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

**Meeting Report  
for  
TSG SA WG3  
meeting: 107e**

**Online, Electronic meeting, 16/05/2022 to 20/05/2022**

Contents:

1 Agenda and Meeting Objectives 3

2 Meeting Reports 3

3 Reports and Liaisons from other Groups 3

4 Work areas 11

4.1 New WID on Security Assurance Specification for Management Function (MnF) 11

4.2 New WID on SECAM and SCAS for 3GPP virtualized network products 13

4.3 New WID on Mission critical security enhancements phase 3 16

4.4 New WID on Security Assurance Specification (SCAS) for 5G Rel-17 Features 16

4.5 New WID on Security Assurance Specification for the Authentication and Key Management for Applications (AKMA) Anchor Function Function (AAnF) 17

4.6 New WID on SCAS for split-gNB product classes 20

4.7 Security Aspects of Proximity based services in 5GS ProSe (Rel-17) 21

4.8 Enhanced security for Phase 2 network slicing (Rel-17) 38

4.9 Security Aspects of eNPN (Rel-17) 38

4.10 Security Aspects of Enhancements for 5G Multicast-Broadcast Services (Rel-17) 44

4.11 Security Aspects of Enhancement of Support for Edge Computing in 5GC (Rel-17) 48

4.12 Non-seamless WLAN Offload in 5GS (Rel-17) 51

4.13 Security Aspects of User Consent for 3GPP services (Rel-17) 53

4.14 Srevice Based Architecture (Rel-15/16/17) 54

4.15 Security Assurance -All NFs (Rel-15/16/17) 59

4.16 Rel-15/16/17 maintenance (All topics) 60

5 Studies areas 71

5.1 Study on 5G security enhancement against false base stations 71

5.2 Study on Security Impacts of Virtualisation 73

5.3 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS 74

5.4 Study on enhanced Security Aspects of the 5G Service Based Architecture 75

5.5 Study on enhanced security for network slicing Phase 2 77

5.6 Study on privacy of identifiers over radio access 79

5.7 Study on Standardising Automated Certificate Management in SBA 81

5.8 New SID on AKMA phase 2 84

5.9 New Study of Security aspect of home network triggered primary authentication 88

5.10 New Study on security aspects of enablers for Network Automation for 5G - phase 3 92

5.11 New Study on Security Enhancement of support for Edge Computing — phase 2 94

6 New Study/Work item proposals 96

7 CVD and research 103

8 Any Other Business 103

Annex A: Contribution documents and status 104

A1: List of TDocs 104

A2: Tdoc decision timing 125

Annex B: List of change requests 135

Annex C: Lists of liaisons 143

C1: Incoming liaison statements 143

C2: Outgoing liaison statements 146

Annex D: List of agreed/approved new and revised Work Items 147

Annex E: List of draft Technical Specifications and Reports 148

Annex H: List of participants 149

Annex I: List of future meetings 156

## 

NOTE: a summary of the email discussions and conference calls can be found in tdoc **S3-220605.**

## 1 Agenda and Meeting Objectives

**S3-220601 Agenda**

*Type: agenda For: Discussion  
 Source: WG Chair*

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

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.

**S3-220603 Process for SA3#107e meeting**

*Type: other For: Information  
 Source: WG Chair*

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

**S3-220606 Process and agenda for SA3#107e**

*Type: other For: Information  
 Source: WG Chair*

**Decision:** The document was **revised to S3-221142**.

**S3-221142 Process and agenda for SA3#107e**

*Type: other For: Information  
 Source: WG Chair*

(Replaces S3-220606)

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

## 2 Meeting Reports

**S3-220602 Report from SA3#106e**

*Type: report For: Approval  
 Source: MCC*

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

**S3-220604 Report from last SA**

*Type: report For: (not specified)  
 Source: WG Chair*

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

**S3-220605 Meeting notes from SA3 leadership**

*Type: report For: (not specified)  
 Source: WG Chair*

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

## 3 Reports and Liaisons from other Groups

**S3-220608 LS to 3GPP CT4 on Identification of source PLMN-ID in SBA**

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

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

**S3-220649 Reply LS on User Controlled PLMN Selector with Access Technology in Control plane solution for steering of roaming in 5GS**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S1-220187*

(Replaces S3-220610)

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

**S3-220648 LS on new parameters for SOR**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-214118*

(Replaces S3-220609)

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

**S3-220651 Reply LS on UE capabilities indication in UPU**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-223177*

(Replaces S3-220612)

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

**S3-220660 LS on 3GPP TS 29.244**

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

(Replaces S3-220621)

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

**S3-221147 LS on 3GPP TS 29.244**

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

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

**S3-220666 Reply LS on LTE User Plane Integrity Protection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2203663*

(Replaces S3-220627)

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

**S3-220667 LS on EPS fallback enhancements**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2204236*

(Replaces S3-220628)

**Decision:** The document was **replied to in S3-221162**.

**S3-220668 Reply LS on EPS fallback enhancements**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2203590*

(Replaces S3-220629)

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

**S3-220879 Disucssion on security aspect of EPS fallback enhancements in Rel-17**

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

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

**S3-220880 LS to RAN2 on EPS fallback enhancements**

*Type: LS out For: Approval  
 to RAN2, SA2, CT1  
 Source: Huawei, HiSilicon*

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

**S3-221064 Reply LS on EPS fallback enhancements**

*Type: LS out For: Approval  
 to RAN2, cc SA2, CT1  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221162**.

**S3-221109 Reply LS on EPS fallback enhancements**

*Type: LS out For: (not specified)  
 to RAN2, cc CT1, SA2, RAN3  
 Source: Nokia Corporation*

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

**S3-221110 Discussion on LS on EPS fallback enhancements**

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

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

**S3-220669 Reply LS on User Plane Integrity Protection for eUTRA connected to EPC**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-222610*

(Replaces S3-220630)

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

**S3-220670 Reply LS on UE providing Location Information for NB-IoT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-222100*

(Replaces S3-220631)

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

**S3-220671 Reply LS on UE providing Location Information for NB-IoT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-222858*

(Replaces S3-220632)

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

**S3-220672 LS Response to LS on UE providing Location Information for NB-IoT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2201333*

(Replaces S3-220633)

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

**S3-220673 LS on V2X PC5 link for unicast communication with null security algorithm**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R5-222035*

(Replaces S3-220634)

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

**S3-220674 Reply LS on reply to SA6 about new SID on Application Enablement for Data Integrity Verification Service in IOT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S1-220185*

(Replaces S3-220635)

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

**S3-220678 LS reply on RAN2 agreements for paging with service indication**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2201838*

(Replaces S3-220639)

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

**S3-220680 LS on MINT functionality for Disaster Roaming**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S5-222575*

(Replaces S3-220641)

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

**S3-220682 LS on Inter-PLMN Handover of VoLTE calls and idle mode mobility of IMS sessions**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S3i220244*

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

**S3-220683 TCG progress - report from TCG rapporteur**

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

**Abstract:**

This contribution provides a brief incremental summary of the progress in TCG Working Groups as of May 2022.

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

**S3-220662 LS on UE location during initial access in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2201881*

(Replaces S3-220623)

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

**S3-220665 LS on UE location in connected mode in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2204257*

(Replaces S3-220626)

**Decision:** The document was **replied to in S3-221268**.

**S3-220664 Reply LS on UE location during initial access in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-222861*

(Replaces S3-220625)

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

**S3-221081 NTN - Reply LS on UE location in connected mode in NTN(R2-2204257)**

*Type: LS out For: Approval  
 to RAN2, cc RAN3, SA2, CT1  
 Source: Apple*

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

**S3-221106 Reply LS on UE location in connected mode in NTN**

*Type: LS out For: (not specified)  
 to RAN2, cc SA2, RAN3, CT1  
 Source: Nokia Corporation*

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

**S3-221082 NTN - Reply LS on NTN specific user consent (R2-2201754)**

*Type: LS out For: Approval  
 to RAN2, cc RAN3, SA2, CT4  
 Source: Apple*

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

**S3-221107 Reply LS on Reply LS on NTN specific User Consent**

*Type: LS out For: (not specified)  
 to RAN2, cc CT1, SA2, RAN3  
 Source: Nokia Corporation*

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

**S3-221063 LS reply on UE location in connected mode in NTN**

*Type: LS out For: Approval  
 to RAN2, cc SA2, RAN3, CT1  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221268**.

**S3-220609 LS on new parameters for SOR**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-214118*

**Decision:** The document was **revised to S3-220648**.

**S3-220610 Reply LS on User Controlled PLMN Selector with Access Technology in Control plane solution for steering of roaming in 5GS**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S1-220187*

**Decision:** The document was **revised to S3-220649**.

**S3-220612 Reply LS on UE capabilities indication in UPU**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-223177*

**Decision:** The document was **revised to S3-220651**.

**S3-220621 LS on 3GPP TS 29.244**

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

**Decision:** The document was **revised to S3-220660**.

**S3-220623 LS on UE location during initial access in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2201881*

**Decision:** The document was **revised to S3-220662**.

**S3-220624 LS on UE location during initial access in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2202057*

**Decision:** The document was **revised to S3-220663**.

**S3-220625 Reply LS on UE location during initial access in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-222861*

**Decision:** The document was **revised to S3-220664**.

**S3-220626 LS on UE location in connected mode in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2204257*

**Decision:** The document was **revised to S3-220665**.

**S3-220627 Reply LS on LTE User Plane Integrity Protection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2203663*

**Decision:** The document was **revised to S3-220666**.

**S3-220628 LS on EPS fallback enhancements**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2204236*

**Decision:** The document was **revised to S3-220667**.

**S3-220629 Reply LS on EPS fallback enhancements**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2203590*

**Decision:** The document was **revised to S3-220668**.

**S3-220630 Reply LS on User Plane Integrity Protection for eUTRA connected to EPC**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-222610*

**Decision:** The document was **revised to S3-220669**.

**S3-220631 Reply LS on UE providing Location Information for NB-IoT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-222100*

**Decision:** The document was **revised to S3-220670**.

**S3-220632 Reply LS on UE providing Location Information for NB-IoT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-222858*

**Decision:** The document was **revised to S3-220671**.

**S3-220633 LS Response to LS on UE providing Location Information for NB-IoT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2201333*

**Decision:** The document was **revised to S3-220672**.

**S3-220634 LS on V2X PC5 link for unicast communication with null security algorithm**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R5-222035*

**Decision:** The document was **revised to S3-220673**.

**S3-220635 Reply LS on reply to SA6 about new SID on Application Enablement for Data Integrity Verification Service in IOT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S1-220185*

**Decision:** The document was **revised to S3-220674**.

**S3-220639 LS reply on RAN2 agreements for paging with service indication**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2201838*

**Decision:** The document was **revised to S3-220678**.

**S3-220641 LS on MINT functionality for Disaster Roaming**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S5-222575*

**Decision:** The document was **revised to S3-220680**.

**S3-220663 LS on UE location during initial access in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2202057*

(Replaces S3-220624)

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

**S3-221162 Reply LS on EPS fallback enhancements**

*Type: LS out For: Approval  
 to RAN2, cc SA2, CT1  
 Source: Ericsson*

(Replaces S3-221064)

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

**S3-221254 Reply LS on the Indication of Network Assisted Positioning method**

*Type: LS out For: Approval  
 to CT4, SA2, cc SA1  
 Source: Huawei, HiSilicon*

(Replaces S3-220872)

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

**S3-221268 LS reply on Reply LS on NTN specific User Consent and UE location in connected mode in NTN**

*Type: LS out For: Approval  
 to RAN2, cc SA2, RAN3, CT1, CT4  
 Source: Ericsson*

(Replaces S3-221063)

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

**S3-221151 LS on authentication type and related information of MSGin5G service**

*Type: LS in For: Discussion  
 Original outgoing LS: -, to -, cc -  
 Source: C1-223957*

**Decision:** The document was **replied to in S3-221152**.

**S3-221152 Reply to: LS on authentication type and related information of MSGin5G service**

*Type: LS out For: Approval  
 to CT1  
 Source: China Mobile*

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

## 4 Work areas

### 4.1 New WID on Security Assurance Specification for Management Function (MnF)

**S3-220885 33.926-Clarifications of the scope of OAM functions in the GNP model**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220886 33.926-Rewrite the 5G MnF GNP model**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221258**.

**S3-220887 33.926-Add new assets to the OAM functions**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221259**.

**S3-220888 33.926-Add a new threat**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221260**.

**S3-220889 33.526 - update clause 4.2.3**

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

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

**S3-220890 33.526 - update clause 4.2.4**

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

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

**S3-220891 33.526 - update clause 4.2.5**

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

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

**S3-220893 Living document for MnF SCAS: draftCR to TR 33.926**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221301**.

**S3-221301 Living document for MnF SCAS: draftCR to TR 33.926**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220893)

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

**S3-221166 new draft TS 33.526 MnF SCAS**

*Type: draft TS For: Approval  
 33.526 v0.2.0  
 Source: Huawei Technologies Sweden AB*

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

**S3-221171 33.926-Add a new threat**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei, HiSilicon*

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

**S3-221258 33.926-Rewrite the 5G MnF GNP model**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220886)

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

**S3-221259 33.926-Add new assets to the OAM functions**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220887)

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

**S3-221260 33.926-Add a new threat**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220888)

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

### 4.2 New WID on SECAM and SCAS for 3GPP virtualized network products

**S3-220840 Modfiy Scope of TR 33.936**

*Type: pCR For: Approval  
 33.936 v0.1.0  
 Source: Huawei, HiSilicon*

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

**S3-220781 adding overview and Scope of a SECAM SCAS for 3GPP virtualized network products**

*Type: pCR For: Approval  
 33.936 v0.2.0  
 Source: China Mobile*

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

**S3-220782 adding Scope of SECAM evaluation and accreditation for 3GPP virtualized network products**

*Type: pCR For: Approval  
 33.936 v0.2.0  
 Source: China Mobile*

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

**S3-220783 adding the contents of chapters 4.5 to 4.7**

*Type: pCR For: Approval  
 33.936 v0.2.0  
 Source: China Mobile*

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

**S3-220784 adding the contents of chapters 4.8 to 4.10**

*Type: pCR For: Approval  
 33.936 v0.2.0  
 Source: China Mobile*

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

**S3-220785 adding content to clause 5.1**

*Type: pCR For: Approval  
 33.936 v0.2.0  
 Source: China Mobile*

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

**S3-220786 Adding description about general content of SCAS document and ToE to clause 5.2**

*Type: pCR For: Approval  
 33.936 v0.2.0  
 Source: China Mobile*

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

**S3-220787 adding description about SPD to clause 5.2**

*Type: pCR For: Approval  
 33.936 v0.2.0  
 Source: China Mobile*

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

**S3-220788 adding description about methodology of security requirements to clause 5.2**

*Type: pCR For: Approval  
 33.936 v0.2.0  
 Source: China Mobile*

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

**S3-220789 adding description about improvement of SCAS and new potential security requirements to clause 5.3**

*Type: pCR For: Approval  
 33.936 v0.2.0  
 Source: China Mobile*

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

**S3-220790 adding description about basic vulnerability testing requirements for GVNP to clause 5.4**

*Type: pCR For: Approval  
 33.936 v0.2.0  
 Source: China Mobile*

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

**S3-220841 Modfiy Scope of TS 33.927**

*Type: pCR For: Approval  
 33.927 v0.1.0  
 Source: Huawei, HiSilicon*

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

**S3-220775 Proposal to add overview in clause 4 Generic Virtulizated Network Product(GVNP) class**

*Type: pCR For: Approval  
 33.927 v0.1.0  
 Source: China Mobile*

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

**S3-220776 Proposal to add clause 4.2 Minimum set of functions defining the GVNP class**

*Type: pCR For: Approval  
 33.927 v0.1.0  
 Source: China Mobile*

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

**S3-220777 Proposal to add introduction in clause 4.3 Generic virtualized network product model**

*Type: pCR For: Approval  
 33.927 v0.1.0  
 Source: China Mobile*

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

**S3-220778 Proposal to add GVNP model of type 1**

*Type: pCR For: Approval  
 33.927 v0.1.0  
 Source: China Mobile*

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

**S3-220769 Supplement to generic virtualised network product model**

*Type: pCR For: Approval  
 33.927 v0.1.0  
 Source: China Telecom Corporation Ltd.*

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

**S3-220779 Proposal to add GVNP model of type 2**

*Type: pCR For: Approval  
 33.927 v0.1.0  
 Source: China Mobile*

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

**S3-220780 Proposal to add GVNP model of type 3**

*Type: pCR For: Approval  
 33.927 v0.1.0  
 Source: China Mobile*

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

**S3-220839 Modfiy Scope of TS 33.527**

*Type: pCR For: Approval  
 33.527 v0.1.0  
 Source: Huawei, HiSilicon*

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

### 4.3 New WID on Mission critical security enhancements phase 3

### 4.4 New WID on Security Assurance Specification (SCAS) for 5G Rel-17 Features

**S3-220739 Adding a test case for gNB in TS 33.511 clause 4.2.2.1.4**

*Type: CR For: Approval  
 33.511 v17.1.0 CR-0027 Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**S3-221090 New threat on Kausf handing**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei,HiSilicon*

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

**S3-221091 threat modifications for token verification**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei,HiSilicon*

**Decision:** The document was **revised to S3-221230**.

**S3-221092 threat modifications for SEPP**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei,HiSilicon*

**Decision:** The document was **revised to S3-221231**.

**S3-221230 threat modifications for token verification**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei,HiSilicon*

(Replaces S3-221091)

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

**S3-221231 threat modifications for SEPP**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Huawei,HiSilicon*

(Replaces S3-221092)

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

**S3-221263 draftCR to TR 33.926 for SCAS 5G Ph2**

*Type: draftCR For: (not specified)  
 33.926 v17.3.0  
 Source: Huawei, HiSilicon*

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

### 4.5 New WID on Security Assurance Specification for the Authentication and Key Management for Applications (AKMA) Anchor Function Function (AAnF)

**S3-220689 New test case for confidentiality, integrity and replay protection between AAnF and AUSF**

*Type: pCR For: Approval  
 33.537 v0.0.0  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

New test case for confidentiality, integrity and replay protection between AAnF and AUSF

**Decision:** The document was **revised to S3-221156**.

**S3-220690 New threat for confidentiality, integrity and replay between AAnF and AUSF**

*Type: CR For: Approval  
 33.926 v17.3.0 CR-0053 Cat: B (Rel-18)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

New threat for confidentiality, integrity and replay between AAnF and AUSF

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

**S3-220691 New test case for confidentiality, integrity and replay protection between AF/NEF and AAnF**

*Type: pCR For: Approval  
 33.537 v0.0.0  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

New test case for confidentiality, integrity and replay protection between AF/NEF and AAnF

**Decision:** The document was **revised to S3-221159**.

**S3-220692 New threat for confidentiality, integrity and replay between AAnF and AF/NEF**

*Type: CR For: Approval  
 33.926 v17.3.0 CR-0054 Cat: B (Rel-18)  
  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

New threat for confidentiality, integrity and replay between AAnF and AF/NEF

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

**S3-220741 Adding AAnF critical assets and threats to TS 33.926**

*Type: CR For: Agreement  
 33.926 v17.3.0 CR-0055 Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**S3-220742 Adding Network product class description for the AAnF to TS 33.926.**

*Type: CR For: Agreement  
 33.926 v17.3.0 CR-0056 Cat: B (Rel-18)  
  
 Source: ZTE Corporation*

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

**S3-220743 AKMA subscription asynchronization\_Test\_Case**

*Type: pCR For: Approval  
 33.537 v0.0.0  
 Source: ZTE Corporation*

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

**S3-220767 Adding AAnF critical assets and threats to TS 33.926**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: ZTE Corporation*

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

**S3-220768 Adding Network product class description for the AAnF to TS 33.926**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: ZTE Corporation*

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

**S3-220808 Skeleton for TS33.537(SCAS for AAnF)**

*Type: draft TS For: Approval  
 33.537 v0.0.0  
 Source: China Mobile*

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

**S3-220809 Scope of TS 33.537**

*Type: pCR For: Approval  
 33.537 v0.0.0  
 Source: China Mobile*

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

**S3-221156 New test case for confidentiality, integrity and replay protection between AAnF and AUSF**

*Type: pCR For: Approval  
 33.537 v0.0.0  
 Source: Keysight Technologies UK Ltd*

(Replaces S3-220689)

**Abstract:**

New test case for confidentiality, integrity and replay protection between AAnF and AUSF

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

**S3-221157 New threat for confidentiality, integrity and replay between AAnF and AUSF**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

Added new threat to cover the confidentiality, integrity and replay between AAnF and AUSF

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

**S3-221159 New test case for confidentiality, integrity and replay protection between AF/NEF and AAnF**

*Type: pCR For: Approval  
 33.537 v0.0.0  
 Source: Keysight Technologies UK Ltd*

(Replaces S3-220691)

**Abstract:**

New test case for confidentiality, integrity and replay protection between AF/NEF and AAnF

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

**S3-221160 New threat for confidentiality, integrity and replay between AAnF and AF/NEF**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: Keysight Technologies UK Ltd*

**Abstract:**

New threat for confidentiality, integrity and replay between AAnF and AF/NEF

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

**S3-221167 Living document for AAnF SCAS: draftCR to TR 33.926**

*Type: draftCR For: Approval  
 33.926 v17.3.0  
 Source: China Mobile*

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

**S3-221168 draft TS 33.537**

*Type: draft TS For: (not specified)  
 33.537 v0.1.0  
 Source: China Mobile*

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

### 4.6 New WID on SCAS for split-gNB product classes

**S3-220988 Proposed skeleton for TS 33.742**

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

**Decision:** The document was **revised to S3-221196**.

**S3-220989 Proposed scope for TS 33.742**

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

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

**S3-220990 Discussion on how to document test cases in TS 33.742**

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

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

**S3-221196 Proposed skeleton for TR 33.742**

*Type: draft TR For: Approval  
 33.742 v0.0.0  
 Source: Qualcomm Incorporated*

(Replaces S3-220988)

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

**S3-221201 TS 33.742 v1.0.0**

*Type: draft TR For: Approval  
 33.742 v0.1.0  
 Source: Qualcomm Austria RFFE GmbH*

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

### 4.7 Security Aspects of Proximity based services in 5GS ProSe (Rel-17)

**S3-220679 Reply to LS on new reference point name for the interface between PKMF and UDM in 5G ProSe**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2203018*

(Replaces S3-220640)

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

**S3-221003 pCR to TS33.503 Abbreviations update**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

**Decision:** The document was **revised to S3-221281**.

**S3-220966 Reference point name**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221182**.

**S3-221005 pCR to TS33.503 Clause 4.2 Update reference point name between 5G PKMF and UDM**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

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

**S3-221025 33.503: Updates in Clause 4.2**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

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

**S3-221026 33.503: Updates in Clause 5.2.5**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

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

**S3-220847 Clarification on restricted discovery procedures**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220851 Add subclause about the restricted discovery for UE-to-Network relay**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220997 CR to ProSe TS – An update on MIC calculation for discovery message**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated*

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

**S3-220998 CR to ProSe TS – Clarification on discovery message protection**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated*

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

**S3-221000 Update on 5G ProSe restricted discovery procedure for U2N relay**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-221302**.

**S3-221302 Update on 5G ProSe restricted discovery procedure for U2N relay**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated*

(Replaces S3-221000)

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

**S3-221027 33.503: Updates in Clause 6.1.3.2**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

**Decision:** The document was **revised to S3-221189**.

**S3-221028 33.503: Clarifiacation on MIC Check in Open Discovery**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

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

**S3-221029 33.503: General Description for ProSe U2N Relay Discovery Security**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

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

**S3-221030 33.503: Add Security Requirement for ProSe U2N Relay Discovery**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

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

**S3-221031 33.503: Control Plane based Security Procedure for ProSe U2N Relay Discovery**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

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

**S3-221032 33.503: User Plane based Security Procedure for ProSe U2N Relay Discovery**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

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

**S3-221033 33.503: Derivation of Discovery Keys for ProSe U2N Relay Discovery**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

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

**S3-221141 Relay Discovery clarifications**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Philips International B.V.*

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

**S3-220874 Security capability negotiation during unicast establishment after restricted discovery**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220968 Rephrasing Clause 6.2.1 to emphasize that security parameters for PC5 Direct Communication are determined during Direct Discovery**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221272**.

**S3-220969 Restructure of security requirements for 5G ProSe UE-to-network relay**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

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

**S3-221007 pCR to TS33.503 Clause 6.3 Update security requirements of UE-to-Network Relay**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

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

**S3-221012 pCR to TS33.503 Clause 6.3 Update security requirements of Layer-3 UE-to-Network Relay**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

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

**S3-221013 pCR to TS33.503 Clause 6.3 Remove unnecessary description from UP-based and CP-based procedures**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

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

**S3-221015 pCR to TS33.503 Clause 6.3 Solution for co-existence of UP and CP security options**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

**Decision:** The document was **revised to S3-221284**.

**S3-221034 33.503: Updates to General Security Requirements for U2N Relay Communication**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

**Decision:** The document was **revised to S3-221206**.

**S3-221035 33.503: Updates to Security Requirements for U2N Relay Communication via L3 Relay UE**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

**Decision:** The document was **revised to S3-221207**.

**S3-221036 Discussion on PC5 Key Hierarchy for ProSe U2N Relay Communication**

*Type: discussion For: Endorsement  
 33.503 v..  
 Source: Xiaomi Technology*

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

**S3-220746 Remove the EN in the clause 6.3.3.2.2**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: ZTE Corporation*

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

**S3-220842 Adding UDM Services for SUCI deconceal and authorization information retrieval**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221241**.

**S3-220843 Remote UE Identity provisioning in UE-to-Network Relay communication security procedure over user plane**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220869 Clarification on PRUK ID**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221252**.

**S3-220881 Clarification on the description of PRUK**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221255**.

**S3-220967 Remote UE Report in UP based solution**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221271**.

**S3-220971 Discussion on UE ID privacy for Remote UE Report**

*Type: discussion For: Endorsement  
 33.503 v..  
 Source: Ericsson*

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

**S3-220972 PLMN ID in Direct Security Mode Failure**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221183**.

**S3-220973 KNRP key derivation**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

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

**S3-220994 PC5 security policy provisioning for user-plane L3 U2N relay solution**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated, Ericsson*

**Decision:** The document was **revised to S3-221294**.

**S3-221294 PC5 security policy provisioning for user-plane L3 U2N relay solution**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated, Ericsson*

(Replaces S3-220994)

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

**S3-220995 Clarification on the PC5 link establishment for user-plane L3 U2N relay solution**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated*

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

**S3-220999 CR to ProSe TS – Removing an Editor’s Note in user plane based U2N procedure**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-221296**.

**S3-221296 CR to ProSe TS – Removing an Editor’s Note in user plane based U2N procedure**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated*

(Replaces S3-220999)

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

**S3-221001 CR to ProSe TS - Clarification on Knrp derivation for U2N relay over user plane**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-221297**.

**S3-221297 CR to ProSe TS - Clarification on Knrp derivation for U2N relay over user plane**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated*

(Replaces S3-221001)

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

**S3-221037 Discussion on Security for ProSe U2N Relay Communication over User Plane**

*Type: discussion For: Endorsement  
 33.503 v..  
 Source: Xiaomi Technology*

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

**S3-221038 33.503: Update to Security Procedure over User Plane**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology, China Telecom*

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

**S3-221039 33.503: PRUK Derivation for ProSe U2N Relay Security over User Plane**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

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

**S3-221140 UP based security selection**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell, Interdigital, LGE, Samsung*

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

**S3-220706 Clarify relationship between KAUSF, KAUSF\_P and 5G PRUK**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: China Telecomunication Corp.*

**Abstract:**

This contribution proposes to clarify the relationship between KASUF\_P and 5G PRUK.

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

**S3-220707 Clarify the necessity of refreshing 5G PRUK during CP-based Security Procedure**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: China Telecomunication Corp.*

**Abstract:**

This contribution proposes to clarify the refreshing of 5G PRUK.

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

**S3-220734 Update Security procedure over CP with using PRUK ID in DCR**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: InterDigital, Europe, Ltd.,, Samsung, LG Electronics, Nokia, Nokia Shanghai Bell, Ericsson, Verizon Wireless, MITRE, Convida Wireless LLC, Philips International B.V.*

**Abstract:**

This contribution proposes to resolve the following editor note in control plane solution for UE-to-network relays in draft TS 33.503:

Editor's note: Further details on the needs and usage of 5GPRUK ID are FFS.

It is based on S3-220371-r7 from SA3#106e, i

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

**S3-220735 5GPRUK/5GPRUK ID Storage Options and Way Forward**

*Type: discussion For: Endorsement  
 33.503 v..  
 Source: InterDigital, Europe, Ltd., Ericsson*

**Abstract:**

discussion and way forward for the 5GPRUK/5GPRUK ID storage.

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

**S3-220736 PAnF supported services discussion**

*Type: discussion For: Endorsement  
 33.503 v..  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

This contribution presents an analysis of the different proposals for 5GPRUK storage/5GPRUK ID usage using a PAnF and proposed way forward

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

**S3-220737 Update Security procedure over CP with using PRUK ID in DCR (alt#2)**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

This document proposes an update to resolve the following Editor's Note:

Editor's note: Further details on the needs and usage of 5GPRUK ID are FFS.

In this compromise alternative, AUSF derives ProSe root key compared to S3-220734 [2] (preferred, with PAn

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

**S3-220744 Add some context about 5G PRUK ID reject cases in the clause 6.3.3.3.2**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: ZTE Corporation*

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

**S3-220745 Clarification on AUSF instance store in UDM**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: ZTE Corporation*

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

**S3-220747 Update the clause 6.3.3.3.3**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: ZTE Corporation*

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

**S3-220815 EN resolution for Secondary Authentication for Remote UE with L3 U2N relay without N3IWF(Alt1)**

*Type: pCR For: Agreement  
 33.503 v0.3.0  
 Source: LG Electronics Inc.*

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

**S3-220816 EN resolution for Secondary Authentication for Remote UE with L3 U2N relay without N3IWF(Alt2)**

*Type: pCR For: Agreement  
 33.503 v0.3.0  
 Source: LG Electronics Inc.*

**Decision:** The document was **revised to S3-221174**.

**S3-220817 Revocation\_ReAuth for Secondary Authentication for Remote UE**

*Type: pCR For: Agreement  
 33.503 v0.3.0  
 Source: LG Electronics Inc.*

**Decision:** The document was **revised to S3-221175**.

**S3-220827 Delete of CP based solution**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220828 Delete of Secondary authentication**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220829 Address EN of secondary authentication**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220844 Remote UE authorization check in UE-to-Network Relay communication security procedure over control plane**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220845 Resolving the EN on the needs and usage of 5GPRUK ID**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221242**.

**S3-220846 Format of 5GPRUK ID**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221243**.

**S3-220850 Key derivation related clarification in CP-based UE-to-Network relay procedures**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221245**.

**S3-220852 Terminology alignment for 5G ProSe Remote UE specific authentication**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220868 Clarification on KAUSF\_P**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220882 Clarification on the secondary authentication procedure**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221256**.

**S3-220883 Update general clause for secondary authentication**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221257**.

**S3-220894 Discussion for key storage and derivation in UE-to-Network security procedure over Control Plane**

*Type: pCR For: Endorsement  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220934 Security protocol over CP with 5G AKA to establishPC5 keys**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: THALES*

**Abstract:**

pCR to TS 33.503: Security protocol over Control Plane with 5G AKA to establishPC5 keys

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

**S3-220936 Security protocol over CP with 5G ProSe security context in the USIM**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: THALES*

**Abstract:**

pCR to TS 33.503: security protocol over Control Plane with 5G ProSe security context in the USIM

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

**S3-220965 Corrections to CP based solution**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

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

**S3-220970 Remote UE Report in CP based solution**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

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

**S3-221014 pCR to TS33.503 Clause 6.3 Clarification text for Kausf\_p**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

**Decision:** The document was **revised to S3-221282**.

**S3-221016 pCR to TS33.503 Clause 6.3 Update security procedure over Control Plane**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

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

**S3-221137 CP based security selection**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell, Interdigital, LGE, Samsung*

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

**S3-221138 derive 5GPRUK based on Kausf\_p**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell, Interdigital, LGE, Samsung*

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

**S3-221139 authorization of remote UE**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell, Interdigital, LGE, Samsung*

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

**S3-220848 Clarification on the security of L2 U2NW**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221244**.

**S3-221040 33.503: Updates in Clause 6.3.4**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

**Decision:** The document was **revised to S3-221208**.

**S3-220825 Integrity protection of DCR message**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220826 Clarification on the privacy protection of DCR**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-220996 CR to ProSe TS - Address the Editor’s Notes in clause 6.3.5**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-221295**.

