4.1 | ZTE Corporation | noted |  |  |
| S3-212543 | Conclusion on key issue 1 | ZTE Corporation | merged |  | S3-213118 |
| S3-212544 | Conclusion on key issue 2 | ZTE Corporation | merged |  | S3-213119 |
| S3-212545 | Conclusion on key issue 7 | ZTE Corporation | merged |  | S3-213117 |
| S3-212546 | Conclusion of Key Issue #1 | ZTE Corporation | merged |  | S3-213109 |
| S3-212547 | Update to Solution #5 | ZTE Corporation | revised |  | S3-213081 |
| S3-212548 | Conclusion for UE to UE relay | ZTE Corporation | merged |  | S3-213106 |
| S3-212549 | Solution for key issue #17 | ZTE Corporation | noted |  |  |
| S3-212550 | Update the key issue#2 | ZTE Corporation | noted |  |  |
| S3-212551 | Update the solution#36 | ZTE Corporation | approved |  |  |
| S3-212552 | Add the evaluation of the solution #6 | ZTE Corporation | revised |  | S3-213084 |
| S3-212553 | Conclusion for the key issue 1 | ZTE Corporation | noted |  |  |
| S3-212554 | Conclusion for the key issue 2 | ZTE Corporation | merged |  | S3-213078 |
| S3-212555 | Update the solution #12 | ZTE Corporation | approved |  |  |
| S3-212556 | Update the solution #6 | ZTE Corporation | revised |  | S3-213085 |
| S3-212557 | New solution on control plane based provisioning PS to AUSF | ZTE Corporation | revised |  | S3-213082 |
| S3-212558 | New solution on control plane based provisioning PS to UDM | ZTE Corporation | approved |  |  |
| S3-212559 | Resolving ENs in Key Issue #2 | ZTE Corporation | noted |  |  |
| S3-212560 | Conclusion for the key issue 1 | ZTE Corporation | noted |  |  |
| S3-212561 | Resolve the EN about the GUTI collision in solution #11 | ZTE Corporation | approved |  |  |
| S3-212562 | Update the solution #11 | ZTE Corporation | revised |  | S3-213086 |
| S3-212563 | Concept of User Consent | China Unicom, Huawei, HiSilicon | noted |  |  |
| S3-212564 | Annex X on EAP\_TTLS for SNPN | CableLabs, Ericsson, Charter Communications, Intel | noted |  |  |
| S3-212565 | Storage of Kausf | NEC Corporation | not pursued |  |  |
| S3-212566 | modification to the solution 6.2.10 | NEC Corporation | approved |  |  |
| S3-212567 | conclusion to key issue 2.2 | NEC Corporation | noted |  |  |
| S3-212568 | Update to solution #25 | Huawei, HiSilicon | noted |  |  |
| S3-212569 | Evaluation of solution #4 | Huawei, HiSilicon | noted |  |  |
| S3-212570 | Conclusion for KI#3 | Huawei, HiSilicon | noted |  |  |
| S3-212571 | Serving network ID in NSSAA | Huawei, HiSilicon | not pursued |  |  |
| S3-212572 | Validity peirod of NSSAA result | Huawei, HiSilicon | not pursued |  |  |
| S3-212573 | Clarification on optional EAP ID Request in NSSAA Procedure | Huawei, HiSilicon | not pursued |  |  |
| S3-212574 | Update to KI#1 (NSSAI analysis) | Huawei, HiSilicon | revised |  | S3-213133 |
| S3-212575 | New KI on DoS to NSAC procedure | Huawei, HiSilicon | revised |  | S3-213134 |
| S3-212576 | New KI on AF authentication and authorization | Huawei, HiSilicon | revised |  | S3-213140 |
| S3-212577 | New KI on simultaneous use of network slice | Huawei, HiSilicon | noted |  |  |
| S3-212578 | Draft LS to GSMA on interfacing with USS/UTM | Huawei, HiSilicon | noted |  |  |
| S3-212579 | Conclusion to KI#3 (TPAE AA) | Huawei, HiSilicon | revised |  | S3-213130 |
| S3-212580 | Conclusion to KI#5 (privacy of UAS identities) | Huawei, HiSilicon | revised |  | S3-213132 |
| S3-212581 | Conclusion to KI#6 (UAV to UTM) | Huawei, HiSilicon | merged |  | S3-213079 |
| S3-212582 | Overview on UAV authentication and authorization (UAA) | Huawei, HiSilicon | revised |  | S3-213219 |
| S3-212583 | UAA procedure at registration (5G) | Huawei, HiSilicon | noted |  |  |
| S3-212584 | UAA procedure at PDU session establsihment (5G) | Huawei, HiSilicon | noted |  |  |
| S3-212585 | UAA re-authentication procedure (5G) | Huawei, HiSilicon | noted |  |  |
| S3-212586 | Revocation of UAA | Huawei, HiSilicon | noted |  |  |
| S3-212587 | Pairing authorizaiton of UAS and UAV | Huawei, HiSilicon | noted |  |  |
| S3-212588 | Solution on AF authorization | Huawei, HiSilicon | revised |  | S3-213144 |
| S3-212589 | Skeloton for clause UAA | Huawei, HiSilicon | noted |  |  |
| S3-212590 | Solution to prevent information leakage between mutual exclusive slices | Huawei, HiSilicon | noted |  |  |
| S3-212591 | Solution of NSAC based on slice usage | Huawei, HiSilicon | noted |  |  |
| S3-212592 | Solution to decouple NSAC and NSSAA status | Huawei, HiSilicon | noted |  |  |
| S3-212593 | Solution on restriction in EAC inactive modes | Huawei, HiSilicon | noted |  |  |
| S3-212594 | A new solution to address KI#1 | Huawei, HiSilicon | merged |  | S3-213037 |
| S3-212595 | A new testcase to NSSAAF SCAS | Huawei, HiSilicon | revised |  | S3-213249 |
| S3-212596 | An editoral change to TS 33.216 | Huawei, HiSilicon | agreed |  |  |
| S3-212597 | Clarification on AS key generation after runing NAS SMC | Huawei, HiSilicon | revised |  | S3-213250 |
| S3-212598 | Clarification on Kausf storage in multi-NAS connection | Huawei, HiSilicon | revised |  | S3-213191 |
| S3-212599 | Clarification on Kausf storage in multi-NAS connection | Huawei, HiSilicon | revised |  | S3-213194 |
| S3-212600 | Clarification on AAnF selection | Huawei, HiSilicon | revised |  | S3-213252 |
| S3-212601 | NSSAAF SCAS cleanup | Huawei, HiSilicon | approved |  |  |
| S3-212602 | CR to 33.926 threat analysis on select AAA-P and AAA-S | Huawei, HiSilicon | revised |  | S3-213251 |
| S3-212603 | conclusion to KI#2 | Huawei, HiSilicon | revised |  | S3-213105 |
| S3-212604 | conclusion to KI#5 to KI#8 | Huawei, HiSilicon | revised |  | S3-213106 |
| S3-212605 | conclusion to KI#11 | Huawei, HiSilicon | noted |  |  |
| S3-212606 | add reference to TS 33.512 | Huawei, HiSilicon | agreed |  |  |
| S3-212607 | Add a new procedure to enable the AF to refresh the Kaf | Huawei, HiSilicon | withdrawn |  |  |
| S3-212608 | Resolve EN in Sol#27 | Huawei, HiSilicon | revised |  | S3-213107 |
| S3-212609 | Resolve EN in Sol#28 | Huawei, HiSilicon | revised |  | S3-213108 |
| S3-212610 | New solution for one-to-one communication | Huawei, HiSilicon | noted |  |  |
| S3-212611 | Add conclusion to Key Issue #1 | Huawei, HiSilicon | revised |  | S3-213109 |
| S3-212612 | Add conclusion to Key Issue #3 | Huawei, HiSilicon | merged |  | S3-213063 |
| S3-212613 | Add conclusion to key Issue #9 | Huawei, HiSilicon | merged |  | S3-213063 |
| S3-212614 | Add conclusion to Key Issue #12 | Huawei, HiSilicon | noted |  |  |
| S3-212615 | Add conclusion to key Issue #16 | Huawei, HiSilicon | merged |  | S3-213163 |
| S3-212616 | Propose evaluation to sol #1 | Huawei, HiSilicon | approved |  |  |
| S3-212617 | Propose evaluation to sol #5 | Huawei, HiSilicon | noted |  |  |
| S3-212618 | UAV location information verification | Huawei, HiSilicon | revised |  | S3-213220 |
| S3-212619 | New solution to avoid policy mismatch | Huawei, HiSilicon | revised |  | S3-213110 |
| S3-212620 | Discussion on the bidding down attack during one-to-one communication establishment | Huawei, HiSilicon | noted |  |  |
| S3-212621 | Security solution for temporary group call | Huawei,HiSilicon | not pursued |  |  |
| S3-212622 | Correction to Authorization for indirect communication with delegated discovery procedure in rel16 | Huawei,HiSilicon | not pursued |  |  |
| S3-212623 | Correction to Authorization for indirect communication with delegated discovery procedure in rel17 | Huawei,HiSilicon | not pursued |  |  |
| S3-212624 | Correction to Deriving AKMA Application Key for a specific AF | Huawei,HiSilicon | not pursued |  |  |
| S3-212625 | New solution on UE-to-network relay Key management based on primary authentication | Huawei,HiSilicon | revised |  | S3-213111 |
| S3-212626 | Resolving the EN about the multiple EECs issues in solution 8 | Huawei,HiSilicon | revised |  | S3-213112 |
| S3-212627 | Add the missing references | Huawei,HiSilicon | agreed |  |  |
| S3-212628 | Add the missing references for Rel 16 | Huawei,HiSilicon | agreed |  |  |
| S3-212629 | Add the missing references for Rel 15 | Huawei,HiSilicon | agreed |  |  |
| S3-212630 | add evaluation for solution#3 | Huawei, HiSilicon | revised |  | S3-213113 |
| S3-212631 | update evaluation for solution#13 | Huawei, HiSilicon | approved |  |  |
| S3-212632 | resovle EN for solution#3 | Huawei,HiSilicon | approved |  |  |
| S3-212633 | Add a new procedure to enable the AF to refresh the Kaf | Huawei, HiSilicon | not pursued |  |  |
| S3-212634 | Discussion on UE capabilities indication in UPU | Huawei, HiSilicon | noted |  |  |
| S3-212635 | reply LS on UE capabilities indication in UPU | Huawei, HiSilicon | noted |  |  |
| S3-212636 | Editorial change in SIP digest | Huawei, HiSilicon | approved |  |  |
| S3-212637 | roaming-related security mechanisms | Huawei, HiSilicon | revised |  | S3-213235 |
| S3-212638 | EN romoval for solution#23 | Huawei, HiSilicon | revised |  | S3-213116 |
| S3-212639 | Solution on Authorization of Data Consumers for data access via DCCF | Huawei, HiSilicon | noted |  |  |
| S3-212640 | Discussion on NF Domain granularity authorization | Huawei, HiSilicon | noted |  |  |
| S3-212641 | New KI on NF Domain granularity authorization | Huawei, HiSilicon | noted |  |  |
| S3-212642 | UP Security policy requirement on the IMS data network | Huawei, HiSilicon | not pursued |  |  |
| S3-212643 | EC: Conclusion for Key issue #1 | Huawei, HiSilicon | noted |  | - |
| S3-212644 | EC: Conclusion for Key issue #2 | Huawei, HiSilicon | noted |  | - |
| S3-212645 | EC : Conclusion for Key issue #7 | Huawei, HiSilicon | revised |  | S3-213117 |
| S3-212646 | EC: Conclusion for Key issue #10 | Huawei, HiSilicon | noted |  |  |
| S3-212647 | EC: Skeleton for the new TS 33.558 | Huawei, HiSilicon | approved |  |  |
| S3-212648 | TS 33.558: Security requirements | Huawei, HiSilicon | revised |  | S3-213225 |
| S3-212649 | TS 33.558: Security for the EDGE interfaces | Huawei, HiSilicon | revised |  | S3-213226 |
| S3-212650 | TS 33.558: adding the scope | Huawei, HiSilicon | approved |  |  |
| S3-212651 | New Key issue on authorization mechanism negotiation | Huawei, HiSilicon; China Mobile | revised |  | S3-213120 |
| S3-212652 | New solution for the authorization mechanism negotiation | Huawei, HiSilicon; China Mobile | revised |  | S3-213121 |
| S3-212653 | Requirement of subscribe-notification key issue | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Samsung | revised |  | S3-213122 |
| S3-212654 | Clarification on SoR transparent container | Huawei, HiSilicon | agreed |  |  |
| S3-212655 | MBS:Discussion paper on Authentication and authorization for multicast service | Huawei, HiSilicon | endorsed |  |  |
| S3-212656 | Conclusion on authentication and authorization for multicast service | Huawei, HiSilicon | revised |  | S3-213123 |
| S3-212657 | Conclusion on key issue #1.2 | Huawei, HiSilicon | revised |  | S3-213124 |
| S3-212658 | Update to solution #14 to ML restrictive transfer of ML models | Huawei, HiSilicon | approved |  |  |
| S3-212659 | Conclusion on key issue #3.3 on restrictive transfer of ML models | Huawei, HiSilicon | approved |  |  |
| S3-212660 | Udpates to key issue #3.1 on attacker model | Huawei, HiSilicon | approved |  |  |
| S3-212661 | Conclusion on key issue #3.2 on protection of UE data in transit | Huawei, HiSilicon | revised |  | S3-213125 |
| S3-212662 | Updates to solutoin #3 | Huawei, HiSilicon | noted |  |  |
| S3-212663 | Discussion on registraiton request messgae being rerouted | Huawei, HiSilicon | noted |  |  |
| S3-212664 | Updates to clause #4.3 | Huawei, HiSilicon | noted |  |  |
| S3-212665 | Discussion on exposing NAS security context to RAN | Huawei, HiSilicon | noted |  |  |
| S3-212666 | Adding for NSSAAF network product class description and assets and critical assets | Huawei, HiSilicon | revised |  | S3-213228 |
| S3-212667 | New threat related to unauthorized slice-specific authorization revocatoin | Huawei, HiSilicon | revised |  | S3-213229 |
| S3-212668 | Comparison of services for providing GBA 5G AV | Huawei, HiSilicon | noted |  |  |
| S3-212669 | New service on 5G GBA AV | Huawei, HiSilicon | revised |  | S3-213230 |
| S3-212670 | Claifications on SoR enablement | Huawei, HiSilicon | not pursued |  |  |
| S3-212671 | New key issue on service authorization in request redirection | Huawei, HiSilicon | noted |  |  |
| S3-212672 | New solution on AF authorization | Huawei, HiSilicon | withdrawn |  |  |
| S3-212673 | New key issue on AF authorization | Huawei, HiSilicon | noted |  |  |
| S3-212674 | New solution on AF authorization | Huawei, HiSilicon | noted |  |  |
| S3-212675 | Conclusion to key issue on unauthorized MBS session operation | Huawei, HiSilicon | noted |  |  |
| S3-212676 | Discussion paper on 256-bit algorithms based on ZUC-256 | CAICT, China Mobile, China Unicom, China Telecom, CBN | noted |  |  |
| S3-212677 | Updates to solution #17 capability negotiation | Intel Corporation (UK) Ltd | revised |  | S3-213259 |
| S3-212678 | Solution 4: Clarify and update EN related Secondary authentication | Intel Corporation (UK) Ltd | approved |  |  |
| S3-212679 | Reply-LS on security aspects for the method of collection of data from the UE | Guangdong OPPO Mobile Telecom. | revised |  | S3-213271 |
| S3-212680 | Solution 4: Clarify and update EN Application Client | Intel Corporation (UK) Ltd | approved |  |  |
| S3-212681 | LS on reply to SA6 about new SID on Application Enablement for Data Integrity Verification Service in IOT | Nokia, Nokia Shanghai Bell | revised |  | S3-213185 |
| S3-212682 | Cleanup MUSIM TR | Intel Corporation (UK) Ltd | approved |  |  |
| S3-212683 | Editorial Clarifications for Trusted non-3GPP Access using TNGF | Intel Corporation (UK) Ltd | revised |  | S3-213237 |
| S3-212684 | pCR to Living doc on addition of 5G to BEST - addition of EMSDP updates | VODAFONE Group Plc | revised |  | S3-213263 |
| S3-212685 | Reply LS on Small data transmission | Intel Corporation (UK) Ltd | merged |  | S3-213034 |
| S3-212686 | Response LS on 256-bit algorithms based on SNOW 3G or SNOW V | VODAFONE Group Plc | revised |  | S3-213267 |
| S3-212687 | Key issue on security aspects of Paging Cause | Intel Corporation (UK) Ltd | approved |  |  |
| S3-212688 | Updates to solution 14: Removal of Editor’s notes: Security Issues | Intel Corporation (UK) Ltd | revised |  | S3-213070 |
| S3-212689 | Updates to solution 14: Removal of Editor’s notes: Three Authentication | Intel Corporation (UK) Ltd | approved |  |  |
| S3-212690 | Updates to solution 14: Removal of Editor’s notes: One-Way | Intel Corporation (UK) Ltd | noted |  |  |
| S3-212691 | Proposal for conclusion for Key Issue 4 | Intel Corporation (UK) Ltd | noted |  |  |
| S3-212692 | Clarification on RRCConnectionRe-establishment Procedure in Control Plane CIoT EPS Optimization | Huawei, HiSilicon | not pursued |  |  |
| S3-212693 | Clarification on RRCConnectionRe-establishment Procedure in Control Plane CIoT 5GS Optimization | Huawei, HiSilicon | not pursued |  |  |
| S3-212694 | UP Security Activation Mechanism in LTE | Huawei, HiSilicon | revised |  | S3-213221 |
| S3-212695 | UP Security Policy Handling for Option 3 | Huawei, HiSilicon | merged |  | S3-213253 |
| S3-212696 | Clarification on UP IP indication based on RAN3 LS | Huawei, HiSilicon | noted |  | - |
| S3-212697 | Clarification on Finding the right NF instance are serving the UE | Huawei, HiSilicon | not pursued |  |  |
| S3-212698 | Reply LS for Small Data Transfer | Huawei, HiSilicon | merged |  | S3-213034 |
| S3-212699 | Evaluation on indication of key derivation | Huawei, HiSilicon | noted |  |  |
| S3-212700 | Conclusion on KI#1 for key derivation | Huawei, HiSilicon | noted |  |  |
| S3-212701 | New solution for User Consent for 3GPP service exposure | Huawei, HiSilicon | revised |  | S3-213095 |
| S3-212702 | General Conclusion on UDM service for User Consent Check | Huawei, HiSilicon | revised |  | S3-213096 |
| S3-212703 | General Conclusion on Generic Requirement for the Procedures for User Consent Check | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | revised |  | S3-213097 |
| S3-212704 | General Conclusion on UDM service for User Consent Revocation | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | revised |  | S3-213098 |
| S3-212705 | New WID for UC3S | Huawei, HiSilicon, China Mobile, China Unicom, China Telecom, Nokia, Nokia Shanghai Bell | revised |  | S3-213223 |
| S3-212706 | Draft skeleton for UC3S WID | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | approved |  |  |
| S3-212707 | General Conclusion on Generic Requirement for the Procedure for User Consent Revocation | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | revised |  | S3-213099 |
| S3-212708 | Solution for user consent revocation | Huawei, HiSilicon | revised |  | S3-213100 |
| S3-212709 | Solution Update and Evaluation for Solution 3 | Huawei, HiSilicon | revised |  | S3-213101 |
| S3-212710 | Conclusion on KI#2 for User Plane Provisioning | Huawei, HiSilicon | noted |  |  |