**S3-221295 CR to ProSe TS - Address the Editor’s Notes in clause 6.3.5**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Qualcomm Incorporated*

(Replaces S3-220996)

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

**S3-220748 Update the clause 7.4.2**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: ZTE Corporation*

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

**S3-220830 Add a new clause for 5G ProSe Layer-3 UE-to-Network Relay with N3IWF support**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221238**.

**S3-220974 CR for Prose changes to TS 33.220 in Rel-17**

*Type: CR For: Agreement  
 33.220 v17.2.0 CR-0216 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

**S3-221006 pCR to TS33.503 Wording update**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

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

**S3-220640 Reply to LS on new reference point name for the interface between PKMF and UDM in 5G ProSe**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2203018*

**Decision:** The document was **revised to S3-220679**.

**S3-220855 Clarification**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

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

**S3-221174 EN resolution for Secondary Authentication for Remote UE with L3 U2N relay without N3IWF(Alt2)**

*Type: pCR For: Agreement  
 33.503 v0.3.0  
 Source: LG Electronics Inc., Interdigital*

(Replaces S3-220816)

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

**S3-221175 Revocation\_ReAuth for Secondary Authentication for Remote UE**

*Type: pCR For: Agreement  
 33.503 v0.3.0  
 Source: LG Electronics Inc., Interdigital*

(Replaces S3-220817)

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

**S3-221182 Reference point name**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

(Replaces S3-220966)

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

**S3-221183 PLMN ID in Direct Security Mode Failure**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

(Replaces S3-220972)

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

**S3-221189 33.503: Updates in Clause 6.1.3.2**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

(Replaces S3-221027)

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

**S3-221206 33.503: Updates to General Security Requirements for U2N Relay Communication**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

(Replaces S3-221034)

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

**S3-221207 33.503: Updates to Security Requirements for U2N Relay Communication via L3 Relay UE**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

(Replaces S3-221035)

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

**S3-221208 33.503: Updates in Clause 6.3.4**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Xiaomi Technology*

(Replaces S3-221040)

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

**S3-221238 Add a new clause for 5G ProSe Layer-3 UE-to-Network Relay with N3IWF support**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220830)

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

**S3-221241 Adding UDM Services for SUCI deconceal and authorization information retrieval**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220842)

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

**S3-221242 Resolving the EN on the needs and usage of 5GPRUK ID**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon, Interdigital, LG Electronics, ChinaTelecom,Xiaomi, CATT, Samsung*

(Replaces S3-220845)

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

**S3-221243 Format of 5GPRUK ID**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon, ZTE*

(Replaces S3-220846)

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

**S3-221244 Clarification on the security of L2 U2NW**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220848)

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

**S3-221245 Key derivation related clarification in CP-based UE-to-Network relay procedures**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220850)

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

**S3-221252 Clarification on PRUK ID**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220869)

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

**S3-221255 Clarification on the description of PRUK**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220881)

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

**S3-221256 Clarification on the secondary authentication procedure**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220882)

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

**S3-221257 Update general clause for secondary authentication**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220883)

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

**S3-221271 Remote UE Report in UP based solution**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

(Replaces S3-220967)

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

**S3-221272 Rephrasing Clause 6.2.1 to emphasize that security parameters for PC5 Direct Communication are determined during Direct Discovery**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: Ericsson*

(Replaces S3-220968)

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

**S3-221281 pCR to TS33.503 Abbreviations update**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

(Replaces S3-221003)

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

**S3-221282 pCR to TS33.503 Clause 6.3 Clarification text for Kausf\_p**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

(Replaces S3-221014)

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

**S3-221284 pCR to TS33.503 Clause 6.3 Solution for co-existence of UP and CP security options**

*Type: pCR For: Approval  
 33.503 v0.3.0  
 Source: CATT*

(Replaces S3-221015)

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

**S3-221286 Draft TS 33.503 v0.4.0 Security Aspects of Proximity based Services (ProSe) in the 5G System (5GS)**

*Type: draft TS For: Approval  
 33.503 v0.4.0  
 Source: CATT*

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

**S3-221149 5G Prose questions on CP for show-of-hands**

*Type: other For: Presentation  
 Source: Interdigital,CATT*

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

**S3-221150 Questions of show hand on ProSe CP-based solution**

*Type: discussion For: Information  
 Source: CATT*

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

**S3-221299 Cover page TS 33.503**

*Type: TS or TR cover For: Approval  
 33.503 v1.0.0  
 Source: CATT*

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

### 4.8 Enhanced security for Phase 2 network slicing (Rel-17)

**S3-220799 Address EN on alignment to SA2**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1369 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-221047 Resolving the alignment related EN for NSACF Subscription/unsubscription procedure**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1404 Cat: F (Rel-17)  
  
 Source: Xiaomi Communication*

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

**S3-220800 Address EN on AF Authorization**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1370 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-221050 Update Subscription and unsubscription procedure of NSACF notification service**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1407 Cat: F (Rel-17)  
  
 Source: Xiaomi Communication*

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

**S3-221061 Clarification on AF authorization for the NSACF notification procedure**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1408 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

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

**S3-220837 Format of anonymous SUCI**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1372 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-220838 LS on anonymous SUCI**

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

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

**S3-220863 Address Ens for NPN**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1376 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-220912 Definition of Anonymous SUCI**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1380 Cat: F (Rel-17)  
  
 Source: Ericsson, Qualcomm*

**Decision:** The document was **revised to S3-221170**.

**S3-220913 UDM interaction for Anonymous SUCI**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1381 Cat: F (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221267**.

**S3-220914 Removing Editor’s note on using only null-scheme SUCI**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1382 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

**S3-220915 Anonymous SUCI for onboarding**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1383 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

**S3-220916 Clarification SUPI privacy for NPN**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1384 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

**S3-221002 Resolving Editor’s note on using only null-scheme SUCI**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1397 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-221202**.

**S3-221008 Resolution of editor's note relating to anonymizing SUPI or skipping default credential identifier.**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1398 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-221009 Resolution of editor's note relating to usage of SUPI as a verifiable identifier**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1399 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-221010 Resolution of editor’s note relating to exclusive use of anonymized SUCI.**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1400 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-221011 Resolution of inconsistency in SUCI usage during UE onboarding.**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1401 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221273**.

**S3-221049 Resolving the Editor’s Notes for UE onboarding in SNPNs**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1406 Cat: F (Rel-17)  
  
 Source: Xiaomi Communication, Ericsson*

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

**S3-221111 Derivation of SUPI from default UE credentials**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1389 rev 1 Cat: F (Rel-17)  
  
 Source: Ericsson, CableLabs, Intel, Qualcomm, Philips*

(Replaces S3-220940)

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

**S3-221112 Removing EN on UE being uniquely identifiable and verifiably secure**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1390 rev 1 Cat: F (Rel-17)  
  
 Source: Ericsson, CableLabs, Intel, Qualcomm, Xiaomi, Philips*

(Replaces S3-220941)

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

**S3-220688 Clarifications to secondary authentication for UE onboarding**

*Type: CR For: (not specified)  
 33.501 v17.5.0 CR-1360 Cat: F (Rel-17)  
  
 Source: Intel Corporation (UK) Ltd*

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

**S3-220939 Corrections and clarifications to secondary authentication during UE onboarding**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1388 Cat: F (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221210**.

**S3-220937 Terminology correction for security of UE onboarding**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1387 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

**S3-220938 PWS for Non-Public Networks**

*Type: CR For: Agreement  
 33.969 v17.0.0 CR-0001 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

**S3-220942 Implementation correction of CR1309**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1391 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

**S3-221048 Update Figure: I.2.2.2.2-1 for consistent service operation names**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1405 Cat: F (Rel-17)  
  
 Source: Xiaomi Communication*

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

**S3-220940 Derivation of SUPI from default UE credentials**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1389 Cat: F (Rel-17)  
  
 Source: Ericsson, CableLabs, Intel, Qualcomm*

**Decision:** The document was **revised to S3-221111**.

**S3-220941 Removing EN on UE being uniquely identifiable and verifiably secure**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1390 Cat: F (Rel-17)  
  
 Source: Ericsson, CableLabs, Intel, Qualcomm, Xiaomi*

**Decision:** The document was **revised to S3-221112**.

**S3-221017 Discussion on usage of identifier during UE onboarding in SNPNs**

*Type: discussion For: Discussion  
 33.501 v..  
 Source: Lenovo*

**Abstract:**

This discussion paper summarizes the reasoning and justification to resolve the Editor’s Notes related to UE onboarding in SNPNs described in TS 33.501 Clause I.9.

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

**S3-221020 Resolving Editor’s Note related to UE onboarding**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1402 Cat: F (Rel-17)  
  
 Source: Lenovo*

**Decision:** The document was **revised to S3-221195**.

**S3-221022 Update to clause I.2.2.2.2 for Onboarding clarifications**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1403 Cat: F (Rel-17)  
  
 Source: Lenovo*

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

**S3-221170 Configuration of Anonymous SUCI**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1380 rev 1 Cat: F (Rel-17)  
  
 Source: Ericsson, Qualcomm*

(Replaces S3-220912)

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

**S3-221195 Resolving Editor’s Note related to UE onboarding**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1402 rev 1 Cat: F (Rel-17)  
  
 Source: Lenovo, Xiaomi Communication*

(Replaces S3-221020)

**Abstract:**

S3-221049 merged in draft\_S3-221020-r5

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

**S3-221202 Resolving Editor’s note on using only null-scheme SUCI**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1397 rev 1 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-221002)

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

**S3-221210 Corrections and clarifications to secondary authentication during UE onboarding**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1388 rev 1 Cat: F (Rel-17)  
  
 Source: Ericsson, Intel*

(Replaces S3-220939)

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

**S3-221267 UDM interaction for Anonymous SUCI**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1381 rev 1 Cat: F (Rel-17)  
  
 Source: Ericsson, Lenovo, Xiaomi*

(Replaces S3-220913)

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

**S3-221273 Resolution of inconsistency in SUCI usage during UE onboarding.**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1401 rev 1 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-221011)

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

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

**S3-220650 LS on the impact of MSK update on MBS multicast session update procedure**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-221747*

(Replaces S3-220611)

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

**S3-220658 LS on Clarification on MBS Security Context (MSK/MTK) Definitions**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-222303*

(Replaces S3-220619)

**Decision:** The document was **replied to in S3-221155**.

**S3-220958 Reply LS on Clarification on MBS Security Context (MSK/MTK) Definitions**

*Type: LS out For: Approval  
 to CT4, cc CT1  
 Source: Ericsson*

**Abstract:**

Reply LS on Clarification on MBS Security Context (MSK/MTK) Definitions

**Decision:** The document was **revised to S3-221155**.

**S3-221155 Reply LS on Clarification on MBS Security Context (MSK/MTK) Definitions**

*Type: LS out For: Approval  
 to CT4, cc CT1  
 Source: Ericsson*

(Replaces S3-220958)

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

**S3-221145 LS on Security architecture for 5G multicast/broadcast services**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S4-220531*

**Decision:** The document was **replied to in S3-221158**.

**S3-220871 Reply LS on security architecture for 5G multicast-broadcast services**

*Type: LS out For: Approval  
 to SA4, cc SA2  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221158**.

**S3-221146 Response LS on Clarifications on Nmbstf\_MBCDistributionSession service**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S4-220575*

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

**S3-221148 Reply LS on secondary authentication for multicast PDU session**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2201311*

(Replaces S3-220675)

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

**S3-220923 Removing EN on secondary authentication**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1385 Cat: F (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

Removal of the Editor’s Note from the 5MBS annex W.4.3.

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

**S3-220858 Removing the Editor’s Note and add clarifications in the security mechanisms for MBS**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1373 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221247**.

**S3-220860 Enhancement for service announcement**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1375 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221249**.

**S3-221135 MBS capability exchange and delivery method**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1423 Cat: B (Rel-17)  
  
 Source: Samsung*

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

**S3-220859 Clarifications on the control-plane and user-plane procedures**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1374 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221248**.

**S3-220870 Clarifications on the multicast security context handling in session creation procedure**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1379 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221253**.

**S3-220611 LS on the impact of MSK update on MBS multicast session update procedure**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-221747*

**Decision:** The document was **revised to S3-220650**.

**S3-220619 LS on Clarification on MBS Security Context (MSK/MTK) Definitions**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-222303*

**Decision:** The document was **revised to S3-220658**.

**S3-220636 Reply LS on secondary authentication for multicast PDU session**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2201311*

**Decision:** The document was **revised to S3-220675**.

**S3-220675 Reply LS on secondary authentication for multicast PDU session**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2201311*

(Replaces S3-220636)

**Decision:** The document was **revised to S3-221148**.

**S3-221158 Reply LS on security architecture for 5G multicast-broadcast services**

*Type: LS out For: Approval  
 to SA4, cc SA2  
 Source: Huawei, HiSilicon*

(Replaces S3-220871)

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

**S3-221233 Clarification on the NSWO in the UE side**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1413 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-221098)

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

**S3-221234 Removing the Ens on the SCP authorization**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1414 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

(Replaces S3-221099)

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

**S3-221247 Removing the Editor’s Note and add clarifications in the security mechanisms for MBS**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1373 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-220858)

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

**S3-221248 Clarifications on the control-plane and user-plane procedures**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1374 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-220859)

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

**S3-221249 Enhancement for service announcement**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1375 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-220860)

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

**S3-221253 Clarifications on the multicast security context handling in session creation procedure**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1379 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-220870)

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

**S3-221262 Reply LS on Clarification on MBS Security Keys**

*Type: LS out For: (not specified)  
 to CT4, cc CT1, CT3, SA2  
 Source: Huawei, HiSilicon*

(Replaces S3-221154)

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

**S3-221153 LS on Clarification on MBS Security Keys**

*Type: LS in For: Information  
 Original outgoing LS: -, to -, cc -  
 Source: C4-223302*

**Decision:** The document was **replied to in S3-221262**.

**S3-221154 Reply to: LS on Clarification on MBS Security Keys**

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

**Decision:** The document was **revised to S3-221262**.

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

**S3-220652 LS on AF specific UE ID retrieval**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C3-221735*

(Replaces S3-220613)

**Decision:** The document was **replied to in S3-221161**.

**S3-220653 Reply LS on AF specific UE ID retrieval**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-220976*

(Replaces S3-220614)

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

**S3-220654 Reply LS on AF specific UE ID retrieval**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2203426*

(Replaces S3-220615)

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

**S3-220918 [DRAFT] Reply LS on AF specific UE ID retrieval**

*Type: LS out For: Approval  
 to CT3, cc SA2, SA6  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221161**.

**S3-221080 MEC - Reply LS on AF specific UE ID retrieval (C3-221735)**

*Type: LS out For: Approval  
 to CT3, cc SA6, SA2, CT4  
 Source: Apple*

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

**S3-220676 Reply LS to GSMA OPG on Further Operator Platform Group questions following SDO Workshop**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: SP-220346*

(Replaces S3-220637)

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

**S3-220677 Reply LS on Further GSMA OPAG questions following SDO Workshop**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2201721*

(Replaces S3-220638)

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

**S3-220681 Reply LS to ETSI MEC on MEC Federation and interest to collaborate**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-220931*

(Replaces S3-220642)

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

**S3-220922 Clarification of access token usage in EC**

*Type: CR For: Agreement  
 33.558 v17.0.0 CR-0002 Cat: F (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221274**.

**S3-221120 Clarification on selected EDGE authentication method indication**

*Type: CR For: Agreement  
 33.558 v17.0.0 CR-0003 Cat: F (Rel-17)  
  
 Source: Samsung*

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

**S3-221130 Editorial corrections and technical clarifications**

*Type: CR For: Agreement  
 33.558 v17.0.0 CR-0001 rev 1 Cat: F (Rel-17)  
  
 Source: Ericsson*

(Replaces S3-220921)

**Decision:** The document was **revised to S3-221275**.

**S3-220613 LS on AF specific UE ID retrieval**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C3-221735*

**Decision:** The document was **revised to S3-220652**.

**S3-220614 Reply LS on AF specific UE ID retrieval**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-220976*

**Decision:** The document was **revised to S3-220653**.

**S3-220615 Reply LS on AF specific UE ID retrieval**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2203426*

**Decision:** The document was **revised to S3-220654**.

**S3-220637 Reply LS to GSMA OPG on Further Operator Platform Group questions following SDO Workshop**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: SP-220346*

**Decision:** The document was **revised to S3-220676**.

**S3-220638 Reply LS on Further GSMA OPAG questions following SDO Workshop**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2201721*

**Decision:** The document was **revised to S3-220677**.

**S3-220642 Reply LS to ETSI MEC on MEC Federation and interest to collaborate**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-220931*

**Decision:** The document was **revised to S3-220681**.

**S3-220921 Editorial corrections and technical clarifications**

*Type: CR For: Agreement  
 33.558 v17.0.0 CR-0001 Cat: F (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221130**.

**S3-221161 Reply LS on AF specific UE ID retrieval**

*Type: LS out For: Approval  
 to CT3, cc SA2, SA6  
 Source: Ericsson*

(Replaces S3-220918)

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

**S3-221235 Draft TR 33.739 0.1.0**

*Type: draft TR For: Approval  
 33.739 v0.1.0  
 Source: Huawei, HiSilicon*

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

**S3-221274 Clarification of access token usage in EC**

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

(Replaces S3-220922)

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

**S3-221275 Editorial corrections and technical clarifications**

*Type: CR For: Agreement  
 33.558 v17.0.0 CR-0001 rev 2 Cat: F (Rel-17)  
  
 Source: Ericsson*

(Replaces S3-221130)

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

### 4.12 Non-seamless WLAN Offload in 5GS (Rel-17)

**S3-220655 LS on 5G NSWO roaming aspects**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2203253*

(Replaces S3-220616)

**Decision:** The document was **replied to in S3-221220**.

**S3-220656 Reply LS on 5G NSWO roaming aspects**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C3-222487*

(Replaces S3-220617)

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

**S3-220657 Reply LS on 5G NSWO roaming aspects**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-222436*

(Replaces S3-220618)

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

**S3-220697 LS reply on 5G NSWO roaming aspects**

*Type: LS out For: Approval  
 to SA2, cc CT3, CT4, TSG CT  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221220**.

**S3-221019 Draft LS on NSWO security**

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

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

**S3-220698 NSWO alignment with SA2 specs**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1363 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221216**.

**S3-221098 Clarification on the NSWO in the UE side**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1413 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221233**.

**S3-220818 Summary for Non-Seamless WLAN offload authentication in 5GS**

*Type: WI summary For: Endorsement  
 21.917 v0.5.0  
 Source: Nokia Solutions & Networks (I)*

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

**S3-221018 NSWO security revisited**

*Type: discussion For: Endorsement  
 Source: Ericsson, Deutsche Telekom, Vodafone*

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

**S3-220616 LS on 5G NSWO roaming aspects**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2203253*

**Decision:** The document was **revised to S3-220655**.

**S3-220617 Reply LS on 5G NSWO roaming aspects**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C3-222487*

**Decision:** The document was **revised to S3-220656**.

**S3-220618 Reply LS on 5G NSWO roaming aspects**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-222436*

**Decision:** The document was **revised to S3-220657**.

**S3-221216 NSWO alignment with SA2 specs**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1363 rev 1 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220698)

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

**S3-221220 LS reply on 5G NSWO roaming aspects**

*Type: LS out For: Approval  
 to SA2, cc CT3, CT4, TSG CT  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220697)

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

### 4.13 Security Aspects of User Consent for 3GPP services (Rel-17)

**S3-220622 Reply LS on NTN specific User Consent**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2201754*

**Decision:** The document was **revised to S3-220661**.

**S3-220661 Reply LS on NTN specific User Consent**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2201754*

(Replaces S3-220622)

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

**S3-220864 Address EN for UC3S**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1377 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-220865 Clarification on Enforcement Point for User Consent**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1378 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

### 4.14 Srevice Based Architecture (Rel-15/16/17)

**S3-220724 Clarification on separate handling of N32-c and N32-f**

*Type: CR For: Agreement  
 33.501 v15.15.0 CR-1332 rev 2 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson, Mavenir, Lenovo, Deutsche Telekom, NCSC, Xiaomi, BT, AT&T, Interdigital*

(Replaces S3-220589)

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

**S3-220725 Clarification on separate handling of N32-c and N32-f**

*Type: CR For: Agreement  
 33.501 v16.10.0 CR-1333 rev 2 Cat: A (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson, Mavenir, Lenovo, Deutsche Telekom, NCSC, Xiaomi, BT, AT&T, Interdigital*

(Replaces S3-220590)

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

**S3-220726 Clarification on separate handling of N32-c and N32-f**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1334 rev 2 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell, Ericsson, Mavenir, Lenovo, Deutsche Telekom, NCSC, Xiaomi, BT, AT&T, Interdigital*

(Replaces S3-220591)

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

**S3-220728 Authorization of N32-f connection establishment with TLS**

*Type: CR For: Agreement  
 33.501 v16.10.0 CR-1364 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221283**.

**S3-220729 Authorization of N32-f connection establishment with TLS**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1365 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221285**.

**S3-220731 Resolving EN on authorization between SCPs**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1366 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-221099 Removing the Ens on the SCP authorization**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1414 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221234**.

**S3-220765 Adding authorization for delegated discovery**

*Type: CR For: Approval  
 33.501 v16.10.0 CR-1367 Cat: F (Rel-16)  
  
 Source: China Telecommunications*

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

**S3-220766 Adding authorization for delegated discovery(mirror)**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1368 Cat: A (Rel-17)  
  
 Source: China Telecommunications*

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

**S3-220943 Clarification on the certificate profile for SCP and SEPP**

*Type: draftCR For: Approval  
 33.310 v16.9.0  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

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

**S3-220944 SEPP interconnect certificate profile**

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

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

**S3-220945 Clarification on CN-ID when it is presented in the certificate**

*Type: CR For: Agreement  
 33.310 v16.9.0 CR-0127 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221211**.

**S3-220946 Clarification on CN-ID when it is presented in the certificate**

*Type: CR For: Agreement  
 33.310 v17.2.0 CR-0128 Cat: A (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221212**.

**S3-220947 Clarification on the format of callback URI in the NF certificate profile**

*Type: CR For: Agreement  
 33.310 v16.9.0 CR-0129 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-220948 Clarification on the format of callback URI in the NF certificate profile**

*Type: CR For: Agreement  
 33.310 v17.2.0 CR-0130 Cat: A (Rel-17)  
  
 Source: Ericsson*

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

**S3-220949 Clarification on access token requests for NF Producers of a specific NF type and token-based authorization for indirect communication with delegated discovery**

*Type: CR For: Agreement  
 33.501 v16.10.0 CR-1392 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-220950 Clarification on access token requests for NF Producers of a specific NF type and token-based authorization for indirect communication with delegated discovery**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1393 Cat: A (Rel-17)  
  
 Source: Ericsson*

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

**S3-220952 LS on PLMN ID used in Roaming Scenarios**

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

**Decision:** The document was **revised to S3-221214**.

**S3-220951 SEPP to include and verify the source PLMN-ID**

*Type: draftCR For: Approval  
 33.501 v17.5.0  
 Source: Ericsson, Nokia, Nokia Shanghai Bell, Mavenir*

**Decision:** The document was **revised to S3-221213**.

**S3-220953 SEPP handling of PLMN-ID in Roaming scenarios for PLMNs supporting more than on PLMN-ID**

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

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

**S3-220954 Clarification of SNI usage for NF clients and servers**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1394 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

**S3-221100 Clarification on IV usage on N32-f protection-R15**

*Type: CR For: Approval  
 33.501 v15.15.0 CR-1415 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

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

**S3-221101 Clarification on IV usage on N32-f protection-R16**

*Type: CR For: Approval  
 33.501 v16.10.0 CR-1416 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-221102 Clarification on IV usage on N32-f protection-R17**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1417 Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-221103 Clarification on handling of the incoming N32-f message in the pSEPP side – R15**

*Type: CR For: Approval  
 33.501 v15.15.0 CR-1418 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

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

**S3-221104 Clarification on handling of the incoming N32-f message in the pSEPP side – R16**

*Type: CR For: Approval  
 33.501 v16.10.0 CR-1419 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-221105 Clarification on handling of the incoming N32-f message in the pSEPP side – R17**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1420 Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-221131 Verification of NSSAIs for preventing slice attack**

*Type: draftCR For: Agreement  
 33.501 v16.10.0  
 Source: CableLabs, Ericsson,Nokia, Nokia Shanghai Bell*

(Replaces S3-220468)

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

**S3-221133 Checking S-NSSAI against authoritative information source**

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

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

**S3-221108 CableLabs, Ericsson, Nokia, Nokia Shanghai Bell**

*Type: draftCR For: Approval  
 33.501 v16.10.0  
 Source: CableLabs*

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

**S3-221163 LS on handling of the modification policy in the IPX and receiving SEPP**

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

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

**S3-221211 Clarification on CN-ID when it is presented in the certificate**

*Type: CR For: Agreement  
 33.310 v16.9.0 CR-0127 rev 1 Cat: F (Rel-16)  
  
 Source: Ericsson*

(Replaces S3-220945)

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

**S3-221212 Clarification on CN-ID when it is presented in the certificate**

*Type: CR For: Agreement  
 33.310 v17.2.0 CR-0128 rev 1 Cat: A (Rel-17)  
  
 Source: Ericsson*

(Replaces S3-220946)

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

**S3-221213 SEPP to include and verify the source PLMN-ID**

*Type: draftCR For: Approval  
 33.501 v17.5.0  
 Source: Ericsson, Nokia, Nokia Shanghai Bell, Mavenir*

(Replaces S3-220951)

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

**S3-221214 LS on PLMN ID used in Roaming Scenarios**

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

(Replaces S3-220952)

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

**S3-221283 Clarification on N32-f connection establishment with TLS**

*Type: CR For: Agreement  
 33.501 v16.10.0 CR-1364 rev 1 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220728)

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

**S3-221285 Clarification on N32-f connection establishment with TLS**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1365 rev 1 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220729)

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

### 4.15 Security Assurance -All NFs (Rel-15/16/17)

**S3-220749 Correction on clause F.2.1 in TS 33.926-R16**

*Type: CR For: Approval  
 33.926 v16.4.0 CR-0057 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-220750 Correction on clause F.2.1 in TS 33.926-R17 mirror**

*Type: CR For: Agreement  
 33.926 v17.3.0 CR-0058 Cat: A (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-220751 Update the test case in TS 33.216 clause 4.2.2.1.10**

*Type: CR For: Agreement  
 33.216 v16.7.0 CR-0024 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-220875 Delete Use Case on Finding the right NF instance are serving the UE**

*Type: CR For: Approval  
 33.521 v17.1.0 CR-0003 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-220876 Delete Threat Analysis on Finding the right NF instance are serving the UE**

*Type: CR For: Approval  
 33.926 v17.3.0 CR-0059 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

### 4.16 Rel-15/16/17 maintenance (All topics)

**S3-220659 LS on Indication of Network Assisted Positioning method**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-222306*

(Replaces S3-220620)

**Decision:** The document was **replied to in S3-221254**.

**S3-220872 Reply LS on the Indication of Network Assisted Positioning method**

*Type: LS out For: Approval  
 to CT4, SA2, cc SA1  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221254**.

**S3-220699 LS reply on High-reliability requirement of UAV**

*Type: LS out For: Approval  
 to CT4, SA2, cc SA1  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220985 Reply LS on Indication of Network Assisted Positioning method**

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

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

**S3-220700 High-reliability requirement of UAV**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0001 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220984 Clarification on ‘high reliability’ location information**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0014 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-221192**.

**S3-220803 Address EN on UAV ID**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0002 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-220979 Resolving the EN on CAA level ID during UUAA procedures**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0009 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

**S3-220804 Address EN on UAV re-auth**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0003 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-220964 Resolving of EN in Clause 5.2.1.4 UUAA re-authentication procedure**

*Type: CR For: Approval  
 33.256 v17.0.0 CR-0006 Cat: F (Rel-17)  
  
 Source: Lenovo*

**Decision:** The document was **revised to S3-221173**.

**S3-220980 Resolving the ENs related to re-authentication**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0010 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

**S3-220960 Correction to Clause 5.2.1.5 UUAA Revocation**

*Type: CR For: Approval  
 33.256 v17.0.0 CR-0004 Cat: F (Rel-17)  
  
 Source: Lenovo*

**Decision:** The document was **revised to S3-221193**.

**S3-220961 Correction to Clause 5.2.2.4 UUAA Revocation**

*Type: CR For: Approval  
 33.256 v17.0.0 CR-0005 Cat: F (Rel-17)  
  
 Source: Lenovo*

**Decision:** The document was **revised to S3-221194**.

**S3-220977 Adding terms and abbreviations**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0007 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

**S3-220978 Adding text for the Overview clause**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0008 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-221197**.

**S3-220981 Resolving the ENs on CAA level ID during revocation**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0011 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

**S3-220982 Removing EN on USS authorisation**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0012 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

**S3-220983 Removing EN on TPAE**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0013 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

**S3-220986 Resolving the ENs on protection of UAS data**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0015 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-221198**.

**S3-220693 Aligning text for AKMA procedure**

*Type: CR For: Agreement  
 33.535 v17.5.0 CR-0125 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220694 Clarification on anonymization api**

*Type: CR For: Agreement  
 33.535 v17.5.0 CR-0126 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221215**.

**S3-220752 Correct AAnF service in clause 6.3**

*Type: CR For: Agreement  
 33.535 v17.5.0 CR-0127 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-221227**.

**S3-220753 NF selects AAnF in clause 6.7**

*Type: CR For: Agreement  
 33.535 v17.5.0 CR-0128 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-221228**.

**S3-220770 Clarification on the description about AAnF**

*Type: CR For: Agreement  
 33.535 v17.5.0 CR-0129 Cat: F (Rel-17)  
  
 Source: China Telecom Corporation Ltd.*

**Decision:** The document was **revised to S3-221203**.

**S3-220807 AAnF sending GPSI to internal AKMA AF**

*Type: CR For: Approval  
 33.535 v17.5.0 CR-0130 Cat: F (Rel-17)  
  
 Source: China Mobile*

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

**S3-220805 Issue of NSSAA in multiple registration**

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

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

**S3-220806 Include SN ID in NSSAA procedure**

*Type: CR For: Agreement  
 33.501 v16.10.0 CR-1371 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-221088 editorial changes of ENSI**

*Type: CR For: Approval  
 33.501 v16.10.0 CR-1411 Cat: F (Rel-16)  
  
 Source: Huawei,HiSilicon*

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

**S3-221089 mirror-editorial changes of ENSI**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1412 Cat: A (Rel-17)  
  
 Source: Huawei,HiSilicon*

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

**S3-220861 Alignment with RAN2 for LTE UP IP**

*Type: CR For: Approval  
 33.401 v17.1.0 CR-0705 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-220862 Address EN for LTE UP IP**

*Type: CR For: Approval  
 33.401 v17.1.0 CR-0706 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-220959 UP IP: mapping of EPS integrity algorithm to NR integrity algorithm**

*Type: CR For: Agreement  
 33.401 v17.1.0 CR-0707 Cat: F (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221177**.

**S3-221143 Avoid linkage between security functions and UE Radio Access Capabilities**

*Type: CR For: Approval  
 33.401 v17.1.0 CR-0708 Cat: F (Rel-17)  
  
 Source: VODAFONE*

**Decision:** The document was **revised to S3-221298**.

**S3-221298 Avoid linkage between security functions and UE Radio Access Capabilities**

*Type: CR For: Approval  
 33.401 v17.1.0 CR-0708 rev 1 Cat: F (Rel-17)  
  
 Source: VODAFONE*

(Replaces S3-221143)

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

**S3-220962 Clarification to multiple registrations in different PLMNs**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1395 Cat: A (Rel-17)  
  
 Source: Ericsson*

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

**S3-220963 Clarification to multiple registrations in different PLMNs**

*Type: CR For: Agreement  
 33.501 v16.10.0 CR-1396 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-221132 Discussion on security procedure during registration procedure over two different PLMN**

*Type: discussion For: Discussion  
 33.501 v..  
 Source: NEC Corporation*

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

**S3-221134 Update to NAS security context procedure when UE is registering over two different PLMNs**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1422 Cat: F (Rel-17)  
  
 Source: NEC Corporation*

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

**S3-220685 Clarifications to secondary authentication PDU Session Container**

*Type: CR For: (not specified)  
 33.501 v15.15.0 CR-1357 Cat: F (Rel-15)  
  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S3-221291**.

**S3-221291 Clarifications to secondary authentication PDU Session Container**

*Type: CR For: -  
 33.501 v15.15.0 CR-1357 rev 1 Cat: F (Rel-15)  
  
 Source: Intel Corporation (UK) Ltd*

(Replaces S3-220685)

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

**S3-220686 Clarifications to secondary authentication PDU Session Container**

*Type: CR For: (not specified)  
 33.501 v16.10.0 CR-1358 Cat: A (Rel-16)  
  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S3-221292**.

**S3-221292 Clarifications to secondary authentication PDU Session Container**

*Type: CR For: -  
 33.501 v16.10.0 CR-1358 rev 1 Cat: A (Rel-16)  
  
 Source: Intel Corporation (UK) Ltd*

(Replaces S3-220686)

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

**S3-220687 Clarifications to secondary authentication PDU Session Container**

*Type: CR For: (not specified)  
 33.501 v17.5.0 CR-1359 Cat: A (Rel-17)  
  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S3-221293**.

**S3-221293 Clarifications to secondary authentication PDU Session Container**

*Type: CR For: -  
 33.501 v17.5.0 CR-1359 rev 1 Cat: A (Rel-17)  
  
 Source: Intel Corporation (UK) Ltd*

(Replaces S3-220687)

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

**S3-220991 Discussion on Ua security protocol identifier for PSK TLS 1.3**

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

(Replaces S3-220317)

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

**S3-220992 Adding a Note about the new Ua security protocol identifier for TLS 1.3**

*Type: CR For: Agreement  
 33.222 v17.1.0 CR-0057 rev 1 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-220318)

**Decision:** The document was **revised to S3-221199**.

**S3-220993 Adding a new Ua security protocol identifier for TLS 1.3**

*Type: CR For: Agreement  
 33.220 v17.2.0 CR-0215 rev 1 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-220319)

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

**S3-220695 UPU procedure alignment**

*Type: CR For: Agreement  
 33.501 v16.10.0 CR-1361 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220696 UPU procedure alignment**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1362 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220849 Rel-16 Add clarifications to unicast procedures**

*Type: CR For: Approval  
 33.536 v16.4.0 CR-0027 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-220873 Rel-17 Add clarifications to unicast procedures**

*Type: CR For: Approval  
 33.536 v17.0.0 CR-0028 Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-220647 LS on ETSI Plugtest #6 Observation 10.1.11**

*Type: LS out For: Approval  
 to TSG CT WG1  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

SA3 notifying CT1 that 6th ETSI Plugtest Report V100 observation 10.1.11 has been resolved.

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

**S3-220917 Updates to 33.434 for CoAP usage**

*Type: CR For: Agreement  
 33.434 v17.1.1 CR-0013 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

**S3-220935 Editorial correction and clarification to 33.501**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1386 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

**S3-221119 [SBA] CR to update NF profile for inter-slice access**

*Type: CR For: Agreement  
 33.501 v17.5.0 CR-1421 Cat: F (Rel-17)  
  
 Source: Samsung*

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

**S3-220643 CR on Modernization of the Integrity & Encryption Algorithms between UE and P-CSFC**

*Type: CR For: Agreement  
 33.203 v17.1.0 CR-0265 Cat: F (Rel-17)  
  
 Source: Deutsche Telekom AG*

**Abstract:**

CR regarding a Modernization of the Integrity & Encryption Algorithms between UE and P-CSFC (for SIP Sessions).

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

**S3-221076 CR - 33501 - Clarification on Fast re-authentication**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1409 Cat: F (Rel-18)  
  
 Source: Apple*

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

**S3-221077 CR - 33501 - Clarification on the NAS COUNT for KeNB derivation**

*Type: CR For: Approval  
 33.501 v17.5.0 CR-1410 Cat: F (Rel-18)  
  
 Source: Apple*

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

**S3-221144 E1 interface security requirements**

*Type: CR For: Approval  
 33.401 v17.1.0 CR-0709 Cat: F (Rel-17)  
  
 Source: VODAFONE*

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

**S3-220620 LS on Indication of Network Assisted Positioning method**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-222306*

**Decision:** The document was **revised to S3-220659**.

**S3-220646 DP on Modernization of the Integrity & Encryption Algorithms between UE and P-CSFC (for SIP Sessions).**

*Type: discussion For: Discussion  
 33.203 v..  
 Source: Deutsche Telekom AG*

**Abstract:**

DP on Modernization of the Integrity & Encryption Algorithms between UE and P-CSFC (for SIP Sessions).

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

**S3-221173 Resolving of EN in Clause 5.2.1.4 UUAA re-authentication procedure**

*Type: CR For: Approval  
 33.256 v17.0.0 CR-0006 rev 1 Cat: F (Rel-17)  
  
 Source: Lenovo, Huawei HiSilicon, Qualcomm Incorporated*

(Replaces S3-220964)

**Abstract:**

Merger of S3-220980, S3-220804, and S3-220964

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

**S3-221177 UP IP: mapping of EPS integrity algorithm to NR integrity algorithm**

*Type: CR For: Agreement  
 33.401 v17.1.0 CR-0707 rev 1 Cat: F (Rel-17)  
  
 Source: Ericsson*

(Replaces S3-220959)

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

**S3-221192 Clarification on ‘high reliability’ location information**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0014 rev 1 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-220984)

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

**S3-221193 Correction to Clause 5.2.1.5 UUAA Revocation**

*Type: CR For: Approval  
 33.256 v17.0.0 CR-0004 rev 1 Cat: F (Rel-17)  
  
 Source: Lenovo*

(Replaces S3-220960)

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

**S3-221194 Correction to Clause 5.2.2.4 UUAA Revocation**

*Type: CR For: Approval  
 33.256 v17.0.0 CR-0005 rev 1 Cat: F (Rel-17)  
  
 Source: Lenovo*

(Replaces S3-220961)

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

**S3-221197 Adding text for the Overview clause**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0008 rev 1 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated, Lenovo*

(Replaces S3-220978)

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

**S3-221198 Resolving the ENs on protection of UAS data**

*Type: CR For: Agreement  
 33.256 v17.0.0 CR-0015 rev 1 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-220986)

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

**S3-221199 Adding a Note about the new Ua security protocol identifier for TLS 1.3**

*Type: CR For: Agreement  
 33.222 v17.1.0 CR-0057 rev 2 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-220992)

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

**S3-221203 Clarification on the description about AAnF**

*Type: CR For: Agreement  
 33.535 v17.5.0 CR-0129 rev 1 Cat: F (Rel-17)  
  
 Source: China Telecom Corporation Ltd.*

(Replaces S3-220770)

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

**S3-221215 Clarification on anonymization api**

*Type: CR For: Agreement  
 33.535 v17.5.0 CR-0126 rev 1 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220694)

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

**S3-221227 Correct AAnF service in clause 6.3**

*Type: CR For: Agreement  
 33.535 v17.5.0 CR-0127 rev 1 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

(Replaces S3-220752)

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

**S3-221228 NF selects AAnF in clause 6.7**

*Type: CR For: Agreement  
 33.535 v17.5.0 CR-0128 rev 1 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

(Replaces S3-220753)

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

## 5 Studies areas

### 5.1 Study on 5G security enhancement against false base stations

**S3-221072 5GFBS - Conclusion for solution#17**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: Apple. Ericsson, Intel, Nokia, Deutsche Telekom, CableLabs, LGE, OPPO, Xiaomi, Huawei, NIST, Telecom Italia, AT&T*

**Discussion:**

The Chair declared this document as a Working agreement, having recorded Ericsson's objection in the present report.

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

**S3-221073 5GFBS - Draft LS to RAN plenary on the conlcusion of solution#17**

*Type: LS out For: Approval  
 to RAN Plenary  
 Source: Apple*

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

**S3-221075 5GFBS - Security risk in lower layers**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: Apple*

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

**S3-220710 Addressing the editor’s note in 6.27.2.1.1 of Sol#27**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: CableLabs, Deutsche Telekom, Philips International B.V.*

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

**S3-220711 Addressing the editor’s note in 6.27.2.1.7 of sol#27**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: CableLabs, Deutsche Telekom, Philips International B.V.*

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

**S3-220712 Addressing the editor’s note in 6.27.2.2.1of Sol#27**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: CableLabs, Deutsche Telekom, Philips International B.V.*

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

**S3-220713 Addressing the editor’s note #1 in 6.27.2.2.4 of Sol#27**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: CableLabs, Deutsche Telekom*

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

**S3-220714 Addressing the editor’s note #2 in 6.27.2.2.4 of Sol#27**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: CableLabs, Deutsche Telekom, Philips International B.V.*

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

**S3-220715 Removing incorrect texts in 6.27.2.2.4 of Sol#27**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: CableLabs, Deutsche Telekom, Philips International B.V.*

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

**S3-220716 Removing redundant texts in 6.27.2.2.4 of Sol#**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: CableLabs, Deutsche Telekom, Philips International B.V.*

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

**S3-220717 Removing unrelated texts in 6.27.2.2.4 of Sol#27**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: CableLabs, Deutsche Telekom, Philips International B.V.*

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

**S3-220718 LS out on authenticity and replay protection of system information**

*Type: LS out For: Approval  
 to RAN2  
 Source: CableLabs, Deutsche Telekom, Philips International B.V.*

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

**S3-220792 Update to solution #25**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: Huawei, HiSilicon*

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

**S3-220793 Evaluation of solution #4**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: Huawei, HiSilicon*

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

**S3-220794 Conclusion for KI#3**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: Huawei, HiSilicon*

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

**S3-221084 Detection of MitM attacks with secret paging**

*Type: pCR For: Approval  
 33.809 v0.18.0  
 Source: Lenovo*

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

**S3-221266 TR 33.809**

*Type: draft TR For: Approval  
 33.809 v0.19.0  
 Source: Apple Computer Trading Co. Ltd*

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

### 5.2 Study on Security Impacts of Virtualisation

**S3-220705 Evaluation of Solution #5**

*Type: pCR For: Approval  
 33.848 v0.11.0  
 Source: Johns Hopkins University APL, US National Security Agency, CableLabs, InterDigital, AT&T, CISA ECD*

**Abstract:**

Evaluation of Solution #5

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

**S3-220866 Update for solution 5**

*Type: pCR For: Approval  
 33.848 v0.11.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221250**.

**S3-220898 Adding evaluation for Sol#6**

*Type: pCR For: Approval  
 33.848 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The contribution proposes a evaluation for sol#6 in TR 33.848.

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

**S3-220976 Adding conclusions and recommendations related to KI#13**

*Type: pCR For: Approval  
 33.848 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

This contribution proposes to use Sol#6 as a basis for further SA3 Rel18 work to solve KI#13.

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

**S3-221087 corrections on measurements flow of solution#5**

*Type: pCR For: Approval  
 33.848 v0.11.0  
 Source: Huawei,HiSilicon*

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

**S3-221115 KI#27 update - requirements**

*Type: pCR For: Approval  
 33.848 v0.11.0  
 Source: MITRE Corporation*

**Abstract:**

This pCR proposes to update the security requirements for KI #27

**Decision:** The document was **revised to S3-221190**.

**S3-221190 KI#27 update - requirements**

*Type: pCR For: Approval  
 33.848 v0.11.0  
 Source: MITRE Corporation*

(Replaces S3-221115)

**Abstract:**

This pCR proposes to update the security requirements for KI #27

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

**S3-221250 Update for solution 5**

*Type: pCR For: Approval  
 33.848 v0.11.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220866)

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

### 5.3 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS

**S3-220754 Key issue on authorization in multi-path transmission for UE-to-Network Relay scenario**

*Type: pCR For: Approval  
 33.740 v0.0.0  
 Source: ZTE Corporation*

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

**S3-220755 Key issue on authorization in the UE-to-UE relay scenario**

*Type: pCR For: Approval  
 33.740 v0.0.0  
 Source: ZTE Corporation*

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

**S3-220756 Key issue on Integrity and confidentiality of information over the UE-to-UE Relay**

*Type: pCR For: Approval  
 33.740 v0.0.0  
 Source: ZTE Corporation*

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

**S3-220757 Key issue on Privacy of information over the UE-to-UE Relay**

*Type: pCR For: Approval  
 33.740 v0.0.0  
 Source: ZTE Corporation*

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

**S3-220758 Key issue on Support direct communication path switching between PC5 and Uu**

*Type: pCR For: Approval  
 33.740 v0.0.0  
 Source: ZTE Corporation*

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

**S3-221114 New Key Issue on UE-to-UE Relay Trust Model**

*Type: pCR For: Approval  
 33.740 v0.0.0  
 Source: OPPO*

**Abstract:**

New KI proposal for U2U relay.

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

**S3-221116 New KI: Remote UE Security Establishment via UE-to-UE Relay**

*Type: pCR For: Approval  
 33.740 v0.0.0  
 Source: OPPO*

**Abstract:**

This is a new KI proposal on remote UE security establishment via UE-to-UE Relay.

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

### 5.4 Study on enhanced Security Aspects of the 5G Service Based Architecture

**S3-220727 Security improvements of N32 connection**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220932 Update to KI on roaming hub**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220933 Requirement to KI on roaming hub**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221287**.

**S3-221287 Requirement to KI on roaming hub**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220933)

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

**S3-220931 Trust in SEPP deployment scenarios**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-221136 New KI for Authentication of PLMNs over IPX**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: CableLabs*

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

**S3-220955 New KI, NRF validation of NFc for access token requests**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Ericsson*

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

**S3-221096 Update of Solution #12**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221232**.

**S3-221097 Update of Solution #9**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Huawei, HiSilicon*

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

**S3-220730 Resolution EN authorization method negotiation per KI7-Sol9**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220732 New sol. for KI7 on authorization mechanism negotiation**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220733 Conclusion on authorization method negotiation**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220910 Rapporteur update to TR 33.875**

*Type: pCR For: (not specified)  
 33.875 v1.1.0  
 Source: Nokia*

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

**S3-221232 Update of Solution #12**

*Type: pCR For: Approval  
 33.875 v1.1.0  
 Source: Huawei, HiSilicon*

(Replaces S3-221096)

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

**S3-221280 TR 33.875-120**

*Type: draft TR For: (not specified)  
 33.875 v1.2.0  
 Source: Nokia UK*

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

### 5.5 Study on enhanced security for network slicing Phase 2

**S3-221051 eNS2\_Sec: Solution #1 update**

*Type: pCR For: Approval  
 33.874 v0.6.0  
 Source: Xiaomi Communication*

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

**S3-220795 KI#2 update - threats and requirements**

*Type: pCR For: Approval  
 33.874 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221181**.

**S3-220796 New solution for part 1 of KI#2**

*Type: pCR For: Approval  
 33.874 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-220797 New solution for part 2 of KI#2**

*Type: pCR For: Approval  
 33.874 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-220798 Conclusion for part 2 of KI#2**

*Type: pCR For: Approval  
 33.874 v0.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221184**.

**S3-221164 LS to SA2 on NSAC**

*Type: LS out For: (not specified)  
 to SA2  
 Source: Huawei Technologies R&D UK*

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

**S3-221181 KI#2 update - threats and requirements**

*Type: pCR For: Approval  
 33.874 v0.6.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220795)

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

**S3-221184 Conclusion for part 2 of KI#2**

*Type: pCR For: Approval  
 33.874 v0.6.0  
 Source: Huawei, HiSilicon*

(Replaces S3-220798)

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

**S3-221187 draft TR 33.874**

*Type: draft TR For: (not specified)  
 33.874 v0.7.0  
 Source: Huawei Technologies R&D UK*

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

**S3-221300 Coversheet TR 33.874**

*Type: TS or TR cover For: Approval  
 33.874 v1.0.0  
 Source: Huawei*

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

### 5.6 Study on privacy of identifiers over radio access

**S3-220701 New content for Terms clause on key properties of privacy**

*Type: pCR For: Approval  
 33.870 v0.1.0  
 Source: InterDigital, Inc.*

**Abstract:**

Privacy has its properties described and defined in ISO publications. This PCR proposes a new clause that lists privacy properties in the general context.

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

**S3-220702 TR 33.870 – Informative Annex A**

*Type: pCR For: Approval  
 33.870 v0.1.0  
 Source: InterDigital, Inc.*

**Abstract:**

This contribution proposes additional content for Informative Annex A for TR 33.870, Study of privacy of identifiers over radio access.

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

**S3-220645 DP on Post-Quantum Secure Subscription Concealed Identifier**

*Type: discussion For: Discussion  
 33.870 v..  
 Source: Deutsche Telekom AG*

**Abstract:**

Discussion on the need of postquantum secure scheme for the SUCI calculation.

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

**S3-220644 New KI on Post-Quantum Secure Subscription Concealed Identifier**

*Type: pCR For: Approval  
 33.870 v0.1.0  
 Source: Deutsche Telekom AG*

**Abstract:**

The security of the public-key cryptography that underpins the SUCI relies currently on the hardness of the discrete logarithm problem. This KI is about the fact, that a quantum adversary could break the SUCI’s cryptography and once more gain the capabili

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

**S3-220911 New key issue on SUPI length disclosed by SUCI**

*Type: pCR For: Approval  
 33.870 v0.1.0  
 Source: Ericsson, Apple, AT&T, Cable Labs, China Southern Power Grid Co, Convida Wireless LLC, Intel, Interdigital, Johns Hopkins University APL, Lenovo, LGE, Mavenir, MITRE, NCSC, Oppo, Phillips, Samsung, Telefonica, US NIST, US NSA, Verizon Wireless, Xiaomi, ZT*

**Decision:** The document was **revised to S3-221180**.

**S3-221078 IDPrvc - Security issue on C-RNTI**

*Type: pCR For: Approval  
 33.870 v0.1.0  
 Source: Apple*

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

**S3-220703 New key issue on TMGI Privacy**

*Type: pCR For: Approval  
 33.870 v0.1.0  
 Source: InterDigital, Inc., Convida*

**Abstract:**

This PCR proposes a new KI on TMGI privacy to be studied in TR 33.870.

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

**S3-220704 New key issue on PIN ID Privacy**

*Type: pCR For: Approval  
 33.870 v0.1.0  
 Source: InterDigital, Inc.*

**Abstract:**

This PCR proposed a new key issue on PIN ID Privacy to be studied in TR 33.870.

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

**S3-220759 New solution on key issue SUPI length disclosed by SUCI.**

*Type: pCR For: Approval  
 33.870 v0.1.0  
 Source: China Southern Power Grid Co., Ltd, ZTE*

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

**S3-221180 New key issue on SUPI length disclosed by SUCI**

*Type: pCR For: Approval  
 33.870 v0.1.0  
 Source: Ericsson, Apple, AT&T, Cable Labs, China Southern Power Grid Co, Convida Wireless LLC, Intel, Interdigital, Johns Hopkins University APL, Lenovo, LGE, Mavenir, MITRE, NCSC, Oppo, Phillips, Samsung, Telefonica, US NIST, US NSA, Verizon Wireless, Xiaomi, ZT*

(Replaces S3-220911)

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

**S3-221290 TR 33.870-020**

*Type: draft TR For: discussion  
 33.870 v0.2.0  
 Source: Interdigital*

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

### 5.7 Study on Standardising Automated Certificate Management in SBA

**S3-220823 New KI for security of certificate update**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221236**.

**S3-220824 New KI for Security protection of certificate enrolment**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221237**.

**S3-220919 A new key issue for single automated certificate management protocol and procedures**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221277**.

**S3-220928 Key issue on CMPv2 adoption and initial NF trust during certificate enrolment**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220920 A new key issue for the relation between NF lifecycle and certificate lifecycle**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-221278**.

**S3-220925 Key issue on Relation between NF and Certificate lifecycle management**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220924 Update of the introduction and scope of TR 33.876 skeleton**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220927 Key issue on Multiple certificates to be associated with a Network Function**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221223**.

**S3-221046 Key Issue on Trust Chain of Certificate Authority Hierarchy**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Beijing Xiaomi Mobile Software*

**Decision:** The document was **revised to S3-221204**.

**S3-220926 Key issue on Network Function instances identifiers**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221224**.

**S3-220929 Key issue on Certificates revocation procedures**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221225**.

**S3-220930 Key issue on Automated certificate management for Network Slicing**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221226**.

**S3-221204 Key Issue on Trust Chain of Certificate Authority Hierarchy**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Beijing Xiaomi Mobile Software*

(Replaces S3-221046)

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

**S3-221223 Key issue on Multiple certificates to be associated with a Network Function**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220927)

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

**S3-221224 Key issue on Network Function instances identifiers**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220926)

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

**S3-221225 Key issue on Certificates revocation procedures**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220929)

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

**S3-221226 Key issue on Automated certificate management for Network Slicing**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220930)

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

**S3-221236 New KI for security of certificate update**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Huawei, HiSilicon, Ericsson*

(Replaces S3-220823)

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

**S3-221237 New KI for Security protection of NF certificate enrolment**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Huawei, HiSilicon, Nokia, Nokia Shanghai Bell*

(Replaces S3-220824)

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

**S3-221270 Draft TR 33.876 Study on Standardising Automated Certificate Management in SBA**

*Type: draft TR For: Approval  
 33.876 v0.2.0  
 Source: Nokia Poland*

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

**S3-221277 A new key issue for single automated certificate management protocol and procedures**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Ericsson*

(Replaces S3-220919)

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

**S3-221278 A new key issue for the relation between NF lifecycle and certificate lifecycle**

*Type: pCR For: Approval  
 33.876 v0.1.0  
 Source: Ericsson*

(Replaces S3-220920)

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

### 5.8 New SID on AKMA phase 2

**S3-220810 Skeleton for TR 33.737(AKMA ph2)**

*Type: draft TR For: Approval  
 33.737 v0.0.0  
 Source: China Mobile*

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

**S3-220811 Scope of TR 33.737**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: China Mobile*

**Decision:** The document was **revised to S3-221288**.

**S3-220812 Architectural Asumptions in TR 33.737**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: China Mobile*

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

**S3-220813 Key issue of AKMA roaming**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: China Mobile*

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

**S3-220901 Key issue on AKMA Roaming Scenario**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221218**.

**S3-221057 New key issue on AKMA application key request in home routed and local-breakout scenarios**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Xiaomi Communication*

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

**S3-221058 New key issue on Secure AAnF service request in roaming scenarios of AKMA**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Xiaomi Communication*

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

**S3-221059 New key issue on secure architecture for roaming scenarios in AKMA**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Xiaomi Communication*

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

**S3-221122 New Key Issue on AKMA Roaming**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Samsung*

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

**S3-221123 New solution on AKMA Roaming**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Samsung*

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

**S3-221124 New solution on pushing AKMA context to visited PLMN**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Samsung*

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

**S3-220814 Key issue of introducing application proxy into AKMA**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: China Mobile*

**Decision:** The document was **revised to S3-221289**.

**S3-220902 KI on AP function introduction**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-221052 New key issue on authentication proxy architecture for AKMA**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Xiaomi Communication*

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

**S3-221053 New key issue on protecting application servers with different security requirements**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Xiaomi Communication*

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

**S3-221054 New key issue on secure AKMA application key request in AKMA supporting authentication proxy**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Xiaomi Communication*

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

**S3-221055 New key issue on secure authorization for AKMA supporting authentication proxy**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Xiaomi Communication*

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

**S3-221056 New key issue on secure identification of authentication proxy and application server in AKMA scenarios**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Xiaomi Communication*

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

**S3-221079 AKMA - New key issue of introducing AP to AKMA architecture**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Apple*

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

**S3-220760 Discussion paper on AKMA application context removal.**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: ZTE Corporation*

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

**S3-220761 Discussion paper on AKMA interworking**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: ZTE Corporation*

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

**S3-220762 New KI on AKMA interworking**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: ZTE Corporation*

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

**S3-220897 New KI AKMA Kaf refresh**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: OPPO*

**Abstract:**

There is a need for Kaf refresh procedure without having to run a primary authentication between UE and the network to update Kakma

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

**S3-220899 New solution Security procedure of KAF refresh-MAC**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: OPPO*

**Abstract:**

This contribution addresses the security requirements in the companion contribution S3-220897

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

**S3-220900 New solution Security procedure of KAF refresh-Counter**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: OPPO*

**Abstract:**

This contribution addresses security requirements in the companion contribution S3-220897

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

**S3-220906 New solution Security procedure of KAF-Nonce**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: OPPO*

**Abstract:**

This contribution addresses security requirements in the companion contribution S3-220897

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

**S3-221169 draft TR 33.737**

*Type: draft TR For: Approval  
 33.737 v0.1.0  
 Source: China Mobile*

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

**S3-221218 Key issue on AKMA Roaming Scenario**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell, CMCC, Lenovo, Xiaomi, Samsung*

(Replaces S3-220901)

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

**S3-221288 Scope of TR 33.737**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: China Mobile*

(Replaces S3-220811)

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

**S3-221289 Key issue of introducing application proxy into AKMA**

*Type: pCR For: Approval  
 33.737 v0.0.0  
 Source: China Mobile*

(Replaces S3-220814)

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

### 5.9 New Study of Security aspect of home network triggered primary authentication

**S3-220831 Skeleton of HNTRA**

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

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

**S3-220832 Scope of HNTRA**

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

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

**S3-220833 Adding a usecase of interworking from EPS to 5G**

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

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

**S3-221045 New Use Case for Security of Interworking**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Beijing Xiaomi Mobile Software*

**Decision:** The document was **revised to S3-221205**.

**S3-220819 A use case of HONTRA in SoR protection service suspension**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: LG Electronics France*

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

**S3-220821 A use case of HONTRA in UPU protection service suspension**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: LG Electronics France*

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

**S3-221043 New Use Case for Continuity of Steering of Roaming Service Delivery**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Beijing Xiaomi Mobile Software*

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

**S3-221044 New Use Case for Continuity of UE Parameters Update Service Delivery**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Beijing Xiaomi Mobile Software*

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

**S3-220892 Adding a usecase of SoR Counter Wrap around**

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

**Decision:** The document was **revised to S3-221261**.

**S3-220835 Adding a usecase of Kakma refresh**

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

**Decision:** The document was **revised to S3-221240**.

**S3-220708 New KI on Home network triggered primary authentication**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: China Telecomunication Corp.*

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

**S3-220822 A Key issue in UPU protection service suspension**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: LG Electronics France*

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

**S3-220820 A Key issue in SoR protection service suspension**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: LG Electronics France*

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

**S3-221083 HN-auth-NAS based HN triggered authentication**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Apple*

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

**S3-220834 KI on Scalability of the home triggered primary authentication**

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

**Decision:** The document was **revised to S3-221239**.

**S3-221126 New Solution on UDM initiated re-authentication based on AUSF request**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Samsung*

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

**S3-220904 Key issue on HN triggering primary reauthentication**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-221127 New solution on HN initiated re-authentication via AUSF**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Samsung*

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

**S3-220905 Reauthentication during the handover**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Intel Corporation (UK) Ltd*

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

**S3-221128 New solution on UDM triggered key update procecdure based on AAnF request**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Samsung*

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

**S3-221041 Key Issue on Refresh of Long Lived Key KAUSF**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Beijing Xiaomi Mobile Software*

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

**S3-221129 New solution on UPU based re-authentication procedure**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Samsung*

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

**S3-221042 Key Issue on Security of Interworking**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Beijing Xiaomi Mobile Software*

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

**S3-221125 New Key issue on HN initiated Re-authentication**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Samsung*

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

**S3-220836 KI on Signalling overhead**

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

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

**S3-220903 Key issue on KAF refresh without primary reauthentication**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221219**.

**S3-221093 Adding a key issue of Multiple registrations**

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

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

**S3-221205 New Use Case for Security of Interworking**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Beijing Xiaomi Mobile Software*

(Replaces S3-221045)

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

**S3-221219 Key issue on KAF refresh without primary reauthentication**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell, Huawei, HiSilicon, OPPO*

(Replaces S3-220903)

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

**S3-221239 KI on Scalability of the home triggered primary authentication**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Huawei, HiSilicon, China telecom, LG Electronics, Nokia, Nokia Shanghai Bell, Beijing Xiaomi Mobile Software, Samsung*

(Replaces S3-220834)

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

**S3-221240 Adding a usecase of Kakma refresh**

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

(Replaces S3-220835)

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

**S3-221261 Adding a usecase of SoR Counter Wrap around**

*Type: pCR For: Approval  
 33.741 v0.0.0  
 Source: Huawei, HiSilicon, LG Electronics France, Beijing Xiaomi Mobile Software*

(Replaces S3-220892)

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

**S3-221264 TR 33.741**

*Type: draft TR For: (not specified)  
 33.741 v0.1.0  
 Source: Huawei, HiSilicon*

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

### 5.10 New Study on security aspects of enablers for Network Automation for 5G - phase 3

**S3-220771 draft\_TR\_33.738- skeleton for eNA security ph3**

*Type: draft TR For: Approval  
 33.738 v0.0.0  
 Source: China Mobile*

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

**S3-220772 Scope of TR 33.738**

*Type: pCR For: Approval  
 33.738 v0.1.0  
 Source: China Mobile*

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

**S3-220773 Overview of TR 33.738**

*Type: pCR For: Approval  
 33.738 v0.1.0  
 Source: China Mobile*

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

**S3-220720 Key issue on Security for data and analytics exchange in roaming**

*Type: pCR For: Approval  
 33.738 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220738 New KI on Topology Hiding in Data and Analytics Exchange**

*Type: pCR For: Approval  
 33.738 v0.0.0  
 Source: China Telecommunications*

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

**S3-220774 KI on Protection of data and analytics exchange in roaming case**

*Type: pCR For: Approval  
 33.738 v0.1.0  
 Source: China Mobile*

**Decision:** The document was **revised to S3-221269**.

**S3-220740 New KI on authorization of selection of participant NWDAF instances in the Federated Learning group**

*Type: pCR For: Approval  
 33.738 v0.0.0  
 Source: China Telecommunications*

**Decision:** The document was **revised to S3-221176**.

**S3-220721 Key issue on Security for AIML model storage**

*Type: pCR For: Approval  
 33.738 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-220722 Key issue on Security for AIML model sharing**

*Type: pCR For: Approval  
 33.738 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221221**.

**S3-220723 Key issue on Anomalous NF behaviour detection by NWDAF**

*Type: pCR For: Approval  
 33.738 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-221222**.