| S3-212711 | Skeleton for UC3S Conclusion | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | approved |  |  |
| S3-212712 | Conclusion for Key Issue #1 | Huawei, HiSilicon | noted |  |  |
| S3-212713 | Conclusion for Key Issue #2 | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | revised |  | S3-213102 |
| S3-212714 | Conclusion for Key Issue #3 | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | revised |  | S3-213103 |
| S3-212715 | skeleton for the new annex | Huawei, HiSilicon | approved |  |  |
| S3-212716 | Security protection between AF and 5GC | Huawei, HiSilicon | approved |  |  |
| S3-212717 | Discussion paper on MBS traffic protection | Huawei, HiSilicon | noted |  |  |
| S3-212718 | Conclusion for key issue 2 | Huawei, HiSilicon | merged |  | S3-213078 |
| S3-212719 | Conclusion for key issue 3 | Huawei, HiSilicon | noted |  |  |
| S3-212720 | addressing the EN in solution#11 | Huawei, HiSilicon | approved |  |  |
| S3-212721 | addressing the EN in solution#12 | Huawei, HiSilicon | revised |  | S3-213104 |
| S3-212722 | Conclusion for key issue 3.2 | Huawei, HiSilicon | revised |  | S3-213224 |
| S3-212723 | [draft] Reply LS for clarification on managing expired or multiple Protection Scheme and Home Network keys used for SUCI calculation. | NTT DOCOMO INC. | revised |  | S3-213218 |
| S3-212724 | Reply LS on Small data transmissions | CATT | merged |  | S3-213034 |
| S3-212725 | Reply LS on UE location aspects in NTN | CATT | noted |  |  |
| S3-212726 | Replay LS on UE location aspects in NTN | Huawei, HiSilicon | noted |  |  |
| S3-212727 | New WID on Security Aspects of Proximity based Services (ProSe) in the 5G | CATT | revised |  | S3-213236 |
| S3-212728 | pCR to TR33.847- Conclusion of KI#1 | CATT | merged |  | S3-213109 |
| S3-212729 | pCR to TR33.847- Conclusion of KI#2 | CATT | merged |  | S3-213105 |
| S3-212730 | Living CR for UPIP for LTE | Huawei, HiSilicon | revised |  | S3-213266 |
| S3-212731 | pCR to TR33.847- Conclusion of KI#3 | CATT | revised |  | S3-213092 |
| S3-212732 | pCR to TR33.847- Conclusion of KI#6-KI#8 | CATT | merged |  | S3-213106 |
| S3-212733 | Further conclusions for KI #1 | Ericsson, Huawei, Interdigital, Lenovo, Motorola Mobility, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated | approved |  |  |
| S3-212734 | Change request to living document: EAP flow | Ericsson | revised |  | S3-213203 |
| S3-212735 | Change request to living document: Key hierarchy | Ericsson | revised |  | S3-213201 |
| S3-212736 | Discussion on protection of UE capabilities indication in UPU and "ME support of SOR-CMCI" indicator in SoR | Ericsson | noted |  |  |
| S3-212737 | UE parameters update data set types supported by the UE | Ericsson | not pursued |  |  |
| S3-212738 | Protection of “ME support of SOR-CMCI” indication | Ericsson | not pursued |  |  |
| S3-212739 | Clarification on AMF transparency for UPU | Ericsson | revised |  | S3-213200 |
| S3-212740 | draft reply LS on UE capabilities indication in UPU | Ericsson | noted |  |  |
| S3-212741 | UDM Service correction | Ericsson | agreed |  |  |
| S3-212742 | UDM Service correction | Ericsson | agreed |  |  |
| S3-212743 | FBS - Clarification in Solution 4 | Philips International B.V. | revised |  | S3-213241 |
| S3-212744 | FBS - Clarification quantum-resistance | Philips International B.V. | revised |  | S3-213240 |
| S3-212745 | pCR to TR33.847- Conclusion of KI#12 | CATT | approved |  |  |
| S3-212746 | FBS - Conclusions Solution 23 | Philips International B.V. | revised |  | S3-213242 |
| S3-212747 | FBS - Conclusions Solution 24 | Philips International B.V. | revised |  | S3-213243 |
| S3-212748 | FBS - Discussion about the stealthy FBSMitM attack and minor modifications in Solution 14 to deal with it | Philips International B.V. | noted |  |  |
| S3-212749 | MBS - Conclusions KI 3 | Philips International B.V. | noted |  |  |
| S3-212750 | MBS - Conclusions Solution 9 | Philips International B.V. | revised |  | S3-213126 |
| S3-212751 | pCR to TR33.847- Conclusion of KI#13 | CATT | revised |  | S3-213093 |
| S3-212752 | Security aspects of eNPN (skeleton for living document) | Ericsson | revised |  | S3-213204 |
| S3-212753 | Change request to living document: Credentials holder using AUSF and UDM for primary authentication | Ericsson | revised |  | S3-213205 |
| S3-212754 | Conclusions for KI#4 (initial access) | Ericsson, Huawei, InterDigital, Lenovo, Motorola Mobility, Qualcomm Incorporated | noted |  |  |
| S3-212755 | Source PLMN-ID solution when using same N32 connection for multiple PLMN-IDs belonging to same PLMN | Ericsson | noted |  |  |
| S3-212756 | SEPP to verify the source PLMN-ID | Ericsson | not pursued |  |  |
| S3-212757 | SEPP to verify the source PLMN-ID | Ericsson | not pursued |  |  |
| S3-212758 | NF to always insert PLMN-ID enabling roaming scenario | Ericsson | not pursued |  |  |
| S3-212759 | NF to always insert PLMN-ID enabling roaming scenario | Ericsson | not pursued |  |  |
| S3-212760 | Misalignment between TS 33.501 and TS 29.500 on audience claim of CCAs | Ericsson | noted |  |  |
| S3-212761 | Update to Solution #3 "Using existing procedures for authorization of SCP to act on behalf of an NF Consumer" | Ericsson | revised |  | S3-213043 |
| S3-212762 | Conclusion to Key Issue #4 "Authorization of SCP to act on behalf of an NF or another SCP" | Ericsson | noted |  |  |
| S3-212763 | Correction of implementation of S3-211046 | Ericsson | approved |  |  |
| S3-212764 | Update Solution #5: End-to-end integrity protection of HTTP body and method | Ericsson | approved |  |  |
| S3-212765 | MBS - Update Solution 11 | Philips International B.V. | revised |  | S3-213127 |
| S3-212766 | pCR to TR33.847- Update Solution#29 | CATT | approved |  |  |
| S3-212767 | Proposal for a conclusion on KI#4 – one way authentication. | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212768 | Proposal for a conclusion on KI#4 – OSNPN authentication. | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212769 | Proposal for a solution to KI#4. | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212770 | Update to solution #19 – Authorization added. | Nokia, Nokia Shanghai Bell | revised |  | S3-213147 |
| S3-212771 | User Plane Integrity Protection Policy Handling in EN-DC | Ericsson | revised |  | S3-213253 |
| S3-212772 | User Plane Integrity Protection Policy Handling in IW handover from 5GS to EPS | Ericsson | revised |  | S3-213254 |
| S3-212773 | User Plane Integrity Protection Policy Handling in DC | Ericsson | revised |  | S3-213255 |
| S3-212774 | User Plane Integrity Protection Policy Handling in IW handover from EPS to 5GS | Ericsson | revised |  | S3-213256 |
| S3-212775 | User Plane Integrity Protection | Ericsson | approved |  |  |
| S3-212776 | User Plane Integrity Protection: Correction to A.7 | Ericsson | approved |  |  |
| S3-212777 | Add details of UPIP algorithms to be supported | Ericsson | noted |  |  |
| S3-212778 | [DRAFT] LS on use of LTE algorithms or NR algorithms for UP integrity protection with NR PDCP | Ericsson | noted |  |  |
| S3-212779 | New WID on 5GFBS | Apple, AT&T, Deutsche Telekom, Charter Communication, China Telecom, China Unicom, NIST, CableLabs, Interdigital, Ericsson, Samsung, CAICT, CATT, Intel, vivo, MITRE, Philips | noted |  |  |
| S3-212780 | 5GFBS-Update of solution#17 | Apple, CableLabs, Intel | revised |  | S3-213238 |
| S3-212781 | 5GFBS-Conclusion on key issue#2 | Apple | noted |  |  |
| S3-212782 | 5GFBS-Conclusion on key issue#1 on solution#17 | Apple | noted |  |  |
| S3-212783 | MEC- Discussion paper on the privacy issue EEC ID | Apple | noted |  |  |
| S3-212784 | MEC-Discussion paper on including EEC ID in the authentication procedure | Apple | noted |  |  |
| S3-212785 | MEC- New solution on EEC ID privacy protection | Apple | noted |  |  |
| S3-212786 | MEC - Conclusion on the key issue 2 on the authentication between EEC and ECS | Apple | noted |  |  |
| S3-212787 | MEC- Addressing the EN in solution#28 on EEC ID authentication | Apple | noted |  |  |
| S3-212788 | UC3S-User consent update | Apple | noted |  |  |
| S3-212789 | MBS-new solution for key issue#2 | Apple | withdrawn |  |  |
| S3-212790 | Discussion paper on the FSAG Doc 92\_003 on NAS messages attack | Apple | noted |  |  |
| S3-212791 | CR on TS 33.501 on adding requirement to mitigate the attack of selectively dropping NAS messages | Apple | not pursued |  |  |
| S3-212792 | Reply to GSMA on FSAG Doc 92\_003 on NAS messages attack | Apple | noted |  |  |
| S3-212793 | Discussion paper on GSMA LS of SPARROW attack | Apple | noted |  |  |
| S3-212794 | Draft reply LS to RAN2 on SDT security | Apple | merged |  | S3-213034 |
| S3-212795 | Discussion paper on the security context handling in IRAT | Apple | noted |  |  |
| S3-212796 | CR on TS 33.501 on the security context handling in IRAT | Apple | revised |  | S3-213239 |
| S3-212797 | CR on TS 33.501 on SOR-MAC calculation | Apple | not pursued |  |  |
| S3-212798 | New WID on Security Assurance Specification for Management Function | Huawei, HiSilicon | noted |  |  |
| S3-212799 | New WID on security aspects of MSGin5G | China Mobile, Samsung, Huawei, Hisilicon | agreed |  |  |
| S3-212800 | draftCR for the skeleton for MSGin5G\_SEC | China Mobile | approved |  |  |
| S3-212801 | Add conclusion to KI #1 | China Mobile | approved |  |  |
| S3-212802 | Transport security of MSGin5G-1 interface | China Mobile | approved |  |  |
| S3-212803 | Solution to the transport security of MSGin5G-2 and MSGin5G-4 | China Mobile | approved |  |  |
| S3-212804 | Add conclusion to KI#2 | China Mobile | noted |  |  |
| S3-212805 | Solution to key issue#3 | China Mobile | approved |  |  |
| S3-212806 | Solution to key issue#4 | China Mobile | approved |  |  |
| S3-212807 | Editorial corrections for TR33.862 | China Mobile | approved |  |  |
| S3-212808 | Deleting the EN of solution#4 | China Mobile | approved |  |  |
| S3-212809 | Update and evaluation of solution #32 | Philips International B.V. | revised |  | S3-213074 |
| S3-212810 | New WID on security aspects of eNA | China Mobile | revised |  | S3-213232 |
| S3-212811 | Draft\_skeleton\_for\_draft\_CR\_eNA\_SEC | China Mobile | revised |  | S3-213269 |
| S3-212812 | Solution to abnormal behaviour detection of IoT SIM card | China Mobile | noted |  |  |
| S3-212813 | Add conclusion to KI #1.2 | China Mobile | merged |  | S3-213124 |
| S3-212814 | Add conclusion to KI #1.5 | China Mobile | approved |  |  |
| S3-212815 | Add conclusion to KI #2.1 | China Mobile | noted |  |  |
| S3-212816 | Add conclusion to KI #3.2 | China Mobile | merged |  | S3-213125 |
| S3-212817 | Add evaluation to solution #3 | China Mobile | merged |  | S3-213113 |
| S3-212818 | Discussion on the conclusion of KI#1.3 | China Mobile | noted |  |  |
| S3-212819 | Add conclusion to KI #6 | China Mobile | revised |  | S3-213079 |
| S3-212820 | Clean up the editorial issues | China Mobile | agreed |  |  |
| S3-212821 | Clarification on Data Masking on Integration Analysis | China Mobile | revised |  | S3-213257 |
| S3-212822 | Deleting the NOTE of roaming | China Mobile | not pursued |  |  |
| S3-212823 | Prevention of attacks on slice core by CCA modifications - Rel-16 | Nokia, Nokia Shanghai Bell | not pursued | S3-211985 |  |
| S3-212824 | Prevention of attacks on slice core by CCA modifications - Rel-17 | Nokia, Nokia Shanghai Bell | not pursued | S3-211986 |  |
| S3-212825 | KAF refresh | China Mobile | not pursued |  |  |
| S3-212826 | IPUPS overload control | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S3-212827 | Editorial corrections to the UAS TR | Qualcomm Incorporated | revised |  | S3-213067 |
| S3-212828 | Resolution of EN in solutions | Qualcomm Incorporated | revised |  | S3-213068 |
| S3-212829 | Proposed conclusion for key issue #3 | Qualcomm Incorporated | merged |  | S3-213130 |
| S3-212830 | Proposed conclusion for key issue #5 | Qualcomm Incorporated | merged |  | S3-213132 |
| S3-212831 | Proposed common conclusion for key issues #6 and #7 | Qualcomm Incorporated | merged |  | S3-213079 |
| S3-212832 | Resolution of EN in general clauses | Qualcomm Incorporated | approved |  |  |
| S3-212833 | Cover sheet | Qualcomm Incorporated | revised |  | S3-213069 |
| S3-212834 | TS 33.256 skeleton | Qualcomm Incorporated | noted |  |  |
| S3-212835 | Proposed text for scope and overview of UAS TS | Qualcomm Incorporated | noted |  |  |
| S3-212836 | Proposed text on UUAA for UAS TS | Qualcomm Incorporated | merged |  | S3-213219 |
| S3-212837 | Proposed text on location security for UAS TS | Qualcomm Incorporated | merged |  | S3-213220 |
| S3-212838 | Discussion on adding SCAS for the various split gNB cases | Qualcomm Incorporated, Deutsche Telekom AG | noted | S3-211792 |  |
| S3-212839 | Adding SCAS for the various split gNB cases | Qualcomm Incorporated, Deutsche Telekom AG | not pursued |  |  |
| S3-212840 | Corrections to the TLS with AKMA specification | Qualcomm Incorporated | not pursued |  |  |
| S3-212841 | Adding TLS 1.3 with AKMA keys | Qualcomm Incorporated | not pursued |  |  |
| S3-212842 | Correction to the GBA TLS 1.3 specification | Qualcomm Incorporated | not pursued |  |  |
| S3-212843 | Proposed conclusion for key issue #4.1 | Qualcomm Incorporated, Thales | noted |  |  |
| S3-212844 | Some proposed text for the assessment of attack risk table | Qualcomm Incorporated | noted |  |  |
| S3-212845 | Proposed conclusion for the linkability parts of key issues #2.1 and 2.2 | Qualcomm Incorporated | approved |  |  |
| S3-212846 | Adding MACS as an input parameter to the calculation of AK\* to provide freshness | Qualcomm Incorporated, Thales | not pursued | S3-201936 |  |
| S3-212847 | Discussion on proposed response to RAN3 LS on User Plane Integrity Protection for eUTRA connected to EPC | Qualcomm Incorporated | noted |  |  |
| S3-212848 | LS on User Plane Integrity Protection for eUTRA connected to EPC | Qualcomm Incorporated | revised |  | S3-213258 |
| S3-212849 | Proposed conclusions for key issue #1 and key issue #2 | Qualcomm Incorporated | noted |  |  |
| S3-212850 | Proposed conclusion for AMF Re-allocation | Qualcomm Incorporated | noted |  |  |
| S3-212851 | Conclusion on KI #3, KI #4 and KI #9 related to security for the Layer-3 UE-to-Network relay scenario | Qualcomm Incorporated, MITRE, AT&T | merged |  | S3-213063 |
| S3-212852 | Conclusion of KI #1 | Qualcomm Incorporated | merged |  | S3-213109 |
| S3-212853 | EN resolution of Solution #34 | Qualcomm Incorporated | noted |  |  |
| S3-212854 | Evaluation of Solution #34 | Qualcomm Incorporated | revised |  | S3-213076 |
| S3-212855 | Evaluation of Solution #24 | Qualcomm Incorporated | noted |  |  |
| S3-212856 | EN resolution of Solution #18 | Qualcomm Incorporated | approved |  |  |
| S3-212857 | Conclusion of KI #3 | Qualcomm Incorporated | merged |  | S3-213092 |
| S3-212858 | Conclusion of KI #4 | Qualcomm Incorporated | noted |  |  |
| S3-212859 | Update of solution #18 to support privacy protection | Qualcomm Incorporated | noted |  |  |
| S3-212860 | Update an evaluation for solution #10 | Qualcomm Incorporated | noted |  |  |
| S3-212861 | Conclusion of security and privacy of groupcast communication | Qualcomm Incorporated | noted |  |  |
| S3-212862 | Way forward for the 5G MBS security | Qualcomm Incorporated | noted |  |  |
| S3-212863 | Update of Solution #12 | Qualcomm Incorporated | revised |  | S3-213077 |
| S3-212864 | Evaluation of Solution #12 | Qualcomm Incorporated | merged |  | S3-213104 |
| S3-212865 | Conclusion for the KI#2 | Qualcomm Incorporated | revised |  | S3-213078 |
| S3-212866 | Solution #4 Evaluation (Enriched MR) | Qualcomm Incorporated | noted |  |  |
| S3-212867 | eNPN: Evaluation of Solution #5 | Qualcomm Incorporated | noted |  |  |
| S3-212868 | pCR: Additional conclusions for KI #1 | Qualcomm Incorporated | noted |  |  |
| S3-212869 | Sending UE identifier to the AKMA AF | Qualcomm Incorporated | not pursued | S3-211817 |  |
| S3-212870 | Solution for 5G NSWO authentication | Qualcomm Incorporated | merged |  | S3-213037 |
| S3-212871 | Alignment of requirements with specification updates | Nokia, Nokia Shanghai Bell | withdrawn | S3-211935 |  |
| S3-212872 | Alignment of requirements with specification updates | Nokia, Nokia Shanghai Bell | not pursued | S3-212395 |  |
| S3-212873 | Solution to KI#1 (Support of EAP-AKA’ authentication for NSWO) using credentials retrieved from UDM | Ericsson | revised |  | S3-213091 |
| S3-212874 | Solution Privacy preservation of transmitted data | Nokia Germany | approved |  |  |
| S3-212875 | Solution to KI#1 (Support of EAP-AKA’ authentication for NSWO) using credentials retrieved from UDM/ARPF via HSS | Ericsson | approved |  |  |
| S3-212876 | Reply LS on Misalignment on usage of OAuth within 3GPP 29.510 | Nokia, Nokia Shanghai Bell | revised |  | S3-213192 |
| S3-212877 | LS on N32 and multiple PLMN IDs | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212878 | KI and solution to NRF deployments | Nokia, Nokia Shanghai Bell | revised |  | S3-213057 |