**S3-221176 New KI on authorization of selection of participant NWDAF instances in the Federated Learning group**

*Type: pCR For: Approval  
 33.738 v0.0.0  
 Source: China Telecommunications*

(Replaces S3-220740)

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

**S3-221221 Key issue on Security for AIML model sharing**

*Type: pCR For: Approval  
 33.738 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220722)

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

**S3-221222 Key issue on Anomalous NF behaviour detection by NWDAF**

*Type: pCR For: Approval  
 33.738 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-220723)

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

**S3-221269 KI on Protection of data and analytics exchange in roaming case**

*Type: pCR For: Approval  
 33.738 v0.1.0  
 Source: China Mobile*

(Replaces S3-220774)

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

**S3-221279 Draft TR 33.738**

*Type: draft TR For: (not specified)  
 33.738 v0.1.0  
 Source: CMCC*

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

### 5.11 New Study on Security Enhancement of support for Edge Computing — phase 2

**S3-220763 Key issue on security of EAS Discovery Procedure with EASDF**

*Type: pCR For: Approval  
 33.739 v0.0.0  
 Source: ZTE Corporation*

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

**S3-220877 new KI on Authentication and Authorization when EHE in a VPLMN**

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

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

**S3-220878 New KI on Security for DNS server IP address**

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

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

**S3-220907 New KI Edge algorithm selection**

*Type: pCR For: Approval  
 33.739 v0.0.0  
 Source: OPPO*

**Abstract:**

There is a need to selection the which authentication algorithm to use between the EEC and EES, EEC and ECS

**Decision:** The document was **revised to S3-221186**.

**S3-221060 New key issue on authentication and authorization problem for the EEC hosted in the roaming UE**

*Type: pCR For: Approval  
 33.739 v0.0.0  
 Source: Xiaomi Communication*

**Decision:** The document was **revised to S3-221191**.

**S3-220908 New solution Authentication algorithm selection in EDGE**

*Type: pCR For: Approval  
 33.739 v0.0.0  
 Source: OPPO*

**Abstract:**

This contribution addresses the security requirements in the companion contribution S3-220907.

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

**S3-220909 New solution Authentication algorithm selection among EEC, ECS, and EES**

*Type: pCR For: Approval  
 33.739 v0.0.0  
 Source: OPPO*

**Abstract:**

This contribution addresses the security requirements in the companion contribution S3-220907

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

**S3-221094 The Scope of the FS\_EDGE\_Ph2**

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

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

**S3-221095 The Skeleton of the FS\_EDGE\_Ph2**

*Type: draft TR For: Approval  
 33.739 v0.0.0  
 Source: Huawei, HiSilicon*

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

**S3-221186 New KI Edge algorithm selection**

*Type: pCR For: Approval  
 33.739 v0.0.0  
 Source: OPPO, CMCC, vivo*

(Replaces S3-220907)

**Abstract:**

There is a need to selection the which authentication algorithm to use between the EEC and EES, EEC and ECS

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

**S3-221191 New key issue on authentication and authorization problem for the EEC hosted in the roaming UE**

*Type: pCR For: Approval  
 33.739 v0.0.0  
 Source: Xiaomi Communication*

(Replaces S3-221060)

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

## 6 New Study/Work item proposals

**S3-220709 New SID on Personal IoT Networks Security Aspects**

*Type: SID new For: Approval  
 Source: vivo, Apple, ZTE, Xiaomi, CATT, OPPO, China Unicom, China Telecom, CableLabs, InterDigital, LGE, Nokia, Nokia Shanghai Bell, Lenovo, Motorola mobility, Philips*

(Replaces S3-220133)

**Abstract:**

The objectives are for studying how 5G security architecture and procedures can be enhanced to support Personal IoT Network.

**Decision:** The document was **revised to S3-221265**.

**S3-220719 New SID: Study on SNAAPP securitY**

*Type: SID new For: Agreement  
 Source: NTT DOCOMO INC.*

**Decision:** The document was **revised to S3-221179**.

**S3-220764 Revised SID on AKMA phase2**

*Type: SID revised For: Agreement  
 Source: ZTE Corporation*

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

**S3-220791 New SID on Study on XR Security**

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

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

**S3-220801 Discussion on Rel-18 study for network slicing security**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon, Lenovo, CATT, CAICT, China Mobile, China Unicom, InterDigital, NEC, Nokia*

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

**S3-220802 New SID: Rel-18 study for network slicing security**

*Type: SID new For: Approval  
 Source: Huawei, HiSilicon, Lenovo, CATT, CAICT, China Mobile, China Unicom, InterDigital, NEC, Nokia*

**Decision:** The document was **revised to S3-221178**.

**S3-220853 New WID on Security aspects of 5G Isolated operation for public safety (IOPS)**

*Type: WID new For: Approval  
 Source: Huawei, HiSilicon*

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

**S3-220854 Discussion paper on 5G IOPS**

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

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

**S3-220856 New SID on security enhancements for 5G multicast-broadcast services Phase 2**

*Type: SID new For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221246**.

**S3-220857 New SID on security enhancements for 5GC LoCation Services Phase 3**

*Type: SID new For: Approval  
 Source: Huawei, HiSilicon*

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

**S3-220884 Discussion paper on security enhancements for 5GC LoCation Services Phase 3**

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

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

**S3-220867 New SID on Enhancement of User Consent for 3GPP Services**

*Type: SID new For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-221251**.

**S3-220895 New SID on Security aspects for 5WWC Phase 2**

*Type: SID new For: Approval  
 Source: Nokia Solutions & Networks (I)*

**Decision:** The document was **revised to S3-221217**.

**S3-220896 Discussion on Security aspects for 5WWC Phase 2**

*Type: discussion For: Discussion  
 Source: Nokia Solutions & Networks (I)*

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

**S3-220956 New SID on security aspects of enhanced support of Non-Public Networks phase 2**

*Type: SID new For: Agreement  
 Source: Ericsson, CableLabs, InterDigital, Intel, Xiaomi, Nokia, Nokia Shanghai Bell, ZTE, China Mobile, LGE, Philips, Lenovo, Samsung*

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

**S3-220957 Skeleton for proposed FS\_eNPN\_Ph2\_SEC**

*Type: other For: Approval  
 Source: Ericsson*

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

**S3-220975 Discussion for Study on Zero Trust Security**

*Type: discussion For: Discussion  
 Source: Lenovo*

**Abstract:**

This contribution presents the motivation, benefits and the scope to have a study on Zero Trust Security for Rel.18.

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

**S3-221004 Study on Zero Trust Security**

*Type: SID new For: Approval  
 Source: Lenovo, Motorola Mobility, Interdigital, Verizon, Cablelabs, Mavenir, Johns Hopkins University APL, LG Electronics, Telefonica, NEC, Telia Company, AT&T, Samsung, PCCW Global B.V, China Mobile, Motorola Solutions, Inc, Nokia, Nokia Shanghai Bell, Intel, N*

**Decision:** The document was **revised to S3-221172**.

**S3-220987 New Study on security of architecture enhancement for UAV and UAM**

*Type: SID new For: Agreement  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-221200**.

**S3-221021 Draft skeleton of TR 33.740**

*Type: draft TR For: Approval  
 33.740 v0.0.0  
 Source: CATT*

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

**S3-221023 New SID on Security Aspects of Ranging Based Services and Sidelink Positioning**

*Type: SID new For: Approval  
 Source: Xiaomi, Apple, China Mobile, CATT, Huawei, Hisilicon, InterDigital, LGE, Philips, vivo, ZTE, Lenovo, Ericsson, Nokia, Nokia Shanghai Bell, China Telecom*

**Decision:** The document was **revised to S3-221209**.

**S3-221024 New SID on Security Aspects of Satellite Access**

*Type: SID new For: Approval  
 Source: Xiaomi, China Mobile, China Telecom*

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

**S3-221062 New SID on the security aspects of Artificial Intelligence (AI)/Machine Learning (ML) for the NR Air Interface and NG-RAN**

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

**Decision:** The document was **revised to S3-221276**.

**S3-221065 New WID on IETF OSCORE Ua\* protocol profile for AKMA**

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

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

**S3-221066 IETF OSCORE as AKMA Ua\* protocol**

*Type: CR For: Agreement  
 33.535 v17.5.0 CR-0131 Cat: B (Rel-18)  
  
 Source: Ericsson, DT*

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

**S3-221067 Extending the Ua security protocol namespace to include the AKMA OSCORE Ua\* protocol**

*Type: CR For: Agreement  
 33.220 v17.2.0 CR-0217 Cat: B (Rel-18)  
  
 Source: Ericsson, DT*

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

**S3-221068 5G registration via trusted non-3GPP access after NSWO authentication**

*Type: discussion For: Endorsement  
 Source: Lenovo*

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

**S3-221069 New Study to enable 5G registration via trusted non-3GPP access after NSWO Authentication (FS\_5GRTN3)**

*Type: SID new For: Approval  
 Source: Lenovo*

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

**S3-221070 Study to enable URSP rules to securely identify applications**

*Type: discussion For: Endorsement  
 Source: Lenovo*

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

**S3-221071 New Study to enable URSP rules to securely identify Applications (FS\_USIA)**

*Type: SID new For: Approval  
 Source: Lenovo, AT&T, Broadcom, CableLabs, CATT, China Mobile, China Telecom, Deutsche Telekom, Intel, LG Electronics, Motorola Solutions MSI, NEC, PCCW Global B.V., Verizon, Xiaomi*

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

**S3-221074 5GFBS - new WID on 5GFBS**

*Type: WID new For: Approval  
 Source: Apple, US National Security Agency, AT&T, Deutsche Telekom, Ericsson, Huawei, Hisilicon, CableLabs, Intel, InterDigital, Johns Hopkins University APL, NIST, Xiaomi, OPPO*

**Decision:** The document was **revised to S3-221185**.

**S3-221085 Discussion on security aspects of NGRTC**

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

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

**S3-221086 New SID on NGRTC**

*Type: SID new For: Approval  
 Source: Huawei,HiSilicon*

**Decision:** The document was **revised to S3-221229**.

**S3-221113 New SID on Security and Privacy of AI/ML-based services and applications in 5G**

*Type: SID new For: Approval  
 Source: OPPO, Apple, vivo, Inter Digital, China Mobile, Samsung, Nokia, Nokia Shanghai Bell*

**Abstract:**

This is a new SID proposal on Security and Privacy of AI/ML-based services and applications in 5G.

**Decision:** The document was **revised to S3-221188**.

**S3-221117 Need for Rel-18 study on UP security enhancement**

*Type: discussion For: Discussion  
 Source: Samsung, CableLabs, Interdigital*

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

**S3-221118 New SID on 5G User plane security enhancements**

*Type: SID new For: Approval  
 Source: Samsung*

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

**S3-221121 New SID on security aspects of control plane based remote provisioning in Non-Public Networks**

*Type: SID new For: Approval  
 Source: Samsung*

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

**S3-221165 LS on TNAP mobility security aspect**

*Type: LS out For: Approval  
 to SA2  
 Source: Nokia Solutions & Networks (I)*

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

**S3-221172 Study on Zero Trust Security**

*Type: SID new For: Approval  
 Source: Lenovo, Motorola Mobility, Interdigital, Verizon, Cablelabs, Mavenir, Johns Hopkins University APL, LG Electronics, Telefonica, NEC, Telia Company, AT&T, Samsung, PCCW Global B.V, China Mobile, Motorola Solutions, Inc, Nokia, Nokia Shanghai Bell, Intel,..*

(Replaces S3-221004)

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

**S3-221178 Rel-18 study for network slicing security**

*Type: SID new For: Approval  
 Source: Huawei, HiSilicon, Lenovo, CATT, CAICT, China Mobile, China Unicom, InterDigital, NEC, Nokia, Deutsche Telekom, ZTE*

(Replaces S3-220802)

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

**S3-221179 New SID: Study on SNAAPP securitY**

*Type: SID new For: Agreement  
 Source: NTT DOCOMO INC.*

(Replaces S3-220719)

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

**S3-221185 5GFBS - new WID on 5GFBS**

*Type: WID new For: Approval  
 Source: Apple, US National Security Agency, AT&T, Deutsche Telekom, Ericsson, Huawei, Hisilicon, CableLabs, Intel, InterDigital, Johns Hopkins University APL, NIST, Xiaomi, OPPO, ZTE*

(Replaces S3-221074)

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

**S3-221188 New SID on Security and Privacy of AI/ML-based services and applications in 5G**

*Type: SID new For: Approval  
 Source: OPPO, Apple, vivo, Inter Digital, China Mobile, Samsung, Nokia, Nokia Shanghai Bell*

(Replaces S3-221113)

**Abstract:**

This is a new SID proposal on Security and Privacy of AI/ML-based services and applications in 5G.

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

**S3-221200 New Study on on Security for Phase 2 for UAS, UAV and UAM**

*Type: SID new For: Agreement  
 Source: Qualcomm Incorporated*

(Replaces S3-220987)

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

**S3-221209 New SID on Security Aspects of Ranging Based Services and Sidelink Positioning**

*Type: SID new For: Approval  
 Source: Xiaomi, Apple, China Mobile, CATT, Huawei, Hisilicon, InterDigital, LGE, Philips, vivo, ZTE, Lenovo, Ericsson, Nokia, Nokia Shanghai Bell, China Telecom*

(Replaces S3-221023)

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

**S3-221217 New SID on Security aspects for 5WWC Phase 2**

*Type: SID new For: Approval  
 Source: Nokia Solutions & Networks (I)*

(Replaces S3-220895)

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

**S3-221229 New SID on NGRTC**

*Type: SID new For: Approval  
 Source: Huawei,HiSilicon*

(Replaces S3-221086)

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

**S3-221246 New SID on security enhancements for 5G multicast-broadcast services Phase 2**

*Type: SID new For: Approval  
 Source: Huawei, HiSilicon*

(Replaces S3-220856)

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

**S3-221251 New SID on Enhancement of User Consent for 3GPP Services**

*Type: SID new For: Approval  
 Source: Huawei, HiSilicon*

(Replaces S3-220867)

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

**S3-221265 New SID on Personal IoT Networks Security Aspects**

*Type: SID new For: Approval  
 Source: vivo, Apple, ZTE, Xiaomi, CATT, OPPO, China Unicom, China Telecom, CableLabs, InterDigital, LGE, Nokia, Nokia Shanghai Bell, Lenovo, Motorola mobility, Philips, China Mobile, Qualcomm*

(Replaces S3-220709)

**Abstract:**

The objectives are for studying how 5G security architecture and procedures can be enhanced to support Personal IoT Network.

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

**S3-221276 New SID on the security aspects of Artificial Intelligence (AI)/Machine Learning (ML) for the NR Air Interface and NG-RAN**

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

(Replaces S3-221062)

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

## 7 CVD and research

**S3-220600 Reserved**

*Type: CR For: Agreement  
 33.203 v17.1.0 CR-0264 Cat: F (Rel-17)  
  
 Source: --*

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

## 8 Any Other Business

**S3-220607 Meeting calendar**

*Type: other For: (not specified)  
 Source: WG Chair*

**Decision:** The document was **revised to S3-220684**.

**S3-220684 Meeting calendar**

*Type: other For: (not specified)  
 Source: WG Chair*

(Replaces S3-220607)