| S3-212879 | vNRF-hNRF mutual authentication in service access authorization | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212880 | Way forward SID eSBA | Nokia, Nokia Shanghai Bell | revised |  | S3-213061 |
| S3-212881 | WID eSBA | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212882 | Sol 1 NFp verification – EN resolutions and evaluation | Nokia, Nokia Shanghai Bell | revised |  | S3-213053 |
| S3-212883 | Editorial update on trust clause | Nokia, Nokia Shanghai Bell | approved |  |  |
| S3-212884 | EN resolution on trust model for SCP | Nokia, Nokia Shanghai Bell | revised |  | S3-213058 |
| S3-212885 | Access token request for NF Set – EN resolution | Nokia, Nokia Shanghai Bell | revised |  | S3-213055 |
| S3-212886 | Access token request for NF Set – RFC clarification | Nokia, Nokia Shanghai Bell | revised |  | S3-213056 |
| S3-212887 | SCP authorization | Nokia, Nokia Shanghai Bell | revised |  | S3-213054 |
| S3-212888 | SCP authorization solution evaluation | Nokia, Nokia Shanghai Bell | approved |  |  |
| S3-212889 | SCP authorization conclusion | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212890 | KI and Solution for verification of NFc by NF producers | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212891 | NRF service definition R15 | Nokia, Nokia Shanghai Bell | revised |  | S3-213196 |
| S3-212892 | NRF service definition R16 | Nokia, Nokia Shanghai Bell | revised |  | S3-213197 |
| S3-212893 | NRF service definition R17 | Nokia, Nokia Shanghai Bell | revised |  | S3-213199 |
| S3-212894 | SBA NRF roaming clarification | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S3-212895 | OAuth misalignment - R15 | Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility | merged |  | S3-213178 |
| S3-212896 | OAuth misalignment - R16 | Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility | merged |  | S3-213177 |
| S3-212897 | OAuth misalignment - R17 | Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility | revised |  | S3-213189 |
| S3-212898 | Alignment for Oauth2.0 validation R15 | Nokia, Nokia Shanghai Bell | not pursued |  | - |
| S3-212899 | Alignment for Oauth2.0 validation R16 | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S3-212900 | Alignment for Oauth2.0 validation R17 | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S3-212901 | Discussion on Refresh of KAKMA and KAF | Samsung, China Mobile | noted |  |  |
| S3-212902 | [CR] Refresh of KAF and KAKMA | Samsung | not pursued |  |  |
| S3-212903 | [CR] HN triggering Primary (Re)Authentication | Samsung | not pursued |  |  |
| S3-212904 | [5GMSG] Evaluation of Solution#1 | Samsung | approved |  |  |
| S3-212905 | [5GMSG] Evaluation of Solution#3 | Samsung | approved |  |  |
| S3-212906 | [5GMSG] Evaluation of Solution#5 | Samsung | approved |  |  |
| S3-212907 | [5GMSG] Evaluation of Solution#8 | Samsung | approved |  |  |
| S3-212908 | [5GMSG] Conclusion for KI#1 and KI#2 | Samsung | noted |  |  |
| S3-212909 | [ProSe] Updates to Solution#1 | Samsung | revised |  | S3-213137 |
| S3-212910 | [ProSe] Updates to evaluation of solution#1 | Samsung | revised |  | S3-213138 |
| S3-212911 | [EDGE] Update to Solution#3 | Samsung | revised |  | S3-213131 |
| S3-212912 | [EDGE] Update to evaluation of Solution#3 | Samsung | revised |  | S3-213135 |
| S3-212913 | [EDGE] Conclusion for KI#1 | Samsung | noted |  |  |
| S3-212914 | [EDGE] Conclusion for KI#2 | Samsung, Lenovo, Motorola Mobility | noted |  |  |
| S3-212915 | [UC3S] Solution on user's consent for exposure of information to Edge Applications | Samsung | noted |  |  |
| S3-212916 | KI on Authorization for Inter-Slice Access | Samsung | revised |  | S3-213139 |
| S3-212917 | New Solution to KI #X: Authorization for Inter-Slice Access | Samsung | noted |  |  |
| S3-212918 | [AMF Re-alloc] Proposed Way Forward | Samsung | noted |  |  |
| S3-212919 | Removal of Editor’s Note in Solution #5 | Samsung | approved |  |  |
| S3-212920 | Discussion on MBS Security | Samsung | noted |  |  |
| S3-212921 | [MBS] Solution#13 Evaluation | Samsung | revised |  | S3-213136 |
| S3-212922 | [IAB] Add requirement to Key Issue #2.4 | Samsung | noted |  |  |
| S3-212923 | [IAB] Solution on authenticity verification of BH-RLF indication | Samsung | noted |  |  |
| S3-212924 | [IAB] Solution to protect the BAP control PDU exchange | Samsung | noted |  |  |
| S3-212925 | [IAB] Conclusion for KI#2.4 | Samsung | noted |  |  |
| S3-212926 | Update to Solution #10 | Samsung | noted |  |  |
| S3-212927 | Update on Solution 6 | Samsung | revised |  | S3-213141 |
| S3-212928 | New solution on key issue #5 | Samsung | approved |  |  |
| S3-212929 | Evaluation for solution 1 | Samsung | revised |  | S3-213142 |
| S3-212930 | Evaluation for solution 4 | Samsung | approved |  |  |
| S3-212931 | Evaluation for solution 5 | Samsung | revised |  | S3-213143 |
| S3-212932 | Conclusion for KI#1 | Samsung | noted |  |  |
| S3-212933 | Conclusion for KI#5 | Samsung | noted |  |  |
| S3-212934 | Conclusion on key issue #3 and key issue #4 | Ericsson | merged |  | S3-213063 |
| S3-212935 | Update to solution #21 | Ericsson | approved |  |  |
| S3-212936 | Update to Solution#4 | Lenovo, Motorola Mobility | approved |  |  |
| S3-212937 | Conclusions for KI#10 "Authorization during Edge Data Network change" | Ericsson | approved |  |  |
| S3-212938 | Conclusions for KI#7 "Security of Network Information Provisioning to Local Applications with low latency procedure" | Ericsson | merged |  | S3-213117 |
| S3-212939 | Update to Solution #17: Resolving EN on Token Usage | Ericsson | approved |  |  |
| S3-212940 | LS on EAS and ECS identifiers | Ericsson | revised |  | S3-213089 |
| S3-212941 | Update to conclusion #1 | Ericsson | noted |  |  |
| S3-212942 | Conclusion on KI#1 | Ericsson | noted |  |  |
| S3-212943 | Conclusion on KI#2 | Ericsson | noted |  |  |
| S3-212944 | Update to Solution #17: Resolving ENs | Ericsson | revised |  | S3-213090 |
| S3-212945 | Discussion on Mission Critical Security over 5G System | Ericsson | noted |  |  |
| S3-212946 | Solution to address KI#1 | Lenovo, Motorola Mobility | revised |  | S3-213049 |
| S3-212947 | Solution to address KI#1 and KI#4 | Lenovo, Motorola Mobility | revised |  | S3-213042 |
| S3-212948 | Conclusion for KI#6 | Lenovo, Motorola Mobility | merged |  | S3-213079 |
| S3-212949 | Conclusion to KI#1 | Lenovo, Motorola Mobility | noted |  |  |
| S3-212950 | EAP ID Request in NSSAA Procedure (Rel-16) | Ericsson | not pursued |  |  |
| S3-212951 | eEDGE: Corrections in Solution #13 | Xiaomi Technology | approved |  |  |
| S3-212952 | eEDGE: Add Clarifications for Solutions covering Application Layer | Xiaomi Technology | approved |  |  |
| S3-212953 | ProSe: Addional Evaluation for Solution #9 | Xiaomi Technology | approved |  |  |
| S3-212954 | ProSe: Addional Evaluation for Solution #10 | Xiaomi Technology | revised |  | S3-213158 |
| S3-212955 | ProSe: Addional Evaluation for Solution #14 | Xiaomi Technology | noted |  |  |
| S3-212956 | ProSe: Addional Evaluation for Solution #15 | Xiaomi Technology | revised |  | S3-213159 |
| S3-212957 | ProSe: Addional Evaluation for Solution #18 | Xiaomi Technology | revised |  | S3-213160 |
| S3-212958 | ProSe: Addional Evaluation for Solution #22 | Xiaomi Technology | noted |  |  |
| S3-212959 | ProSe: Add Evaluation for Solution #27 | Xiaomi Technology | revised |  | S3-213161 |
| S3-212960 | ProSe: Add Evaluation for Solution #28 | Xiaomi Technology | revised |  | S3-213162 |
| S3-212961 | ProSe: Addional Evaluation for Solution #30 | Xiaomi Technology | approved |  |  |
| S3-212962 | ProSe: Conclusions for Key Issues #6, #7, #8 | Xiaomi Technology | merged |  | S3-213106 |
| S3-212963 | ProSe: Conclusion for Key Issue #13 | Xiaomi Technology | noted |  |  |
| S3-212964 | ProSe: Conclusion for Key Issue #16 | Xiaomi Technology | revised |  | S3-213163 |
| S3-212965 | ProSe: New Solution for Key Issue #17 | Xiaomi Technology | revised |  | S3-213164 |
| S3-212966 | ProSe: Conclusion for Key Issue #17 | Xiaomi Technology | noted |  |  |
| S3-212967 | ProSe: New Solution for Key Issue #3 | Xiaomi Technology | revised |  | S3-213165 |
| S3-212968 | ProSe: Conclusion for Key Issue #3 | Xiaomi Technology | noted |  |  |
| S3-212969 | eNPN: Conclusion Update for Key Issue #1 | Xiaomi Technology | approved |  |  |
| S3-212970 | eNPN: New Solution for Key Issue #2 | Xiaomi Technology | noted |  |  |
| S3-212971 | eNPN: Resolution of the Editor’s Notes in Key Issue #2 | Xiaomi Technology, Lenovo, Motorola Mobility | noted |  |  |
| S3-212972 | eNPN: Conclusion for Key Issue #2 | Xiaomi Technology | noted |  |  |
| S3-212973 | New KI on Secrets in Container Images | Altiostar | revised |  | S3-213182 |
| S3-212974 | EAP ID Request in NSSAA Procedure (Rel-17) | Ericsson | not pursued |  |  |
| S3-212975 | New KI on Container breakouts | Altiostar | revised |  | S3-213188 |
| S3-212976 | Security for temporary calls | CATT | not pursued |  |  |
| S3-212977 | LS on EAP ID Request in NSSAA Procedure | Ericsson | noted |  |  |
| S3-212978 | Ed Note Removal for Solution 11 | Nokia, Nokia Shanghai Bell | revised |  | S3-213048 |
| S3-212979 | Ed Note Removal to include mechanism when notification sent via MFAF for Solution 11 | Nokia, Nokia Shanghai Bell | revised |  | S3-213052 |
| S3-212980 | Evaluation to the Solution 11 | Nokia, Nokia Shanghai Bell | revised |  | S3-213051 |
| S3-212981 | Ed Note Removal for Solution 10 | Nokia, Nokia Shanghai Bell | revised |  | S3-213039 |
| S3-212982 | Conclusion to KI 1.3 | Nokia, Nokia Shanghai Bell | revised |  | S3-213050 |
| S3-212983 | Evaluation to the Solution 10 | Nokia, Nokia Shanghai Bell | revised |  | S3-213044 |
| S3-212984 | Editorial Notes Removal for Solution 10 to address authorization mechanisms when data is sent via MFAF | Nokia, Nokia Shanghai Bell | revised |  | S3-213041 |
| S3-212985 | Enhancement to the solution on Detection of anomalous NF behaviour by NWDAF | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212986 | Evaluation to the Solution 7 | Nokia, Nokia Shanghai Bell | revised |  | S3-213047 |
| S3-212987 | Conclusion to KI 2.2 | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212988 | Evaluation on Sol 14 - Solution to ML restrictive transfer Framework | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212989 | Update KI 3.3 - Ensuring restrictive transfer of ML models between authorized NWDAF instances | Nokia, Nokia Shanghai Bell | revised |  | S3-213046 |
| S3-212990 | Evaluation on Sol 5- Providing the Security protection of data via Messaging Framework | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212991 | Update to KI 1.4 | Nokia, Nokia Shanghai Bell | merged |  | S3-213152 |
| S3-212992 | Conclusion to KI 1.4 | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212993 | Solution on Protection of data sent via MFAF using existing SBA mechanisms | Nokia, Nokia Shanghai Bell, Huawei, HiSilicon | revised |  | S3-213045 |
| S3-212994 | LS on NF Service Producer Meta Data Addition by ADRF | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-212995 | Removal of Editor’s Note of Solution#4 | Lenovo, Motorola Mobility | approved |  |  |
| S3-212996 | Adding Evaluation to Solution#4 | Lenovo, Motorola Mobility | revised |  | S3-213064 |
| S3-212997 | Removal of Editor’s Note of Solution#5 | Lenovo, Motorola Mobility | merged |  | S3-213154 |
| S3-212998 | Adding Evaluation to Solution#5 | Lenovo, Motorola Mobility | merged |  | S3-213154 |
| S3-212999 | Solution on NSWO authentication with AAA-Server | Lenovo, Motorola Mobility | merged |  | S3-213037 |
| S3-213000 | Tracking, enforcement, and validity of user consent | Ericsson | merged |  | S3-213102 |
| S3-213001 | Solution on NSWO authentication via an interworking function | Lenovo, Motorola Mobility | noted |  |  |
| S3-213002 | Evaluation of the potential security issue in QoE report handling at QoE pause | Lenovo, Motorola Mobility | noted |  |  |
| S3-213003 | Padding SUPIs in NAI format for non-null schemes | Ericsson, AT&T, CableLabs | not pursued |  |  |
| S3-213004 | [DRAFT] Reply LS on QoE report handling at QoE pause | Lenovo, Motorola Mobility | noted |  |  |
| S3-213005 | A new onboarding solution addressing KI#2 | Lenovo, Motorola Mobility | revised |  | S3-213065 |
| S3-213006 | pCR to 33.846: impacts on the USIM of solution #4.6 | THALES | approved |  |  |
| S3-213007 | pCR to 33.846: assessment of attack risk | THALES | noted |  |  |
| S3-213008 | pCR to 33.839: solution #26 | THALES | revised |  | S3-213211 |
| S3-213009 | pCR to 33.839: solution #27 | THALES | revised |  | S3-213212 |
| S3-213010 | pCR to 33.839: conclusion for Key Issue #1 | THALES | noted |  |  |
| S3-213011 | pCR to 33.839: Conclusion for Key Issue #2 | THALES | noted |  |  |
| S3-213012 | Recovering NSSAI and ENSI mapping (Rel-16) | Samsung | not pursued |  |  |
| S3-213013 | Recovering NSSAI and ENSI mapping (Rel-17) | Samsung | not pursued |  |  |
| S3-213014 | Comment on 256-bit algorithms based on Snow-V | CATT | noted |  |  |
| S3-213015 | Update\_on\_Key\_issue#1.4 | Ericsson | revised |  | S3-213152 |
| S3-213016 | Update\_on\_Solution#5 | Ericsson | revised |  | S3-213154 |
| S3-213017 | Update\_on\_Solution#12 | Ericsson | revised |  | S3-213153 |
| S3-213018 | Conclusion on KI#1.3 | Ericsson | noted |  |  |
| S3-213019 | Conclusion on KI#1.4 | Ericsson | noted |  |  |
| S3-213020 | eCryptPr 01 CR 33.310 R17 Security updates for algorithms and protocols | Ericsson | agreed |  |  |
| S3-213021 | eCryptPr 02 CR 33.203 R17 Security updates for algorithms and protocols | Ericsson | not pursued |  |  |
| S3-213022 | Security updates for algorithms and protocols for 33.310 | Ericsson | revised |  | S3-213264 |
| S3-213023 | Security updates for algorithms and protocols for 33.210 | Ericsson | revised |  | S3-213265 |
| S3-213024 | User consent: New key issue on naming of purposes | NTT DOCOMO INC. | revised |  | S3-213071 |
| S3-213025 | draft CR to 33.401 - addition of UPIP requirements (NEA and NIA based) | VODAFONE Group Plc | noted |  |  |
| S3-213026 | draft CR to 33.401 - addition of UPIP requirements (EEA and EIA based) | VODAFONE Group Plc | noted |  |  |
| S3-213027 | [Draft] Reply LS on UE location aspects in NTN | Xiaomi Technology | noted |  |  |
| S3-213028 | Addressing Editor's notes of KI#2 | Philips International B.V., Lenovo, Motorola Mobility | noted |  |  |
| S3-213029 | New KI on Compromised slice information | Lenovo, Motorola Mobility | noted |  |  |
| S3-213030 | Update to Key Issue #1 | Lenovo, Motorola Mobility | approved |  |  |
| S3-213031 | Clarification on UP IP indication based on RAN3 LS | Huawei, HiSilicon | revised |  | S3-213231 |
| S3-213032 | SA3 meeting calendar | WG Chair | noted |  |  |
| S3-213033 | Reply LS on Security risk evaluation of using long term key for another key derivation than AKA | ETSI SAGE | postponed |  |  |
| S3-213034 | Reply LS on Small data transmissions | InterDigital, Inc. | approved |  |  |
| S3-213035 | LS on full registration request in AMF reallocation via RAN | Huawei, HiSilicon | approved |  |  |
| S3-213036 | LS on NSAC procedure | Huawei, HiSilicon | approved |  | - |
| S3-213037 | Non-Seamless WLAN offload Authentication in 5GS | Nokia, Nokia Shanghai Bell, AT&T,Lenovo, Motorola Mobility, Huawei, HiSilicon, Samsung, Intel, Qualcomm Incorporated, Thales | approved | S3-212514 |  |
| S3-213038 | Editor note removal and update for solution#10 | Nokia, Nokia Shanghai Bell | approved | S3-212512 |  |
| S3-213039 | Ed Note Removal for Solution 10 | Nokia, Nokia Shanghai Bell | approved | S3-212981 |  |
| S3-213040 | Reply LS on Header Enrichment for HTTPS in PFCP | C4-214531 | postponed |  |  |
| S3-213041 | Editorial Notes Removal for Solution 10 to address authorization mechanisms when data is sent via MFAF | Nokia, Nokia Shanghai Bell | approved | S3-212984 |  |
| S3-213042 | Solution to address KI#4 | Lenovo, Motorola Mobility | approved | S3-212947 |  |
| S3-213043 | Update to Solution #3 "Using existing procedures for authorization of SCP to act on behalf of an NF Consumer" | Ericsson | approved | S3-212761 |  |
| S3-213044 | Evaluation to the Solution 10 | Nokia, Nokia Shanghai Bell | approved | S3-212983 |  |
| S3-213045 | Solution on Protection of data sent via MFAF using existing SBA mechanisms | Nokia, Nokia Shanghai Bell, Huawei, HiSilicon | approved | S3-212993 |  |
| S3-213046 | Update KI 3.3 - Ensuring restrictive transfer of ML models between authorized NWDAF instances | Nokia, Nokia Shanghai Bell | approved | S3-212989 |  |
| S3-213047 | Evaluation to the Solution 7 | Nokia, Nokia Shanghai Bell | approved | S3-212986 |  |
| S3-213048 | Ed Note Removal for Solution 11 | Nokia, Nokia Shanghai Bell | approved | S3-212978 |  |
| S3-213049 | Solution to address KI#1 | Lenovo, Motorola Mobility | approved | S3-212946 |  |
| S3-213050 | Conclusion to KI 1.3 | Nokia, Nokia Shanghai Bell, Lenovo, Motorola Mobility | approved | S3-212982 |  |
| S3-213051 | Evaluation to the Solution 11 | Nokia, Nokia Shanghai Bell | approved | S3-212980 |  |