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

## Annex A: Contribution documents and status

### A1: List of TDocs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| S3-220600 | Reserved | -- | withdrawn |  |  |
| S3-220601 | Agenda | WG Chair | approved |  |  |
| S3-220602 | Report from SA3#106e | MCC | approved |  |  |
| S3-220603 | Process for SA3#107e meeting | WG Chair | noted |  |  |
| S3-220604 | Report from last SA | WG Chair | noted |  |  |
| S3-220605 | Meeting notes from SA3 leadership | WG Chair | reserved |  |  |
| S3-220606 | Process and agenda for SA3#107e | WG Chair | revised |  | S3-221142 |
| S3-220607 | Meeting calendar | WG Chair | revised |  | S3-220684 |
| S3-220608 | LS to 3GPP CT4 on Identification of source PLMN-ID in SBA | GSMA | postponed |  |  |
| S3-220609 | LS on new parameters for SOR | C1-214118 | revised |  | S3-220648 |
| S3-220610 | Reply LS on User Controlled PLMN Selector with Access Technology in Control plane solution for steering of roaming in 5GS | S1-220187 | revised |  | S3-220649 |
| S3-220611 | LS on the impact of MSK update on MBS multicast session update procedure | C1-221747 | revised |  | S3-220650 |
| S3-220612 | Reply LS on UE capabilities indication in UPU | C1-223177 | revised |  | S3-220651 |
| S3-220613 | LS on AF specific UE ID retrieval | C3-221735 | revised |  | S3-220652 |
| S3-220614 | Reply LS on AF specific UE ID retrieval | S6-220976 | revised |  | S3-220653 |
| S3-220615 | Reply LS on AF specific UE ID retrieval | S2-2203426 | revised |  | S3-220654 |
| S3-220616 | LS on 5G NSWO roaming aspects | S2-2203253 | revised |  | S3-220655 |
| S3-220617 | Reply LS on 5G NSWO roaming aspects | C3-222487 | revised |  | S3-220656 |
| S3-220618 | Reply LS on 5G NSWO roaming aspects | C4-222436 | revised |  | S3-220657 |
| S3-220619 | LS on Clarification on MBS Security Context (MSK/MTK) Definitions | C4-222303 | revised |  | S3-220658 |
| S3-220620 | LS on Indication of Network Assisted Positioning method | C4-222306 | revised |  | S3-220659 |
| S3-220621 | LS on 3GPP TS 29.244 | BBF | revised |  | S3-220660 |
| S3-220622 | Reply LS on NTN specific User Consent | R2-2201754 | revised |  | S3-220661 |
| S3-220623 | LS on UE location during initial access in NTN | R2-2201881 | revised |  | S3-220662 |
| S3-220624 | LS on UE location during initial access in NTN | R2-2202057 | revised |  | S3-220663 |
| S3-220625 | Reply LS on UE location during initial access in NTN | R3-222861 | revised |  | S3-220664 |
| S3-220626 | LS on UE location in connected mode in NTN | R2-2204257 | revised |  | S3-220665 |
| S3-220627 | Reply LS on LTE User Plane Integrity Protection | R2-2203663 | revised |  | S3-220666 |
| S3-220628 | LS on EPS fallback enhancements | R2-2204236 | revised |  | S3-220667 |
| S3-220629 | Reply LS on EPS fallback enhancements | S2-2203590 | revised |  | S3-220668 |
| S3-220630 | Reply LS on User Plane Integrity Protection for eUTRA connected to EPC | R3-222610 | revised |  | S3-220669 |
| S3-220631 | Reply LS on UE providing Location Information for NB-IoT | C1-222100 | revised |  | S3-220670 |
| S3-220632 | Reply LS on UE providing Location Information for NB-IoT | R3-222858 | revised |  | S3-220671 |
| S3-220633 | LS Response to LS on UE providing Location Information for NB-IoT | S2-2201333 | revised |  | S3-220672 |
| S3-220634 | LS on V2X PC5 link for unicast communication with null security algorithm | R5-222035 | revised |  | S3-220673 |
| S3-220635 | Reply LS on reply to SA6 about new SID on Application Enablement for Data Integrity Verification Service in IOT | S1-220185 | revised |  | S3-220674 |
| S3-220636 | Reply LS on secondary authentication for multicast PDU session | S2-2201311 | revised |  | S3-220675 |
| S3-220637 | Reply LS to GSMA OPG on Further Operator Platform Group questions following SDO Workshop | SP-220346 | revised |  | S3-220676 |
| S3-220638 | Reply LS on Further GSMA OPAG questions following SDO Workshop | S2-2201721 | revised |  | S3-220677 |
| S3-220639 | LS reply on RAN2 agreements for paging with service indication | S2-2201838 | revised |  | S3-220678 |
| S3-220640 | Reply to LS on new reference point name for the interface between PKMF and UDM in 5G ProSe | S2-2203018 | revised |  | S3-220679 |
| S3-220641 | LS on MINT functionality for Disaster Roaming | S5-222575 | revised |  | S3-220680 |
| S3-220642 | Reply LS to ETSI MEC on MEC Federation and interest to collaborate | S6-220931 | revised |  | S3-220681 |
| S3-220643 | CR on Modernization of the Integrity & Encryption Algorithms between UE and P-CSFC | Deutsche Telekom AG | not pursued |  |  |
| S3-220644 | New KI on Post-Quantum Secure Subscription Concealed Identifier | Deutsche Telekom AG | noted |  |  |
| S3-220645 | DP on Post-Quantum Secure Subscription Concealed Identifier | Deutsche Telekom AG | noted |  |  |
| S3-220646 | DP on Modernization of the Integrity & Encryption Algorithms between UE and P-CSFC (for SIP Sessions). | Deutsche Telekom AG | withdrawn |  |  |
| S3-220647 | LS on ETSI Plugtest #6 Observation 10.1.11 | Motorola Solutions Danmark A/S | approved |  |  |
| S3-220648 | LS on new parameters for SOR | C1-214118 | noted | S3-220609 |  |
| S3-220649 | Reply LS on User Controlled PLMN Selector with Access Technology in Control plane solution for steering of roaming in 5GS | S1-220187 | noted | S3-220610 |  |
| S3-220650 | LS on the impact of MSK update on MBS multicast session update procedure | C1-221747 | noted | S3-220611 |  |
| S3-220651 | Reply LS on UE capabilities indication in UPU | C1-223177 | noted | S3-220612 |  |
| S3-220652 | LS on AF specific UE ID retrieval | C3-221735 | replied to | S3-220613 |  |
| S3-220653 | Reply LS on AF specific UE ID retrieval | S6-220976 | noted | S3-220614 |  |
| S3-220654 | Reply LS on AF specific UE ID retrieval | S2-2203426 | noted | S3-220615 |  |
| S3-220655 | LS on 5G NSWO roaming aspects | S2-2203253 | replied to | S3-220616 |  |
| S3-220656 | Reply LS on 5G NSWO roaming aspects | C3-222487 | noted | S3-220617 |  |
| S3-220657 | Reply LS on 5G NSWO roaming aspects | C4-222436 | noted | S3-220618 |  |
| S3-220658 | LS on Clarification on MBS Security Context (MSK/MTK) Definitions | C4-222303 | replied to | S3-220619 |  |
| S3-220659 | LS on Indication of Network Assisted Positioning method | C4-222306 | replied to | S3-220620 |  |
| S3-220660 | LS on 3GPP TS 29.244 | BBF | noted | S3-220621 |  |
| S3-220661 | Reply LS on NTN specific User Consent | R2-2201754 | noted | S3-220622 |  |
| S3-220662 | LS on UE location during initial access in NTN | R2-2201881 | noted | S3-220623 |  |
| S3-220663 | LS on UE location during initial access in NTN | R2-2202057 | withdrawn | S3-220624 |  |
| S3-220664 | Reply LS on UE location during initial access in NTN | R3-222861 | noted | S3-220625 |  |
| S3-220665 | LS on UE location in connected mode in NTN | R2-2204257 | replied to | S3-220626 |  |
| S3-220666 | Reply LS on LTE User Plane Integrity Protection | R2-2203663 | noted | S3-220627 |  |
| S3-220667 | LS on EPS fallback enhancements | R2-2204236 | replied to | S3-220628 |  |
| S3-220668 | Reply LS on EPS fallback enhancements | S2-2203590 | noted | S3-220629 |  |
| S3-220669 | Reply LS on User Plane Integrity Protection for eUTRA connected to EPC | R3-222610 | noted | S3-220630 |  |
| S3-220670 | Reply LS on UE providing Location Information for NB-IoT | C1-222100 | noted | S3-220631 |  |
| S3-220671 | Reply LS on UE providing Location Information for NB-IoT | R3-222858 | noted | S3-220632 |  |
| S3-220672 | LS Response to LS on UE providing Location Information for NB-IoT | S2-2201333 | noted | S3-220633 |  |
| S3-220673 | LS on V2X PC5 link for unicast communication with null security algorithm | R5-222035 | postponed | S3-220634 |  |
| S3-220674 | Reply LS on reply to SA6 about new SID on Application Enablement for Data Integrity Verification Service in IOT | S1-220185 | noted | S3-220635 |  |
| S3-220675 | Reply LS on secondary authentication for multicast PDU session | S2-2201311 | revised | S3-220636 | S3-221148 |
| S3-220676 | Reply LS to GSMA OPG on Further Operator Platform Group questions following SDO Workshop | SP-220346 | noted | S3-220637 |  |
| S3-220677 | Reply LS on Further GSMA OPAG questions following SDO Workshop | S2-2201721 | noted | S3-220638 |  |
| S3-220678 | LS reply on RAN2 agreements for paging with service indication | S2-2201838 | noted | S3-220639 |  |
| S3-220679 | Reply to LS on new reference point name for the interface between PKMF and UDM in 5G ProSe | S2-2203018 | noted | S3-220640 |  |
| S3-220680 | LS on MINT functionality for Disaster Roaming | S5-222575 | noted | S3-220641 |  |
| S3-220681 | Reply LS to ETSI MEC on MEC Federation and interest to collaborate | S6-220931 | noted | S3-220642 |  |
| S3-220682 | LS on Inter-PLMN Handover of VoLTE calls and idle mode mobility of IMS sessions | S3i220244 | noted |  |  |
| S3-220683 | TCG progress - report from TCG rapporteur | InterDigital, Inc. | noted |  |  |
| S3-220684 | Meeting calendar | WG Chair | noted | S3-220607 |  |
| S3-220685 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | revised |  | S3-221291 |
| S3-220686 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | revised |  | S3-221292 |
| S3-220687 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | revised |  | S3-221293 |
| S3-220688 | Clarifications to secondary authentication for UE onboarding | Intel Corporation (UK) Ltd | merged |  | S3-221210 |
| S3-220689 | New test case for confidentiality, integrity and replay protection between AAnF and AUSF | Keysight Technologies UK Ltd | revised |  | S3-221156 |
| S3-220690 | New threat for confidentiality, integrity and replay between AAnF and AUSF | Keysight Technologies UK Ltd | not pursued |  |  |
| S3-220691 | New test case for confidentiality, integrity and replay protection between AF/NEF and AAnF | Keysight Technologies UK Ltd | revised |  | S3-221159 |
| S3-220692 | New threat for confidentiality, integrity and replay between AAnF and AF/NEF | Keysight Technologies UK Ltd | not pursued |  |  |
| S3-220693 | Aligning text for AKMA procedure | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S3-220694 | Clarification on anonymization api | Nokia, Nokia Shanghai Bell | revised |  | S3-221215 |
| S3-220695 | UPU procedure alignment | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S3-220696 | UPU procedure alignment | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S3-220697 | LS reply on 5G NSWO roaming aspects | Nokia, Nokia Shanghai Bell | revised |  | S3-221220 |
| S3-220698 | NSWO alignment with SA2 specs | Nokia, Nokia Shanghai Bell | revised |  | S3-221216 |
| S3-220699 | LS reply on High-reliability requirement of UAV | Nokia, Nokia Shanghai Bell | merged |  | S3-221254 |
| S3-220700 | High-reliability requirement of UAV | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S3-220701 | New content for Terms clause on key properties of privacy | InterDigital, Inc. | noted |  |  |
| S3-220702 | TR 33.870 – Informative Annex A | InterDigital, Inc. | noted |  |  |
| S3-220703 | New key issue on TMGI Privacy | InterDigital, Inc., Convida | noted |  |  |
| S3-220704 | New key issue on PIN ID Privacy | InterDigital, Inc. | noted |  |  |
| S3-220705 | Evaluation of Solution #5 | Johns Hopkins University APL, US National Security Agency, CableLabs, InterDigital, AT&T, CISA ECD | noted |  |  |
| S3-220706 | Clarify relationship between KAUSF, KAUSF\_P and 5G PRUK | China Telecomunication Corp. | merged |  | S3-221282 |
| S3-220707 | Clarify the necessity of refreshing 5G PRUK during CP-based Security Procedure | China Telecomunication Corp. | merged |  | S3-221242 |
| S3-220708 | New KI on Home network triggered primary authentication | China Telecomunication Corp. | merged |  | S3-221239 |
| S3-220709 | New SID on Personal IoT Networks Security Aspects | vivo, Apple, ZTE, Xiaomi, CATT, OPPO, China Unicom, China Telecom, CableLabs, InterDigital, LGE, Nokia, Nokia Shanghai Bell, Lenovo, Motorola mobility, Philips | revised | S3-220133 | S3-221265 |
| S3-220710 | Addressing the editor’s note in 6.27.2.1.1 of Sol#27 | CableLabs, Deutsche Telekom, Philips International B.V. | noted |  |  |
| S3-220711 | Addressing the editor’s note in 6.27.2.1.7 of sol#27 | CableLabs, Deutsche Telekom, Philips International B.V. | noted |  |  |
| S3-220712 | Addressing the editor’s note in 6.27.2.2.1of Sol#27 | CableLabs, Deutsche Telekom, Philips International B.V. | noted |  |  |
| S3-220713 | Addressing the editor’s note #1 in 6.27.2.2.4 of Sol#27 | CableLabs, Deutsche Telekom | approved |  |  |
| S3-220714 | Addressing the editor’s note #2 in 6.27.2.2.4 of Sol#27 | CableLabs, Deutsche Telekom, Philips International B.V. | approved |  |  |
| S3-220715 | Removing incorrect texts in 6.27.2.2.4 of Sol#27 | CableLabs, Deutsche Telekom, Philips International B.V. | approved |  |  |
| S3-220716 | Removing redundant texts in 6.27.2.2.4 of Sol# | CableLabs, Deutsche Telekom, Philips International B.V. | approved |  |  |
| S3-220717 | Removing unrelated texts in 6.27.2.2.4 of Sol#27 | CableLabs, Deutsche Telekom, Philips International B.V. | noted |  |  |
| S3-220718 | LS out on authenticity and replay protection of system information | CableLabs, Deutsche Telekom, Philips International B.V. | noted |  |  |
| S3-220719 | New SID: Study on SNAAPP securitY | NTT DOCOMO INC. | revised |  | S3-221179 |
| S3-220720 | Key issue on Security for data and analytics exchange in roaming | Nokia, Nokia Shanghai Bell | merged |  | S3-221269 |
| S3-220721 | Key issue on Security for AIML model storage | Nokia, Nokia Shanghai Bell | merged |  | S3-221221 |
| S3-220722 | Key issue on Security for AIML model sharing | Nokia, Nokia Shanghai Bell | revised |  | S3-221221 |
| S3-220723 | Key issue on Anomalous NF behaviour detection by NWDAF | Nokia, Nokia Shanghai Bell | revised |  | S3-221222 |
| S3-220724 | Clarification on separate handling of N32-c and N32-f | Nokia, Nokia Shanghai Bell, Ericsson, Mavenir, Lenovo, Deutsche Telekom, NCSC, Xiaomi, BT, AT&T, Interdigital | agreed | S3-220589 |  |
| S3-220725 | Clarification on separate handling of N32-c and N32-f | Nokia, Nokia Shanghai Bell, Ericsson, Mavenir, Lenovo, Deutsche Telekom, NCSC, Xiaomi, BT, AT&T, Interdigital | agreed | S3-220590 |  |
| S3-220726 | Clarification on separate handling of N32-c and N32-f | Nokia, Nokia Shanghai Bell, Ericsson, Mavenir, Lenovo, Deutsche Telekom, NCSC, Xiaomi, BT, AT&T, Interdigital | agreed | S3-220591 |  |
| S3-220727 | Security improvements of N32 connection | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-220728 | Authorization of N32-f connection establishment with TLS | Nokia, Nokia Shanghai Bell | revised |  | S3-221283 |
| S3-220729 | Authorization of N32-f connection establishment with TLS | Nokia, Nokia Shanghai Bell | revised |  | S3-221285 |
| S3-220730 | Resolution EN authorization method negotiation per KI7-Sol9 | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-220731 | Resolving EN on authorization between SCPs | Nokia, Nokia Shanghai Bell | merged |  | S3-221234 |
| S3-220732 | New sol. for KI7 on authorization mechanism negotiation | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-220733 | Conclusion on authorization method negotiation | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-220734 | Update Security procedure over CP with using PRUK ID in DCR | InterDigital, Europe, Ltd.,, Samsung, LG Electronics, Nokia, Nokia Shanghai Bell, Ericsson, Verizon Wireless, MITRE, Convida Wireless LLC, Philips International B.V. | merged |  | S3-221242 |
| S3-220735 | 5GPRUK/5GPRUK ID Storage Options and Way Forward | InterDigital, Europe, Ltd., Ericsson | noted |  |  |
| S3-220736 | PAnF supported services discussion | InterDigital, Europe, Ltd. | noted |  |  |
| S3-220737 | Update Security procedure over CP with using PRUK ID in DCR (alt#2) | InterDigital, Europe, Ltd. | merged |  | S3-221242 |
| S3-220738 | New KI on Topology Hiding in Data and Analytics Exchange | China Telecommunications | merged |  | S3-221269 |
| S3-220739 | Adding a test case for gNB in TS 33.511 clause 4.2.2.1.4 | ZTE Corporation | not pursued |  |  |
| S3-220740 | New KI on authorization of selection of participant NWDAF instances in the Federated Learning group | China Telecommunications | revised |  | S3-221176 |
| S3-220741 | Adding AAnF critical assets and threats to TS 33.926 | ZTE Corporation | withdrawn |  |  |
| S3-220742 | Adding Network product class description for the AAnF to TS 33.926. | ZTE Corporation | withdrawn |  |  |
| S3-220743 | AKMA subscription asynchronization\_Test\_Case | ZTE Corporation | noted |  |  |
| S3-220744 | Add some context about 5G PRUK ID reject cases in the clause 6.3.3.3.2 | ZTE Corporation | noted |  |  |
| S3-220745 | Clarification on AUSF instance store in UDM | ZTE Corporation | noted |  |  |
| S3-220746 | Remove the EN in the clause 6.3.3.2.2 | ZTE Corporation | merged |  | S3-221296 |
| S3-220747 | Update the clause 6.3.3.3.3 | ZTE Corporation | merged |  | S3-221282 |
| S3-220748 | Update the clause 7.4.2 | ZTE Corporation | merged |  | S3-221243 |
| S3-220749 | Correction on clause F.2.1 in TS 33.926-R16 | ZTE Corporation | agreed |  |  |
| S3-220750 | Correction on clause F.2.1 in TS 33.926-R17 mirror | ZTE Corporation | agreed |  |  |
| S3-220751 | Update the test case in TS 33.216 clause 4.2.2.1.10 | ZTE Corporation | not pursued |  |  |
| S3-220752 | Correct AAnF service in clause 6.3 | ZTE Corporation | revised |  | S3-221227 |
| S3-220753 | NF selects AAnF in clause 6.7 | ZTE Corporation | revised |  | S3-221228 |
| S3-220754 | Key issue on authorization in multi-path transmission for UE-to-Network Relay scenario | ZTE Corporation | noted |  |  |
| S3-220755 | Key issue on authorization in the UE-to-UE relay scenario | ZTE Corporation | noted |  |  |
| S3-220756 | Key issue on Integrity and confidentiality of information over the UE-to-UE Relay | ZTE Corporation | noted |  |  |
| S3-220757 | Key issue on Privacy of information over the UE-to-UE Relay | ZTE Corporation | noted |  |  |
| S3-220758 | Key issue on Support direct communication path switching between PC5 and Uu | ZTE Corporation | noted |  |  |
| S3-220759 | New solution on key issue SUPI length disclosed by SUCI. | China Southern Power Grid Co., Ltd, ZTE | noted |  |  |
| S3-220760 | Discussion paper on AKMA application context removal. | ZTE Corporation | noted |  |  |
| S3-220761 | Discussion paper on AKMA interworking | ZTE Corporation | noted |  |  |
| S3-220762 | New KI on AKMA interworking | ZTE Corporation | noted |  |  |
| S3-220763 | Key issue on security of EAS Discovery Procedure with EASDF | ZTE Corporation | noted |  |  |
| S3-220764 | Revised SID on AKMA phase2 | ZTE Corporation | noted |  |  |
| S3-220765 | Adding authorization for delegated discovery | China Telecommunications | not pursued |  |  |
| S3-220766 | Adding authorization for delegated discovery(mirror) | China Telecommunications | not pursued |  |  |
| S3-220767 | Adding AAnF critical assets and threats to TS 33.926 | ZTE Corporation | noted |  |  |
| S3-220768 | Adding Network product class description for the AAnF to TS 33.926 | ZTE Corporation | approved |  |  |
| S3-220769 | Supplement to generic virtualised network product model | China Telecom Corporation Ltd. | noted |  |  |
| S3-220770 | Clarification on the description about AAnF | China Telecom Corporation Ltd. | revised |  | S3-221203 |
| S3-220771 | draft\_TR\_33.738- skeleton for eNA security ph3 | China Mobile | approved |  |  |
| S3-220772 | Scope of TR 33.738 | China Mobile | approved |  |  |
| S3-220773 | Overview of TR 33.738 | China Mobile | approved |  |  |
| S3-220774 | KI on Protection of data and analytics exchange in roaming case | China Mobile | revised |  | S3-221269 |
| S3-220775 | Proposal to add overview in clause 4 Generic Virtulizated Network Product(GVNP) class | China Mobile | noted |  |  |
| S3-220776 | Proposal to add clause 4.2 Minimum set of functions defining the GVNP class | China Mobile | noted |  |  |
| S3-220777 | Proposal to add introduction in clause 4.3 Generic virtualized network product model | China Mobile | noted |  |  |
| S3-220778 | Proposal to add GVNP model of type 1 | China Mobile | noted |  |  |
| S3-220779 | Proposal to add GVNP model of type 2 | China Mobile | noted |  |  |
| S3-220780 | Proposal to add GVNP model of type 3 | China Mobile | noted |  |  |
| S3-220781 | adding overview and Scope of a SECAM SCAS for 3GPP virtualized network products | China Mobile | noted |  |  |
| S3-220782 | adding Scope of SECAM evaluation and accreditation for 3GPP virtualized network products | China Mobile | noted |  |  |
| S3-220783 | adding the contents of chapters 4.5 to 4.7 | China Mobile | noted |  |  |
| S3-220784 | adding the contents of chapters 4.8 to 4.10 | China Mobile | noted |  |  |
| S3-220785 | adding content to clause 5.1 | China Mobile | noted |  |  |
| S3-220786 | Adding description about general content of SCAS document and ToE to clause 5.2 | China Mobile | noted |  |  |
| S3-220787 | adding description about SPD to clause 5.2 | China Mobile | noted |  |  |
| S3-220788 | adding description about methodology of security requirements to clause 5.2 | China Mobile | noted |  |  |
| S3-220789 | adding description about improvement of SCAS and new potential security requirements to clause 5.3 | China Mobile | noted |  |  |
| S3-220790 | adding description about basic vulnerability testing requirements for GVNP to clause 5.4 | China Mobile | noted |  |  |
| S3-220791 | New SID on Study on XR Security | China Mobile | noted |  |  |
| S3-220792 | Update to solution #25 | Huawei, HiSilicon | noted |  |  |
| S3-220793 | Evaluation of solution #4 | Huawei, HiSilicon | noted |  |  |
| S3-220794 | Conclusion for KI#3 | Huawei, HiSilicon | noted |  |  |
| S3-220795 | KI#2 update - threats and requirements | Huawei, HiSilicon | revised |  | S3-221181 |
| S3-220796 | New solution for part 1 of KI#2 | Huawei, HiSilicon | noted |  |  |
| S3-220797 | New solution for part 2 of KI#2 | Huawei, HiSilicon | noted |  |  |
| S3-220798 | Conclusion for part 2 of KI#2 | Huawei, HiSilicon | revised |  | S3-221184 |
| S3-220799 | Address EN on alignment to SA2 | Huawei, HiSilicon | not pursued |  |  |
| S3-220800 | Address EN on AF Authorization | Huawei, HiSilicon | not pursued |  |  |
| S3-220801 | Discussion on Rel-18 study for network slicing security | Huawei, HiSilicon, Lenovo, CATT, CAICT, China Mobile, China Unicom, InterDigital, NEC, Nokia | noted |  |  |
| S3-220802 | New SID: Rel-18 study for network slicing security | Huawei, HiSilicon, Lenovo, CATT, CAICT, China Mobile, China Unicom, InterDigital, NEC, Nokia | revised |  | S3-221178 |
| S3-220803 | Address EN on UAV ID | Huawei, HiSilicon | not pursued |  |  |
| S3-220804 | Address EN on UAV re-auth | Huawei, HiSilicon | merged |  | S3-221173 |
| S3-220805 | Issue of NSSAA in multiple registration | Huawei, HiSilicon | noted |  |  |
| S3-220806 | Include SN ID in NSSAA procedure | Huawei, HiSilicon | not pursued |  |  |
| S3-220807 | AAnF sending GPSI to internal AKMA AF | China Mobile | not pursued |  |  |
| S3-220808 | Skeleton for TS33.537(SCAS for AAnF) | China Mobile | approved |  |  |
| S3-220809 | Scope of TS 33.537 | China Mobile | approved |  |  |
| S3-220810 | Skeleton for TR 33.737(AKMA ph2) | China Mobile | approved |  |  |
| S3-220811 | Scope of TR 33.737 | China Mobile | revised |  | S3-221288 |
| S3-220812 | Architectural Asumptions in TR 33.737 | China Mobile | approved |  |  |
| S3-220813 | Key issue of AKMA roaming | China Mobile | merged |  | S3-221218 |
| S3-220814 | Key issue of introducing application proxy into AKMA | China Mobile | revised |  | S3-221289 |
| S3-220815 | EN resolution for Secondary Authentication for Remote UE with L3 U2N relay without N3IWF(Alt1) | LG Electronics Inc. | noted |  |  |
| S3-220816 | EN resolution for Secondary Authentication for Remote UE with L3 U2N relay without N3IWF(Alt2) | LG Electronics Inc. | revised |  | S3-221174 |
| S3-220817 | Revocation\_ReAuth for Secondary Authentication for Remote UE | LG Electronics Inc. | revised |  | S3-221175 |
| S3-220818 | Summary for Non-Seamless WLAN offload authentication in 5GS | Nokia Solutions & Networks (I) | noted |  |  |
| S3-220819 | A use case of HONTRA in SoR protection service suspension | LG Electronics France | merged |  | S3-221261 |
| S3-220820 | A Key issue in SoR protection service suspension | LG Electronics France | merged |  | S3-221239 |
| S3-220821 | A use case of HONTRA in UPU protection service suspension | LG Electronics France | merged |  | S3-221261 |
| S3-220822 | A Key issue in UPU protection service suspension | LG Electronics France | merged |  | S3-221239 |
| S3-220823 | New KI for security of certificate update | Huawei, HiSilicon | revised |  | S3-221236 |
| S3-220824 | New KI for Security protection of certificate enrolment | Huawei, HiSilicon | revised |  | S3-221237 |
| S3-220825 | Integrity protection of DCR message | Huawei, HiSilicon | merged |  | S3-221295 |
| S3-220826 | Clarification on the privacy protection of DCR | Huawei, HiSilicon | noted |  |  |
| S3-220827 | Delete of CP based solution | Huawei, HiSilicon | noted |  |  |
| S3-220828 | Delete of Secondary authentication | Huawei, HiSilicon | noted |  |  |
| S3-220829 | Address EN of secondary authentication | Huawei, HiSilicon | noted |  |  |
| S3-220830 | Add a new clause for 5G ProSe Layer-3 UE-to-Network Relay with N3IWF support | Huawei, HiSilicon | revised |  | S3-221238 |
| S3-220831 | Skeleton of HNTRA | Huawei, HiSilicon | approved |  |  |
| S3-220832 | Scope of HNTRA | Huawei, HiSilicon | approved |  |  |
| S3-220833 | Adding a usecase of interworking from EPS to 5G | Huawei, HiSilicon | merged |  | S3-221205 |
| S3-220834 | KI on Scalability of the home triggered primary authentication | Huawei, HiSilicon | revised |  | S3-221239 |
| S3-220835 | Adding a usecase of Kakma refresh | Huawei, HiSilicon | revised |  | S3-221240 |
| S3-220836 | KI on Signalling overhead | Huawei, HiSilicon | merged |  | S3-221219 |
| S3-220837 | Format of anonymous SUCI | Huawei, HiSilicon | not pursued |  |  |
| S3-220838 | LS on anonymous SUCI | Huawei, HiSilicon | noted |  |  |
| S3-220839 | Modfiy Scope of TS 33.527 | Huawei, HiSilicon | noted |  |  |
| S3-220840 | Modfiy Scope of TR 33.936 | Huawei, HiSilicon | noted |  |  |
| S3-220841 | Modfiy Scope of TS 33.927 | Huawei, HiSilicon | noted |  |  |
| S3-220842 | Adding UDM Services for SUCI deconceal and authorization information retrieval | Huawei, HiSilicon | revised |  | S3-221241 |
| S3-220843 | Remote UE Identity provisioning in UE-to-Network Relay communication security procedure over user plane | Huawei, HiSilicon | merged |  | S3-221271 |
| S3-220844 | Remote UE authorization check in UE-to-Network Relay communication security procedure over control plane | Huawei, HiSilicon | approved |  |  |
| S3-220845 | Resolving the EN on the needs and usage of 5GPRUK ID | Huawei, HiSilicon | revised |  | S3-221242 |
| S3-220846 | Format of 5GPRUK ID | Huawei, HiSilicon | revised |  | S3-221243 |
| S3-220847 | Clarification on restricted discovery procedures | Huawei, HiSilicon | noted |  |  |
| S3-220848 | Clarification on the security of L2 U2NW | Huawei, HiSilicon | revised |  | S3-221244 |
| S3-220849 | Rel-16 Add clarifications to unicast procedures | Huawei, HiSilicon | agreed |  |  |
| S3-220850 | Key derivation related clarification in CP-based UE-to-Network relay procedures | Huawei, HiSilicon | revised |  | S3-221245 |
| S3-220851 | Add subclause about the restricted discovery for UE-to-Network relay | Huawei, HiSilicon | merged |  | S3-221302 |
| S3-220852 | Terminology alignment for 5G ProSe Remote UE specific authentication | Huawei, HiSilicon | approved |  |  |
| S3-220853 | New WID on Security aspects of 5G Isolated operation for public safety (IOPS) | Huawei, HiSilicon | noted |  |  |
| S3-220854 | Discussion paper on 5G IOPS | Huawei, HiSilicon | noted |  |  |
| S3-220855 | Clarification | Huawei, HiSilicon | withdrawn |  |  |
| S3-220856 | New SID on security enhancements for 5G multicast-broadcast services Phase 2 | Huawei, HiSilicon | revised |  | S3-221246 |
| S3-220857 | New SID on security enhancements for 5GC LoCation Services Phase 3 | Huawei, HiSilicon | noted |  |  |
| S3-220858 | Removing the Editor’s Note and add clarifications in the security mechanisms for MBS | Huawei, HiSilicon | revised |  | S3-221247 |
| S3-220859 | Clarifications on the control-plane and user-plane procedures | Huawei, HiSilicon | revised |  | S3-221248 |
| S3-220860 | Enhancement for service announcement | Huawei, HiSilicon | revised |  | S3-221249 |
| S3-220861 | Alignment with RAN2 for LTE UP IP | Huawei, HiSilicon | not pursued |  |  |
| S3-220862 | Address EN for LTE UP IP | Huawei, HiSilicon | merged |  | S3-221298 |
| S3-220863 | Address Ens for NPN | Huawei, HiSilicon | not pursued |  |  |
| S3-220864 | Address EN for UC3S | Huawei, HiSilicon | not pursued |  |  |
| S3-220865 | Clarification on Enforcement Point for User Consent | Huawei, HiSilicon | not pursued |  |  |
| S3-220866 | Update for solution 5 | Huawei, HiSilicon | revised |  | S3-221250 |
| S3-220867 | New SID on Enhancement of User Consent for 3GPP Services | Huawei, HiSilicon | revised |  | S3-221251 |
| S3-220868 | Clarification on KAUSF\_P | Huawei, HiSilicon | merged |  | S3-221282 |
| S3-220869 | Clarification on PRUK ID | Huawei, HiSilicon | revised |  | S3-221252 |
| S3-220870 | Clarifications on the multicast security context handling in session creation procedure | Huawei, HiSilicon | revised |  | S3-221253 |
| S3-220871 | Reply LS on security architecture for 5G multicast-broadcast services | Huawei, HiSilicon | revised |  | S3-221158 |
| S3-220872 | Reply LS on the Indication of Network Assisted Positioning method | Huawei, HiSilicon | revised |  | S3-221254 |
| S3-220873 | Rel-17 Add clarifications to unicast procedures | Huawei, HiSilicon | agreed |  |  |
| S3-220874 | Security capability negotiation during unicast establishment after restricted discovery | Huawei, HiSilicon | noted |  |  |
| S3-220875 | Delete Use Case on Finding the right NF instance are serving the UE | Huawei, HiSilicon | agreed |  |  |
| S3-220876 | Delete Threat Analysis on Finding the right NF instance are serving the UE | Huawei, HiSilicon | agreed |  |  |
| S3-220877 | new KI on Authentication and Authorization when EHE in a VPLMN | Huawei, HiSilicon | noted |  |  |
| S3-220878 | New KI on Security for DNS server IP address | Huawei, HiSilicon | merged |  | S3-221191 |
| S3-220879 | Disucssion on security aspect of EPS fallback enhancements in Rel-17 | Huawei, HiSilicon | noted |  |  |
| S3-220880 | LS to RAN2 on EPS fallback enhancements | Huawei, HiSilicon | merged |  | S3-221162 |
| S3-220881 | Clarification on the description of PRUK | Huawei, HiSilicon | revised |  | S3-221255 |
| S3-220882 | Clarification on the secondary authentication procedure | Huawei, HiSilicon | revised |  | S3-221256 |
| S3-220883 | Update general clause for secondary authentication | Huawei, HiSilicon | revised |  | S3-221257 |
| S3-220884 | Discussion paper on security enhancements for 5GC LoCation Services Phase 3 | Huawei, HiSilicon | noted |  |  |
| S3-220885 | 33.926-Clarifications of the scope of OAM functions in the GNP model | Huawei, HiSilicon | approved |  |  |
| S3-220886 | 33.926-Rewrite the 5G MnF GNP model | Huawei, HiSilicon | revised |  | S3-221258 |
| S3-220887 | 33.926-Add new assets to the OAM functions | Huawei, HiSilicon | revised |  | S3-221259 |
| S3-220888 | 33.926-Add a new threat | Huawei, HiSilicon | revised |  | S3-221260 |
| S3-220889 | 33.526 - update clause 4.2.3 | Huawei, HiSilicon | approved |  |  |
| S3-220890 | 33.526 - update clause 4.2.4 | Huawei, HiSilicon | approved |  |  |
| S3-220891 | 33.526 - update clause 4.2.5 | Huawei, HiSilicon | approved |  |  |
| S3-220892 | Adding a usecase of SoR Counter Wrap around | Huawei, HiSilicon | revised |  | S3-221261 |
| S3-220893 | Living document for MnF SCAS: draftCR to TR 33.926 | Huawei, HiSilicon | revised |  | S3-221301 |
| S3-220894 | Discussion for key storage and derivation in UE-to-Network security procedure over Control Plane | Huawei, HiSilicon | noted |  |  |
| S3-220895 | New SID on Security aspects for 5WWC Phase 2 | Nokia Solutions & Networks (I) | revised |  | S3-221217 |
| S3-220896 | Discussion on Security aspects for 5WWC Phase 2 | Nokia Solutions & Networks (I) | noted |  |  |
| S3-220897 | New KI AKMA Kaf refresh | OPPO | merged |  | S3-221219 |
| S3-220898 | Adding evaluation for Sol#6 | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-220899 | New solution Security procedure of KAF refresh-MAC | OPPO | noted |  |  |
| S3-220900 | New solution Security procedure of KAF refresh-Counter | OPPO | noted |  |  |
| S3-220901 | Key issue on AKMA Roaming Scenario | Nokia, Nokia Shanghai Bell | revised |  | S3-221218 |
| S3-220902 | KI on AP function introduction | Nokia, Nokia Shanghai Bell | merged |  | S3-221289 |
| S3-220903 | Key issue on KAF refresh without primary reauthentication | Nokia, Nokia Shanghai Bell | revised |  | S3-221219 |
| S3-220904 | Key issue on HN triggering primary reauthentication | Nokia, Nokia Shanghai Bell | merged |  | S3-221239 |
| S3-220905 | Reauthentication during the handover | Intel Corporation (UK) Ltd | merged |  | S3-221239 |
| S3-220906 | New solution Security procedure of KAF-Nonce | OPPO | noted |  |  |
| S3-220907 | New KI Edge algorithm selection | OPPO | revised |  | S3-221186 |
| S3-220908 | New solution Authentication algorithm selection in EDGE | OPPO | noted |  |  |
| S3-220909 | New solution Authentication algorithm selection among EEC, ECS, and EES | OPPO | noted |  |  |
| S3-220910 | Rapporteur update to TR 33.875 | Nokia | approved |  |  |
| S3-220911 | New key issue on SUPI length disclosed by SUCI | Ericsson, Apple, AT&T, Cable Labs, China Southern Power Grid Co, Convida Wireless LLC, Intel, Interdigital, Johns Hopkins University APL, Lenovo, LGE, Mavenir, MITRE, NCSC, Oppo, Phillips, Samsung, Telefonica, US NIST, US NSA, Verizon Wireless, Xiaomi, ZT | revised |  | S3-221180 |
| S3-220912 | Definition of Anonymous SUCI | Ericsson, Qualcomm | revised |  | S3-221170 |
| S3-220913 | UDM interaction for Anonymous SUCI | Ericsson | revised |  | S3-221267 |
| S3-220914 | Removing Editor’s note on using only null-scheme SUCI | Ericsson | not pursued |  |  |
| S3-220915 | Anonymous SUCI for onboarding | Ericsson | not pursued |  |  |
| S3-220916 | Clarification SUPI privacy for NPN | Ericsson | not pursued |  |  |
| S3-220917 | Updates to 33.434 for CoAP usage | Ericsson | agreed |  |  |
| S3-220918 | [DRAFT] Reply LS on AF specific UE ID retrieval | Ericsson | revised |  | S3-221161 |
| S3-220919 | A new key issue for single automated certificate management protocol and procedures | Ericsson | revised |  | S3-221277 |
| S3-220920 | A new key issue for the relation between NF lifecycle and certificate lifecycle | Ericsson | revised |  | S3-221278 |
| S3-220921 | Editorial corrections and technical clarifications | Ericsson | revised |  | S3-221130 |
| S3-220922 | Clarification of access token usage in EC | Ericsson | revised |  | S3-221274 |
| S3-220923 | Removing EN on secondary authentication | Ericsson | merged |  | S3-221247 |
| S3-220924 | Update of the introduction and scope of TR 33.876 skeleton | Nokia, Nokia Shanghai Bell | approved |  |  |
| S3-220925 | Key issue on Relation between NF and Certificate lifecycle management | Nokia, Nokia Shanghai Bell | merged |  | S3-221278 |
| S3-220926 | Key issue on Network Function instances identifiers | Nokia, Nokia Shanghai Bell | revised |  | S3-221224 |
| S3-220927 | Key issue on Multiple certificates to be associated with a Network Function | Nokia, Nokia Shanghai Bell | revised |  | S3-221223 |
| S3-220928 | Key issue on CMPv2 adoption and initial NF trust during certificate enrolment | Nokia, Nokia Shanghai Bell | merged |  | S3-221237 |
| S3-220929 | Key issue on Certificates revocation procedures | Nokia, Nokia Shanghai Bell | revised |  | S3-221225 |
| S3-220930 | Key issue on Automated certificate management for Network Slicing | Nokia, Nokia Shanghai Bell | revised |  | S3-221226 |
| S3-220931 | Trust in SEPP deployment scenarios | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-220932 | Update to KI on roaming hub | Nokia, Nokia Shanghai Bell | approved |  | - |
| S3-220933 | Requirement to KI on roaming hub | Nokia, Nokia Shanghai Bell | revised |  | S3-221287 |
| S3-220934 | Security protocol over CP with 5G AKA to establishPC5 keys | THALES | noted |  |  |
| S3-220935 | Editorial correction and clarification to 33.501 | Ericsson | agreed |  |  |
| S3-220936 | Security protocol over CP with 5G ProSe security context in the USIM | THALES | noted |  |  |
| S3-220937 | Terminology correction for security of UE onboarding | Ericsson | agreed |  |  |
| S3-220938 | PWS for Non-Public Networks | Ericsson | agreed |  |  |
| S3-220939 | Corrections and clarifications to secondary authentication during UE onboarding | Ericsson | revised |  | S3-221210 |
| S3-220940 | Derivation of SUPI from default UE credentials | Ericsson, CableLabs, Intel, Qualcomm | revised |  | S3-221111 |
| S3-220941 | Removing EN on UE being uniquely identifiable and verifiably secure | Ericsson, CableLabs, Intel, Qualcomm, Xiaomi | revised |  | S3-221112 |
| S3-220942 | Implementation correction of CR1309 | Ericsson | agreed |  |  |
| S3-220943 | Clarification on the certificate profile for SCP and SEPP | Ericsson, Nokia, Nokia Shanghai Bell | approved |  |  |
| S3-220944 | SEPP interconnect certificate profile | Ericsson | noted |  |  |
| S3-220945 | Clarification on CN-ID when it is presented in the certificate | Ericsson | revised |  | S3-221211 |
| S3-220946 | Clarification on CN-ID when it is presented in the certificate | Ericsson | revised |  | S3-221212 |
| S3-220947 | Clarification on the format of callback URI in the NF certificate profile | Ericsson | not pursued |  |  |
| S3-220948 | Clarification on the format of callback URI in the NF certificate profile | Ericsson | not pursued |  |  |
| S3-220949 | Clarification on access token requests for NF Producers of a specific NF type and token-based authorization for indirect communication with delegated discovery | Ericsson | not pursued |  |  |
| S3-220950 | Clarification on access token requests for NF Producers of a specific NF type and token-based authorization for indirect communication with delegated discovery | Ericsson | not pursued |  |  |
| S3-220951 | SEPP to include and verify the source PLMN-ID | Ericsson, Nokia, Nokia Shanghai Bell, Mavenir | revised |  | S3-221213 |
| S3-220952 | LS on PLMN ID used in Roaming Scenarios | Ericsson | revised |  | S3-221214 |
| S3-220953 | SEPP handling of PLMN-ID in Roaming scenarios for PLMNs supporting more than on PLMN-ID | Ericsson | approved |  |  |
| S3-220954 | Clarification of SNI usage for NF clients and servers | Ericsson | not pursued |  |  |
| S3-220955 | New KI, NRF validation of NFc for access token requests | Ericsson | approved |  |  |
| S3-220956 | New SID on security aspects of enhanced support of Non-Public Networks phase 2 | Ericsson, CableLabs, InterDigital, Intel, Xiaomi, Nokia, Nokia Shanghai Bell, ZTE, China Mobile, LGE, Philips, Lenovo, Samsung | agreed |  |  |
| S3-220957 | Skeleton for proposed FS\_eNPN\_Ph2\_SEC | Ericsson | approved |  |  |
| S3-220958 | Reply LS on Clarification on MBS Security Context (MSK/MTK) Definitions | Ericsson | revised |  | S3-221155 |
| S3-220959 | UP IP: mapping of EPS integrity algorithm to NR integrity algorithm | Ericsson | revised |  | S3-221177 |
| S3-220960 | Correction to Clause 5.2.1.5 UUAA Revocation | Lenovo | revised |  | S3-221193 |
| S3-220961 | Correction to Clause 5.2.2.4 UUAA Revocation | Lenovo | revised |  | S3-221194 |
| S3-220962 | Clarification to multiple registrations in different PLMNs | Ericsson | not pursued |  |  |
| S3-220963 | Clarification to multiple registrations in different PLMNs | Ericsson | not pursued |  |  |
| S3-220964 | Resolving of EN in Clause 5.2.1.4 UUAA re-authentication procedure | Lenovo | revised |  | S3-221173 |
| S3-220965 | Corrections to CP based solution | Ericsson | approved |  |  |
| S3-220966 | Reference point name | Ericsson | revised |  | S3-221182 |
| S3-220967 | Remote UE Report in UP based solution | Ericsson | revised |  | S3-221271 |
| S3-220968 | Rephrasing Clause 6.2.1 to emphasize that security parameters for PC5 Direct Communication are determined during Direct Discovery | Ericsson | revised |  | S3-221272 |
| S3-220969 | Restructure of security requirements for 5G ProSe UE-to-network relay | Ericsson | noted |  |  |
| S3-220970 | Remote UE Report in CP based solution | Ericsson | noted |  |  |
| S3-220971 | Discussion on UE ID privacy for Remote UE Report | Ericsson | noted |  |  |
| S3-220972 | PLMN ID in Direct Security Mode Failure | Ericsson | revised |  | S3-221183 |
| S3-220973 | KNRP key derivation | Ericsson | merged |  | S3-221297 |
| S3-220974 | CR for Prose changes to TS 33.220 in Rel-17 | Ericsson | not pursued |  |  |
| S3-220975 | Discussion for Study on Zero Trust Security | Lenovo | noted |  |  |
| S3-220976 | Adding conclusions and recommendations related to KI#13 | Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-220977 | Adding terms and abbreviations | Qualcomm Incorporated | agreed |  |  |
| S3-220978 | Adding text for the Overview clause | Qualcomm Incorporated | revised |  | S3-221197 |
| S3-220979 | Resolving the EN on CAA level ID during UUAA procedures | Qualcomm Incorporated | not pursued |  |  |
| S3-220980 | Resolving the ENs related to re-authentication | Qualcomm Incorporated | merged |  | S3-221173 |
| S3-220981 | Resolving the ENs on CAA level ID during revocation | Qualcomm Incorporated | not pursued |  |  |
| S3-220982 | Removing EN on USS authorisation | Qualcomm Incorporated | agreed |  |  |
| S3-220983 | Removing EN on TPAE | Qualcomm Incorporated | agreed |  |  |
| S3-220984 | Clarification on ‘high reliability’ location information | Qualcomm Incorporated | revised |  | S3-221192 |
| S3-220985 | Reply LS on Indication of Network Assisted Positioning method | Qualcomm Incorporated | merged |  | S3-221254 |
| S3-220986 | Resolving the ENs on protection of UAS data | Qualcomm Incorporated | revised |  | S3-221198 |
| S3-220987 | New Study on security of architecture enhancement for UAV and UAM | Qualcomm Incorporated | revised |  | S3-221200 |
| S3-220988 | Proposed skeleton for TS 33.742 | Qualcomm Incorporated | revised |  | S3-221196 |
| S3-220989 | Proposed scope for TS 33.742 | Qualcomm Incorporated | approved |  |  |
| S3-220990 | Discussion on how to document test cases in TS 33.742 | Qualcomm Incorporated | noted |  |  |
| S3-220991 | Discussion on Ua security protocol identifier for PSK TLS 1.3 | Qualcomm Incorporated | noted | S3-220317 |  |
| S3-220992 | Adding a Note about the new Ua security protocol identifier for TLS 1.3 | Qualcomm Incorporated | revised | S3-220318 | S3-221199 |
| S3-220993 | Adding a new Ua security protocol identifier for TLS 1.3 | Qualcomm Incorporated | agreed | S3-220319 |  |
| S3-220994 | PC5 security policy provisioning for user-plane L3 U2N relay solution | Qualcomm Incorporated, Ericsson | revised |  | S3-221294 |
| S3-220995 | Clarification on the PC5 link establishment for user-plane L3 U2N relay solution | Qualcomm Incorporated | noted |  |  |
| S3-220996 | CR to ProSe TS - Address the Editor’s Notes in clause 6.3.5 | Qualcomm Incorporated | revised |  | S3-221295 |
| S3-220997 | CR to ProSe TS – An update on MIC calculation for discovery message | Qualcomm Incorporated | approved |  |  |
| S3-220998 | CR to ProSe TS – Clarification on discovery message protection | Qualcomm Incorporated | approved |  |  |
| S3-220999 | CR to ProSe TS – Removing an Editor’s Note in user plane based U2N procedure | Qualcomm Incorporated | revised |  | S3-221296 |
| S3-221000 | Update on 5G ProSe restricted discovery procedure for U2N relay | Qualcomm Incorporated | revised |  | S3-221302 |
| S3-221001 | CR to ProSe TS - Clarification on Knrp derivation for U2N relay over user plane | Qualcomm Incorporated | revised |  | S3-221297 |
| S3-221002 | Resolving Editor’s note on using only null-scheme SUCI | Qualcomm Incorporated | revised |  | S3-221202 |
| S3-221003 | pCR to TS33.503 Abbreviations update | CATT | revised |  | S3-221281 |
| S3-221004 | Study on Zero Trust Security | Lenovo, Motorola Mobility, Interdigital, Verizon, Cablelabs, Mavenir, Johns Hopkins University APL, LG Electronics, Telefonica, NEC, Telia Company, AT&T, Samsung, PCCW Global B.V, China Mobile, Motorola Solutions, Inc, Nokia, Nokia Shanghai Bell, Intel, N | revised |  | S3-221172 |
| S3-221005 | pCR to TS33.503 Clause 4.2 Update reference point name between 5G PKMF and UDM | CATT | merged |  | S3-221182 |
| S3-221006 | pCR to TS33.503 Wording update | CATT | approved |  |  |
| S3-221007 | pCR to TS33.503 Clause 6.3 Update security requirements of UE-to-Network Relay | CATT | noted |  |  |
| S3-221008 | Resolution of editor's note relating to anonymizing SUPI or skipping default credential identifier. | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S3-221009 | Resolution of editor's note relating to usage of SUPI as a verifiable identifier | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S3-221010 | Resolution of editor’s note relating to exclusive use of anonymized SUCI. | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S3-221011 | Resolution of inconsistency in SUCI usage during UE onboarding. | Nokia, Nokia Shanghai Bell | revised |  | S3-221273 |
| S3-221012 | pCR to TS33.503 Clause 6.3 Update security requirements of Layer-3 UE-to-Network Relay | CATT | noted |  |  |
| S3-221013 | pCR to TS33.503 Clause 6.3 Remove unnecessary description from UP-based and CP-based procedures | CATT | noted |  |  |
| S3-221014 | pCR to TS33.503 Clause 6.3 Clarification text for Kausf\_p | CATT | revised |  | S3-221282 |
| S3-221015 | pCR to TS33.503 Clause 6.3 Solution for co-existence of UP and CP security options | CATT | revised |  | S3-221284 |
| S3-221016 | pCR to TS33.503 Clause 6.3 Update security procedure over Control Plane | CATT | merged |  | S3-221242 |
| S3-221017 | Discussion on usage of identifier during UE onboarding in SNPNs | Lenovo | noted |  |  |
| S3-221018 | NSWO security revisited | Ericsson, Deutsche Telekom, Vodafone | noted |  |  |
| S3-221019 | Draft LS on NSWO security | Ericsson | noted |  |  |
| S3-221020 | Resolving Editor’s Note related to UE onboarding | Lenovo | revised |  | S3-221195 |
| S3-221021 | Draft skeleton of TR 33.740 | CATT | approved |  |  |
| S3-221022 | Update to clause I.2.2.2.2 for Onboarding clarifications | Lenovo | merged |  | S3-221267 |
| S3-221023 | New SID on Security Aspects of Ranging Based Services and Sidelink Positioning | Xiaomi, Apple, China Mobile, CATT, Huawei, Hisilicon, InterDigital, LGE, Philips, vivo, ZTE, Lenovo, Ericsson, Nokia, Nokia Shanghai Bell, China Telecom | revised |  | S3-221209 |
| S3-221024 | New SID on Security Aspects of Satellite Access | Xiaomi, China Mobile, China Telecom | noted |  |  |
| S3-221025 | 33.503: Updates in Clause 4.2 | Xiaomi Technology | approved |  |  |
| S3-221026 | 33.503: Updates in Clause 5.2.5 | Xiaomi Technology | approved |  |  |
| S3-221027 | 33.503: Updates in Clause 6.1.3.2 | Xiaomi Technology | revised |  | S3-221189 |
| S3-221028 | 33.503: Clarifiacation on MIC Check in Open Discovery | Xiaomi Technology | approved |  |  |
| S3-221029 | 33.503: General Description for ProSe U2N Relay Discovery Security | Xiaomi Technology | noted |  |  |
| S3-221030 | 33.503: Add Security Requirement for ProSe U2N Relay Discovery | Xiaomi Technology | noted |  |  |
| S3-221031 | 33.503: Control Plane based Security Procedure for ProSe U2N Relay Discovery | Xiaomi Technology | noted |  |  |
| S3-221032 | 33.503: User Plane based Security Procedure for ProSe U2N Relay Discovery | Xiaomi Technology | noted |  |  |
| S3-221033 | 33.503: Derivation of Discovery Keys for ProSe U2N Relay Discovery | Xiaomi Technology | noted |  |  |
| S3-221034 | 33.503: Updates to General Security Requirements for U2N Relay Communication | Xiaomi Technology | revised |  | S3-221206 |
| S3-221035 | 33.503: Updates to Security Requirements for U2N Relay Communication via L3 Relay UE | Xiaomi Technology | revised |  | S3-221207 |
| S3-221036 | Discussion on PC5 Key Hierarchy for ProSe U2N Relay Communication | Xiaomi Technology | noted |  |  |
| S3-221037 | Discussion on Security for ProSe U2N Relay Communication over User Plane | Xiaomi Technology | noted |  |  |
| S3-221038 | 33.503: Update to Security Procedure over User Plane | Xiaomi Technology, China Telecom | noted |  |  |
| S3-221039 | 33.503: PRUK Derivation for ProSe U2N Relay Security over User Plane | Xiaomi Technology | noted |  |  |
| S3-221040 | 33.503: Updates in Clause 6.3.4 | Xiaomi Technology | revised |  | S3-221208 |
| S3-221041 | Key Issue on Refresh of Long Lived Key KAUSF | Beijing Xiaomi Mobile Software | merged |  | S3-221239 |
| S3-221042 | Key Issue on Security of Interworking | Beijing Xiaomi Mobile Software | merged |  | S3-221239 |
| S3-221043 | New Use Case for Continuity of Steering of Roaming Service Delivery | Beijing Xiaomi Mobile Software | merged |  | S3-221261 |
| S3-221044 | New Use Case for Continuity of UE Parameters Update Service Delivery | Beijing Xiaomi Mobile Software | merged |  | S3-221261 |
| S3-221045 | New Use Case for Security of Interworking | Beijing Xiaomi Mobile Software | revised |  | S3-221205 |
| S3-221046 | Key Issue on Trust Chain of Certificate Authority Hierarchy | Beijing Xiaomi Mobile Software | revised |  | S3-221204 |
| S3-221047 | Resolving the alignment related EN for NSACF Subscription/unsubscription procedure | Xiaomi Communication | not pursued |  |  |
| S3-221048 | Update Figure: I.2.2.2.2-1 for consistent service operation names | Xiaomi Communication | merged |  | S3-221267 |
| S3-221049 | Resolving the Editor’s Notes for UE onboarding in SNPNs | Xiaomi Communication, Ericsson | merged |  | S3-221195 |
| S3-221050 | Update Subscription and unsubscription procedure of NSACF notification service | Xiaomi Communication | not pursued |  |  |
| S3-221051 | eNS2\_Sec: Solution #1 update | Xiaomi Communication | noted |  |  |
| S3-221052 | New key issue on authentication proxy architecture for AKMA | Xiaomi Communication | merged |  | S3-221289 |
| S3-221053 | New key issue on protecting application servers with different security requirements | Xiaomi Communication | noted |  |  |
| S3-221054 | New key issue on secure AKMA application key request in AKMA supporting authentication proxy | Xiaomi Communication | merged |  | S3-221289 |
| S3-221055 | New key issue on secure authorization for AKMA supporting authentication proxy | Xiaomi Communication | noted |  |  |
| S3-221056 | New key issue on secure identification of authentication proxy and application server in AKMA scenarios | Xiaomi Communication | noted |  |  |
| S3-221057 | New key issue on AKMA application key request in home routed and local-breakout scenarios | Xiaomi Communication | merged |  | S3-221218 |
| S3-221058 | New key issue on Secure AAnF service request in roaming scenarios of AKMA | Xiaomi Communication | noted |  |  |
| S3-221059 | New key issue on secure architecture for roaming scenarios in AKMA | Xiaomi Communication | noted |  |  |
| S3-221060 | New key issue on authentication and authorization problem for the EEC hosted in the roaming UE | Xiaomi Communication | revised |  | S3-221191 |
| S3-221061 | Clarification on AF authorization for the NSACF notification procedure | Ericsson | not pursued |  |  |
| S3-221062 | New SID on the security aspects of Artificial Intelligence (AI)/Machine Learning (ML) for the NR Air Interface and NG-RAN | Ericsson | revised |  | S3-221276 |
| S3-221063 | LS reply on UE location in connected mode in NTN | Ericsson | revised |  | S3-221268 |
| S3-221064 | Reply LS on EPS fallback enhancements | Ericsson | revised |  | S3-221162 |
| S3-221065 | New WID on IETF OSCORE Ua\* protocol profile for AKMA | Ericsson | noted |  |  |
| S3-221066 | IETF OSCORE as AKMA Ua\* protocol | Ericsson, DT | not pursued |  |  |
| S3-221067 | Extending the Ua security protocol namespace to include the AKMA OSCORE Ua\* protocol | Ericsson, DT | not pursued |  |  |
| S3-221068 | 5G registration via trusted non-3GPP access after NSWO authentication | Lenovo | noted |  |  |
| S3-221069 | New Study to enable 5G registration via trusted non-3GPP access after NSWO Authentication (FS\_5GRTN3) | Lenovo | noted |  |  |
| S3-221070 | Study to enable URSP rules to securely identify applications | Lenovo | noted |  |  |
| S3-221071 | New Study to enable URSP rules to securely identify Applications (FS\_USIA) | Lenovo, AT&T, Broadcom, CableLabs, CATT, China Mobile, China Telecom, Deutsche Telekom, Intel, LG Electronics, Motorola Solutions MSI, NEC, PCCW Global B.V., Verizon, Xiaomi | agreed |  |  |
| S3-221072 | 5GFBS - Conclusion for solution#17 | Apple. Ericsson, Intel, Nokia, Deutsche Telekom, CableLabs, LGE, OPPO, Xiaomi, Huawei, NIST, Telecom Italia, AT&T | approved |  |  |
| S3-221073 | 5GFBS - Draft LS to RAN plenary on the conlcusion of solution#17 | Apple | noted |  |  |
| S3-221074 | 5GFBS - new WID on 5GFBS | Apple, US National Security Agency, AT&T, Deutsche Telekom, Ericsson, Huawei, Hisilicon, CableLabs, Intel, InterDigital, Johns Hopkins University APL, NIST, Xiaomi, OPPO | revised |  | S3-221185 |
| S3-221075 | 5GFBS - Security risk in lower layers | Apple | noted |  |  |
| S3-221076 | CR - 33501 - Clarification on Fast re-authentication | Apple | not pursued |  |  |
| S3-221077 | CR - 33501 - Clarification on the NAS COUNT for KeNB derivation | Apple | not pursued |  |  |
| S3-221078 | IDPrvc - Security issue on C-RNTI | Apple | noted |  |  |
| S3-221079 | AKMA - New key issue of introducing AP to AKMA architecture | Apple | merged |  | S3-221289 |
| S3-221080 | MEC - Reply LS on AF specific UE ID retrieval (C3-221735) | Apple | merged |  | S3-221161 |
| S3-221081 | NTN - Reply LS on UE location in connected mode in NTN(R2-2204257) | Apple | noted |  |  |
| S3-221082 | NTN - Reply LS on NTN specific user consent (R2-2201754) | Apple | merged |  | S3-221268 |
| S3-221083 | HN-auth-NAS based HN triggered authentication | Apple | noted |  |  |
| S3-221084 | Detection of MitM attacks with secret paging | Lenovo | noted |  |  |
| S3-221085 | Discussion on security aspects of NGRTC | Huawei,HiSilicon, Deutsche Telekom | noted |  |  |
| S3-221086 | New SID on NGRTC | Huawei,HiSilicon | revised |  | S3-221229 |
| S3-221087 | corrections on measurements flow of solution#5 | Huawei,HiSilicon | noted |  |  |
| S3-221088 | editorial changes of ENSI | Huawei,HiSilicon | agreed |  |  |
| S3-221089 | mirror-editorial changes of ENSI | Huawei,HiSilicon | agreed |  |  |
| S3-221090 | New threat on Kausf handing | Huawei,HiSilicon | noted |  |  |
| S3-221091 | threat modifications for token verification | Huawei,HiSilicon | revised |  | S3-221230 |
| S3-221092 | threat modifications for SEPP | Huawei,HiSilicon | revised |  | S3-221231 |
| S3-221093 | Adding a key issue of Multiple registrations | Huawei,HiSilicon | noted |  |  |
| S3-221094 | The Scope of the FS\_EDGE\_Ph2 | Huawei, HiSilicon | approved |  |  |
| S3-221095 | The Skeleton of the FS\_EDGE\_Ph2 | Huawei, HiSilicon | approved |  |  |
| S3-221096 | Update of Solution #12 | Huawei, HiSilicon | revised |  | S3-221232 |
| S3-221097 | Update of Solution #9 | Huawei, HiSilicon | noted |  |  |
| S3-221098 | Clarification on the NSWO in the UE side | Huawei, HiSilicon | revised |  | S3-221233 |
| S3-221099 | Removing the Ens on the SCP authorization | Huawei, HiSilicon | revised |  | S3-221234 |
| S3-221100 | Clarification on IV usage on N32-f protection-R15 | Huawei, HiSilicon | not pursued |  |  |
| S3-221101 | Clarification on IV usage on N32-f protection-R16 | Huawei, HiSilicon | not pursued |  |  |
| S3-221102 | Clarification on IV usage on N32-f protection-R17 | Huawei, HiSilicon | not pursued |  |  |
| S3-221103 | Clarification on handling of the incoming N32-f message in the pSEPP side – R15 | Huawei, HiSilicon | not pursued |  |  |
| S3-221104 | Clarification on handling of the incoming N32-f message in the pSEPP side – R16 | Huawei, HiSilicon | not pursued |  |  |
| S3-221105 | Clarification on handling of the incoming N32-f message in the pSEPP side – R17 | Huawei, HiSilicon | not pursued |  |  |
| S3-221106 | Reply LS on UE location in connected mode in NTN | Nokia Corporation | noted |  |  |
| S3-221107 | Reply LS on Reply LS on NTN specific User Consent | Nokia Corporation | merged |  | S3-221268 |
| S3-221108 | CableLabs, Ericsson, Nokia, Nokia Shanghai Bell | CableLabs | withdrawn |  |  |
| S3-221109 | Reply LS on EPS fallback enhancements | Nokia Corporation | merged |  | S3-221162 |
| S3-221110 | Discussion on LS on EPS fallback enhancements | Nokia Corporation | noted |  |  |
| S3-221111 | Derivation of SUPI from default UE credentials | Ericsson, CableLabs, Intel, Qualcomm, Philips | not pursued | S3-220940 |  |
| S3-221112 | Removing EN on UE being uniquely identifiable and verifiably secure | Ericsson, CableLabs, Intel, Qualcomm, Xiaomi, Philips | not pursued | S3-220941 |  |
| S3-221113 | New SID on Security and Privacy of AI/ML-based services and applications in 5G | OPPO, Apple, vivo, Inter Digital, China Mobile, Samsung, Nokia, Nokia Shanghai Bell | revised |  | S3-221188 |
| S3-221114 | New Key Issue on UE-to-UE Relay Trust Model | OPPO | noted |  |  |
| S3-221115 | KI#27 update - requirements | MITRE Corporation | revised |  | S3-221190 |
| S3-221116 | New KI: Remote UE Security Establishment via UE-to-UE Relay | OPPO | noted |  |  |
| S3-221117 | Need for Rel-18 study on UP security enhancement | Samsung, CableLabs, Interdigital | noted |  |  |
| S3-221118 | New SID on 5G User plane security enhancements | Samsung | noted |  |  |
| S3-221119 | [SBA] CR to update NF profile for inter-slice access | Samsung | not pursued |  |  |
| S3-221120 | Clarification on selected EDGE authentication method indication | Samsung | not pursued |  |  |
| S3-221121 | New SID on security aspects of control plane based remote provisioning in Non-Public Networks | Samsung | noted |  |  |
| S3-221122 | New Key Issue on AKMA Roaming | Samsung | merged |  | S3-221218 |
| S3-221123 | New solution on AKMA Roaming | Samsung | noted |  |  |
| S3-221124 | New solution on pushing AKMA context to visited PLMN | Samsung | noted |  |  |
| S3-221125 | New Key issue on HN initiated Re-authentication | Samsung | merged |  | S3-221239 |
| S3-221126 | New Solution on UDM initiated re-authentication based on AUSF request | Samsung | noted |  |  |
| S3-221127 | New solution on HN initiated re-authentication via AUSF | Samsung | noted |  |  |
| S3-221128 | New solution on UDM triggered key update procecdure based on AAnF request | Samsung | noted |  |  |
| S3-221129 | New solution on UPU based re-authentication procedure | Samsung | noted |  |  |
| S3-221130 | Editorial corrections and technical clarifications | Ericsson | revised | S3-220921 | S3-221275 |
| S3-221131 | Verification of NSSAIs for preventing slice attack | CableLabs, Ericsson,Nokia, Nokia Shanghai Bell | approved | S3-220468 |  |
| S3-221132 | Discussion on security procedure during registration procedure over two different PLMN | NEC Corporation | noted |  |  |
| S3-221133 | Checking S-NSSAI against authoritative information source | CableLabs,Nokia, Nokia Shanghai Bell | noted |  |  |
| S3-221134 | Update to NAS security context procedure when UE is registering over two different PLMNs | NEC Corporation | not pursued |  |  |
| S3-221135 | MBS capability exchange and delivery method | Samsung | not pursued |  |  |
| S3-221136 | New KI for Authentication of PLMNs over IPX | CableLabs | noted |  |  |
| S3-221137 | CP based security selection | Nokia, Nokia Shanghai Bell, Interdigital, LGE, Samsung | noted |  |  |
| S3-221138 | derive 5GPRUK based on Kausf\_p | Nokia, Nokia Shanghai Bell, Interdigital, LGE, Samsung | merged |  | S3-221282 |
| S3-221139 | authorization of remote UE | Nokia, Nokia Shanghai Bell, Interdigital, LGE, Samsung | noted |  |  |
| S3-221140 | UP based security selection | Nokia, Nokia Shanghai Bell, Interdigital, LGE, Samsung | noted |  |  |
| S3-221141 | Relay Discovery clarifications | Philips International B.V. | noted |  |  |
| S3-221142 | Process and agenda for SA3#107e | WG Chair | noted | S3-220606 |  |
| S3-221143 | Avoid linkage between security functions and UE Radio Access Capabilities | VODAFONE | revised |  | S3-221298 |
| S3-221144 | E1 interface security requirements | VODAFONE | agreed |  |  |
| S3-221145 | LS on Security architecture for 5G multicast/broadcast services | S4-220531 | replied to |  |  |
| S3-221146 | Response LS on Clarifications on Nmbstf\_MBCDistributionSession service | S4-220575 | noted |  |  |
| S3-221147 | LS on 3GPP TS 29.244 | BBF | noted |  |  |
| S3-221148 | Reply LS on secondary authentication for multicast PDU session | S2-2201311 | noted | S3-220675 |  |
| S3-221149 | 5G Prose questions on CP for show-of-hands | Interdigital,CATT | noted |  |  |
| S3-221150 | Questions of show hand on ProSe CP-based solution | CATT | noted |  |  |
| S3-221151 | LS on authentication type and related information of MSGin5G service | C1-223957 | replied to |  |  |
| S3-221152 | Reply to: LS on authentication type and related information of MSGin5G service | China Mobile | approved |  |  |
| S3-221153 | LS on Clarification on MBS Security Keys | C4-223302 | replied to |  |  |
| S3-221154 | Reply to: LS on Clarification on MBS Security Keys | Huawei | revised |  | S3-221262 |
| S3-221155 | Reply LS on Clarification on MBS Security Context (MSK/MTK) Definitions | Ericsson | approved | S3-220958 |  |
| S3-221156 | New test case for confidentiality, integrity and replay protection between AAnF and AUSF | Keysight Technologies UK Ltd | approved | S3-220689 |  |
| S3-221157 | New threat for confidentiality, integrity and replay between AAnF and AUSF | Keysight Technologies UK Ltd | approved |  |  |
| S3-221158 | Reply LS on security architecture for 5G multicast-broadcast services | Huawei, HiSilicon | approved | S3-220871 |  |
| S3-221159 | New test case for confidentiality, integrity and replay protection between AF/NEF and AAnF | Keysight Technologies UK Ltd | approved | S3-220691 |  |
| S3-221160 | New threat for confidentiality, integrity and replay between AAnF and AF/NEF | Keysight Technologies UK Ltd | approved |  |  |
| S3-221161 | Reply LS on AF specific UE ID retrieval | Ericsson | approved | S3-220918 |  |
| S3-221162 | Reply LS on EPS fallback enhancements | Ericsson | approved | S3-221064 |  |
| S3-221163 | LS on handling of the modification policy in the IPX and receiving SEPP | Huawei, HiSilicon | approved |  |  |
| S3-221164 | LS to SA2 on NSAC | Huawei Technologies R&D UK | approved |  | - |
| S3-221165 | LS on TNAP mobility security aspect | Nokia Solutions & Networks (I) | approved |  |  |
| S3-221166 | new draft TS 33.526 MnF SCAS | Huawei Technologies Sweden AB | approved |  |  |
| S3-221167 | Living document for AAnF SCAS: draftCR to TR 33.926 | China Mobile | approved |  |  |
| S3-221168 | draft TS 33.537 | China Mobile | approved |  |  |
| S3-221169 | draft TR 33.737 | China Mobile | approved |  |  |
| S3-221170 | Configuration of Anonymous SUCI | Ericsson, Qualcomm | agreed | S3-220912 |  |
| S3-221171 | 33.926-Add a new threat | Huawei, HiSilicon | withdrawn | - |  |
| S3-221172 | Study on Zero Trust Security | Lenovo, Motorola Mobility, Interdigital, Verizon, Cablelabs, Mavenir, Johns Hopkins University APL, LG Electronics, Telefonica, NEC, Telia Company, AT&T, Samsung, PCCW Global B.V, China Mobile, Motorola Solutions, Inc, Nokia, Nokia Shanghai Bell, Intel,.. | agreed | S3-221004 |  |
| S3-221173 | Resolving of EN in Clause 5.2.1.4 UUAA re-authentication procedure | Lenovo, Huawei HiSilicon, Qualcomm Incorporated | agreed | S3-220964 |  |
| S3-221174 | EN resolution for Secondary Authentication for Remote UE with L3 U2N relay without N3IWF(Alt2) | LG Electronics Inc., Interdigital | approved | S3-220816 |  |
| S3-221175 | Revocation\_ReAuth for Secondary Authentication for Remote UE | LG Electronics Inc., Interdigital | approved | S3-220817 |  |
| S3-221176 | New KI on authorization of selection of participant NWDAF instances in the Federated Learning group | China Telecommunications | approved | S3-220740 |  |
| S3-221177 | UP IP: mapping of EPS integrity algorithm to NR integrity algorithm | Ericsson | agreed | S3-220959 |  |
| S3-221178 | Rel-18 study for network slicing security | Huawei, HiSilicon, Lenovo, CATT, CAICT, China Mobile, China Unicom, InterDigital, NEC, Nokia, Deutsche Telekom, ZTE | agreed | S3-220802 |  |
| S3-221179 | New SID: Study on SNAAPP securitY | NTT DOCOMO INC. | agreed | S3-220719 |  |
| S3-221180 | New key issue on SUPI length disclosed by SUCI | Ericsson, Apple, AT&T, Cable Labs, China Southern Power Grid Co, Convida Wireless LLC, Intel, Interdigital, Johns Hopkins University APL, Lenovo, LGE, Mavenir, MITRE, NCSC, Oppo, Phillips, Samsung, Telefonica, US NIST, US NSA, Verizon Wireless, Xiaomi, ZT | approved | S3-220911 |  |
| S3-221181 | KI#2 update - threats and requirements | Huawei, HiSilicon | approved | S3-220795 |  |
| S3-221182 | Reference point name | Ericsson | approved | S3-220966 |  |
| S3-221183 | PLMN ID in Direct Security Mode Failure | Ericsson | approved | S3-220972 |  |
| S3-221184 | Conclusion for part 2 of KI#2 | Huawei, HiSilicon | approved | S3-220798 |  |
| S3-221185 | 5GFBS - new WID on 5GFBS | Apple, US National Security Agency, AT&T, Deutsche Telekom, Ericsson, Huawei, Hisilicon, CableLabs, Intel, InterDigital, Johns Hopkins University APL, NIST, Xiaomi, OPPO, ZTE | agreed | S3-221074 |  |
| S3-221186 | New KI Edge algorithm selection | OPPO, CMCC, vivo | approved | S3-220907 |  |
| S3-221187 | draft TR 33.874 | Huawei Technologies R&D UK | approved |  |  |
| S3-221188 | New SID on Security and Privacy of AI/ML-based services and applications in 5G | OPPO, Apple, vivo, Inter Digital, China Mobile, Samsung, Nokia, Nokia Shanghai Bell | agreed | S3-221113 |  |
| S3-221189 | 33.503: Updates in Clause 6.1.3.2 | Xiaomi Technology | approved | S3-221027 |  |
| S3-221190 | KI#27 update - requirements | MITRE Corporation | approved | S3-221115 |  |
| S3-221191 | New key issue on authentication and authorization problem for the EEC hosted in the roaming UE | Xiaomi Communication | approved | S3-221060 |  |
| S3-221192 | Clarification on ‘high reliability’ location information | Qualcomm Incorporated | agreed | S3-220984 |  |
| S3-221193 | Correction to Clause 5.2.1.5 UUAA Revocation | Lenovo | agreed | S3-220960 |  |
| S3-221194 | Correction to Clause 5.2.2.4 UUAA Revocation | Lenovo | agreed | S3-220961 |  |
| S3-221195 | Resolving Editor’s Note related to UE onboarding | Lenovo, Xiaomi Communication | agreed | S3-221020 |  |
| S3-221196 | Proposed skeleton for TR 33.742 | Qualcomm Incorporated | approved | S3-220988 |  |
| S3-221197 | Adding text for the Overview clause | Qualcomm Incorporated, Lenovo | agreed | S3-220978 |  |
| S3-221198 | Resolving the ENs on protection of UAS data | Qualcomm Incorporated | agreed | S3-220986 |  |
| S3-221199 | Adding a Note about the new Ua security protocol identifier for TLS 1.3 | Qualcomm Incorporated | agreed | S3-220992 |  |
| S3-221200 | New Study on on Security for Phase 2 for UAS, UAV and UAM | Qualcomm Incorporated | agreed | S3-220987 |  |
| S3-221201 | TS 33.742 v1.0.0 | Qualcomm Austria RFFE GmbH | approved |  |  |
| S3-221202 | Resolving Editor’s note on using only null-scheme SUCI | Qualcomm Incorporated | agreed | S3-221002 |  |
| S3-221203 | Clarification on the description about AAnF | China Telecom Corporation Ltd. | agreed | S3-220770 |  |
| S3-221204 | Key Issue on Trust Chain of Certificate Authority Hierarchy | Beijing Xiaomi Mobile Software | approved | S3-221046 |  |
| S3-221205 | New Use Case for Security of Interworking | Beijing Xiaomi Mobile Software | approved | S3-221045 |  |
| S3-221206 | 33.503: Updates to General Security Requirements for U2N Relay Communication | Xiaomi Technology | approved | S3-221034 |  |
| S3-221207 | 33.503: Updates to Security Requirements for U2N Relay Communication via L3 Relay UE | Xiaomi Technology | approved | S3-221035 |  |
| S3-221208 | 33.503: Updates in Clause 6.3.4 | Xiaomi Technology | approved | S3-221040 |  |
| S3-221209 | New SID on Security Aspects of Ranging Based Services and Sidelink Positioning | Xiaomi, Apple, China Mobile, CATT, Huawei, Hisilicon, InterDigital, LGE, Philips, vivo, ZTE, Lenovo, Ericsson, Nokia, Nokia Shanghai Bell, China Telecom | agreed | S3-221023 |  |
| S3-221210 | Corrections and clarifications to secondary authentication during UE onboarding | Ericsson, Intel | agreed | S3-220939 |  |
| S3-221211 | Clarification on CN-ID when it is presented in the certificate | Ericsson | agreed | S3-220945 |  |
| S3-221212 | Clarification on CN-ID when it is presented in the certificate | Ericsson | agreed | S3-220946 |  |
| S3-221213 | SEPP to include and verify the source PLMN-ID | Ericsson, Nokia, Nokia Shanghai Bell, Mavenir | approved | S3-220951 |  |
| S3-221214 | LS on PLMN ID used in Roaming Scenarios | Ericsson | approved | S3-220952 |  |
| S3-221215 | Clarification on anonymization api | Nokia, Nokia Shanghai Bell | agreed | S3-220694 |  |
| S3-221216 | NSWO alignment with SA2 specs | Nokia, Nokia Shanghai Bell | agreed | S3-220698 |  |
| S3-221217 | New SID on Security aspects for 5WWC Phase 2 | Nokia Solutions & Networks (I) | agreed | S3-220895 |  |
| S3-221218 | Key issue on AKMA Roaming Scenario | Nokia, Nokia Shanghai Bell, CMCC, Lenovo, Xiaomi, Samsung | approved | S3-220901 |  |
| S3-221219 | Key issue on KAF refresh without primary reauthentication | Nokia, Nokia Shanghai Bell, Huawei, HiSilicon, OPPO | approved | S3-220903 |  |
| S3-221220 | LS reply on 5G NSWO roaming aspects | Nokia, Nokia Shanghai Bell | approved | S3-220697 |  |
| S3-221221 | Key issue on Security for AIML model sharing | Nokia, Nokia Shanghai Bell | approved | S3-220722 |  |
| S3-221222 | Key issue on Anomalous NF behaviour detection by NWDAF | Nokia, Nokia Shanghai Bell | approved | S3-220723 |  |
| S3-221223 | Key issue on Multiple certificates to be associated with a Network Function | Nokia, Nokia Shanghai Bell | approved | S3-220927 |  |
| S3-221224 | Key issue on Network Function instances identifiers | Nokia, Nokia Shanghai Bell | approved | S3-220926 |  |
| S3-221225 | Key issue on Certificates revocation procedures | Nokia, Nokia Shanghai Bell | approved | S3-220929 |  |
| S3-221226 | Key issue on Automated certificate management for Network Slicing | Nokia, Nokia Shanghai Bell | approved | S3-220930 |  |
| S3-221227 | Correct AAnF service in clause 6.3 | ZTE Corporation | agreed | S3-220752 |  |
| S3-221228 | NF selects AAnF in clause 6.7 | ZTE Corporation | agreed | S3-220753 |  |
| S3-221229 | New SID on NGRTC | Huawei,HiSilicon | agreed | S3-221086 |  |
| S3-221230 | threat modifications for token verification | Huawei,HiSilicon | approved | S3-221091 |  |
| S3-221231 | threat modifications for SEPP | Huawei,HiSilicon | approved | S3-221092 |  |
| S3-221232 | Update of Solution #12 | Huawei, HiSilicon | approved | S3-221096 |  |
| S3-221233 | Clarification on the NSWO in the UE side | Huawei, HiSilicon | agreed | S3-221098 |  |
| S3-221234 | Removing the Ens on the SCP authorization | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | agreed | S3-221099 |  |
| S3-221235 | Draft TR 33.739 0.1.0 | Huawei, HiSilicon | approved |  |  |
| S3-221236 | New KI for security of certificate update | Huawei, HiSilicon, Ericsson | approved | S3-220823 |  |
| S3-221237 | New KI for Security protection of NF certificate enrolment | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | approved | S3-220824 |  |
| S3-221238 | Add a new clause for 5G ProSe Layer-3 UE-to-Network Relay with N3IWF support | Huawei, HiSilicon | approved | S3-220830 |  |
| S3-221239 | KI on Scalability of the home triggered primary authentication | Huawei, HiSilicon, China telecom, LG Electronics, Nokia, Nokia Shanghai Bell, Beijing Xiaomi Mobile Software, Samsung | approved | S3-220834 |  |
| S3-221240 | Adding a usecase of Kakma refresh | Huawei, HiSilicon | approved | S3-220835 |  |
| S3-221241 | Adding UDM Services for SUCI deconceal and authorization information retrieval | Huawei, HiSilicon | approved | S3-220842 |  |
| S3-221242 | Resolving the EN on the needs and usage of 5GPRUK ID | Huawei, HiSilicon, Interdigital, LG Electronics, ChinaTelecom,Xiaomi, CATT, Samsung | approved | S3-220845 |  |
| S3-221243 | Format of 5GPRUK ID | Huawei, HiSilicon, ZTE | approved | S3-220846 |  |
| S3-221244 | Clarification on the security of L2 U2NW | Huawei, HiSilicon | approved | S3-220848 |  |
| S3-221245 | Key derivation related clarification in CP-based UE-to-Network relay procedures | Huawei, HiSilicon | approved | S3-220850 |  |
| S3-221246 | New SID on security enhancements for 5G multicast-broadcast services Phase 2 | Huawei, HiSilicon | agreed | S3-220856 |  |
| S3-221247 | Removing the Editor’s Note and add clarifications in the security mechanisms for MBS | Huawei, HiSilicon | agreed | S3-220858 |  |
| S3-221248 | Clarifications on the control-plane and user-plane procedures | Huawei, HiSilicon | agreed | S3-220859 |  |
| S3-221249 | Enhancement for service announcement | Huawei, HiSilicon | agreed | S3-220860 |  |
| S3-221250 | Update for solution 5 | Huawei, HiSilicon | approved | S3-220866 |  |
| S3-221251 | New SID on Enhancement of User Consent for 3GPP Services | Huawei, HiSilicon | agreed | S3-220867 |  |
| S3-221252 | Clarification on PRUK ID | Huawei, HiSilicon | approved | S3-220869 |  |
| S3-221253 | Clarifications on the multicast security context handling in session creation procedure | Huawei, HiSilicon | agreed | S3-220870 |  |
| S3-221254 | Reply LS on the Indication of Network Assisted Positioning method | Huawei, HiSilicon | approved | S3-220872 |  |
| S3-221255 | Clarification on the description of PRUK | Huawei, HiSilicon | approved | S3-220881 |  |
| S3-221256 | Clarification on the secondary authentication procedure | Huawei, HiSilicon | approved | S3-220882 |  |
| S3-221257 | Update general clause for secondary authentication | Huawei, HiSilicon | approved | S3-220883 |  |
| S3-221258 | 33.926-Rewrite the 5G MnF GNP model | Huawei, HiSilicon | approved | S3-220886 |  |
| S3-221259 | 33.926-Add new assets to the OAM functions | Huawei, HiSilicon | approved | S3-220887 |  |
| S3-221260 | 33.926-Add a new threat | Huawei, HiSilicon | approved | S3-220888 |  |
| S3-221261 | Adding a usecase of SoR Counter Wrap around | Huawei, HiSilicon, LG Electronics France, Beijing Xiaomi Mobile Software | approved | S3-220892 |  |
| S3-221262 | Reply LS on Clarification on MBS Security Keys | Huawei, HiSilicon | approved | S3-221154 |  |
| S3-221263 | draftCR to TR 33.926 for SCAS 5G Ph2 | Huawei, HiSilicon | approved |  |  |
| S3-221264 | TR 33.741 | Huawei, HiSilicon | approved |  |  |
| S3-221265 | New SID on Personal IoT Networks Security Aspects | vivo, Apple, ZTE, Xiaomi, CATT, OPPO, China Unicom, China Telecom, CableLabs, InterDigital, LGE, Nokia, Nokia Shanghai Bell, Lenovo, Motorola mobility, Philips, China Mobile, Qualcomm | agreed | S3-220709 |  |
| S3-221266 | TR 33.809 | Apple Computer Trading Co. Ltd | approved |  |  |
| S3-221267 | UDM interaction for Anonymous SUCI | Ericsson, Lenovo, Xiaomi | agreed | S3-220913 |  |
| S3-221268 | LS reply on Reply LS on NTN specific User Consent and UE location in connected mode in NTN | Ericsson | approved | S3-221063 |  |
| S3-221269 | KI on Protection of data and analytics exchange in roaming case | China Mobile | approved | S3-220774 |  |
| S3-221270 | Draft TR 33.876 Study on Standardising Automated Certificate Management in SBA | Nokia Poland | approved |  |  |
| S3-221271 | Remote UE Report in UP based solution | Ericsson | approved | S3-220967 |  |
| S3-221272 | Rephrasing Clause 6.2.1 to emphasize that security parameters for PC5 Direct Communication are determined during Direct Discovery | Ericsson | approved | S3-220968 |  |
| S3-221273 | Resolution of inconsistency in SUCI usage during UE onboarding. | Nokia, Nokia Shanghai Bell | agreed | S3-221011 |  |
| S3-221274 | Clarification of access token usage in EC | Ericsson | agreed | S3-220922 |  |
| S3-221275 | Editorial corrections and technical clarifications | Ericsson | agreed | S3-221130 |  |
| S3-221276 | New SID on the security aspects of Artificial Intelligence (AI)/Machine Learning (ML) for the NR Air Interface and NG-RAN | Ericsson | agreed | S3-221062 |  |
| S3-221277 | A new key issue for single automated certificate management protocol and procedures | Ericsson | approved | S3-220919 |  |
| S3-221278 | A new key issue for the relation between NF lifecycle and certificate lifecycle | Ericsson | approved | S3-220920 |  |
| S3-221279 | Draft TR 33.738 | CMCC | approved |  |  |
| S3-221280 | TR 33.875-120 | Nokia UK | approved |  |  |
| S3-221281 | pCR to TS33.503 Abbreviations update | CATT | approved | S3-221003 |  |
| S3-221282 | pCR to TS33.503 Clause 6.3 Clarification text for Kausf\_p | CATT | approved | S3-221014 |  |
| S3-221283 | Clarification on N32-f connection establishment with TLS | Nokia, Nokia Shanghai Bell | agreed | S3-220728 |  |
| S3-221284 | pCR to TS33.503 Clause 6.3 Solution for co-existence of UP and CP security options | CATT | approved | S3-221015 |  |
| S3-221285 | Clarification on N32-f connection establishment with TLS | Nokia, Nokia Shanghai Bell | agreed | S3-220729 |  |
| S3-221286 | Draft TS 33.503 v0.4.0 Security Aspects of Proximity based Services (ProSe) in the 5G System (5GS) | CATT | approved |  |  |
| S3-221287 | Requirement to KI on roaming hub | Nokia, Nokia Shanghai Bell | approved | S3-220933 |  |
| S3-221288 | Scope of TR 33.737 | China Mobile | approved | S3-220811 |  |
| S3-221289 | Key issue of introducing application proxy into AKMA | China Mobile | approved | S3-220814 |  |
| S3-221290 | TR 33.870-020 | Interdigital | approved | - | - |
| S3-221291 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | agreed | S3-220685 | - |
| S3-221292 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | agreed | S3-220686 | - |
| S3-221293 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | agreed | S3-220687 | - |
| S3-221294 | PC5 security policy provisioning for user-plane L3 U2N relay solution | Qualcomm Incorporated, Ericsson | approved | S3-220994 | - |
| S3-221295 | CR to ProSe TS - Address the Editor’s Notes in clause 6.3.5 | Qualcomm Incorporated | approved | S3-220996 | - |
| S3-221296 | CR to ProSe TS – Removing an Editor’s Note in user plane based U2N procedure | Qualcomm Incorporated | approved | S3-220999 | - |
| S3-221297 | CR to ProSe TS - Clarification on Knrp derivation for U2N relay over user plane | Qualcomm Incorporated | approved | S3-221001 | - |
| S3-221298 | Avoid linkage between security functions and UE Radio Access Capabilities | VODAFONE | agreed | S3-221143 | - |
| S3-221299 | Cover page TS 33.503 | CATT | approved | - | - |
| S3-221300 | Coversheet TR 33.874 | Huawei | approved | - | - |
| S3-221301 | Living document for MnF SCAS: draftCR to TR 33.926 | Huawei, HiSilicon | approved | S3-220893 | - |
| S3-221302 | Update on 5G ProSe restricted discovery procedure for U2N relay | Qualcomm Incorporated | approved | S3-221000 | - |