| S3-213052 | Ed Note Removal to include mechanism when notification sent via MFAF for Solution 11 | Nokia, Nokia Shanghai Bell | approved | S3-212979 |  |
| S3-213053 | Sol 1 NFp verification – EN resolutions and evaluation | Nokia, Nokia Shanghai Bell | approved | S3-212882 |  |
| S3-213054 | SCP authorization | Nokia, Nokia Shanghai Bell | approved | S3-212887 |  |
| S3-213055 | Access token request for NF Set – EN resolution | Nokia, Nokia Shanghai Bell | approved | S3-212885 |  |
| S3-213056 | Access token request for NF Set – RFC clarification | Nokia, Nokia Shanghai Bell | approved | S3-212886 |  |
| S3-213057 | KI and solution to NRF deployments | Nokia, Nokia Shanghai Bell | approved | S3-212878 |  |
| S3-213058 | EN resolution on trust model for SCP | Nokia, Nokia Shanghai Bell | approved | S3-212884 |  |
| S3-213059 | TR 33.847 Update for solution #10 | InterDigital, Europe, Ltd. | approved | S3-212478 |  |
| S3-213060 | TR 33.847 Update for solution #24 | InterDigital, Europe, Ltd. | approved | S3-212479 |  |
| S3-213061 | Way forward SID eSBA | Nokia, Nokia Shanghai Bell | noted | S3-212880 |  |
| S3-213062 | TR 33.847 Update for solution #25 | InterDigital, Europe, Ltd. | approved | S3-212481 |  |
| S3-213063 | Conclusions for U2N relay Key Issues | InterDigital, Europe, Ltd., Samsung, LG Electronics, Nokia, Nokia Shanghai Bell, Huawei, HiSilicon , Qualcomm Incorporated, MITRE, AT&T, Ericsson | approved | S3-212485 |  |
| S3-213064 | Adding Evaluation to Solution#4 | Lenovo, Motorola Mobility | approved | S3-212996 |  |
| S3-213065 | A new onboarding solution addressing KI#2 | Lenovo, Motorola Mobility | approved | S3-213005 |  |
| S3-213066 | Further conclusions for KI #1 | CableLabs,Ericsson, Charter Communications, Intel | approved | S3-212521 |  |
| S3-213067 | Editorial corrections to the UAS TR | Qualcomm Incorporated | approved | S3-212827 |  |
| S3-213068 | Resolution of EN in solutions | Qualcomm Incorporated | approved | S3-212828 |  |
| S3-213069 | Cover sheet TR 33.854 | Qualcomm Incorporated | approved | S3-212833 |  |
| S3-213070 | Updates to solution 14: Removal of Editor’s notes: Security Issues | Intel Corporation (UK) Ltd | approved | S3-212688 |  |
| S3-213071 | User consent: New key issue on naming of purposes | NTT DOCOMO INC. | approved | S3-213024 |  |
| S3-213072 | Draft TR 33.864 v0.6.0 Study on the security of Access and Mobility Management Function (AMF) re-allocation | Ericsson Hungary Ltd | approved |  |  |
| S3-213073 | Updates to terminology in the architecture assumptions | Ericsson | approved | S3-212494 |  |
| S3-213074 | Update and evaluation of solution #32 | Philips International B.V. | approved | S3-212809 |  |
| S3-213075 | TR 33.881 revision for NSWO | Nokia Corporation | approved |  |  |
| S3-213076 | Evaluation of Solution #34 | Qualcomm Incorporated | approved | S3-212854 |  |
| S3-213077 | Update of Solution #12 | Qualcomm Incorporated | approved | S3-212863 |  |
| S3-213078 | Conclusion for the KI#2 | Qualcomm Incorporated | approved | S3-212865 |  |
| S3-213079 | Add conclusion to KI #6 | China Mobile, Lenovo, Motorola Mobility, InterDigital, Europe, Ltd., Qualcomm Incorporated, Huawei, HiSilicon | approved | S3-212819 |  |
| S3-213080 | TR 33.850 for 5MBS security | Huawei, Hisilicon | approved |  |  |
| S3-213081 | Update to Solution #5 | ZTE Corporation | approved | S3-212547 |  |
| S3-213082 | New solution on control plane based provisioning PS to AUSF | ZTE Corporation | approved | S3-212557 |  |
| S3-213083 | Update for Conclusion on Key Issue #4 | China Telecommunications, Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | approved | S3-212522 |  |
| S3-213084 | Add the evaluation of the solution #6 | ZTE Corporation | approved | S3-212552 |  |
| S3-213085 | Update the solution #6 | ZTE Corporation | approved | S3-212556 |  |
| S3-213086 | Update the solution #11 | ZTE Corporation | approved | S3-212562 |  |
| S3-213087 | Evaluation for sol#13 | LG Electronics Inc. | approved | S3-212472 |  |
| S3-213088 | Updates on sol#13 | LG Electronics Inc. | approved | S3-212516 |  |
| S3-213089 | LS on EAS and ECS identifiers | Ericsson | approved | S3-212940 |  |
| S3-213090 | Update to Solution #17: Resolving ENs | Ericsson | approved | S3-212944 |  |
| S3-213091 | Solution to KI#1 (Support of EAP-AKA’ authentication for NSWO) using credentials retrieved from UDM | Ericsson | approved | S3-212873 |  |
| S3-213092 | pCR to TR33.847- Conclusion of KI#3 | CATT | approved | S3-212731 |  |
| S3-213093 | pCR to TR33.847- Conclusion of KI#13 | CATT | approved | S3-212751 |  |
| S3-213094 | draft TR 33.866 0.6.0 | China Mobile Com. Corporation | approved |  |  |
| S3-213095 | New Solution for Check of User Consent for 3GPP service Exposure | Huawei, HiSilicon | approved | S3-212701 |  |
| S3-213096 | General Conclusion on UDM service for User Consent Check | Huawei, HiSilicon | approved | S3-212702 |  |
| S3-213097 | General Conclusion on Generic Requirement for the Procedures for User Consent Check | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | approved | S3-212703 |  |
| S3-213098 | General Conclusion on UDM service for User Consent Revocation | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Ericssion | approved | S3-212704 |  |
| S3-213099 | General Conclusion on Generic Requirement for the Procedure for User Consent Revocation | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | approved | S3-212707 |  |
| S3-213100 | Solution for user consent revocation | Huawei, HiSilicon | approved | S3-212708 |  |
| S3-213101 | Solution Update and Evaluation for Solution 3 | Huawei, HiSilicon | approved | S3-212709 |  |
| S3-213102 | Conclusion for Key Issue #2 | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Ericssion | approved | S3-212713 |  |
| S3-213103 | Conclusion for Key Issue #3 | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | approved | S3-212714 |  |
| S3-213104 | addressing the EN in solution#12 | Huawei, HiSilicon | approved | S3-212721 |  |
| S3-213105 | conclusion to KI#2 | Huawei, HiSilicon, CATT | approved | S3-212603 |  |
| S3-213106 | conclusion to KI#5 to KI#8 | Huawei, HiSilicon, ZTE Corporation, CATT, Xiaomi Technology | approved | S3-212604 |  |
| S3-213107 | Resolve EN in Sol#27 | Huawei, HiSilicon | approved | S3-212608 |  |
| S3-213108 | Resolve EN in Sol#28 | Huawei, HiSilicon | approved | S3-212609 |  |
| S3-213109 | Add conclusion to Key Issue #1 | Huawei, HiSilicon, ZTE Corporation, CATT, Qualcomm Incorporated | approved | S3-212611 |  |
| S3-213110 | New solution to avoid policy mismatch | Huawei, HiSilicon | approved | S3-212619 |  |
| S3-213111 | New solution on UE-to-network relay Key management based on primary authentication | Huawei,HiSilicon | approved | S3-212625 |  |
| S3-213112 | Resolving the EN about the multiple EECs issues in solution 8 | Huawei,HiSilicon | approved | S3-212626 |  |
| S3-213113 | add evaluation for solution#3 | Huawei, HiSilicon, China Mobile | approved | S3-212630 |  |
| S3-213114 | draft TR 33.862 0.6.0 | China Mobile Com. Corporation | approved |  |  |
| S3-213115 | TR 33.839for Edge computing security | Huawei, HiSilicon | approved |  |  |
| S3-213116 | EN romoval for solution#23 | Huawei, HiSilicon | approved | S3-212638 |  |
| S3-213117 | EC : Conclusion for Key issue #7 | Huawei, HiSilicon, Ericsson, ZTE | approved | S3-212645 |  |
| S3-213118 | EC: Conclusion for Key issue #1 | Huawei, HiSilicon | withdrawn | - |  |
| S3-213119 | EC: Conclusion for Key issue #2 | Huawei, HiSilicon | withdrawn | - |  |
| S3-213120 | New Key issue on authorization mechanism negotiation | Huawei, HiSilicon; China Mobile | approved | S3-212651 |  |
| S3-213121 | New solution for the authorization mechanism negotiation | Huawei, HiSilicon; China Mobile | approved | S3-212652 |  |
| S3-213122 | Requirement of subscribe-notification key issue | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Samsung | revised | S3-212653 | S3-213166 |
| S3-213123 | Conclusion on authentication and authorization for multicast service | Huawei, HiSilicon | approved | S3-212656 |  |
| S3-213124 | Conclusion on key issue #1.2 | Huawei, HiSilicon, China Mobile | approved | S3-212657 |  |
| S3-213125 | Conclusion on key issue #3.2 on protection of UE data in transit | Huawei, HiSilicon, China Mobile | approved | S3-212661 |  |
| S3-213126 | Evaluation Solution 9 | Philips International B.V. | approved | S3-212750 |  |
| S3-213127 | Update Solution 11 for reduced key update overhead | Philips International B.V. | approved | S3-212765 |  |
| S3-213128 | Reply LS on Layer-3 UE-to-Network Relay authentication and authorization | CATT | approved |  |  |
| S3-213129 | Draft TR 33.847 v0.7.0 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS | CATT | approved |  |  |
| S3-213130 | Conclusion to KI#3 (TPAE AA) | Huawei, HiSilicon, InterDigital Europe Ltd., Qualcomm Incorporated | approved | S3-212579 |  |
| S3-213131 | [EDGE] Update to Solution#3 | Samsung | approved | S3-212911 |  |
| S3-213132 | Conclusion to KI#5 (privacy of UAS identities) | Huawei, HiSilicon, InterDigital Europe Ltd., Qualcomm Incorporated | approved | S3-212580 |  |
| S3-213133 | Update to KI#1 (NSSAI analysis) | Huawei, HiSilicon | approved | S3-212574 |  |
| S3-213134 | New KI on DoS to NSAC procedure | Huawei, HiSilicon | approved | S3-212575 |  |
| S3-213135 | [EDGE] Update to evaluation of Solution#3 | Samsung | approved | S3-212912 |  |
| S3-213136 | [MBS] Solution#13 Evaluation | Samsung | approved | S3-212921 |  |
| S3-213137 | [ProSe] Updates to Solution#1 | Samsung | approved | S3-212909 |  |
| S3-213138 | [ProSe] Updates to evaluation of solution#1 | Samsung | approved | S3-212910 |  |
| S3-213139 | KI on Authorization for Inter-Slice Access | Samsung | approved | S3-212916 |  |
| S3-213140 | New KI on AF authentication and authorization | Huawei, HiSilicon | approved | S3-212576 |  |
| S3-213141 | Update on Solution 6 | Samsung | approved | S3-212927 |  |
| S3-213142 | Evaluation for solution 1 | Samsung,Nokia, Nokia Shanghai Bell | approved | S3-212929 |  |
| S3-213143 | Evaluation for solution 5 | Samsung | approved | S3-212931 |  |
| S3-213144 | Solution on AF authorization | Huawei, HiSilicon | approved | S3-212588 |  |
| S3-213145 | draft TR 33.874-030 | Huawei; HiSilicon | approved |  |  |
| S3-213146 | Draft TR 33.867 | Huawei; HiSilicon | approved |  |  |
| S3-213147 | Update to solution #19 – Authorization added. | Nokia, Nokia Shanghai Bell | approved | S3-212770 |  |
| S3-213148 | Draft TR 33.854 | Qualcomm | approved | S3-212247 |  |
| S3-213149 | LS on 256-bit algorithms based on ZUC-256 | CAICT | approved |  |  |
| S3-213150 | Reply to LS on broadcast of NTN GW or gNB position | Ericsson Hungary Ltd | noted |  |  |
| S3-213151 | Update\_on\_Key\_issue#1.4 | Ericsson | withdrawn | - |  |
| S3-213152 | Update\_on\_Key\_issue#1.4 | Ericsson, Nokia, Nokia Shanghai Bell | approved | S3-213015 |  |
| S3-213153 | Update\_on\_Solution#12 | Ericsson | approved | S3-213017 |  |
| S3-213154 | Update\_on\_Solution#5 | Ericsson, Lenovo, Motorola Mobility | approved | S3-213016 |  |
| S3-213155 | Cleanup MUSIM TR | Intel Corporation (UK) Ltd | agreed |  |  |
| S3-213156 | Key issue on security aspects of Paging Cause | Intel Corporation (UK) Ltd | agreed |  |  |
| S3-213157 | conclusion to KI#5 to KI#8 | Huawei, HiSilicon, ZTE Corporation, CATT, Xiaomi Technology | withdrawn | - |  |
| S3-213158 | ProSe: Addional Evaluation for Solution #10 | Xiaomi Technology | approved | S3-212954 |  |
| S3-213159 | ProSe: Addional Evaluation for Solution #15 | Xiaomi Technology | approved | S3-212956 |  |
| S3-213160 | ProSe: Addional Evaluation for Solution #18 | Xiaomi Technology | approved | S3-212957 |  |
| S3-213161 | ProSe: Add Evaluation for Solution #27 | Xiaomi Technology | approved | S3-212959 |  |
| S3-213162 | ProSe: Add Evaluation for Solution #28 | Xiaomi Technology | approved | S3-212960 |  |
| S3-213163 | ProSe: Conclusion for Key Issue #16 | Xiaomi Technology | approved | S3-212964 |  |
| S3-213164 | ProSe: New Solution for Key Issue #17 | Xiaomi Technology | approved | S3-212965 |  |
| S3-213165 | ProSe: New Solution for Key Issue #3 | Xiaomi Technology | approved | S3-212967 |  |
| S3-213166 | Requirement of subscribe-notification key issue | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell, Samsung | approved | S3-213122 |  |
| S3-213167 | Draft TR 33.875 | Nokia Germany | approved |  |  |
| S3-213168 | LS Reply to SA3 on security protection on RRCResumeRequest message | R2-2109121 | postponed |  |  |
| S3-213169 | Reply LS on Storage of KAUSF | C1-214800 | replied to |  |  |
| S3-213170 | LS on Home Network triggered re-authentication | Samsung R&D Institute UK | approved |  |  |
| S3-213171 | LS on use of 4G algorithm identifier in NR-PDCP for UP IP | Huawei Technologies Sweden AB | noted |  |  |
| S3-213172 | Reply LS on Storage of KAUSF | Samsung R&D Institute UK | approved |  |  |
| S3-213173 | Conclusion on Key issue #3.2 SUPI guessing attacks | Nokia, Nokia Shanghai Bell, Thales, NTT DOCOMO, NEC | approved | S3-212511 |  |
| S3-213174 | LS on proposed NSWO architecture | Nokia, Nokia Shanghai Bell | approved | S3-212513 |  |
| S3-213175 | New solution: Keying procedures for Group Member and Relay discovery: public safety case | MITRE Corporation | approved | S3-212464 |  |
| S3-213176 | Update to KI #17 | MITRE Corporation | approved | S3-212465 |  |
| S3-213177 | OAuth2.0 misalignmnet | Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung, Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility | agreed | S3-212450 |  |
| S3-213178 | OAuth2.0 misalignmnet | Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung, Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility | agreed | S3-212451 |  |
| S3-213179 | [33.180] R17 Group subscription | Motorola Solutions Danmark A/S | agreed | S3-212467 |  |
| S3-213180 | Mirror for Rel-16 Editorial Clarifications for Trusted non-3GPP Access using TNGF | Intel Corporation (UK) Ltd | agreed |  |  |
| S3-213181 | Way forward for U2N Relay authentication and authorization | CATT | noted |  |  |
| S3-213182 | New KI on Secrets in Container Images | Altiostar | approved | S3-212973 |  |
| S3-213183 | SCAS\_5G\_IPUPS: New threats to IPUPS to TR 33.926 | ZTE Corporation | withdrawn |  |  |
| S3-213184 | SCAS\_5G\_IPUPS: New test cases of IPUPS to TS 33.513 | ZTE Corporation | withdrawn |  |  |
| S3-213185 | LS on reply to SA6 about new SID on Application Enablement for Data Integrity Verification Service in IOT | Nokia, Nokia Shanghai Bell | noted | S3-212681 |  |
| S3-213186 | Correction of message name in SMF | Keysight Technologies UK Ltd | agreed | S3-212459 |  |
| S3-213187 | eCryptPr 02 CR 33.203 R17 Security updates for algorithms and protocols | Ericsson | withdrawn |  |  |
| S3-213188 | New KI on Container breakouts | Altiostar | revised | S3-212975 | S3-213190 |
| S3-213189 | OAuth misalignment - R17 | Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility, Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung | agreed | S3-212897 |  |
| S3-213190 | New KI on Container breakouts | Altiostar | approved | S3-213188 |  |
| S3-213191 | Clarification on Kausf storage in multi-NAS connection | Huawei, HiSilicon | revised | S3-212598 | S3-213195 |
| S3-213192 | Reply LS on Misalignment on usage of OAuth within 3GPP 29.510 | Nokia, Nokia Shanghai Bell | approved | S3-212876 |  |
| S3-213193 | Reply LS on OAuth2 misalignments between SA3 and CT4 specifications | Nokia, Nokia Shanghai Bell | approved | - |  |
| S3-213194 | Clarification on Kausf storage in multi-NAS connection | Huawei, HiSilicon | agreed | S3-212599 |  |
| S3-213195 | Clarification on Kausf storage in multi-NAS connection | Huawei, HiSilicon | agreed | S3-213191 |  |
| S3-213196 | NRF service definition R15 | Nokia, Nokia Shanghai Bell | agreed | S3-212891 |  |
| S3-213197 | NRF service definition R16 | Nokia, Nokia Shanghai Bell | agreed | S3-212892 |  |
| S3-213198 | Alignment for Oauth2.0 validation R15 | Nokia, Nokia Shanghai Bell | withdrawn | S3-212898 |  |
| S3-213199 | NRF service definition R17 | Nokia, Nokia Shanghai Bell | agreed | S3-212893 |  |
| S3-213200 | Clarification on AMF transparency for UPU | Ericsson | agreed | S3-212739 |  |
| S3-213201 | Change request to living document: Key hierarchy | Ericsson | approved | S3-212735 |  |
| S3-213202 | Draft TR 33.848 | BT plc | approved |  |  |
| S3-213203 | Change request to living document: EAP flow | Ericsson | approved | S3-212734 |  |
| S3-213204 | Security aspects of eNPN (skeleton for living document) | Ericsson | revised | S3-212752 | S3-213206 |
| S3-213205 | Change request to living document: Credentials holder using AUSF and UDM for primary authentication | Ericsson | approved | S3-212753 |  |
| S3-213206 | Security aspects of eNPN (living document) | Ericsson, Huawei, HiSilicon | available | S3-213204 |  |
| S3-213207 | Living document for BEST\_5G: draftCR to TS 33.163 | KPN N.V. | approved | S3-212458 |  |
| S3-213208 | draft TR 33.857 v0.7.0 | Ericsson | available |  |  |
| S3-213209 | Reply LS to GSMA on prevention of attacks on sliced core network | CableLabs, Huawei, HiSilicon, Ericsson, Nokia, Nokia Shanghai Bell | approved | S3-212463 |  |
| S3-213210 | Short-lived public key-based solution for KI#2 | CableLabs,Deutsche Telekom AG, InterDigital, Johns Hopkins University APL, US National Security Agency | approved | S3-212523 |  |
| S3-213211 | pCR to 33.839: solution #26 | THALES | approved | S3-213008 |  |
| S3-213212 | pCR to 33.839: solution #27 | THALES | approved | S3-213009 |  |
| S3-213213 | SCAS\_5G\_IPUPS: New threats to IPUPS to TR 33.926 | ZTE Corporation | agreed |  |  |
| S3-213214 | SCAS\_5G\_IPUPS: New test cases of IPUPS to TS 33.513 | ZTE Corporation | agreed |  |  |
| S3-213215 | LS on SBA for GBA | Ericsson | approved | S3-212504 |  |
| S3-213216 | New solution proposal | JSRPC Kryptonite | approved | S3-212408 |  |
| S3-213217 | New solution: Hardware Mediated Execution Enclave (HMEE) | MITRE Corporation | approved | S3-212466 |  |
| S3-213218 | Reply LS for clarification on managing expired or multiple Protection Scheme and Home Network keys used for SUCI calculation. | NTT DOCOMO INC. | approved | S3-212723 |  |
| S3-213219 | Overview on UAV authentication and authorization (UUAA) | Huawei, HiSilicon, Qualcomm, InterDigital, Lenovo, Motorola Mobility | approved | S3-212582 |  |
| S3-213220 | UAV location information verification | Huawei, HiSilicon, Qualcomm Incorporated, InterDigitalal | approved | S3-212618 |  |
| S3-213221 | UP Security Activation Mechanism in LTE | Huawei, HiSilicon | approved | S3-212694 |  |
| S3-213222 | Clarification on UP IP indication based on RAN3 LS | Huawei, HiSilicon | withdrawn | - |  |
| S3-213223 | New WID for UC3S | Huawei, HiSilicon, China Mobile, China Unicom, China Telecom, Nokia, Nokia Shanghai Bell, FutureWei | agreed | S3-212705 |  |
| S3-213224 | Update to clause 7.02 | Huawei, HiSilicon | approved | S3-212722 |  |
| S3-213225 | TS 33.558: Security requirements | Huawei, HiSilicon | approved | S3-212648 |  |
| S3-213226 | TS 33.558: Security for the EDGE interfaces | Huawei, HiSilicon | approved | S3-212649 |  |
| S3-213227 | draft TS 33.558: Edge computing security | Huawei, HiSilicon | approved |  |  |
| S3-213228 | Adding for NSSAAF network product class description and assets and critical assets | Huawei, HiSilicon | approved | S3-212666 |  |
| S3-213229 | New threat related to unauthorized slice-specific authorization revocatoinsue #1.2 | Huawei, HiSilicon | approved | S3-212667 |  |
| S3-213230 | New service on 5G GBA AV | Huawei, HiSilicon, Ericsson, Thales | revised | S3-212669 | S3-213234 |
| S3-213231 | Clarification on UP IP indication based on RAN3 LS | Huawei, HiSilicon | approved | S3-213031 |  |
| S3-213232 | New WID on security aspects of eNA | China Mobile | agreed | S3-212810 |  |
| S3-213233 | Draft TR 33.846 v0.13.0 Study on authentication enhancements in the 5G System (5GS) | Ericsson Hungary Ltd | approved |  |  |
| S3-213234 | New service on 5G GBA AV | Huawei, HiSilicon, Ericsson, Thales | approved | S3-213230 |  |
| S3-213235 | roaming-related security mechanisms | Huawei, HiSilicon | approved | S3-212637 |  |
| S3-213236 | New WID on Security Aspects of Proximity based Services (ProSe) in the 5G | CATT | agreed | S3-212727 |  |
| S3-213237 | Editorial Clarifications for Trusted non-3GPP Access using TNGF | Intel Corporation (UK) Ltd | agreed | S3-212683 |  |
| S3-213238 | 5GFBS-Update of solution#17 | Apple, CableLabs, Intel | approved | S3-212780 |  |
| S3-213239 | CR on TS 33.501 on the security context handling in IRAT | Apple | agreed | S3-212796 |  |
| S3-213240 | FBS - Clarification quantum-resistance | Philips International B.V. | approved | S3-212744 |  |
| S3-213241 | Clarification in Solution 4 | Philips International B.V. | approved | S3-212743 |  |
| S3-213242 | FBS - Evaluation Solution 23 | Philips International B.V. | approved | S3-212746 |  |
| S3-213243 | FBS - Evaluation Solution 24 | Philips International B.V. | approved | S3-212747 |  |
| S3-213244 | TR 33.809-5GFBS | Apple Computer Trading Co. Ltd | approved |  |  |
| S3-213245 | Living document for GBA\_5G: draftCR to TS 33.220: SBA support for Zh and Zn interfaces | Ericsson | approved | S3-212500 |  |
| S3-213246 | Living document for GBA\_5G: draftCR to TS 33.223: SBA support for Zpn | Ericsson | approved | S3-212501 |  |
| S3-213247 | Draft TS 33.326 | Huawei, HiSilicon | approved |  |  |
| S3-213248 | Coversheet for TS 33.326 | Huawei, Hisilicon | approved |  |  |
| S3-213249 | A new testcase to NSSAAF SCAS | Huawei, HiSilicon | approved | S3-212595 |  |
| S3-213250 | Clarification on AS key generation after runing NAS SMC | Huawei, HiSilicon | agreed | S3-212597 |  |
| S3-213251 | CR to 33.926 threat analysis on select AAA-P and AAA-S | Huawei, HiSilicon | agreed | S3-212602 |  |
| S3-213252 | Clarification on AAnF selection | Huawei, HiSilicon | agreed | S3-212600 |  |
| S3-213253 | User Plane Integrity Protection Policy Handling in EN-DC | Ericsson | approved | S3-212771 |  |
| S3-213254 | User Plane Integrity Protection Policy Handling in IW handover from 5GS to EPS | Ericsson | approved | S3-212772 |  |
| S3-213255 | User Plane Integrity Protection Policy Handling in DC | Ericsson | approved | S3-212773 |  |
| S3-213256 | User Plane Integrity Protection Policy Handling in IW handover from EPS to 5GS | Ericsson | approved | S3-212774 |  |
| S3-213257 | Clarification on Data Masking on Integration Analysis | China Mobile | agreed | S3-212821 |  |
| S3-213258 | LS on User Plane Integrity Protection for eUTRA connected to EPC | Qualcomm Incorporated | revised | S3-212848 | S3-213272 |
| S3-213259 | Updates to solution #17 capability negotiation | Intel Corporation (UK) Ltd | approved | S3-212677 |  |
| S3-213260 | Draft TS 33.256 | Qualcomm CDMA Technologies | approved |  |  |
| S3-213261 | Rel16 Align KAUSF handling for 5G AKA and EAP-AKA' | Ericsson | agreed | S3-212506 |  |
| S3-213262 | Rel17 Align KAUSF handling for 5G AKA and EAP-AKA' for Release 17 | Ericsson | agreed | S3-212507 |  |
| S3-213263 | pCR to Living doc on addition of 5G to BEST - addition of EMSDP updates | VODAFONE Group Plc | approved | S3-212684 |  |
| S3-213264 | Security updates for algorithms and protocols for 33.310 | Ericsson | approved | S3-213022 |  |
| S3-213265 | Security updates for algorithms and protocols for 33.210 | Ericsson | approved | S3-213023 |  |
| S3-213266 | Living CR for UPIP for LTE | Vodafone | available | S3-212730 |  |
| S3-213267 | Response LS on 256-bit algorithms based on SNOW 3G or SNOW V | VODAFONE Group Plc | approved | S3-212686 |  |
| S3-213268 | Add step 4 in annex B.1.2.2 | ZTE Corporation | agreed | S3-212535 | - |
| S3-213269 | Draft\_skeleton\_for\_draft\_CR\_eNA\_SEC | China Mobile | approved | S3-212811 | - |
| S3-213270 | Living document for 5BMS | Huawei | approved | - | - |
| S3-213271 | Reply-LS on security aspects for the method of collection of data from the UE | Guangdong OPPO Mobile Telecom. | approved | S3-212679 | - |
| S3-213272 | LS on User Plane Integrity Protection for eUTRA connected to EPC | Qualcomm Incorporated | approved | S3-213258 | - |

### A2: Tdoc decision timing

|  |  |  |
| --- | --- | --- |
| Document | Date/time UTC | Decision |
| S3-212400 | 31/08/2021 13:34:38 | approved |
| S3-212401 | 31/08/2021 13:34:55 | approved |
| S3-212402 | 31/08/2021 13:34:43 | noted |
| S3-212403 | 31/08/2021 13:34:58 | noted |
| S3-212404 | 31/08/2021 13:35:17 | noted |
| S3-212407 | 31/08/2021 17:18:29 | noted |
| S3-212409 | 31/08/2021 13:42:56 | revised |
| S3-212410 | 31/08/2021 13:54:09 | available |
| S3-212411 | 31/08/2021 15:42:17 | postponed |
| S3-212412 | 31/08/2021 15:42:18 | postponed |
| S3-212413 | 31/08/2021 13:56:00 | noted |
| S3-212414 | 01/09/2021 08:37:41 | postponed |
| S3-212415 | 01/09/2021 08:37:48 | noted |
| S3-212416 | 01/09/2021 08:37:54 | noted |
| S3-212417 | 01/09/2021 08:38:01 | noted |
| S3-212418 | 01/09/2021 09:57:44 | noted |
| S3-212419 | 31/08/2021 17:21:55 | postponed |
| S3-212420 | 31/08/2021 16:33:11 | available |
| S3-212421 | 31/08/2021 17:25:07 | postponed |
| S3-212422 | 31/08/2021 17:25:11 | noted |
| S3-212423 | 31/08/2021 17:25:11 | noted |
| S3-212424 | 31/08/2021 18:01:47 | available |
| S3-212425 | 31/08/2021 13:56:36 | available |
| S3-212426 | 31/08/2021 14:43:30 | postponed |
| S3-212427 | 01/09/2021 09:24:24 | available |
| S3-212429 | 31/08/2021 14:22:40 | available |
| S3-212430 | 31/08/2021 16:35:34 | noted |
| S3-212431 | 31/08/2021 14:25:02 | postponed |
| S3-212432 | 31/08/2021 14:25:03 | postponed |
| S3-212433 | 31/08/2021 14:25:41 | noted |
| S3-212434 | 31/08/2021 14:25:49 | noted |
| S3-212435 | 31/08/2021 14:25:54 | noted |
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| S3-212438 | 01/09/2021 09:57:21 | noted |
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| S3-212440 | 31/08/2021 14:27:46 | noted |
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| S3-212555 | 01/09/2021 08:33:22 | approved |
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| S3-212560 | 01/09/2021 09:52:00 | noted |
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| S3-212569 | 31/08/2021 17:12:58 | noted |
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| S3-212596 | 31/08/2021 16:17:57 | agreed |
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| S3-212641 | 01/09/2021 09:58:02 | noted |
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| S3-212647 | 31/08/2021 15:52:33 | approved |
| S3-212650 | 31/08/2021 15:57:22 | approved |
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| S3-212660 | 01/09/2021 09:30:33 | approved |
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| S3-212679 | 01/09/2021 09:24:17 | approved |
| S3-212679 | 01/09/2021 09:26:34 | revised |
| S3-212680 | 31/08/2021 17:42:12 | approved |
| S3-212682 | 01/09/2021 09:57:30 | approved |
| S3-212685 | 31/08/2021 14:36:08 | available |
| S3-212687 | 01/09/2021 09:57:33 | approved |
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| S3-212690 | 01/09/2021 08:39:39 | noted |
| S3-212691 | 01/09/2021 08:39:41 | noted |
| S3-212692 | 31/08/2021 17:05:05 | available |
| S3-212693 | 31/08/2021 16:32:17 | available |
| S3-212695 | 31/08/2021 15:27:05 | available |
| S3-212696 | 31/08/2021 15:30:39 | noted |
| S3-212697 | 31/08/2021 14:44:38 | available |
| S3-212698 | 31/08/2021 14:36:12 | available |
| S3-212699 | 01/09/2021 08:39:50 | noted |
| S3-212700 | 01/09/2021 08:39:58 | noted |
| S3-212706 | 31/08/2021 16:36:30 | approved |
| S3-212710 | 01/09/2021 08:40:08 | noted |
| S3-212711 | 01/09/2021 08:57:46 | approved |
| S3-212712 | 01/09/2021 08:57:58 | noted |
| S3-212715 | 31/08/2021 15:41:40 | approved |
| S3-212716 | 31/08/2021 15:41:48 | approved |
| S3-212717 | 01/09/2021 08:34:27 | noted |
| S3-212718 | 01/09/2021 08:34:51 | available |
| S3-212719 | 01/09/2021 08:35:05 | noted |
| S3-212720 | 01/09/2021 08:35:15 | approved |
| S3-212724 | 31/08/2021 14:36:26 | available |
| S3-212725 | 31/08/2021 14:25:18 | noted |
| S3-212726 | 31/08/2021 14:25:19 | noted |
| S3-212728 | 01/09/2021 08:20:31 | available |
| S3-212729 | 01/09/2021 08:21:04 | available |
| S3-212732 | 01/09/2021 08:21:56 | available |
| S3-212733 | 01/09/2021 08:40:21 | approved |
| S3-212736 | 31/08/2021 15:45:00 | noted |
| S3-212737 | 31/08/2021 15:45:06 | available |
| S3-212738 | 31/08/2021 17:04:21 | available |
| S3-212740 | 31/08/2021 15:45:14 | noted |
| S3-212741 | 31/08/2021 17:05:35 | agreed |
| S3-212742 | 31/08/2021 17:05:36 | agreed |
| S3-212745 | 01/09/2021 08:24:47 | approved |
| S3-212748 | 31/08/2021 17:14:29 | noted |
| S3-212749 | 01/09/2021 08:35:36 | noted |
| S3-212754 | 01/09/2021 08:40:31 | noted |
| S3-212755 | 31/08/2021 16:18:33 | noted |
| S3-212756 | 31/08/2021 16:18:43 | available |
| S3-212757 | 31/08/2021 16:18:46 | available |
| S3-212758 | 31/08/2021 16:18:49 | available |
| S3-212759 | 31/08/2021 16:18:59 | available |
| S3-212760 | 31/08/2021 16:19:15 | noted |
| S3-212762 | 01/09/2021 09:59:07 | noted |
| S3-212763 | 01/09/2021 09:59:16 | approved |
| S3-212764 | 01/09/2021 09:59:27 | approved |
| S3-212766 | 01/09/2021 08:25:39 | approved |
| S3-212767 | 01/09/2021 08:40:37 | noted |
| S3-212768 | 01/09/2021 08:40:41 | noted |
| S3-212769 | 01/09/2021 08:40:46 | noted |
| S3-212775 | 31/08/2021 15:37:08 | approved |
| S3-212776 | 31/08/2021 15:37:13 | approved |
| S3-212777 | 31/08/2021 15:37:48 | noted |
| S3-212778 | 31/08/2021 15:37:55 | noted |
| S3-212779 | 31/08/2021 16:37:01 | noted |
| S3-212781 | 31/08/2021 17:14:57 | noted |
| S3-212782 | 31/08/2021 17:15:06 | noted |
| S3-212783 | 31/08/2021 17:42:25 | noted |
| S3-212784 | 31/08/2021 17:42:30 | noted |
| S3-212785 | 31/08/2021 17:42:35 | noted |
| S3-212785 | 31/08/2021 17:42:36 | agreed |
| S3-212785 | 31/08/2021 17:42:38 | noted |
| S3-212786 | 31/08/2021 17:43:27 | noted |
| S3-212787 | 31/08/2021 17:43:37 | noted |
| S3-212788 | 01/09/2021 08:58:25 | noted |
| S3-212790 | 01/09/2021 10:50:22 | noted |
| S3-212791 | 01/09/2021 10:50:27 | available |
| S3-212792 | 01/09/2021 10:50:30 | noted |
| S3-212793 | 01/09/2021 10:50:03 | noted |
| S3-212794 | 31/08/2021 14:36:38 | available |
| S3-212795 | 31/08/2021 17:06:15 | noted |
| S3-212797 | 31/08/2021 17:04:18 | available |
| S3-212798 | 31/08/2021 17:06:42 | noted |
| S3-212798 | 03/09/2021 08:48:10 | agreed |
| S3-212799 | 31/08/2021 16:37:07 | agreed |
| S3-212800 | 31/08/2021 16:37:18 | approved |
| S3-212801 | 01/09/2021 09:16:14 | approved |
| S3-212802 | 01/09/2021 09:16:19 | approved |
| S3-212803 | 01/09/2021 09:16:19 | approved |
| S3-212804 | 01/09/2021 09:16:36 | noted |
| S3-212805 | 01/09/2021 09:16:50 | approved |
| S3-212806 | 01/09/2021 09:16:52 | approved |
| S3-212807 | 01/09/2021 09:16:53 | approved |
| S3-212808 | 01/09/2021 09:17:02 | approved |
| S3-212811 | 31/08/2021 16:59:04 | revised |
| S3-212812 | 01/09/2021 09:30:56 | noted |
| S3-212813 | 01/09/2021 09:31:30 | available |
| S3-212814 | 01/09/2021 09:31:44 | noted |
| S3-212814 | 01/09/2021 09:31:48 | approved |
| S3-212815 | 01/09/2021 09:31:56 | noted |
| S3-212816 | 01/09/2021 09:32:13 | available |
| S3-212817 | 01/09/2021 09:32:41 | available |
| S3-212818 | 01/09/2021 09:33:05 | noted |
| S3-212820 | 31/08/2021 17:15:34 | agreed |
| S3-212822 | 31/08/2021 15:01:59 | available |
| S3-212823 | 31/08/2021 17:06:54 | available |
| S3-212824 | 31/08/2021 17:06:57 | available |
| S3-212825 | 31/08/2021 15:02:46 | available |
| S3-212826 | 31/08/2021 17:07:07 | available |
| S3-212829 | 31/08/2021 17:30:04 | available |
| S3-212830 | 31/08/2021 17:30:23 | available |
| S3-212831 | 31/08/2021 17:30:53 | available |
| S3-212832 | 31/08/2021 17:31:55 | approved |
| S3-212834 | 31/08/2021 16:15:48 | noted |
| S3-212835 | 31/08/2021 16:15:53 | noted |
| S3-212836 | 31/08/2021 16:16:24 | available |
| S3-212837 | 31/08/2021 16:17:04 | available |
| S3-212838 | 31/08/2021 14:43:42 | noted |
| S3-212839 | 31/08/2021 14:43:54 | available |
| S3-212840 | 31/08/2021 16:03:53 | available |
| S3-212841 | 31/08/2021 16:04:39 | available |
| S3-212842 | 31/08/2021 15:40:44 | available |
| S3-212843 | 31/08/2021 17:24:08 | noted |
| S3-212844 | 31/08/2021 17:24:16 | noted |
| S3-212845 | 31/08/2021 17:24:25 | approved |
| S3-212846 | 31/08/2021 17:07:14 | available |
| S3-212847 | 31/08/2021 17:07:26 | noted |
| S3-212849 | 31/08/2021 17:45:39 | noted |
| S3-212850 | 01/09/2021 09:53:04 | noted |
| S3-212851 | 01/09/2021 08:26:25 | available |
| S3-212852 | 01/09/2021 08:26:43 | available |
| S3-212853 | 01/09/2021 08:26:59 | noted |
| S3-212855 | 01/09/2021 08:27:20 | noted |
| S3-212856 | 01/09/2021 08:27:28 | approved |
| S3-212857 | 01/09/2021 08:27:52 | available |
| S3-212858 | 01/09/2021 08:28:06 | noted |
| S3-212859 | 01/09/2021 08:28:10 | noted |
| S3-212860 | 01/09/2021 08:28:12 | noted |
| S3-212861 | 01/09/2021 08:28:26 | noted |
| S3-212862 | 01/09/2021 08:36:11 | noted |
| S3-212864 | 01/09/2021 08:36:45 | available |
| S3-212866 | 31/08/2021 17:15:23 | noted |
| S3-212867 | 01/09/2021 08:41:06 | noted |
| S3-212868 | 01/09/2021 08:41:11 | noted |
| S3-212869 | 31/08/2021 15:03:03 | available |
| S3-212870 | 01/09/2021 10:43:44 | available |
| S3-212872 | 31/08/2021 14:43:57 | available |
| S3-212874 | 01/09/2021 08:58:36 | approved |
| S3-212875 | 01/09/2021 10:49:18 | approved |
| S3-212877 | 31/08/2021 16:23:59 | noted |
| S3-212877 | 31/08/2021 16:30:59 | postponed |
| S3-212877 | 31/08/2021 16:31:03 | noted |
| S3-212879 | 01/09/2021 09:59:42 | noted |
| S3-212881 | 31/08/2021 16:43:32 | noted |
| S3-212883 | 01/09/2021 10:00:23 | approved |
| S3-212888 | 01/09/2021 10:01:06 | approved |
| S3-212889 | 01/09/2021 10:01:19 | noted |
| S3-212890 | 01/09/2021 10:17:31 | noted |
| S3-212894 | 31/08/2021 16:20:27 | available |
| S3-212895 | 31/08/2021 16:44:36 | agreed |
| S3-212896 | 31/08/2021 16:46:33 | agreed |
| S3-212898 | 31/08/2021 16:20:55 | revised |
| S3-212899 | 31/08/2021 16:21:07 | available |
| S3-212900 | 31/08/2021 16:21:10 | available |
| S3-212901 | 31/08/2021 15:03:14 | noted |