### A2: Tdoc decision timing

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| --- | --- | --- |
| Document | Date/time UTC | Decision |
| S3-220601 | 24/05/2022 13:08:04 | approved |
| S3-220602 | 24/05/2022 13:08:17 | approved |
| S3-220603 | 24/05/2022 13:08:10 | noted |
| S3-220604 | 24/05/2022 13:08:20 | noted |
| S3-220608 | 24/05/2022 13:09:49 | postponed |
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| S3-220644 | 25/05/2022 09:51:43 | noted |
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| S3-220947 | 24/05/2022 16:00:26 | available |
| S3-220948 | 24/05/2022 16:00:30 | available |
| S3-220949 | 24/05/2022 16:00:37 | available |
| S3-220950 | 24/05/2022 16:00:41 | available |
| S3-220953 | 24/05/2022 16:01:18 | approved |
| S3-220954 | 24/05/2022 16:01:48 | available |
| S3-220955 | 25/05/2022 09:46:43 | approved |
| S3-220956 | 25/05/2022 10:58:34 | agreed |
| S3-220957 | 25/05/2022 10:58:49 | approved |
| S3-220958 | 19/05/2022 11:13:37 | available |
| S3-220958 | 19/05/2022 11:14:07 | revised |
| S3-220962 | 24/05/2022 16:29:34 | available |
| S3-220963 | 24/05/2022 16:29:41 | available |
| S3-220965 | 25/05/2022 11:18:22 | approved |
| S3-220969 | 25/05/2022 11:18:50 | noted |
| S3-220970 | 25/05/2022 11:18:58 | noted |
| S3-220971 | 25/05/2022 11:44:58 | noted |
| S3-220973 | 25/05/2022 11:45:22 | available |
| S3-220974 | 25/05/2022 11:45:33 | available |
| S3-220975 | 25/05/2022 10:58:57 | noted |
| S3-220976 | 25/05/2022 09:42:29 | noted |
| S3-220977 | 24/05/2022 16:07:23 | agreed |
| S3-220979 | 24/05/2022 16:06:25 | available |
| S3-220980 | 24/05/2022 16:07:01 | available |
| S3-220981 | 24/05/2022 16:07:38 | available |
| S3-220982 | 24/05/2022 16:07:41 | agreed |
| S3-220983 | 24/05/2022 16:07:44 | agreed |
| S3-220985 | 24/05/2022 16:05:59 | available |
| S3-220989 | 24/05/2022 13:28:52 | approved |
| S3-220990 | 24/05/2022 13:28:55 | noted |
| S3-220991 | 24/05/2022 16:37:22 | noted |
| S3-220993 | 24/05/2022 16:39:15 | agreed |
| S3-220994 | 25/05/2022 07:32:03 | revised |
| S3-220995 | 25/05/2022 11:45:46 | noted |
| S3-220996 | 25/05/2022 07:32:20 | revised |
| S3-220997 | 25/05/2022 11:45:59 | approved |
| S3-220998 | 25/05/2022 11:46:06 | approved |
| S3-220999 | 25/05/2022 07:32:35 | revised |
| S3-221000 | 24/05/2022 13:55:15 | available |
| S3-221000 | 25/05/2022 07:32:49 | noted |
| S3-221000 | 25/05/2022 13:23:28 | approved |
| S3-221000 | 25/05/2022 13:49:34 | noted |
| S3-221000 | 26/05/2022 07:48:36 | revised |
| S3-221001 | 25/05/2022 07:33:04 | revised |
| S3-221005 | 25/05/2022 11:46:59 | available |
| S3-221006 | 25/05/2022 11:47:07 | approved |
| S3-221007 | 25/05/2022 11:47:13 | noted |
| S3-221008 | 24/05/2022 14:55:14 | available |
| S3-221009 | 24/05/2022 14:55:18 | available |
| S3-221010 | 24/05/2022 14:55:25 | available |
| S3-221012 | 25/05/2022 11:47:17 | noted |
| S3-221013 | 25/05/2022 11:47:18 | noted |
| S3-221016 | 25/05/2022 11:47:57 | available |
| S3-221017 | 24/05/2022 14:59:36 | noted |
| S3-221018 | 24/05/2022 15:56:20 | noted |
| S3-221019 | 24/05/2022 15:55:49 | noted |
| S3-221021 | 25/05/2022 11:02:48 | approved |
| S3-221022 | 24/05/2022 15:00:02 | available |
| S3-221024 | 25/05/2022 11:03:02 | noted |
| S3-221025 | 25/05/2022 11:48:05 | approved |
| S3-221026 | 25/05/2022 11:48:07 | approved |
| S3-221028 | 25/05/2022 11:48:20 | approved |
| S3-221029 | 25/05/2022 11:48:24 | noted |
| S3-221030 | 25/05/2022 11:48:27 | noted |
| S3-221031 | 25/05/2022 11:48:31 | noted |
| S3-221032 | 25/05/2022 11:48:32 | noted |
| S3-221033 | 25/05/2022 11:48:37 | noted |
| S3-221036 | 25/05/2022 11:48:56 | noted |
| S3-221037 | 25/05/2022 11:49:03 | noted |
| S3-221038 | 25/05/2022 11:49:05 | noted |
| S3-221039 | 25/05/2022 11:49:09 | noted |
| S3-221041 | 25/05/2022 10:50:06 | available |
| S3-221042 | 25/05/2022 10:50:16 | available |
| S3-221043 | 25/05/2022 10:38:16 | available |
| S3-221044 | 25/05/2022 10:38:28 | available |
| S3-221047 | 25/05/2022 11:53:04 | available |
| S3-221048 | 24/05/2022 14:58:59 | available |
| S3-221049 | 24/05/2022 14:56:09 | available |
| S3-221050 | 25/05/2022 11:54:06 | available |
| S3-221051 | 25/05/2022 09:47:25 | noted |
| S3-221052 | 25/05/2022 10:09:57 | available |
| S3-221053 | 25/05/2022 10:10:01 | noted |
| S3-221054 | 25/05/2022 10:10:10 | available |
| S3-221055 | 25/05/2022 10:10:13 | noted |
| S3-221056 | 25/05/2022 10:10:15 | noted |
| S3-221057 | 25/05/2022 10:08:23 | available |
| S3-221058 | 25/05/2022 10:08:26 | noted |
| S3-221059 | 25/05/2022 10:08:29 | noted |
| S3-221061 | 25/05/2022 11:54:31 | available |
| S3-221065 | 25/05/2022 11:03:16 | noted |
| S3-221066 | 25/05/2022 11:03:22 | available |
| S3-221067 | 25/05/2022 11:03:29 | available |
| S3-221068 | 25/05/2022 11:03:35 | noted |
| S3-221069 | 25/05/2022 11:03:37 | noted |
| S3-221070 | 25/05/2022 11:03:43 | noted |
| S3-221071 | 25/05/2022 11:03:49 | agreed |
| S3-221072 | 25/05/2022 09:40:26 | approved |
| S3-221073 | 25/05/2022 09:41:07 | noted |
| S3-221075 | 25/05/2022 09:41:08 | noted |
| S3-221076 | 25/05/2022 09:39:41 | available |
| S3-221077 | 25/05/2022 09:39:50 | available |
| S3-221078 | 25/05/2022 09:51:57 | noted |
| S3-221079 | 25/05/2022 10:10:23 | available |
| S3-221080 | 24/05/2022 15:52:12 | available |
| S3-221081 | 24/05/2022 13:18:29 | noted |
| S3-221082 | 24/05/2022 13:19:06 | available |
| S3-221083 | 25/05/2022 10:47:20 | noted |
| S3-221084 | 25/05/2022 09:41:52 | noted |
| S3-221085 | 25/05/2022 11:04:06 | noted |
| S3-221087 | 25/05/2022 09:42:30 | noted |
| S3-221088 | 24/05/2022 16:09:41 | agreed |
| S3-221089 | 24/05/2022 16:09:42 | agreed |
| S3-221090 | 24/05/2022 13:25:10 | noted |
| S3-221093 | 25/05/2022 10:52:44 | noted |
| S3-221094 | 25/05/2022 10:55:33 | approved |
| S3-221095 | 25/05/2022 10:55:39 | approved |
| S3-221097 | 25/05/2022 09:46:58 | noted |
| S3-221100 | 24/05/2022 16:01:41 | available |
| S3-221101 | 24/05/2022 16:01:56 | available |
| S3-221102 | 24/05/2022 16:02:00 | available |
| S3-221103 | 24/05/2022 16:02:04 | available |
| S3-221104 | 24/05/2022 16:03:24 | available |
| S3-221105 | 24/05/2022 16:03:27 | available |
| S3-221106 | 24/05/2022 13:18:34 | noted |
| S3-221107 | 24/05/2022 13:19:28 | available |
| S3-221109 | 24/05/2022 13:16:08 | available |
| S3-221110 | 24/05/2022 13:16:16 | approved |
| S3-221111 | 24/05/2022 14:56:20 | available |
| S3-221112 | 24/05/2022 14:56:29 | available |
| S3-221114 | 25/05/2022 09:43:13 | noted |
| S3-221116 | 25/05/2022 09:43:14 | noted |
| S3-221117 | 25/05/2022 11:09:13 | noted |
| S3-221118 | 25/05/2022 11:09:14 | noted |
| S3-221119 | 25/05/2022 09:39:30 | available |
| S3-221120 | 24/05/2022 15:52:39 | available |
| S3-221121 | 25/05/2022 11:09:20 | noted |
| S3-221122 | 25/05/2022 10:08:37 | available |
| S3-221123 | 25/05/2022 10:09:05 | noted |
| S3-221124 | 25/05/2022 10:09:09 | noted |
| S3-221125 | 25/05/2022 10:50:25 | available |
| S3-221126 | 25/05/2022 10:47:31 | noted |
| S3-221127 | 25/05/2022 10:47:42 | noted |
| S3-221128 | 25/05/2022 10:47:55 | noted |
| S3-221129 | 25/05/2022 10:50:09 | noted |
| S3-221131 | 24/05/2022 16:03:41 | approved |
| S3-221132 | 24/05/2022 16:29:46 | noted |
| S3-221133 | 24/05/2022 16:03:45 | noted |
| S3-221134 | 24/05/2022 16:29:51 | available |
| S3-221135 | 24/05/2022 15:50:39 | available |
| S3-221136 | 25/05/2022 09:46:40 | noted |
| S3-221137 | 25/05/2022 11:49:31 | noted |
| S3-221138 | 25/05/2022 11:49:47 | available |
| S3-221139 | 25/05/2022 11:49:51 | noted |
| S3-221140 | 25/05/2022 11:50:15 | noted |
| S3-221141 | 25/05/2022 11:50:22 | noted |
| S3-221142 | 24/05/2022 13:08:13 | noted |
| S3-221143 | 25/05/2022 07:59:08 | revised |
| S3-221144 | 25/05/2022 09:39:56 | agreed |
| S3-221145 | 24/05/2022 15:49:40 | available |
| S3-221146 | 24/05/2022 15:49:57 | noted |
| S3-221147 | 24/05/2022 13:10:08 | noted |
| S3-221148 | 24/05/2022 15:49:59 | noted |
| S3-221149 | 25/05/2022 08:51:06 | withdrawn |
| S3-221149 | 25/05/2022 14:07:47 | noted |
| S3-221150 | 24/05/2022 14:12:27 | noted |
| S3-221151 | 18/05/2022 07:11:18 | replied to |
| S3-221152 | 24/05/2022 13:20:39 | reserved |
| S3-221152 | 26/05/2022 06:04:58 | approved |
| S3-221153 | 18/05/2022 13:10:12 | replied to |
| S3-221155 | 24/05/2022 15:00:59 | approved |
| S3-221156 | 24/05/2022 13:25:41 | approved |
| S3-221157 | 24/05/2022 13:26:54 | approved |
| S3-221158 | 24/05/2022 15:49:12 | approved |
| S3-221159 | 24/05/2022 13:26:05 | approved |
| S3-221160 | 24/05/2022 13:26:59 | approved |
| S3-221161 | 24/05/2022 15:51:23 | approved |
| S3-221162 | 24/05/2022 13:08:40 | postponed |
| S3-221162 | 24/05/2022 13:14:40 | approved |
| S3-221163 | 24/05/2022 16:02:26 | reserved |
| S3-221163 | 26/05/2022 06:05:35 | approved |
| S3-221164 | 25/05/2022 09:47:51 | approved |
| S3-221164 | 25/05/2022 09:50:55 | revised |
| S3-221164 | 25/05/2022 09:54:47 | approved |
| S3-221165 | 25/05/2022 10:58:07 | approved |
| S3-221166 | 24/05/2022 13:23:27 | reserved |
| S3-221166 | 26/05/2022 06:24:18 | approved |
| S3-221167 | 24/05/2022 13:27:08 | reserved |
| S3-221167 | 26/05/2022 06:05:48 | approved |
| S3-221168 | 24/05/2022 13:27:11 | reserved |
| S3-221168 | 26/05/2022 06:05:51 | approved |
| S3-221169 | 25/05/2022 10:35:46 | noted |
| S3-221169 | 26/05/2022 06:06:04 | approved |
| S3-221170 | 24/05/2022 14:54:04 | agreed |
| S3-221171 | 24/05/2022 13:22:31 | withdrawn |
| S3-221172 | 25/05/2022 10:59:03 | agreed |
| S3-221173 | 24/05/2022 16:06:50 | agreed |
| S3-221174 | 25/05/2022 11:13:33 | approved |
| S3-221175 | 25/05/2022 11:13:38 | approved |
| S3-221176 | 25/05/2022 10:54:20 | approved |
| S3-221177 | 24/05/2022 16:10:36 | agreed |
| S3-221178 | 25/05/2022 10:56:50 | agreed |
| S3-221179 | 25/05/2022 10:56:26 | agreed |
| S3-221180 | 25/05/2022 09:51:49 | approved |
| S3-221181 | 25/05/2022 09:47:33 | approved |
| S3-221182 | 25/05/2022 11:18:34 | approved |
| S3-221183 | 25/05/2022 11:45:02 | approved |
| S3-221184 | 25/05/2022 09:47:45 | approved |
| S3-221185 | 25/05/2022 11:03:56 | agreed |
| S3-221186 | 25/05/2022 10:55:13 | approved |
| S3-221187 | 25/05/2022 09:51:18 | reserved |
| S3-221187 | 27/05/2022 13:33:53 | approved |
| S3-221188 | 25/05/2022 11:09:06 | agreed |
| S3-221189 | 25/05/2022 11:48:14 | approved |
| S3-221190 | 25/05/2022 09:42:38 | approved |
| S3-221191 | 25/05/2022 10:55:17 | approved |
| S3-221192 | 24/05/2022 16:06:11 | agreed |
| S3-221193 | 24/05/2022 16:07:08 | agreed |
| S3-221194 | 24/05/2022 16:07:10 | agreed |
| S3-221195 | 24/05/2022 14:59:41 | agreed |
| S3-221196 | 24/05/2022 13:28:09 | approved |
| S3-221197 | 24/05/2022 16:07:28 | agreed |
| S3-221198 | 24/05/2022 16:07:50 | agreed |
| S3-221199 | 24/05/2022 16:37:26 | agreed |
| S3-221200 | 25/05/2022 11:02:37 | agreed |
| S3-221201 | 24/05/2022 13:28:11 | reserved |
| S3-221201 | 26/05/2022 12:37:18 | approved |
| S3-221202 | 24/05/2022 14:55:06 | agreed |
| S3-221203 | 24/05/2022 16:09:10 | agreed |
| S3-221204 | 25/05/2022 09:53:16 | approved |
| S3-221205 | 25/05/2022 10:36:27 | approved |
| S3-221206 | 25/05/2022 11:48:49 | approved |
| S3-221207 | 25/05/2022 11:48:51 | approved |
| S3-221208 | 25/05/2022 11:49:25 | approved |
| S3-221209 | 25/05/2022 11:02:54 | agreed |
| S3-221210 | 24/05/2022 14:56:52 | agreed |
| S3-221211 | 24/05/2022 16:00:17 | agreed |
| S3-221212 | 24/05/2022 16:00:20 | agreed |
| S3-221213 | 24/05/2022 16:01:10 | approved |
| S3-221214 | 24/05/2022 16:00:56 | reserved |
| S3-221214 | 26/05/2022 12:37:51 | approved |
| S3-221215 | 24/05/2022 16:08:52 | agreed |
| S3-221216 | 24/05/2022 15:55:54 | agreed |
| S3-221217 | 25/05/2022 10:57:41 | agreed |
| S3-221218 | 25/05/2022 10:08:10 | approved |
| S3-221219 | 25/05/2022 10:50:45 | approved |
| S3-221220 | 24/05/2022 15:55:17 | approved |
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| S3-221222 | 25/05/2022 10:54:40 | approved |
| S3-221223 | 25/05/2022 09:53:05 | approved |
| S3-221224 | 25/05/2022 09:53:22 | approved |
| S3-221225 | 25/05/2022 09:53:30 | approved |
| S3-221226 | 25/05/2022 09:53:33 | approved |
| S3-221227 | 24/05/2022 16:08:55 | agreed |
| S3-221228 | 24/05/2022 16:08:57 | agreed |
| S3-221229 | 25/05/2022 11:08:54 | agreed |
| S3-221230 | 24/05/2022 13:25:22 | approved |
| S3-221231 | 24/05/2022 13:25:25 | approved |
| S3-221232 | 25/05/2022 09:46:51 | approved |
| S3-221233 | 24/05/2022 15:56:08 | agreed |
| S3-221234 | 24/05/2022 15:59:46 | agreed |
| S3-221235 | 25/05/2022 10:55:48 | reserved |
| S3-221235 | 26/05/2022 06:06:16 | approved |
| S3-221236 | 25/05/2022 09:52:22 | approved |
| S3-221237 | 25/05/2022 09:52:30 | approved |
| S3-221238 | 25/05/2022 11:16:03 | approved |
| S3-221239 | 25/05/2022 10:47:25 | approved |
| S3-221240 | 25/05/2022 10:41:02 | approved |
| S3-221241 | 25/05/2022 11:16:10 | approved |
| S3-221242 | 25/05/2022 11:16:38 | approved |
| S3-221243 | 25/05/2022 11:16:41 | approved |
| S3-221244 | 25/05/2022 11:16:45 | approved |
| S3-221245 | 25/05/2022 11:16:49 | approved |
| S3-221246 | 25/05/2022 10:57:10 | agreed |
| S3-221247 | 24/05/2022 15:50:26 | agreed |
| S3-221248 | 24/05/2022 15:50:44 | agreed |
| S3-221249 | 24/05/2022 15:50:33 | agreed |
| S3-221250 | 25/05/2022 09:42:15 | approved |
| S3-221251 | 25/05/2022 10:57:33 | agreed |
| S3-221252 | 25/05/2022 11:17:43 | approved |
| S3-221253 | 24/05/2022 15:50:48 | agreed |
| S3-221254 | 24/05/2022 16:05:16 | approved |
| S3-221255 | 25/05/2022 11:18:00 | approved |
| S3-221256 | 24/05/2022 13:57:52 | approved |
| S3-221257 | 25/05/2022 11:18:07 | approved |
| S3-221258 | 24/05/2022 13:21:49 | approved |
| S3-221259 | 24/05/2022 13:21:52 | approved |
| S3-221260 | 24/05/2022 13:21:55 | approved |
| S3-221261 | 25/05/2022 10:38:50 | approved |
| S3-221262 | 24/05/2022 13:21:18 | reserved |
| S3-221262 | 27/05/2022 05:59:46 | approved |
| S3-221263 | 25/05/2022 11:51:06 | reserved |
| S3-221263 | 27/05/2022 07:39:49 | approved |
| S3-221264 | 25/05/2022 10:38:53 | reserved |
| S3-221264 | 27/05/2022 05:59:56 | approved |
| S3-221265 | 25/05/2022 10:56:16 | agreed |
| S3-221266 | 25/05/2022 09:42:02 | reserved |
| S3-221266 | 27/05/2022 13:34:02 | approved |
| S3-221267 | 24/05/2022 14:54:17 | agreed |
| S3-221268 | 24/05/2022 13:19:35 | approved |
| S3-221269 | 25/05/2022 10:53:53 | approved |
| S3-221270 | 25/05/2022 10:07:23 | reserved |
| S3-221270 | 26/05/2022 06:06:36 | approved |
| S3-221271 | 24/05/2022 13:57:42 | approved |
| S3-221272 | 24/05/2022 13:55:32 | reserved |
| S3-221272 | 25/05/2022 11:11:26 | approved |
| S3-221273 | 24/05/2022 14:55:31 | agreed |
| S3-221274 | 24/05/2022 15:52:32 | agreed |
| S3-221275 | 24/05/2022 15:52:46 | agreed |
| S3-221276 | 25/05/2022 11:03:09 | agreed |
| S3-221277 | 25/05/2022 09:52:39 | approved |
| S3-221278 | 25/05/2022 09:52:42 | approved |
| S3-221279 | 25/05/2022 10:53:56 | reserved |
| S3-221279 | 26/05/2022 06:06:42 | approved |
| S3-221280 | 25/05/2022 09:47:16 | reserved |
| S3-221280 | 26/05/2022 06:06:55 | approved |
| S3-221281 | 25/05/2022 11:46:46 | approved |
| S3-221282 | 25/05/2022 11:47:28 | approved |
| S3-221283 | 25/05/2022 11:56:02 | agreed |
| S3-221284 | 25/05/2022 11:47:34 | approved |
| S3-221285 | 24/05/2022 15:59:24 | agreed |
| S3-221286 | 25/05/2022 11:47:37 | reserved |
| S3-221286 | 27/05/2022 14:01:24 | approved |
| S3-221287 | 25/05/2022 09:43:31 | noted |
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| S3-221288 | 25/05/2022 10:07:43 | approved |
| S3-221289 | 25/05/2022 10:09:14 | approved |
| S3-221290 | 24/05/2022 16:28:58 | reserved |
| S3-221290 | 26/05/2022 06:07:07 | approved |
| S3-221291 | 25/05/2022 07:10:50 | agreed |
| S3-221292 | 25/05/2022 07:10:49 | agreed |
| S3-221293 | 25/05/2022 07:10:47 | agreed |
| S3-221294 | 25/05/2022 07:32:04 | approved |
| S3-221295 | 25/05/2022 07:32:21 | approved |
| S3-221296 | 25/05/2022 07:32:36 | approved |
| S3-221297 | 25/05/2022 07:33:05 | approved |
| S3-221298 | 25/05/2022 07:59:09 | agreed |
| S3-221299 | 25/05/2022 08:29:26 | reserved |
| S3-221299 | 25/05/2022 08:30:28 | approved |
| S3-221300 | 25/05/2022 09:50:59 | approved |
| S3-221300 | 25/05/2022 13:41:30 | reserved |
| S3-221300 | 27/05/2022 13:34:18 | approved |
| S3-221301 | 26/05/2022 05:28:49 | reserved |
| S3-221301 | 26/05/2022 06:24:30 | approved |
| S3-221302 | 26/05/2022 07:48:37 | approved |