| S3-212902 | 31/08/2021 15:03:23 | available |
| S3-212903 | 31/08/2021 15:03:26 | available |
| S3-212904 | 01/09/2021 09:17:14 | approved |
| S3-212905 | 01/09/2021 09:17:23 | approved |
| S3-212906 | 01/09/2021 09:17:29 | approved |
| S3-212907 | 01/09/2021 09:17:38 | approved |
| S3-212908 | 01/09/2021 09:23:23 | noted |
| S3-212913 | 31/08/2021 17:46:45 | noted |
| S3-212914 | 31/08/2021 17:47:51 | noted |
| S3-212915 | 01/09/2021 08:58:48 | noted |
| S3-212917 | 01/09/2021 10:17:46 | noted |
| S3-212918 | 01/09/2021 09:52:58 | noted |
| S3-212919 | 01/09/2021 09:53:13 | approved |
| S3-212920 | 01/09/2021 08:37:19 | noted |
| S3-212922 | 01/09/2021 09:57:02 | noted |
| S3-212923 | 01/09/2021 09:57:02 | noted |
| S3-212924 | 01/09/2021 09:57:04 | noted |
| S3-212925 | 01/09/2021 09:57:08 | noted |
| S3-212926 | 01/09/2021 09:53:21 | noted |
| S3-212928 | 01/09/2021 10:18:10 | approved |
| S3-212930 | 01/09/2021 10:18:31 | approved |
| S3-212932 | 01/09/2021 10:18:46 | noted |
| S3-212933 | 01/09/2021 10:18:55 | noted |
| S3-212934 | 01/09/2021 08:29:11 | available |
| S3-212935 | 01/09/2021 08:29:26 | approved |
| S3-212936 | 01/09/2021 09:53:33 | approved |
| S3-212937 | 31/08/2021 17:48:01 | approved |
| S3-212938 | 31/08/2021 17:48:37 | available |
| S3-212939 | 31/08/2021 17:49:09 | approved |
| S3-212941 | 31/08/2021 17:32:16 | noted |
| S3-212942 | 31/08/2021 17:51:17 | noted |
| S3-212943 | 31/08/2021 17:51:40 | noted |
| S3-212945 | 31/08/2021 14:47:51 | noted |
| S3-212948 | 31/08/2021 17:32:49 | available |
| S3-212949 | 01/09/2021 09:53:50 | noted |
| S3-212950 | 31/08/2021 16:34:48 | available |
| S3-212951 | 31/08/2021 17:52:09 | approved |
| S3-212952 | 31/08/2021 17:52:14 | approved |
| S3-212953 | 01/09/2021 08:29:30 | approved |
| S3-212955 | 01/09/2021 08:29:48 | noted |
| S3-212958 | 01/09/2021 08:30:06 | noted |
| S3-212961 | 01/09/2021 08:30:25 | approved |
| S3-212962 | 01/09/2021 08:30:54 | available |
| S3-212963 | 01/09/2021 08:31:02 | noted |
| S3-212966 | 01/09/2021 08:31:23 | noted |
| S3-212968 | 01/09/2021 08:31:42 | noted |
| S3-212969 | 01/09/2021 08:41:33 | approved |
| S3-212970 | 01/09/2021 08:41:45 | noted |
| S3-212971 | 01/09/2021 08:41:46 | noted |
| S3-212972 | 01/09/2021 08:41:47 | noted |
| S3-212974 | 31/08/2021 16:34:51 | available |
| S3-212976 | 31/08/2021 14:48:00 | available |
| S3-212977 | 31/08/2021 16:35:01 | noted |
| S3-212985 | 01/09/2021 09:39:19 | noted |
| S3-212987 | 01/09/2021 09:39:38 | noted |
| S3-212988 | 01/09/2021 09:39:42 | noted |
| S3-212990 | 01/09/2021 09:40:02 | noted |
| S3-212991 | 01/09/2021 09:41:04 | available |
| S3-212992 | 01/09/2021 09:41:16 | noted |
| S3-212994 | 01/09/2021 09:48:33 | noted |
| S3-212995 | 01/09/2021 09:48:43 | approved |
| S3-212997 | 01/09/2021 09:49:05 | available |
| S3-212998 | 01/09/2021 09:49:15 | available |
| S3-212999 | 01/09/2021 10:49:35 | available |
| S3-213000 | 01/09/2021 09:02:24 | available |
| S3-213001 | 01/09/2021 10:49:43 | noted |
| S3-213002 | 31/08/2021 14:27:04 | noted |
| S3-213003 | 01/09/2021 10:50:08 | available |
| S3-213004 | 31/08/2021 14:27:32 | noted |
| S3-213006 | 31/08/2021 17:22:55 | noted |
| S3-213006 | 31/08/2021 17:24:40 | approved |
| S3-213007 | 31/08/2021 17:24:31 | noted |
| S3-213010 | 31/08/2021 17:56:45 | noted |
| S3-213011 | 31/08/2021 17:57:29 | noted |
| S3-213012 | 31/08/2021 16:35:10 | available |
| S3-213013 | 31/08/2021 16:35:17 | available |
| S3-213014 | 31/08/2021 13:57:53 | noted |
| S3-213018 | 01/09/2021 09:50:57 | noted |
| S3-213019 | 01/09/2021 09:51:02 | noted |
| S3-213020 | 31/08/2021 15:40:51 | agreed |
| S3-213021 | 31/08/2021 15:41:01 | available |
| S3-213025 | 31/08/2021 15:38:01 | noted |
| S3-213026 | 31/08/2021 15:38:14 | noted |
| S3-213027 | 31/08/2021 14:25:32 | noted |
| S3-213028 | 01/09/2021 08:42:10 | noted |
| S3-213029 | 01/09/2021 10:21:18 | noted |
| S3-213030 | 01/09/2021 10:21:25 | approved |
| S3-213032 | 01/09/2021 10:51:26 | noted |
| S3-213033 | 31/08/2021 17:24:49 | postponed |
| S3-213034 | 31/08/2021 14:30:08 | approved |
| S3-213035 | 01/09/2021 09:56:35 | approved |
| S3-213036 | 01/09/2021 10:24:29 | revised |
| S3-213036 | 01/09/2021 10:48:17 | approved |
| S3-213037 | 01/09/2021 10:42:59 | approved |
| S3-213038 | 01/09/2021 08:32:07 | approved |
| S3-213039 | 01/09/2021 09:38:37 | approved |
| S3-213040 | 31/08/2021 14:37:07 | postponed |
| S3-213041 | 01/09/2021 09:39:08 | approved |
| S3-213042 | 01/09/2021 08:41:23 | approved |
| S3-213043 | 01/09/2021 09:58:56 | approved |
| S3-213044 | 01/09/2021 09:38:57 | approved |
| S3-213045 | 01/09/2021 09:48:22 | approved |
| S3-213046 | 01/09/2021 09:39:55 | approved |
| S3-213047 | 01/09/2021 09:39:26 | approved |
| S3-213048 | 01/09/2021 09:37:55 | approved |
| S3-213049 | 01/09/2021 09:53:42 | approved |
| S3-213050 | 01/09/2021 09:38:48 | approved |
| S3-213051 | 01/09/2021 09:38:21 | approved |
| S3-213052 | 01/09/2021 09:38:07 | approved |
| S3-213053 | 01/09/2021 10:00:15 | approved |
| S3-213054 | 01/09/2021 10:00:56 | approved |
| S3-213055 | 01/09/2021 10:00:41 | approved |
| S3-213056 | 01/09/2021 10:00:45 | approved |
| S3-213057 | 01/09/2021 09:59:35 | approved |
| S3-213058 | 01/09/2021 10:00:29 | approved |
| S3-213059 | 31/08/2021 18:05:07 | approved |
| S3-213060 | 31/08/2021 18:05:11 | approved |
| S3-213061 | 01/09/2021 09:59:55 | noted |
| S3-213062 | 31/08/2021 18:05:17 | approved |
| S3-213063 | 31/08/2021 18:08:20 | approved |
| S3-213064 | 01/09/2021 09:48:49 | approved |
| S3-213065 | 01/09/2021 08:42:02 | approved |
| S3-213066 | 01/09/2021 08:38:42 | approved |
| S3-213067 | 31/08/2021 17:29:30 | approved |
| S3-213068 | 31/08/2021 17:29:37 | approved |
| S3-213069 | 31/08/2021 17:32:06 | approved |
| S3-213070 | 01/09/2021 08:39:21 | approved |
| S3-213071 | 01/09/2021 09:15:42 | approved |
| S3-213072 | 01/09/2021 11:27:13 | approved |
| S3-213073 | 01/09/2021 09:51:31 | approved |
| S3-213074 | 01/09/2021 08:25:48 | approved |
| S3-213075 | 01/09/2021 11:27:36 | approved |
| S3-213076 | 01/09/2021 08:27:09 | approved |
| S3-213077 | 01/09/2021 08:36:20 | approved |
| S3-213078 | 01/09/2021 08:37:09 | approved |
| S3-213079 | 31/08/2021 17:29:19 | approved |
| S3-213080 | 02/09/2021 15:18:54 | reserved |
| S3-213080 | 03/09/2021 07:45:22 | approved |
| S3-213081 | 31/08/2021 18:10:28 | approved |
| S3-213082 | 01/09/2021 08:38:53 | approved |
| S3-213083 | 01/09/2021 08:56:22 | approved |
| S3-213084 | 01/09/2021 08:32:20 | approved |
| S3-213085 | 01/09/2021 08:33:31 | approved |
| S3-213086 | 01/09/2021 09:52:15 | approved |
| S3-213087 | 31/08/2021 18:04:36 | approved |
| S3-213088 | 31/08/2021 18:08:29 | approved |
| S3-213089 | 31/08/2021 17:50:18 | approved |
| S3-213090 | 31/08/2021 17:51:52 | approved |
| S3-213091 | 01/09/2021 10:49:05 | approved |
| S3-213092 | 01/09/2021 08:21:37 | approved |
| S3-213093 | 01/09/2021 08:25:23 | approved |
| S3-213094 | 01/09/2021 11:27:01 | approved |
| S3-213095 | 01/09/2021 08:56:43 | approved |
| S3-213096 | 01/09/2021 08:56:55 | approved |
| S3-213097 | 01/09/2021 08:57:00 | approved |
| S3-213098 | 01/09/2021 08:57:08 | approved |
| S3-213099 | 01/09/2021 08:57:16 | approved |
| S3-213100 | 01/09/2021 08:57:21 | approved |
| S3-213101 | 01/09/2021 08:57:27 | approved |
| S3-213102 | 01/09/2021 08:58:09 | approved |
| S3-213103 | 01/09/2021 08:58:14 | approved |
| S3-213104 | 01/09/2021 08:35:25 | approved |
| S3-213105 | 31/08/2021 18:14:19 | approved |
| S3-213106 | 31/08/2021 18:16:33 | approved |
| S3-213107 | 31/08/2021 18:17:49 | approved |
| S3-213108 | 31/08/2021 18:17:54 | approved |
| S3-213109 | 31/08/2021 18:18:35 | approved |
| S3-213110 | 01/09/2021 08:19:49 | approved |
| S3-213111 | 01/09/2021 08:20:05 | approved |
| S3-213112 | 31/08/2021 17:36:19 | approved |
| S3-213113 | 01/09/2021 09:29:19 | approved |
| S3-213114 | 01/09/2021 11:26:49 | approved |
| S3-213115 | 02/09/2021 15:18:44 | reserved |
| S3-213115 | 03/09/2021 07:42:41 | approved |
| S3-213116 | 31/08/2021 17:36:24 | approved |
| S3-213117 | 31/08/2021 17:37:39 | approved |
| S3-213120 | 01/09/2021 09:58:12 | approved |
| S3-213121 | 01/09/2021 09:58:19 | approved |
| S3-213123 | 01/09/2021 08:33:51 | approved |
| S3-213124 | 01/09/2021 09:30:05 | approved |
| S3-213125 | 01/09/2021 09:30:41 | approved |
| S3-213126 | 01/09/2021 08:35:42 | approved |
| S3-213127 | 01/09/2021 08:35:48 | approved |
| S3-213128 | 31/08/2021 18:00:50 | approved |
| S3-213129 | 01/09/2021 11:26:20 | approved |
| S3-213130 | 31/08/2021 17:27:17 | approved |
| S3-213131 | 31/08/2021 17:45:53 | approved |
| S3-213132 | 31/08/2021 17:27:22 | approved |
| S3-213133 | 01/09/2021 10:20:14 | approved |
| S3-213134 | 01/09/2021 10:20:19 | approved |
| S3-213135 | 31/08/2021 17:45:54 | approved |
| S3-213136 | 01/09/2021 08:37:29 | approved |
| S3-213137 | 01/09/2021 08:28:43 | approved |
| S3-213138 | 01/09/2021 08:28:49 | approved |
| S3-213139 | 01/09/2021 10:17:38 | approved |
| S3-213140 | 01/09/2021 10:20:23 | approved |
| S3-213141 | 01/09/2021 10:17:55 | approved |
| S3-213142 | 01/09/2021 10:18:23 | approved |
| S3-213143 | 01/09/2021 10:18:37 | approved |
| S3-213144 | 01/09/2021 10:20:43 | approved |
| S3-213145 | 01/09/2021 11:27:57 | approved |
| S3-213146 | 01/09/2021 11:26:37 | approved |
| S3-213147 | 01/09/2021 08:40:53 | approved |
| S3-213148 | 01/09/2021 11:25:59 | approved |
| S3-213149 | 31/08/2021 14:21:51 | approved |
| S3-213150 | 31/08/2021 14:38:24 | noted |
| S3-213152 | 01/09/2021 09:49:38 | approved |
| S3-213153 | 01/09/2021 09:50:46 | approved |
| S3-213154 | 01/09/2021 09:49:57 | approved |
| S3-213155 | 01/09/2021 11:08:32 | agreed |
| S3-213156 | 02/09/2021 08:07:39 | agreed |
| S3-213157 | 31/08/2021 18:11:30 | withdrawn |
| S3-213158 | 01/09/2021 08:29:37 | approved |
| S3-213159 | 01/09/2021 08:29:56 | approved |
| S3-213160 | 01/09/2021 08:30:00 | approved |
| S3-213161 | 01/09/2021 08:30:11 | approved |
| S3-213162 | 01/09/2021 08:30:17 | approved |
| S3-213163 | 01/09/2021 08:31:09 | approved |
| S3-213164 | 01/09/2021 08:31:13 | approved |
| S3-213165 | 01/09/2021 08:31:33 | approved |
| S3-213166 | 01/09/2021 09:58:29 | approved |
| S3-213167 | 01/09/2021 11:27:27 | approved |
| S3-213168 | 31/08/2021 14:38:37 | postponed |
| S3-213169 | 31/08/2021 14:40:59 | available |
| S3-213170 | 01/09/2021 11:01:28 | approved |
| S3-213171 | 31/08/2021 17:08:40 | noted |
| S3-213172 | 31/08/2021 14:40:48 | approved |
| S3-213173 | 31/08/2021 17:22:41 | approved |
| S3-213174 | 01/09/2021 10:42:20 | approved |
| S3-213175 | 31/08/2021 18:03:57 | approved |
| S3-213176 | 31/08/2021 18:03:58 | approved |
| S3-213177 | 31/08/2021 16:44:24 | agreed |
| S3-213178 | 31/08/2021 16:44:12 | agreed |
| S3-213179 | 31/08/2021 14:47:01 | agreed |
| S3-213180 | 01/09/2021 11:07:09 | agreed |
| S3-213181 | 01/09/2021 08:31:55 | noted |
| S3-213182 | 31/08/2021 17:17:59 | approved |
| S3-213185 | 31/08/2021 14:28:39 | noted |
| S3-213186 | 31/08/2021 16:17:49 | agreed |
| S3-213187 | 02/09/2021 15:17:13 | reserved |
| S3-213187 | 06/09/2021 07:36:17 | withdrawn |
| S3-213189 | 31/08/2021 16:47:45 | agreed |
| S3-213190 | 31/08/2021 17:18:01 | approved |
| S3-213192 | 31/08/2021 13:53:57 | approved |
| S3-213193 | 31/08/2021 13:47:45 | approved |
| S3-213194 | 31/08/2021 17:00:13 | agreed |
| S3-213195 | 31/08/2021 16:58:27 | agreed |
| S3-213196 | 31/08/2021 16:20:04 | agreed |
| S3-213197 | 31/08/2021 16:20:09 | agreed |
| S3-213199 | 31/08/2021 16:20:17 | agreed |
| S3-213200 | 31/08/2021 17:04:39 | agreed |
| S3-213201 | 31/08/2021 15:43:28 | approved |
| S3-213202 | 02/09/2021 15:18:24 | reserved |
| S3-213202 | 03/09/2021 14:57:47 | approved |
| S3-213203 | 31/08/2021 15:43:19 | approved |
| S3-213205 | 31/08/2021 15:52:01 | approved |
| S3-213206 | 31/08/2021 15:51:15 | approved |
| S3-213207 | 31/08/2021 14:58:25 | reserved |
| S3-213207 | 03/09/2021 14:36:18 | approved |
| S3-213208 | 02/09/2021 15:19:05 | reserved |
| S3-213209 | 31/08/2021 16:32:53 | approved |
| S3-213210 | 31/08/2021 17:12:09 | approved |
| S3-213211 | 31/08/2021 17:52:30 | approved |
| S3-213212 | 31/08/2021 17:52:36 | approved |
| S3-213213 | 02/09/2021 08:21:49 | agreed |
| S3-213214 | 02/09/2021 08:21:50 | agreed |
| S3-213215 | 31/08/2021 14:42:26 | reserved |
| S3-213215 | 03/09/2021 09:09:47 | approved |
| S3-213216 | 31/08/2021 17:19:52 | approved |
| S3-213217 | 31/08/2021 17:15:45 | approved |
| S3-213218 | 31/08/2021 14:23:55 | approved |
| S3-213219 | 31/08/2021 16:05:05 | approved |
| S3-213220 | 31/08/2021 16:14:16 | approved |
| S3-213221 | 31/08/2021 15:26:41 | approved |
| S3-213223 | 31/08/2021 16:36:14 | agreed |
| S3-213224 | 31/08/2021 17:24:00 | approved |
| S3-213225 | 31/08/2021 15:57:04 | approved |
| S3-213226 | 31/08/2021 15:57:09 | approved |
| S3-213227 | 02/09/2021 15:17:36 | reserved |
| S3-213227 | 03/09/2021 14:36:47 | approved |
| S3-213228 | 31/08/2021 14:46:21 | approved |
| S3-213229 | 31/08/2021 14:46:30 | approved |
| S3-213231 | 31/08/2021 15:39:18 | approved |
| S3-213232 | 31/08/2021 16:37:32 | agreed |
| S3-213233 | 02/09/2021 15:18:34 | reserved |
| S3-213233 | 03/09/2021 09:10:02 | approved |
| S3-213234 | 31/08/2021 14:43:18 | approved |
| S3-213235 | 31/08/2021 15:43:06 | approved |
| S3-213236 | 31/08/2021 16:36:44 | agreed |
| S3-213237 | 31/08/2021 17:04:48 | agreed |
| S3-213238 | 31/08/2021 17:14:46 | approved |
| S3-213239 | 31/08/2021 17:06:25 | agreed |
| S3-213240 | 31/08/2021 17:13:53 | approved |
| S3-213241 | 31/08/2021 17:13:36 | approved |
| S3-213242 | 31/08/2021 17:14:04 | approved |
| S3-213243 | 31/08/2021 17:14:12 | approved |
| S3-213244 | 01/09/2021 11:25:46 | approved |
| S3-213245 | 31/08/2021 14:41:19 | reserved |
| S3-213245 | 03/09/2021 09:10:07 | approved |
| S3-213246 | 31/08/2021 14:41:24 | reserved |
| S3-213246 | 03/09/2021 09:10:30 | approved |
| S3-213247 | 02/09/2021 15:16:52 | reserved |
| S3-213247 | 06/09/2021 07:36:45 | approved |
| S3-213248 | 02/09/2021 15:16:59 | reserved |
| S3-213248 | 06/09/2021 07:36:46 | approved |
| S3-213249 | 31/08/2021 14:45:39 | approved |
| S3-213250 | 31/08/2021 16:54:22 | agreed |
| S3-213251 | 31/08/2021 14:46:05 | agreed |
| S3-213252 | 31/08/2021 15:01:12 | agreed |
| S3-213253 | 31/08/2021 15:34:51 | approved |
| S3-213254 | 31/08/2021 15:34:55 | approved |
| S3-213255 | 31/08/2021 15:35:03 | approved |
| S3-213256 | 31/08/2021 15:35:05 | approved |
| S3-213257 | 31/08/2021 14:44:46 | agreed |
| S3-213258 | 31/08/2021 15:16:11 | approved |
| S3-213258 | 02/09/2021 08:12:51 | revised |
| S3-213259 | 31/08/2021 17:13:21 | approved |
| S3-213260 | 02/09/2021 08:08:20 | approved |
| S3-213261 | 31/08/2021 16:48:39 | agreed |
| S3-213262 | 31/08/2021 16:48:40 | agreed |
| S3-213263 | 31/08/2021 14:58:39 | approved |
| S3-213264 | 31/08/2021 15:41:27 | approved |
| S3-213265 | 31/08/2021 15:41:33 | approved |
| S3-213266 | 31/08/2021 15:33:57 | approved |
| S3-213267 | 31/08/2021 13:56:28 | approved |
| S3-213268 | 31/08/2021 16:49:31 | agreed |
| S3-213269 | 31/08/2021 16:59:05 | approved |
| S3-213270 | 02/09/2021 15:17:25 | reserved |
| S3-213270 | 03/09/2021 07:45:36 | approved |
| S3-213271 | 01/09/2021 09:26:35 | approved |
| S3-213272 | 02/09/2021 08:12:52 | approved |

## Annex B: List of change requests

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Spec | CR | Rev | Rel | Cat | WI | Decision |
| S3-212846 | Adding MACS as an input parameter to the calculation of AK\* to provide freshness | Qualcomm Incorporated, Thales | 33.102 | 0277 | 3 | Rel-17 | F | TEI17 | not pursued |
| S3-212871 | Alignment of requirements with specification updates | Nokia, Nokia Shanghai Bell | 33.117 | 0071 | 2 | Rel-16 | F | SCAS\_5G | withdrawn |
| S3-212872 | Alignment of requirements with specification updates | Nokia, Nokia Shanghai Bell | 33.117 | 0071 | 3 | Rel-16 | F | SCAS\_5G | not pursued |
| S3-212467 | [33.180] R17 Group subscription | Motorola Solutions Danmark A/S | 33.180 | 0173 | - | Rel-17 | F | MCXSec2 | revised |
| S3-213179 | [33.180] R17 Group subscription | Motorola Solutions Danmark A/S | 33.180 | 0173 | 1 | Rel-17 | F | MCXSec2 | agreed |
| S3-212468 | [33.180] R17 Preconfigured group clarification | Motorola Solutions Danmark A/S | 33.180 | 0174 | - | Rel-17 | B | MCXSec2 | not pursued |
| S3-212621 | Security solution for temporary group call | Huawei,HiSilicon | 33.180 | 0175 | - | Rel-17 | B | MCXSec2 | not pursued |
| S3-212976 | Security for temporary calls | CATT | 33.180 | 0176 | - | Rel-17 | B | MCXSec2 | not pursued |
| S3-213021 | eCryptPr 02 CR 33.203 R17 Security updates for algorithms and protocols | Ericsson | 33.203 | 0259 | - | Rel-17 | B | eCryptPr | not pursued |
| S3-212596 | An editoral change to TS 33.216 | Huawei, HiSilicon | 33.216 | 0023 | - | Rel-17 | F | SCAS\_5G | agreed |
| S3-212491 | Extending the Ua security protocol namespace to include the AKMA OSCORE Ua\* protocol | Ericsson | 33.220 | 0213 | - | Rel-17 | B | DUMMY | not pursued |
| S3-212842 | Correction to the GBA TLS 1.3 specification | Qualcomm Incorporated | 33.222 | 0055 | - | Rel-17 | F | eCryptPr | not pursued |
| S3-213020 | eCryptPr 01 CR 33.310 R17 Security updates for algorithms and protocols | Ericsson | 33.310 | 0120 | - | Rel-17 | B | eCryptPr | agreed |
| S3-212692 | Clarification on RRCConnectionRe-establishment Procedure in Control Plane CIoT EPS Optimization | Huawei, HiSilicon | 33.401 | 0699 | - | Rel-14 | F | TEI14 | not pursued |
| S3-212823 | Prevention of attacks on slice core by CCA modifications - Rel-16 | Nokia, Nokia Shanghai Bell | 33.501 | 1131 | 1 | Rel-16 | F | 5G\_eSBA | not pursued |
| S3-212824 | Prevention of attacks on slice core by CCA modifications - Rel-17 | Nokia, Nokia Shanghai Bell | 33.501 | 1132 | 1 | Rel-17 | A | 5G\_eSBA | not pursued |
| S3-212450 | OAuth2.0 misalignmnet | Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung | 33.501 | 1145 | - | Rel-16 | A | 5GS\_Ph1-SEC | revised |
| S3-213177 | OAuth2.0 misalignmnet | Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung, Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility | 33.501 | 1145 | 1 | Rel-16 | A | 5GS\_Ph1-SEC | agreed |
| S3-212451 | OAuth2.0 misalignmnet | Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung | 33.501 | 1146 | - | Rel-15 | F | 5GS\_Ph1-SEC | revised |
| S3-213178 | OAuth2.0 misalignmnet | Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung, Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility | 33.501 | 1146 | 1 | Rel-15 | F | 5GS\_Ph1-SEC | agreed |
| S3-212495 | Rel16 Clarification about multiple horizontal key derivations upon AMF re-allocation via direct NAS reroute | Ericsson | 33.501 | 1147 | - | Rel-16 | F | TEI16 | not pursued |
| S3-212496 | Rel17 Clarification about multiple horizontal key derivations upon AMF re-allocation via direct NAS reroute | Ericsson | 33.501 | 1148 | - | Rel-17 | A | TEI16 | not pursued |
| S3-212506 | Rel16 Align KAUSF handling for 5G AKA and EAP-AKA' | Ericsson | 33.501 | 1149 | - | Rel-16 | F | TEI16 | revised |
| S3-213261 | Rel16 Align KAUSF handling for 5G AKA and EAP-AKA' | Ericsson | 33.501 | 1149 | 1 | Rel-16 | F | TEI16 | agreed |
| S3-212507 | Rel17 Align KAUSF handling for 5G AKA and EAP-AKA' for Release 17 | Ericsson | 33.501 | 1150 | - | Rel-17 | A | TEI16 | revised |
| S3-213262 | Rel17 Align KAUSF handling for 5G AKA and EAP-AKA' for Release 17 | Ericsson | 33.501 | 1150 | 1 | Rel-17 | A | TEI16 | agreed |
| S3-212528 | Add Routing indicator in Authentication response | ZTE Corporation | 33.501 | 1151 | - | Rel-17 | F | AKMA | agreed |
| S3-212538 | Correct the description of KAUSF handling upon successful primary authentication-R16 | ZTE Corporation | 33.501 | 1152 | - | Rel-16 | F | TEI16 | not pursued |
| S3-212539 | Correct the description of KAUSF handling upon successful primary authentication-R17 | ZTE Corporation | 33.501 | 1153 | - | Rel-17 | A | TEI16 | not pursued |
| S3-212565 | Storage of Kausf | NEC Corporation | 33.501 | 1154 | - | Rel-17 | F | TEI17 | not pursued |
| S3-212571 | Serving network ID in NSSAA | Huawei, HiSilicon | 33.501 | 1155 | - | Rel-16 | F | eNS | not pursued |
| S3-212572 | Validity peirod of NSSAA result | Huawei, HiSilicon | 33.501 | 1156 | - | Rel-16 | F | eNS | not pursued |
| S3-212573 | Clarification on optional EAP ID Request in NSSAA Procedure | Huawei, HiSilicon | 33.501 | 1157 | - | Rel-16 | F | eNS | not pursued |
| S3-212597 | Clarification on AS key generation after runing NAS SMC | Huawei, HiSilicon | 33.501 | 1158 | - | Rel-17 | F | TEI17 | revised |
| S3-213250 | Clarification on AS key generation after runing NAS SMC | Huawei, HiSilicon | 33.501 | 1158 | 1 | Rel-17 | F | TEI17 | agreed |
| S3-212598 | Clarification on Kausf storage in multi-NAS connection | Huawei, HiSilicon | 33.501 | 1159 | - | Rel-17 | F | TEI17 | revised |
| S3-213191 | Clarification on Kausf storage in multi-NAS connection | Huawei, HiSilicon | 33.501 | 1159 | 1 | Rel-17 | F | TEI17 | revised |
| S3-213195 | Clarification on Kausf storage in multi-NAS connection | Huawei, HiSilicon | 33.501 | 1159 | 2 | Rel-17 | A | TEI16 | agreed |
| S3-212599 | Clarification on Kausf storage in multi-NAS connection | Huawei, HiSilicon | 33.501 | 1160 | - | Rel-16 | F | TEI16 | revised |
| S3-213194 | Clarification on Kausf storage in multi-NAS connection | Huawei, HiSilicon | 33.501 | 1160 | 1 | Rel-16 | F | TEI16 | agreed |
| S3-212607 | Add a new procedure to enable the AF to refresh the Kaf | Huawei, HiSilicon | 33.501 | 1161 | - | Rel-17 | F | AKMA | withdrawn |
| S3-212622 | Correction to Authorization for indirect communication with delegated discovery procedure in rel16 | Huawei,HiSilicon | 33.501 | 1162 | - | Rel-16 | F | 5G\_eSBA | not pursued |
| S3-212623 | Correction to Authorization for indirect communication with delegated discovery procedure in rel17 | Huawei,HiSilicon | 33.501 | 1163 | - | Rel-17 | A | 5G\_eSBA | not pursued |
| S3-212627 | Add the missing references | Huawei,HiSilicon | 33.501 | 1164 | - | Rel-17 | A | TEI15 | agreed |
| S3-212628 | Add the missing references for Rel 16 | Huawei,HiSilicon | 33.501 | 1165 | - | Rel-16 | A | TEI15 | agreed |
| S3-212629 | Add the missing references for Rel 15 | Huawei,HiSilicon | 33.501 | 1166 | - | Rel-15 | F | TEI15 | agreed |
| S3-212642 | UP Security policy requirement on the IMS data network | Huawei, HiSilicon | 33.501 | 1167 | - | Rel-17 | F | TEI17 | not pursued |
| S3-212654 | Clarification on SoR transparent container | Huawei, HiSilicon | 33.501 | 1168 | - | Rel-17 | F | TEI17 | agreed |
| S3-212670 | Claifications on SoR enablement | Huawei, HiSilicon | 33.501 | 1169 | - | Rel-17 | F | TEI17 | not pursued |
| S3-212683 | Editorial Clarifications for Trusted non-3GPP Access using TNGF | Intel Corporation (UK) Ltd | 33.501 | 1170 | - | Rel-17 | F | 5GS\_Ph1-SEC, TEI17 | revised |
| S3-213237 | Editorial Clarifications for Trusted non-3GPP Access using TNGF | Intel Corporation (UK) Ltd | 33.501 | 1170 | 1 | Rel-17 | A | TEI16 | agreed |
| S3-212693 | Clarification on RRCConnectionRe-establishment Procedure in Control Plane CIoT 5GS Optimization | Huawei, HiSilicon | 33.501 | 1171 | - | Rel-16 | F | 5G\_CIoT | not pursued |
| S3-212737 | UE parameters update data set types supported by the UE | Ericsson | 33.501 | 1172 | - | Rel-17 | B | eNPN | not pursued |
| S3-212738 | Protection of “ME support of SOR-CMCI” indication | Ericsson | 33.501 | 1173 | - | Rel-17 | B | TEI17 | not pursued |
| S3-212739 | Clarification on AMF transparency for UPU | Ericsson | 33.501 | 1174 | - | Rel-17 | F | TEI17 | revised |
| S3-213200 | Clarification on AMF transparency for UPU | Ericsson | 33.501 | 1174 | 1 | Rel-17 | F | TEI17 | agreed |
| S3-212741 | UDM Service correction | Ericsson | 33.501 | 1175 | - | Rel-16 | F | TEI16 | agreed |
| S3-212742 | UDM Service correction | Ericsson | 33.501 | 1176 | - | Rel-17 | A | TEI16 | agreed |
| S3-212756 | SEPP to verify the source PLMN-ID | Ericsson | 33.501 | 1177 | - | Rel-16 | F | 5G\_eSBA | not pursued |
| S3-212757 | SEPP to verify the source PLMN-ID | Ericsson | 33.501 | 1178 | - | Rel-17 | A | 5G\_eSBA | not pursued |
| S3-212758 | NF to always insert PLMN-ID enabling roaming scenario | Ericsson | 33.501 | 1179 | - | Rel-16 | F | 5G\_eSBA | not pursued |
| S3-212759 | NF to always insert PLMN-ID enabling roaming scenario | Ericsson | 33.501 | 1180 | - | Rel-17 | A | 5G\_eSBA | not pursued |
| S3-212791 | CR on TS 33.501 on adding requirement to mitigate the attack of selectively dropping NAS messages | Apple | 33.501 | 1181 | - | Rel-17 | C | TEI17 | not pursued |
| S3-212796 | CR on TS 33.501 on the security context handling in IRAT | Apple | 33.501 | 1182 | - | Rel-17 | F | TEI17 | revised |
| S3-213239 | CR on TS 33.501 on the security context handling in IRAT | Apple | 33.501 | 1182 | 1 | Rel-17 | F | TEI17 | agreed |
| S3-212797 | CR on TS 33.501 on SOR-MAC calculation | Apple | 33.501 | 1183 | - | Rel-17 | F | TEI17 | not pursued |
| S3-212826 | IPUPS overload control | Nokia, Nokia Shanghai Bell | 33.501 | 1184 | - | Rel-17 | B | DUMMY | not pursued |
| S3-212891 | NRF service definition R15 | Nokia, Nokia Shanghai Bell | 33.501 | 1185 | - | Rel-15 | F | 5G\_eSBA | revised |
| S3-213196 | NRF service definition R15 | Nokia, Nokia Shanghai Bell | 33.501 | 1185 | 1 | Rel-15 | F | TEI15 | agreed |
| S3-212892 | NRF service definition R16 | Nokia, Nokia Shanghai Bell | 33.501 | 1186 | - | Rel-16 | A | 5G\_eSBA | revised |
| S3-213197 | NRF service definition R16 | Nokia, Nokia Shanghai Bell | 33.501 | 1186 | 1 | Rel-16 | A | TEI15 | agreed |
| S3-212893 | NRF service definition R17 | Nokia, Nokia Shanghai Bell | 33.501 | 1187 | - | Rel-17 | A | 5G\_eSBA | revised |
| S3-213199 | NRF service definition R17 | Nokia, Nokia Shanghai Bell | 33.501 | 1187 | 1 | Rel-17 | A | TEI15 | agreed |
| S3-212894 | SBA NRF roaming clarification | Nokia, Nokia Shanghai Bell | 33.501 | 1188 | - | Rel-17 | F | 5G\_eSBA | not pursued |
| S3-212895 | OAuth misalignment - R15 | Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility | 33.501 | 1189 | - | Rel-15 | F | TEI15 | merged |
| S3-212896 | OAuth misalignment - R16 | Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility | 33.501 | 1190 | - | Rel-16 | A | TEI15 | merged |
| S3-212897 | OAuth misalignment - R17 | Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility | 33.501 | 1191 | - | Rel-17 | A | TEI15 | revised |
| S3-213189 | OAuth misalignment - R17 | Nokia, Nokia Shanghai Bell, Ericsson, AT&T, Interdigital, Xiaomi, HPE, Lenovo, Motorola Mobility, Mavenir, Huawei, HiSilicon, Deutsche Telekom AG, China Mobile, CableLabs, Verizon, Samsung | 33.501 | 1191 | 1 | Rel-17 | A | 5GS\_Ph1-SEC | agreed |
| S3-212898 | Alignment for Oauth2.0 validation R15 | Nokia, Nokia Shanghai Bell | 33.501 | 1192 | - | Rel-15 | F | 5G\_eSBA | not pursued |
| S3-213198 | Alignment for Oauth2.0 validation R15 | Nokia, Nokia Shanghai Bell | 33.501 | 1192 | 1 | Rel-15 | F | 5G\_eSBA | withdrawn |
| S3-212899 | Alignment for Oauth2.0 validation R16 | Nokia, Nokia Shanghai Bell | 33.501 | 1193 | - | Rel-16 | A | 5G\_eSBA | not pursued |
| S3-212900 | Alignment for Oauth2.0 validation R17 | Nokia, Nokia Shanghai Bell | 33.501 | 1194 | - | Rel-17 | A | 5G\_eSBA | not pursued |
| S3-212903 | [CR] HN triggering Primary (Re)Authentication | Samsung | 33.501 | 1195 | - | Rel-17 | B | AKMA | not pursued |
| S3-212950 | EAP ID Request in NSSAA Procedure (Rel-16) | Ericsson | 33.501 | 1196 | - | Rel-16 | F | eNS | not pursued |
| S3-212974 | EAP ID Request in NSSAA Procedure (Rel-17) | Ericsson | 33.501 | 1197 | - | Rel-17 | A | eNS | not pursued |
| S3-213003 | Padding SUPIs in NAI format for non-null schemes | Ericsson, AT&T, CableLabs | 33.501 | 1198 | - | Rel-17 | C | TEI17 | not pursued |
| S3-213012 | Recovering NSSAI and ENSI mapping (Rel-16) | Samsung | 33.501 | 1199 | - | Rel-16 | F | eNS | not pursued |
| S3-213013 | Recovering NSSAI and ENSI mapping (Rel-17) | Samsung | 33.501 | 1200 | - | Rel-17 | A | eNS | not pursued |
| S3-213180 | Mirror for Rel-16 Editorial Clarifications for Trusted non-3GPP Access using TNGF | Intel Corporation (UK) Ltd | 33.501 | 1201 | - | Rel-16 | F | TEI16 | agreed |
| S3-212839 | Adding SCAS for the various split gNB cases | Qualcomm Incorporated, Deutsche Telekom AG | 33.511 | 0025 | - | Rel-17 | B | eSCAS\_5G | not pursued |
| S3-212455 | AMF – NAS NULL integrity protection clarifications (Rel-16) | Keysight Technologies UK Ltd | 33.512 | 0011 | - | Rel-16 | F | SCAS\_5G | not pursued |
| S3-212456 | AMF – NAS NULL integrity protection clarifications (Rel-17) | Keysight Technologies UK Ltd | 33.512 | 0012 | - | Rel-17 | A | SCAS\_5G | not pursued |
| S3-212606 | add reference to TS 33.512 | Huawei, HiSilicon | 33.512 | 0013 | - | Rel-17 | F | eSCAS\_5G | agreed |
| S3-213184 | SCAS\_5G\_IPUPS: New test cases of IPUPS to TS 33.513 | ZTE Corporation | 33.513 | 0004 | - | Rel-17 | B | SCAS\_5G\_IPUPS | withdrawn |
| S3-213214 | SCAS\_5G\_IPUPS: New test cases of IPUPS to TS 33.513 | ZTE Corporation | 33.513 | 0005 | - | Rel-17 | B | SCAS\_5G\_IPUPS | agreed |
| S3-212454 | Correction of message name in SMF | Keysight Technologies UK Ltd | 33.515 | 0007 | - | Rel-16 | D | SCAS\_5G | withdrawn |
| S3-212459 | Correction of message name in SMF | Keysight Technologies UK Ltd | 33.515 | 0008 | - | Rel-16 | F | SCAS\_5G | revised |
| S3-213186 | Correction of message name in SMF | Keysight Technologies UK Ltd | 33.515 | 0008 | 1 | Rel-16 | F | SCAS\_5G | agreed |
| S3-212697 | Clarification on Finding the right NF instance are serving the UE | Huawei, HiSilicon | 33.521 | 0001 | - | Rel-17 | F | SCAS\_5G\_NWDAF | not pursued |
| S3-212821 | Clarification on Data Masking on Integration Analysis | China Mobile | 33.521 | 0002 | - | Rel-17 | F | SCAS\_5G\_NWDAF | revised |
| S3-213257 | Clarification on Data Masking on Integration Analysis | China Mobile | 33.521 | 0002 | 1 | Rel-17 | F | SCAS\_5G\_NWDAF | agreed |
| S3-212869 | Sending UE identifier to the AKMA AF | Qualcomm Incorporated | 33.535 | 0078 | 1 | Rel-17 | F | AKMA | not pursued |
| S3-212490 | IETF OSCORE as AKMA Ua\* protocol | Ericsson | 33.535 | 0084 | - | Rel-17 | B | DUMMY | not pursued |
| S3-212529 | Resolution of EN on other parameter in clause 6.3 | ZTE Corporation | 33.535 | 0085 | - | Rel-17 | F | AKMA | not pursued |
| S3-212530 | Resolve the Kaf update issue | ZTE Corporation | 33.535 | 0086 | - | Rel-17 | F | AKMA | not pursued |
| S3-212531 | UDM notifies AAnF AKMA context removal and performs AAnF selection | ZTE Corporation | 33.535 | 0087 | - | Rel-17 | F | AKMA | not pursued |
| S3-212532 | Update clause 6.1 about RID | ZTE Corporation | 33.535 | 0088 | - | Rel-17 | F | AKMA | agreed |
| S3-212533 | Update clause 6.1 refer to Kausf stored in AUSF | ZTE Corporation | 33.535 | 0089 | - | Rel-17 | F | AKMA | not pursued |
| S3-212535 | Add step 4 in annex B.1.2.2 | ZTE Corporation | 33.535 | 0090 | - | Rel-17 | F | AKMA\_TLS | revised |
| S3-213268 | Add step 4 in annex B.1.2.2 | ZTE Corporation | 33.535 | 0090 | 1 | Rel-17 | F | AKMA\_TLS | agreed |
| S3-212536 | Add TLS1.3 to annex B.1.3 | ZTE Corporation | 33.535 | 0091 | - | Rel-17 | B | AKMA\_TLS | not pursued |
| S3-212537 | Delete the GBA\_Digest in annex B.1.2.2 | ZTE Corporation | 33.535 | 0092 | - | Rel-17 | F | AKMA\_TLS | not pursued |
| S3-212600 | Clarification on AAnF selection | Huawei, HiSilicon | 33.535 | 0093 | - | Rel-17 | F | AKMA | revised |
| S3-213252 | Clarification on AAnF selection | Huawei, HiSilicon | 33.535 | 0093 | 1 | Rel-17 | F | AKMA | agreed |
| S3-212624 | Correction to Deriving AKMA Application Key for a specific AF | Huawei,HiSilicon | 33.535 | 0094 | - | Rel-17 | F | AKMA | not pursued |
| S3-212633 | Add a new procedure to enable the AF to refresh the Kaf | Huawei, HiSilicon | 33.535 | 0095 | - | Rel-17 | B | AKMA | not pursued |
| S3-212822 | Deleting the NOTE of roaming | China Mobile | 33.535 | 0096 | - | Rel-17 | F | AKMA | not pursued |
| S3-212825 | KAF refresh | China Mobile | 33.535 | 0097 | - | Rel-17 | B | AKMA | not pursued |
| S3-212840 | Corrections to the TLS with AKMA specification | Qualcomm Incorporated | 33.535 | 0098 | - | Rel-17 | F | AKMA\_TLS | not pursued |
| S3-212841 | Adding TLS 1.3 with AKMA keys | Qualcomm Incorporated | 33.535 | 0099 | - | Rel-17 | B | AKMA\_TLS | not pursued |
| S3-212902 | [CR] Refresh of KAF and KAKMA | Samsung | 33.535 | 0100 | - | Rel-17 | B | AKMA | not pursued |
| S3-212820 | Clean up the editorial issues | China Mobile | 33.818 | 0001 | - | Rel-17 | F | FS\_VNP\_SECAM\_SCAS | agreed |
| S3-213155 | Cleanup MUSIM TR | Intel Corporation (UK) Ltd | 33.873 | 0001 | - | Rel-17 | F | FS\_MUSIM\_SEC | agreed |
| S3-213156 | Key issue on security aspects of Paging Cause | Intel Corporation (UK) Ltd | 33.873 | 0002 | - | Rel-17 | B | FS\_MUSIM\_SEC | agreed |
| S3-212602 | CR to 33.926 threat analysis on select AAA-P and AAA-S | Huawei, HiSilicon | 33.926 | 0046 | - | Rel-17 | F | SCAS\_5G\_NSSAAF | revised |
| S3-213251 | CR to 33.926 threat analysis on select AAA-P and AAA-S | Huawei, HiSilicon | 33.926 | 0046 | 1 | Rel-17 | F | SCAS\_5G\_NSSAAF | agreed |
| S3-213183 | SCAS\_5G\_IPUPS: New threats to IPUPS to TR 33.926 | ZTE Corporation | 33.926 | 0047 | - | Rel-17 | B | SCAS\_5G\_IPUPS | withdrawn |
| S3-213213 | SCAS\_5G\_IPUPS: New threats to IPUPS to TR 33.926 | ZTE Corporation | 33.926 | 0048 | - | Rel-17 | B | SCAS\_5G\_IPUPS | agreed |

## Annex C: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Original | Title | From | Decision | Reply TDoc |
| S3-212409 |  | LS on OAuth2 misalignments between SA3 and CT4 specifications | CP-211326 | replied to | S3-213193 |
| S3-212410 |  | Misalignment on usage of OAuth within 3GPP 29.510 | GSMA | replied to | S3-213192 |
| S3-212411 |  | LS on UE capabilities indication in UPU | S2-2101072 | postponed | (none) |
| S3-212412 |  | Reply LS on UE capabilities indication in UPU | C1-212599 | postponed | (none) |
| S3-212413 |  | LS reply on SDP attribute a=key-mgmt:mikey | C1-213548 | noted | (none) |
| S3-212414 |  | LS on support of PWS over SNPN | S1-210368 | postponed | (none) |
| S3-212415 |  | Reply LS on support of PWS over SNPN | C1-213640 | noted | (none) |
| S3-212416 |  | Reply LS on support of PWS over SNPN in R17 | R3-212863 | noted | (none) |
| S3-212417 |  | Reply LS on support of PWS over NPN | SP-210584 | noted | (none) |
| S3-212418 |  | Reply LS on end-to-end protection of HTTP message for Indirect communication | C4-213369 | noted | (none) |
| S3-212419 |  | Reply to LS on Resynchronisations | ETSI SAGE | postponed | (none) |
| S3-212420 |  | Prevention of attacks on sliced core network | GSMA | replied to | S3-213209 |
| S3-212421 |  | Support of UAVs authentication/authorization in 3GPP systems and interfacing with USS/UTM | GSMA | postponed | (none) |
| S3-212422 |  | Reply LS on Support of UAVs authentication/authorization in 3GPP systems and interfacing with USS/UTM | S2-214895 | noted | (none) |
| S3-212423 |  | Reply LS to GSMA-ACJA: 3GPP SA1 clarifications on problematic UAV | S2-214916 | noted | (none) |
| S3-212424 |  | LS on Layer-3 UE-to-Network Relay authentication and authorization | S2-2101623 | replied to | S3-212424 |
| S3-212425 |  | 256-bit algorithms based on SNOW 3G or SNOW V | ETSI SAGE | replied to | S3-213267 |
| S3-212426 |  | LS re Penetration Testing of SCAS | GSMA | postponed | (none) |
| S3-212427 |  | LS on security aspects for the method of collection of data from the UE | S2-213263 | replied to | S3-213271 |
| S3-212428 |  | LS to SA3 on Small data transmissions | R2-2104401 | replied to | S3-213034 |
| S3-212429 |  | LS for clarification on managing expired or multiple Protection Scheme and Home Network keys used for SUCI calculation. | C6-210180 | replied to | S3-213218 |
| S3-212430 |  | LS on new work item on draft Recommendation ITU-T F.VG-VMA "Architecture of vehicular multimedia systems" [to various organizations] | ITU-T Focus Group on Vehicular Multimedia (FG-VM) | noted | (none) |
| S3-212431 |  | LS on broadcast of NTN GW or gNB position | R1-2106332 | postponed | S3-213150 |
| S3-212432 |  | New LS on UE location aspects in NTN | R2-2106543 | postponed | S3-213027 |
| S3-212433 |  | Reply LS on UE location aspects in NTN | R3-212917 | noted | (none) |
| S3-212434 |  | LS to SA3 on SLIC | R2-2106516 | noted | (none) |
| S3-212435 |  | S on QoE report handling at QoE pause | R2-2106775 | noted | S3-213004 |
| S3-212436 |  | Reply LS to LS on User Plane Integrity Protection for eUTRA connected to EPC | R3-212812 | replied to | S3-213272 |
| S3-212437 |  | Reply LS on NAS-based busy indication | R3-212877 | noted | ???? |
| S3-212438 |  | Reply LS on NAS-based busy indication | S2-2105150 | noted | (none) |
| S3-212439 |  | LS on 5G capabilities exposure for factories of the future | S2-2104794 | noted | (none) |
| S3-212440 |  | LS on 5G capabilities exposure for factories of the future | S6-211497 | noted | (none) |
| S3-212441 |  | Reply LS to SA4 on UE Data Collection | S2-2104864 | noted | (none) |
| S3-212442 |  | Reply LS to SA2 on UE Data Collection | S4-210961 | noted | (none) |
| S3-212443 |  | LS on progress of study items for security on management aspect | S5-213456 | noted | (none) |
| S3-212444 |  | LS on new SID on Application Enablement for Data Integrity Verification Service in IOT | S6-211496 | postponed | S3-213185 |
| S3-212445 |  | LS on ITU-T SG17 new work item X.5Gsec-message: Security requirements for 5G message service | ITU-T SG17 | noted | (none) |
| S3-212446 |  | LS on ITU-T SG17 new work item X.sa-ec ‘Security architecture for edge cloud’ | ITU-T SG17 | noted | (none) |
| S3-212447 |  | LS on UAS terminology alignment | SP-210579 | noted | (none) |
| S3-212448 |  | Reply LS on the conclusion of FS\_MINT-CT | SP-210581 | noted | (none) |
| S3-212449 |  | Attack preventing NAS procedures to succeed | GSMA | postponed | (none) |
| S3-212452 |  | Stealth Pirating Attack by RACH Rebroadcast Overwriting (SPARROW) | GSMA | postponed | (none) |
| S3-213033 |  | Reply LS on Security risk evaluation of using long term key for another key derivation than AKA | ETSI SAGE | postponed | (none) |
| S3-213040 |  | Reply LS on Header Enrichment for HTTPS in PFCP | C4-214531 | postponed | (none) |
| S3-213168 |  | LS Reply to SA3 on security protection on RRCResumeRequest message | R2-2109121 | postponed | (none) |
| S3-213169 |  | Reply LS on Storage of KAUSF | C1-214800 | replied to | S3-213172 |

### C2: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| S3-213034 | Reply LS on Small data transmissions | RAN2 | SA2 | S3-212428 |
| S3-213035 | LS on full registration request in AMF reallocation via RAN | SA2 | CT1,RAN3 |  |
| S3-213036 | LS on NSAC procedure | SA2 | - |  |
| S3-213089 | LS on EAS and ECS identifiers | SA6 | - |  |
| S3-213128 | Reply LS on Layer-3 UE-to-Network Relay authentication and authorization | SA2 | - | S3-212424 |
| S3-213149 | LS on 256-bit algorithms based on ZUC-256 | ETSI SAGE | - |  |
| S3-213170 | LS on Home Network triggered re-authentication | CT4 | CT1 |  |
| S3-213172 | Reply LS on Storage of KAUSF | CT1 | - | S3-213169 |
| S3-213174 | LS on proposed NSWO architecture | SA2 | - |  |
| S3-213192 | Reply LS on Misalignment on usage of OAuth within 3GPP 29.510 | GSMA FASG RIFS 5GIS | CT4 | S3‑212410 |
| S3-213193 | Reply LS on OAuth2 misalignments between SA3 and CT4 specifications | CT, CT4 | SA | S3-212409 |
| S3-213209 | Reply LS to GSMA on prevention of attacks on sliced core network | GSMA | SA2, CT4 | S3-212420 |
| S3-213215 | LS on SBA for GBA | SA2 | - |  |
| S3-213218 | Reply LS for clarification on managing expired or multiple Protection Scheme and Home Network keys used for SUCI calculation. | CT6 | SA1 | S3-212429 |
| S3-213267 | Response LS on 256-bit algorithms based on SNOW 3G or SNOW V | ETSI SAGE | - | S3-212425 |
| S3-213271 | Reply-LS on security aspects for the method of collection of data from the UE | SA WG2 | - | S3-212427 |
| S3-213272 | LS on User Plane Integrity Protection for eUTRA connected to EPC | RAN3 | RAN2, CT1, CT4, SA2 | S3-212436 |

## Annex D: List of agreed/approved new and revised Work Items

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | Source | new/revised |
| S3-212799 | New WID on security aspects of MSGin5G | China Mobile, Samsung, Huawei, Hisilicon | WID new |
| S3-213223 | New WID for UC3S | Huawei, HiSilicon, China Mobile, China Unicom, China Telecom, Nokia, Nokia Shanghai Bell, FutureWei | WID new |
| S3-213232 | New WID on security aspects of eNA | China Mobile | WID new |
| S3-213236 | New WID on Security Aspects of Proximity based Services (ProSe) in the 5G | CATT | WID new |

## Annex E: List of draft Technical Specifications and Reports

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Spec | vers | Doc title |
| S3-212647 | 33.558 | 0.0.0 | EC: Skeleton for the new TS 33.558 |
| S3-212834 | 33.256 | 0.0.0 | TS 33.256 skeleton |
| S3-213072 | 33.864 | 0.6.0 | Draft TR 33.864 v0.6.0 Study on the security of Access and Mobility Management Function (AMF) re-allocation |
| S3-213075 | 33.881 | 0.2.0 | TR 33.881 revision for NSWO |
| S3-213080 | 33.850 | 0.7.0 | TR 33.850 for 5MBS security |
| S3-213094 | 33.866 | 0.6.0 | draft TR 33.866 0.6.0 |
| S3-213114 | 33.862 | 0.6.0 | draft TR 33.862 0.6.0 |
| S3-213115 | 33.839 | 0.7.0 | TR 33.839for Edge computing security |
| S3-213129 | 33.847 | 0.7.0 | Draft TR 33.847 v0.7.0 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS |
| S3-213145 | 33.874 | 0.3.0 | draft TR 33.874-030 |
| S3-213146 | 33.867 | 0.6.0 | Draft TR 33.867 |
| S3-213148 | 33.854 | 0.7.0 | Draft TR 33.854 |
| S3-213167 | 33.875 | 0.4.0 | Draft TR 33.875 |
| S3-213202 | 33.848 | 0.9.0 | Draft TR 33.848 |
| S3-213208 | 33.857 | 0.7.0 | draft TR 33.857 v0.7.0 |
| S3-213227 | 33.558 | 0.1.0 | draft TS 33.558: Edge computing security |
| S3-213233 | 33.846 | 0.13.0 | Draft TR 33.846 v0.13.0 Study on authentication enhancements in the 5G System (5GS) |
| S3-213244 | 33.809 | 0.16.0 | TR 33.809-5GFBS |
| S3-213247 | 33.326 | 0.3.0 | Draft TS 33.326 |
| S3-213260 | 33.256 | 0.1.0 | Draft TS 33.256 |

## Annex F: List of participants

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TITLE | Family Name | Given Name | Employer Organization | Organization Represented |
| Mr. | Aggarwal | Chaitanya | Nokia Germany | Nokia Italy |
| Mr. | Ali | Irfan | Cisco Systems Belgium | Cisco Systems Belgium |
| Mr. | Ashton | Tim | National Technical Assistance | National Technical Assistance |
| Prof. | Babbage | Steve | VODAFONE Group Plc | VODAFONE Group Plc |
| Dr. | Baboescu | Florin | BROADCOM CORPORATION | BROADCOM CORPORATION |
| Dr. | Baskaran | Sheeba Backia Mary | Motorola Mobility Germany GmbH | Motorola Mobility Germany GmbH |
| Dr. | Ben Henda | Noamen | Huawei Technologies Sweden AB | Huawei Technologies Sweden AB |
| Mr. | Bjerrum | Bo Holm | Nokia Corporation | Nokia Denmark |
| Ing. | Bouchmal | Faiza | Casa Systems Inc. | Casa Systems Inc. |
| Mr. | Brusilovsky | Alec | InterDigital, Inc. | InterDigital, Inc. |
| Mr. | Bykampadi | Nagendra | Altiostar | Altiostar |
| Mr. | Cano Soveri | Mirko | ETSI | ETSI |
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| Mr. | Chater-Lea | David | Motorola Solutions UK Ltd. | Motorola Solutions UK Ltd. |
| Mr. | Chen | Dong | Beijing Xiaomi Mobile Software | Xiaomi Communications |
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| Mr. | Choyi | Vinod Kumar | Verizon UK Ltd | Verizon Denmark |
| Mr. | Chuberre | Nicolas | THALES | THALES |
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| Dr. | Dolan | Michael | FirstNet | FirstNet |
| Mr. | Drynkin | Anton | JSRPC Kryptonite | JSRPC Kryptonite |
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| Mr. | Ennesser | Francois | Huawei Technologies France | Huawei Technologies France |
| Dr. | Escott | Adrian | Qualcomm CDMA Technologies | Qualcomm CDMA Technologies |
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| Mr. | Everett | Jared | Johns Hopkins University APL | Johns Hopkins University APL |
| Dr. | Falk | Rainer | Siemens AG | Siemens AG |
| Mr. | Feng | Cheng | Datang Mobile Com. Equipment | Datang Mobile Com. Equipment |
| Mr. | Ferdi | Samir | InterDigital, Inc. | InterDigital, Europe, Ltd. |
| Mr. | Gabay | David | MITRE Corporation | MITRE Corporation |
| Ing. | Gallo | Luigi | TELECOM ITALIA S.p.A. | TELECOM ITALIA S.p.A. |
| Mrs. | Gan | Lu | OPPO | OPPO |
| Dr. | Gao | Feng | China Unicom | China Unicom |
| Dr. | Garcia-Morchon | Oscar | Philips International B.V. | Philips International B.V. |
| Ms. | Gauthier | Sandrine | Airbus | Airbus |
| Mr. | Goldberg | Martin | U.S. National Security Agency | U.S. National Security Agency |
| Mr. | Grewal | Rajpreet Singh | NTIA | NTIA |
| Miss | Griboedova | Ekaterina | JSRPC Kryptonite | JSRPC Kryptonite |
| Ms. | Guo | Ivy | Apple Computer Trading Co. Ltd | Apple Computer Trading Co. Ltd |
| Mr. | Guo | Longhua | HUAWEI TECH. GmbH | HiSilicon Technologies Co. Ltd |
| Mr. | Gupta | Varini | Samsung R&D Institute India | Samsung R&D Institute India |
| Mr. | Gustafsson | Sune | Ericsson LM | Ericsson LM |
| Mr. | Hanhisalo | Markus | Ericsson LM | Ericsson LM |
| Mr. | Harper | Colby | Pivotal Commware | Pivotal Commware |
| Mr. | Hegedus | Gabor | SSNS | SSNS |
| Mr. | Hjelm | Bjorn | Verizon UK Ltd | Verizon Sweden |
| Mr. | Hoffpauir | Dusty | Charter Communications, Inc | Charter Communications, Inc |
| Mr. | Hu | Li | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Tech.(UK) Co.. Ltd |
| Miss | Huang | Xiaoting | China Mobile Com. Corporation | China Mobile Com. Corporation |
| Miss | Jerichow | Anja | Nokia Germany | Nokia Germany |
| Mr. | jiao | qingwen | CBN | CBN |
| Dr. | Jost | Christine | Ericsson LM | Ericsson LM |
| Dr. | Karakoc | Ferhat | Ericsson LM | Ericsson LM |
| Dr. | Keesmaat | Iko | TNO | KPN N.V. |
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| Mr. | Kim | Dongjoo | LG Electronics Inc. | LG Electronics Inc. |
| Dr. | Kim | Hongil | Qualcomm Incorporated | Qualcomm Incorporated |
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| Mr. | Kolekar | Abhijeet | Intel Corporation (UK) Ltd | Intel Corporation (UK) Ltd |
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| Mr. | Kruse | Heiko | IDEMIA | IDEMIA |
| Dr. | Kunz | Andreas | Motorola Mobility Germany GmbH | Lenovo (Beijing) Ltd |
| Mr. | Laitinen | Mika | Airbus | Airbus |
| Mr. | Leadbeater | Alex | BT plc | BT plc |
| Dr. | Lee | Duckey | Samsung R&D Institute UK | Samsung Electronics Benelux BV |
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| Mr. | Li | Michael | Ericsson LM | Ericsson LM |
| Mr. | Libunao | Gerardo | Verizon UK Ltd | Verizon UK Ltd |
| Dr. | Lim | Taehyung | Samsung R&D Institute UK | Samsung Guangzhou Mobile R&D |
| Mr. | Lipsky | Jeff | U.S. Department of Defense | U.S. Department of Defense |
| Mr. | Liu | Chang | China Mobile Research Inst. | China Mobile Com. Corporation |
| Mr. | LIU | Jianning(Carry) | Beijing Xiaomi Software Tech | Beijing Xiaomi Software Tech |
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| Mr. | Loushine | Mike | AT&T | AT&T |
| Mr. | Lu | Jinghao | CBN | CBN |
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| Mr. | Niemi | Marko | MediaTek Inc. | MediaTek Inc. |
| Mr. | Norton | Mark | U.S. Department of Defense | U.S. Department of Defense |
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| Mr. | Palanigounder | Anand | Qualcomm Technologies Int | Qualcomm Incorporated |
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| Mr. | Patry | Frank | Omnispace | Omnispace |
| Mr. | Pätzold | Thomas | Deutsche Telekom AG | Deutsche Telekom AG |
| Mr. | PENG | Jin | ZTE Corporation | ZTE Corporation |
| Miss | Ping | Jing | Nokia Germany | Nokia Germany |
| Mr. | PINTO | BARUCH | Allot Ltd | Allot Ltd |
| Mr. | prakasam | sridhar | Apple (UK) Limited | Apple (UK) Limited |
| Mr. | Pudney | Chris | VODAFONE Group Plc | Vodafone GmbH |
| Mr. | Qi | Minpeng | China Mobile Com. Corporation | China Mobile Com. Corporation |
| Mr. | Rajadurai | Rajavelsamy | Samsung R&D Institute UK | Samsung R&D Institute UK |
| Ms. | Rajendran | Rohini | Samsung R&D Institute India | Samsung Electronics Romania |
| Mrs. | Rong | Wu | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Device Co., Ltd |
| Mr. | Rutkowski | Tony | CIS | CIS |
| Mr. | Samokhvalov | Roman | JSRPC Kryptonite | JSRPC Kryptonite |
| Ing. | Sánchez | Antonio | KEYSIGHT TECHNOLOGIES | Keysight Technologies UK Ltd |
| Mr. | Schumacher | Greg | T-Mobile USA | T-Mobile USA |
| Ms. | Shen | Jun | China Telecommunications | China Telecommunications |
| Ms. | Shen | Yang | Beijing Xiaomi Mobile Software | Beijing Xiaomi Mobile Software |
| Dr. | Son | Jungje | Samsung R&D Institute UK | Samsung Electronics Czech |
| Dr. | Staufer | Markus | Nokia Germany | Nokia Belgium |
| Mr. | Syrett | Mark | Hewlett-Packard Enterprise | Hewlett-Packard Enterprise |
| Mr. | Taylor | Richard | Public Safety Canada | Public Safety Canada |
| Mr. | Tiwari | Kundan | NEC Corporation | NEC Corporation |
| Mr. | Torrecilla | Joaquin | Keysight Technologies UK Ltd | Keysight Technologies UK Ltd |
| Mr. | Trygar | Tobey | Peraton Labs | Peraton Labs |
| Dr. | Tsiatsis | Vlasios | Ericsson LM | Ericsson Hungary Ltd |
| Mrs. | Vahidi | Helena | Ericsson LM | Ericsson LM |
| Dr. | Vanderveen | Michaela | MITRE Corporation | MITRE Corporation |
| Dr. | Walewski | Joachim | Siemens AG | Siemens AG |
| Dr. | Wan | Tao | CableLabs | CableLabs |
| Dr. | Wang | Dan | IPLOOK | IPLOOK |
| Mrs. | wang | haimei | CAICT | CAICT |
| Dr. | Wang | Zhibi | InterDigital Communications | InterDigital Communications |
| Ms. | Wifvesson | Monica | Ericsson LM | Ericsson LM |
| Mr. | Wong | Marcus | Futurewei | Futurewei |
| Mr. | Woodward | Tim | Motorola Solutions Danmark A/S | Motorola Solutions Danmark A/S |
| Ms. | WU | Jinhua | Beijing Xiaomi Mobile Software | Beijing Xiaomi Mobile Software |
| Miss | Wu | Yizhuang | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Telecommunication India |
| Miss | Xie | Zecheng | China Unicom | China Unicom |
| Mr. | Xie | Zhenhua | vivo Mobile Communication Co., | vivo Mobile Communication (S) |
| Ms. | Xing | Zhen | ZTE Corporation | ZTE Corporation |
| Miss | Xu | Hui | CATT | CICT |
| Mr. | Xu | Yang | Guangdong OPPO Mobile Telecom. | Guangdong OPPO Mobile Telecom. |
| Dr. | Yao | Ge | China Unicom | China Unicom |
| Mr. | You | Shilin | ZTE Corporation | ZTE Corporation |
| Dr. | Zhang | Bo | HUAWEI TECHNOLOGIES Co. Ltd. | HuaWei Technologies Co., Ltd |
| Ms. | Zhang | Wanqiao | Alibaba (China) Group., Ltd. | Alibaba (China) Group., Ltd. |
| Mr. | Zhou | Wei | CATT | CATT |
| Mr. | Zhu | Chunhui | Spreadtrum Communications | Spreadtrum Communications |
| Dr. | Zugenmaier | Alf | NTT DOCOMO INC. | NTT DOCOMO INC. |

## Annex G: List of future meetings

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| --- | --- | --- | --- | --- | --- |
| Title | Start date | End date (OP) | Town | Country | Reference |
| SA3#105-e | 08-11-2021 | 12-11-2021 | Online | Electronic meeting |  |
| SA3#106e | 07-02-2022 | 11-02-2022 | Online | Electronic meeting |  |