## Annex B: List of change requests

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Spec | CR | Rev | Rel | Cat | WI | Decision |
| S3-220600 | Reserved | -- | 33.203 | 0264 | - | Rel-17 | F | TEI17 | withdrawn |
| S3-220643 | CR on Modernization of the Integrity & Encryption Algorithms between UE and P-CSFC | Deutsche Telekom AG | 33.203 | 0265 | - | Rel-17 | F | TEI17 | not pursued |
| S3-220751 | Update the test case in TS 33.216 clause 4.2.2.1.10 | ZTE Corporation | 33.216 | 0024 | - | Rel-16 | F | SCAS\_eNB | not pursued |
| S3-220993 | Adding a new Ua security protocol identifier for TLS 1.3 | Qualcomm Incorporated | 33.220 | 0215 | 1 | Rel-17 | F | eCryptPr | agreed |
| S3-220974 | CR for Prose changes to TS 33.220 in Rel-17 | Ericsson | 33.220 | 0216 | - | Rel-17 | F | 5G\_ProSe | not pursued |
| S3-221067 | Extending the Ua security protocol namespace to include the AKMA OSCORE Ua\* protocol | Ericsson, DT | 33.220 | 0217 | - | Rel-18 | B | DUMMY | not pursued |
| S3-220992 | Adding a Note about the new Ua security protocol identifier for TLS 1.3 | Qualcomm Incorporated | 33.222 | 0057 | 1 | Rel-17 | F | eCryptPr | revised |
| S3-221199 | Adding a Note about the new Ua security protocol identifier for TLS 1.3 | Qualcomm Incorporated | 33.222 | 0057 | 2 | Rel-17 | F | eCryptPr | agreed |
| S3-220700 | High-reliability requirement of UAV | Nokia, Nokia Shanghai Bell | 33.256 | 0001 | - | Rel-17 | F | TEI17 | not pursued |
| S3-220803 | Address EN on UAV ID | Huawei, HiSilicon | 33.256 | 0002 | - | Rel-17 | F | ID\_UAS | not pursued |
| S3-220804 | Address EN on UAV re-auth | Huawei, HiSilicon | 33.256 | 0003 | - | Rel-17 | F | ID\_UAS | merged |
| S3-220960 | Correction to Clause 5.2.1.5 UUAA Revocation | Lenovo | 33.256 | 0004 | - | Rel-17 | F | ID\_UAS | revised |
| S3-221193 | Correction to Clause 5.2.1.5 UUAA Revocation | Lenovo | 33.256 | 0004 | 1 | Rel-17 | F | ID\_UAS | agreed |
| S3-220961 | Correction to Clause 5.2.2.4 UUAA Revocation | Lenovo | 33.256 | 0005 | - | Rel-17 | F | ID\_UAS | revised |
| S3-221194 | Correction to Clause 5.2.2.4 UUAA Revocation | Lenovo | 33.256 | 0005 | 1 | Rel-17 | F | ID\_UAS | agreed |
| S3-220964 | Resolving of EN in Clause 5.2.1.4 UUAA re-authentication procedure | Lenovo | 33.256 | 0006 | - | Rel-17 | F | ID\_UAS | revised |
| S3-221173 | Resolving of EN in Clause 5.2.1.4 UUAA re-authentication procedure | Lenovo, Huawei HiSilicon, Qualcomm Incorporated | 33.256 | 0006 | 1 | Rel-17 | F | ID\_UAS | agreed |
| S3-220977 | Adding terms and abbreviations | Qualcomm Incorporated | 33.256 | 0007 | - | Rel-17 | F | ID\_UAS | agreed |
| S3-220978 | Adding text for the Overview clause | Qualcomm Incorporated | 33.256 | 0008 | - | Rel-17 | F | ID\_UAS | revised |
| S3-221197 | Adding text for the Overview clause | Qualcomm Incorporated, Lenovo | 33.256 | 0008 | 1 | Rel-17 | F | ID\_UAS | agreed |
| S3-220979 | Resolving the EN on CAA level ID during UUAA procedures | Qualcomm Incorporated | 33.256 | 0009 | - | Rel-17 | F | ID\_UAS | not pursued |
| S3-220980 | Resolving the ENs related to re-authentication | Qualcomm Incorporated | 33.256 | 0010 | - | Rel-17 | F | ID\_UAS | merged |
| S3-220981 | Resolving the ENs on CAA level ID during revocation | Qualcomm Incorporated | 33.256 | 0011 | - | Rel-17 | F | ID\_UAS | not pursued |
| S3-220982 | Removing EN on USS authorisation | Qualcomm Incorporated | 33.256 | 0012 | - | Rel-17 | F | ID\_UAS | agreed |
| S3-220983 | Removing EN on TPAE | Qualcomm Incorporated | 33.256 | 0013 | - | Rel-17 | F | ID\_UAS | agreed |
| S3-220984 | Clarification on ‘high reliability’ location information | Qualcomm Incorporated | 33.256 | 0014 | - | Rel-17 | F | ID\_UAS | revised |
| S3-221192 | Clarification on ‘high reliability’ location information | Qualcomm Incorporated | 33.256 | 0014 | 1 | Rel-17 | F | ID\_UAS | agreed |
| S3-220986 | Resolving the ENs on protection of UAS data | Qualcomm Incorporated | 33.256 | 0015 | - | Rel-17 | F | ID\_UAS | revised |
| S3-221198 | Resolving the ENs on protection of UAS data | Qualcomm Incorporated | 33.256 | 0015 | 1 | Rel-17 | F | ID\_UAS | agreed |
| S3-220945 | Clarification on CN-ID when it is presented in the certificate | Ericsson | 33.310 | 0127 | - | Rel-16 | F | 5G\_eSBA | revised |
| S3-221211 | Clarification on CN-ID when it is presented in the certificate | Ericsson | 33.310 | 0127 | 1 | Rel-16 | F | 5G\_eSBA | agreed |
| S3-220946 | Clarification on CN-ID when it is presented in the certificate | Ericsson | 33.310 | 0128 | - | Rel-17 | A | 5G\_eSBA | revised |
| S3-221212 | Clarification on CN-ID when it is presented in the certificate | Ericsson | 33.310 | 0128 | 1 | Rel-17 | A | 5G\_eSBA | agreed |
| S3-220947 | Clarification on the format of callback URI in the NF certificate profile | Ericsson | 33.310 | 0129 | - | Rel-16 | F | 5G\_eSBA | not pursued |
| S3-220948 | Clarification on the format of callback URI in the NF certificate profile | Ericsson | 33.310 | 0130 | - | Rel-17 | A | 5G\_eSBA | not pursued |
| S3-220861 | Alignment with RAN2 for LTE UP IP | Huawei, HiSilicon | 33.401 | 0705 | - | Rel-17 | F | UPIP\_SEC\_LTE | not pursued |
| S3-220862 | Address EN for LTE UP IP | Huawei, HiSilicon | 33.401 | 0706 | - | Rel-17 | F | UPIP\_SEC\_LTE | merged |
| S3-220959 | UP IP: mapping of EPS integrity algorithm to NR integrity algorithm | Ericsson | 33.401 | 0707 | - | Rel-17 | F | eUPIP\_SEC | revised |
| S3-221177 | UP IP: mapping of EPS integrity algorithm to NR integrity algorithm | Ericsson | 33.401 | 0707 | 1 | Rel-17 | F | eUPIP\_SEC | agreed |
| S3-221143 | Avoid linkage between security functions and UE Radio Access Capabilities | VODAFONE | 33.401 | 0708 | - | Rel-17 | F | UPIP\_SEC\_LTE | revised |
| S3-221298 | Avoid linkage between security functions and UE Radio Access Capabilities | VODAFONE | 33.401 | 0708 | 1 | Rel-17 | F | UPIP\_SEC\_LTE | agreed |
| S3-221144 | E1 interface security requirements | VODAFONE | 33.401 | 0709 | - | Rel-17 | F | TEI17 | agreed |
| S3-220917 | Updates to 33.434 for CoAP usage | Ericsson | 33.434 | 0013 | - | Rel-17 | F | eSEAL | agreed |
| S3-220724 | Clarification on separate handling of N32-c and N32-f | Nokia, Nokia Shanghai Bell, Ericsson, Mavenir, Lenovo, Deutsche Telekom, NCSC, Xiaomi, BT, AT&T, Interdigital | 33.501 | 1332 | 2 | Rel-15 | F | TEI15 | agreed |
| S3-220725 | Clarification on separate handling of N32-c and N32-f | Nokia, Nokia Shanghai Bell, Ericsson, Mavenir, Lenovo, Deutsche Telekom, NCSC, Xiaomi, BT, AT&T, Interdigital | 33.501 | 1333 | 2 | Rel-16 | A | TEI15 | agreed |
| S3-220726 | Clarification on separate handling of N32-c and N32-f | Nokia, Nokia Shanghai Bell, Ericsson, Mavenir, Lenovo, Deutsche Telekom, NCSC, Xiaomi, BT, AT&T, Interdigital | 33.501 | 1334 | 2 | Rel-17 | A | TEI15 | agreed |
| S3-220685 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | 33.501 | 1357 | - | Rel-15 | F | 5GS\_Ph1-SEC | revised |
| S3-221291 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | 33.501 | 1357 | 1 | Rel-15 | F | 5GS\_Ph1-SEC | agreed |
| S3-220686 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | 33.501 | 1358 | - | Rel-16 | A | 5GS\_Ph1-SEC | revised |
| S3-221292 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | 33.501 | 1358 | 1 | Rel-16 | A | 5GS\_Ph1-SEC | agreed |
| S3-220687 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | 33.501 | 1359 | - | Rel-17 | A | 5GS\_Ph1-SEC | revised |
| S3-221293 | Clarifications to secondary authentication PDU Session Container | Intel Corporation (UK) Ltd | 33.501 | 1359 | 1 | Rel-17 | A | 5GS\_Ph1-SEC | agreed |
| S3-220688 | Clarifications to secondary authentication for UE onboarding | Intel Corporation (UK) Ltd | 33.501 | 1360 | - | Rel-17 | F | eNPN | merged |
| S3-220695 | UPU procedure alignment | Nokia, Nokia Shanghai Bell | 33.501 | 1361 | - | Rel-16 | F | TEI16 | not pursued |
| S3-220696 | UPU procedure alignment | Nokia, Nokia Shanghai Bell | 33.501 | 1362 | - | Rel-17 | A | TEI16 | not pursued |
| S3-220698 | NSWO alignment with SA2 specs | Nokia, Nokia Shanghai Bell | 33.501 | 1363 | - | Rel-17 | F | TEI17 | revised |
| S3-221216 | NSWO alignment with SA2 specs | Nokia, Nokia Shanghai Bell | 33.501 | 1363 | 1 | Rel-17 | F | TEI17 | agreed |
| S3-220728 | Authorization of N32-f connection establishment with TLS | Nokia, Nokia Shanghai Bell | 33.501 | 1364 | - | Rel-16 | F | TEI16 | revised |
| S3-221283 | Clarification on N32-f connection establishment with TLS | Nokia, Nokia Shanghai Bell | 33.501 | 1364 | 1 | Rel-16 | F | TEI16 | agreed |
| S3-220729 | Authorization of N32-f connection establishment with TLS | Nokia, Nokia Shanghai Bell | 33.501 | 1365 | - | Rel-17 | A | TEI16 | revised |
| S3-221285 | Clarification on N32-f connection establishment with TLS | Nokia, Nokia Shanghai Bell | 33.501 | 1365 | 1 | Rel-17 | A | TEI16 | agreed |
| S3-220731 | Resolving EN on authorization between SCPs | Nokia, Nokia Shanghai Bell | 33.501 | 1366 | - | Rel-17 | F | TEI17 | merged |
| S3-220765 | Adding authorization for delegated discovery | China Telecommunications | 33.501 | 1367 | - | Rel-16 | F | 5G\_eSBA | not pursued |
| S3-220766 | Adding authorization for delegated discovery(mirror) | China Telecommunications | 33.501 | 1368 | - | Rel-17 | A | 5G\_eSBA | not pursued |
| S3-220799 | Address EN on alignment to SA2 | Huawei, HiSilicon | 33.501 | 1369 | - | Rel-17 | F | TEI17 | not pursued |
| S3-220800 | Address EN on AF Authorization | Huawei, HiSilicon | 33.501 | 1370 | - | Rel-17 | F | TEI17 | not pursued |
| S3-220806 | Include SN ID in NSSAA procedure | Huawei, HiSilicon | 33.501 | 1371 | - | Rel-16 | F | eNS | not pursued |
| S3-220837 | Format of anonymous SUCI | Huawei, HiSilicon | 33.501 | 1372 | - | Rel-17 | F | eNPN | not pursued |
| S3-220858 | Removing the Editor’s Note and add clarifications in the security mechanisms for MBS | Huawei, HiSilicon | 33.501 | 1373 | - | Rel-17 | F | 5MBS | revised |
| S3-221247 | Removing the Editor’s Note and add clarifications in the security mechanisms for MBS | Huawei, HiSilicon | 33.501 | 1373 | 1 | Rel-17 | F | 5MBS | agreed |
| S3-220859 | Clarifications on the control-plane and user-plane procedures | Huawei, HiSilicon | 33.501 | 1374 | - | Rel-17 | F | 5MBS | revised |
| S3-221248 | Clarifications on the control-plane and user-plane procedures | Huawei, HiSilicon | 33.501 | 1374 | 1 | Rel-17 | F | 5MBS | agreed |
| S3-220860 | Enhancement for service announcement | Huawei, HiSilicon | 33.501 | 1375 | - | Rel-17 | F | 5MBS | revised |
| S3-221249 | Enhancement for service announcement | Huawei, HiSilicon | 33.501 | 1375 | 1 | Rel-17 | F | 5MBS | agreed |
| S3-220863 | Address Ens for NPN | Huawei, HiSilicon | 33.501 | 1376 | - | Rel-17 | F | eNPN | not pursued |
| S3-220864 | Address EN for UC3S | Huawei, HiSilicon | 33.501 | 1377 | - | Rel-17 | F | UC3S\_SEC | not pursued |
| S3-220865 | Clarification on Enforcement Point for User Consent | Huawei, HiSilicon | 33.501 | 1378 | - | Rel-17 | F | UC3S\_SEC | not pursued |
| S3-220870 | Clarifications on the multicast security context handling in session creation procedure | Huawei, HiSilicon | 33.501 | 1379 | - | Rel-17 | F | 5MBS | revised |
| S3-221253 | Clarifications on the multicast security context handling in session creation procedure | Huawei, HiSilicon | 33.501 | 1379 | 1 | Rel-17 | F | 5MBS | agreed |
| S3-220912 | Definition of Anonymous SUCI | Ericsson, Qualcomm | 33.501 | 1380 | - | Rel-17 | F | eNPN | revised |
| S3-221170 | Configuration of Anonymous SUCI | Ericsson, Qualcomm | 33.501 | 1380 | 1 | Rel-17 | F | eNPN | agreed |
| S3-220913 | UDM interaction for Anonymous SUCI | Ericsson | 33.501 | 1381 | - | Rel-17 | F | eNPN | revised |
| S3-221267 | UDM interaction for Anonymous SUCI | Ericsson, Lenovo, Xiaomi | 33.501 | 1381 | 1 | Rel-17 | F | eNPN | agreed |
| S3-220914 | Removing Editor’s note on using only null-scheme SUCI | Ericsson | 33.501 | 1382 | - | Rel-17 | F | eNPN | not pursued |
| S3-220915 | Anonymous SUCI for onboarding | Ericsson | 33.501 | 1383 | - | Rel-17 | F | eNPN | not pursued |
| S3-220916 | Clarification SUPI privacy for NPN | Ericsson | 33.501 | 1384 | - | Rel-17 | F | eNPN | not pursued |
| S3-220923 | Removing EN on secondary authentication | Ericsson | 33.501 | 1385 | - | Rel-17 | F | 5MBS | merged |
| S3-220935 | Editorial correction and clarification to 33.501 | Ericsson | 33.501 | 1386 | - | Rel-17 | F | eNA\_Ph2 | agreed |
| S3-220937 | Terminology correction for security of UE onboarding | Ericsson | 33.501 | 1387 | - | Rel-17 | F | eNPN | agreed |
| S3-220939 | Corrections and clarifications to secondary authentication during UE onboarding | Ericsson | 33.501 | 1388 | - | Rel-17 | F | eNPN | revised |
| S3-221210 | Corrections and clarifications to secondary authentication during UE onboarding | Ericsson, Intel | 33.501 | 1388 | 1 | Rel-17 | F | eNPN | agreed |
| S3-220940 | Derivation of SUPI from default UE credentials | Ericsson, CableLabs, Intel, Qualcomm | 33.501 | 1389 | - | Rel-17 | F | eNPN | revised |
| S3-221111 | Derivation of SUPI from default UE credentials | Ericsson, CableLabs, Intel, Qualcomm, Philips | 33.501 | 1389 | 1 | Rel-17 | F | eNPN | not pursued |
| S3-220941 | Removing EN on UE being uniquely identifiable and verifiably secure | Ericsson, CableLabs, Intel, Qualcomm, Xiaomi | 33.501 | 1390 | - | Rel-17 | F | eNPN | revised |
| S3-221112 | Removing EN on UE being uniquely identifiable and verifiably secure | Ericsson, CableLabs, Intel, Qualcomm, Xiaomi, Philips | 33.501 | 1390 | 1 | Rel-17 | F | eNPN | not pursued |
| S3-220942 | Implementation correction of CR1309 | Ericsson | 33.501 | 1391 | - | Rel-17 | F | eNPN | agreed |
| S3-220949 | Clarification on access token requests for NF Producers of a specific NF type and token-based authorization for indirect communication with delegated discovery | Ericsson | 33.501 | 1392 | - | Rel-16 | F | 5G\_eSBA | not pursued |
| S3-220950 | Clarification on access token requests for NF Producers of a specific NF type and token-based authorization for indirect communication with delegated discovery | Ericsson | 33.501 | 1393 | - | Rel-17 | A | 5G\_eSBA | not pursued |
| S3-220954 | Clarification of SNI usage for NF clients and servers | Ericsson | 33.501 | 1394 | - | Rel-17 | F | TEI17 | not pursued |
| S3-220962 | Clarification to multiple registrations in different PLMNs | Ericsson | 33.501 | 1395 | - | Rel-17 | A | TEI16 | not pursued |
| S3-220963 | Clarification to multiple registrations in different PLMNs | Ericsson | 33.501 | 1396 | - | Rel-16 | F | TEI16 | not pursued |
| S3-221002 | Resolving Editor’s note on using only null-scheme SUCI | Qualcomm Incorporated | 33.501 | 1397 | - | Rel-17 | F | eNPN | revised |
| S3-221202 | Resolving Editor’s note on using only null-scheme SUCI | Qualcomm Incorporated | 33.501 | 1397 | 1 | Rel-17 | F | eNPN | agreed |
| S3-221008 | Resolution of editor's note relating to anonymizing SUPI or skipping default credential identifier. | Nokia, Nokia Shanghai Bell | 33.501 | 1398 | - | Rel-17 | F | eNPN | not pursued |
| S3-221009 | Resolution of editor's note relating to usage of SUPI as a verifiable identifier | Nokia, Nokia Shanghai Bell | 33.501 | 1399 | - | Rel-17 | F | eNPN | not pursued |
| S3-221010 | Resolution of editor’s note relating to exclusive use of anonymized SUCI. | Nokia, Nokia Shanghai Bell | 33.501 | 1400 | - | Rel-17 | F | eNPN | not pursued |
| S3-221011 | Resolution of inconsistency in SUCI usage during UE onboarding. | Nokia, Nokia Shanghai Bell | 33.501 | 1401 | - | Rel-17 | F | eNPN | revised |
| S3-221273 | Resolution of inconsistency in SUCI usage during UE onboarding. | Nokia, Nokia Shanghai Bell | 33.501 | 1401 | 1 | Rel-17 | F | eNPN | agreed |
| S3-221020 | Resolving Editor’s Note related to UE onboarding | Lenovo | 33.501 | 1402 | - | Rel-17 | F | eNPN | revised |
| S3-221195 | Resolving Editor’s Note related to UE onboarding | Lenovo, Xiaomi Communication | 33.501 | 1402 | 1 | Rel-17 | F | eNPN | agreed |
| S3-221022 | Update to clause I.2.2.2.2 for Onboarding clarifications | Lenovo | 33.501 | 1403 | - | Rel-17 | F | eNPN | merged |
| S3-221047 | Resolving the alignment related EN for NSACF Subscription/unsubscription procedure | Xiaomi Communication | 33.501 | 1404 | - | Rel-17 | F | TEI17 | not pursued |
| S3-221048 | Update Figure: I.2.2.2.2-1 for consistent service operation names | Xiaomi Communication | 33.501 | 1405 | - | Rel-17 | F | eNPN | merged |
| S3-221049 | Resolving the Editor’s Notes for UE onboarding in SNPNs | Xiaomi Communication, Ericsson | 33.501 | 1406 | - | Rel-17 | F | eNPN | merged |
| S3-221050 | Update Subscription and unsubscription procedure of NSACF notification service | Xiaomi Communication | 33.501 | 1407 | - | Rel-17 | F | TEI17 | not pursued |
| S3-221061 | Clarification on AF authorization for the NSACF notification procedure | Ericsson | 33.501 | 1408 | - | Rel-17 | F | TEI17 | not pursued |
| S3-221076 | CR - 33501 - Clarification on Fast re-authentication | Apple | 33.501 | 1409 | - | Rel-18 | F | TEI17 | not pursued |
| S3-221077 | CR - 33501 - Clarification on the NAS COUNT for KeNB derivation | Apple | 33.501 | 1410 | - | Rel-18 | F | TEI17 | not pursued |
| S3-221088 | editorial changes of ENSI | Huawei,HiSilicon | 33.501 | 1411 | - | Rel-16 | F | TEI16 | agreed |
| S3-221089 | mirror-editorial changes of ENSI | Huawei,HiSilicon | 33.501 | 1412 | - | Rel-17 | A | TEI16 | agreed |
| S3-221098 | Clarification on the NSWO in the UE side | Huawei, HiSilicon | 33.501 | 1413 | - | Rel-17 | F | NSWO\_5G | revised |
| S3-221233 | Clarification on the NSWO in the UE side | Huawei, HiSilicon | 33.501 | 1413 | 1 | Rel-17 | F | NSWO\_5G | agreed |
| S3-221099 | Removing the Ens on the SCP authorization | Huawei, HiSilicon | 33.501 | 1414 | - | Rel-17 | F | TEI17 | revised |
| S3-221234 | Removing the Ens on the SCP authorization | Huawei, HiSilicon, Nokia, Nokia Shanghai Bell | 33.501 | 1414 | 1 | Rel-17 | F | TEI17 | agreed |
| S3-221100 | Clarification on IV usage on N32-f protection-R15 | Huawei, HiSilicon | 33.501 | 1415 | - | Rel-15 | F | 5GS\_Ph1-SEC | not pursued |
| S3-221101 | Clarification on IV usage on N32-f protection-R16 | Huawei, HiSilicon | 33.501 | 1416 | - | Rel-16 | A | 5GS\_Ph1-SEC | not pursued |
| S3-221102 | Clarification on IV usage on N32-f protection-R17 | Huawei, HiSilicon | 33.501 | 1417 | - | Rel-17 | A | 5GS\_Ph1-SEC | not pursued |
| S3-221103 | Clarification on handling of the incoming N32-f message in the pSEPP side – R15 | Huawei, HiSilicon | 33.501 | 1418 | - | Rel-15 | F | 5GS\_Ph1-SEC | not pursued |
| S3-221104 | Clarification on handling of the incoming N32-f message in the pSEPP side – R16 | Huawei, HiSilicon | 33.501 | 1419 | - | Rel-16 | A | 5GS\_Ph1-SEC | not pursued |
| S3-221105 | Clarification on handling of the incoming N32-f message in the pSEPP side – R17 | Huawei, HiSilicon | 33.501 | 1420 | - | Rel-17 | A | 5GS\_Ph1-SEC | not pursued |
| S3-221119 | [SBA] CR to update NF profile for inter-slice access | Samsung | 33.501 | 1421 | - | Rel-17 | F | 5G\_eSBA | not pursued |
| S3-221134 | Update to NAS security context procedure when UE is registering over two different PLMNs | NEC Corporation | 33.501 | 1422 | - | Rel-17 | F | TEI17 | not pursued |
| S3-221135 | MBS capability exchange and delivery method | Samsung | 33.501 | 1423 | - | Rel-17 | B | 5MBS | not pursued |
| S3-220739 | Adding a test case for gNB in TS 33.511 clause 4.2.2.1.4 | ZTE Corporation | 33.511 | 0027 | - | Rel-18 | B | SCAS\_5G\_Ph2 | not pursued |
| S3-220875 | Delete Use Case on Finding the right NF instance are serving the UE | Huawei, HiSilicon | 33.521 | 0003 | - | Rel-17 | F | SCAS\_5G\_NWDAF | agreed |
| S3-220693 | Aligning text for AKMA procedure | Nokia, Nokia Shanghai Bell | 33.535 | 0125 | - | Rel-17 | F | AKMA | agreed |
| S3-220694 | Clarification on anonymization api | Nokia, Nokia Shanghai Bell | 33.535 | 0126 | - | Rel-17 | F | TEI17 | revised |
| S3-221215 | Clarification on anonymization api | Nokia, Nokia Shanghai Bell | 33.535 | 0126 | 1 | Rel-17 | F | TEI17 | agreed |
| S3-220752 | Correct AAnF service in clause 6.3 | ZTE Corporation | 33.535 | 0127 | - | Rel-17 | F | AKMA | revised |
| S3-221227 | Correct AAnF service in clause 6.3 | ZTE Corporation | 33.535 | 0127 | 1 | Rel-17 | F | AKMA | agreed |
| S3-220753 | NF selects AAnF in clause 6.7 | ZTE Corporation | 33.535 | 0128 | - | Rel-17 | F | AKMA | revised |
| S3-221228 | NF selects AAnF in clause 6.7 | ZTE Corporation | 33.535 | 0128 | 1 | Rel-17 | F | AKMA | agreed |
| S3-220770 | Clarification on the description about AAnF | China Telecom Corporation Ltd. | 33.535 | 0129 | - | Rel-17 | F | AKMA | revised |
| S3-221203 | Clarification on the description about AAnF | China Telecom Corporation Ltd. | 33.535 | 0129 | 1 | Rel-17 | F | AKMA | agreed |
| S3-220807 | AAnF sending GPSI to internal AKMA AF | China Mobile | 33.535 | 0130 | - | Rel-17 | F | AKMA | not pursued |
| S3-221066 | IETF OSCORE as AKMA Ua\* protocol | Ericsson, DT | 33.535 | 0131 | - | Rel-18 | B | DUMMY | not pursued |
| S3-220849 | Rel-16 Add clarifications to unicast procedures | Huawei, HiSilicon | 33.536 | 0027 | - | Rel-16 | F | eV2XARC | agreed |
| S3-220873 | Rel-17 Add clarifications to unicast procedures | Huawei, HiSilicon | 33.536 | 0028 | - | Rel-17 | A | eV2XARC | agreed |
| S3-220921 | Editorial corrections and technical clarifications | Ericsson | 33.558 | 0001 | - | Rel-17 | F | eEDGE\_5GC | revised |
| S3-221130 | Editorial corrections and technical clarifications | Ericsson | 33.558 | 0001 | 1 | Rel-17 | F | eEDGE\_5GC | revised |
| S3-221275 | Editorial corrections and technical clarifications | Ericsson | 33.558 | 0001 | 2 | Rel-17 | F | eEDGE\_5GC | agreed |
| S3-220922 | Clarification of access token usage in EC | Ericsson | 33.558 | 0002 | - | Rel-17 | F | eEDGE\_5GC | revised |
| S3-221274 | Clarification of access token usage in EC | Ericsson | 33.558 | 0002 | 1 | Rel-17 | F | eEDGE\_5GC | agreed |
| S3-221120 | Clarification on selected EDGE authentication method indication | Samsung | 33.558 | 0003 | - | Rel-17 | F | eEDGE\_5GC | not pursued |
| S3-220690 | New threat for confidentiality, integrity and replay between AAnF and AUSF | Keysight Technologies UK Ltd | 33.926 | 0053 | - | Rel-18 | B | SCAS\_5G\_AAnF | not pursued |
| S3-220692 | New threat for confidentiality, integrity and replay between AAnF and AF/NEF | Keysight Technologies UK Ltd | 33.926 | 0054 | - | Rel-18 | B | SCAS\_5G\_AAnF | not pursued |
| S3-220741 | Adding AAnF critical assets and threats to TS 33.926 | ZTE Corporation | 33.926 | 0055 | - | Rel-18 | B | SCAS\_5G\_AAnF | withdrawn |
| S3-220742 | Adding Network product class description for the AAnF to TS 33.926. | ZTE Corporation | 33.926 | 0056 | - | Rel-18 | B | SCAS\_5G\_AAnF | withdrawn |
| S3-220749 | Correction on clause F.2.1 in TS 33.926-R16 | ZTE Corporation | 33.926 | 0057 | - | Rel-16 | F | SCAS\_5G | agreed |
| S3-220750 | Correction on clause F.2.1 in TS 33.926-R17 mirror | ZTE Corporation | 33.926 | 0058 | - | Rel-17 | A | SCAS\_5G | agreed |
| S3-220876 | Delete Threat Analysis on Finding the right NF instance are serving the UE | Huawei, HiSilicon | 33.926 | 0059 | - | Rel-17 | F | SCAS\_5G\_NWDAF | agreed |
| S3-220938 | PWS for Non-Public Networks | Ericsson | 33.969 | 0001 | - | Rel-17 | F | eNPN | agreed |

## Annex C: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Original | Title | From | Decision | Reply TDoc |
| S3-220608 |  | LS to 3GPP CT4 on Identification of source PLMN-ID in SBA | GSMA | postponed | (none) |
| S3-220609 |  | LS on new parameters for SOR | C1-214118 | revised | (none) |
| S3-220610 |  | Reply LS on User Controlled PLMN Selector with Access Technology in Control plane solution for steering of roaming in 5GS | S1-220187 | revised | (none) |
| S3-220611 |  | LS on the impact of MSK update on MBS multicast session update procedure | C1-221747 | revised | (none) |
| S3-220612 |  | Reply LS on UE capabilities indication in UPU | C1-223177 | revised | (none) |
| S3-220613 |  | LS on AF specific UE ID retrieval | C3-221735 | revised | (none) |
| S3-220614 |  | Reply LS on AF specific UE ID retrieval | S6-220976 | revised | (none) |
| S3-220615 |  | Reply LS on AF specific UE ID retrieval | S2-2203426 | revised | (none) |
| S3-220616 |  | LS on 5G NSWO roaming aspects | S2-2203253 | revised | S3-221220 |
| S3-220617 |  | Reply LS on 5G NSWO roaming aspects | C3-222487 | revised | (none) |
| S3-220618 |  | Reply LS on 5G NSWO roaming aspects | C4-222436 | revised | (none) |
| S3-220619 |  | LS on Clarification on MBS Security Context (MSK/MTK) Definitions | C4-222303 | revised | S3-221155 |
| S3-220620 |  | LS on Indication of Network Assisted Positioning method | C4-222306 | revised | S3-221254 |
| S3-220621 |  | LS on 3GPP TS 29.244 | BBF | revised | (none) |
| S3-220622 |  | Reply LS on NTN specific User Consent | R2-2201754 | revised | (none) |
| S3-220623 |  | LS on UE location during initial access in NTN | R2-2201881 | revised | (none) |
| S3-220624 |  | LS on UE location during initial access in NTN | R2-2202057 | revised | (none) |
| S3-220625 |  | Reply LS on UE location during initial access in NTN | R3-222861 | revised | (none) |
| S3-220626 |  | LS on UE location in connected mode in NTN | R2-2204257 | revised | (none) |
| S3-220627 |  | Reply LS on LTE User Plane Integrity Protection | R2-2203663 | revised | (none) |
| S3-220628 |  | LS on EPS fallback enhancements | R2-2204236 | revised | (none) |
| S3-220629 |  | Reply LS on EPS fallback enhancements | S2-2203590 | revised | (none) |
| S3-220630 |  | Reply LS on User Plane Integrity Protection for eUTRA connected to EPC | R3-222610 | revised | (none) |
| S3-220631 |  | Reply LS on UE providing Location Information for NB-IoT | C1-222100 | revised | (none) |
| S3-220632 |  | Reply LS on UE providing Location Information for NB-IoT | R3-222858 | revised | (none) |
| S3-220633 |  | LS Response to LS on UE providing Location Information for NB-IoT | S2-2201333 | revised | (none) |
| S3-220634 |  | LS on V2X PC5 link for unicast communication with null security algorithm | R5-222035 | revised | (none) |
| S3-220635 |  | Reply LS on reply to SA6 about new SID on Application Enablement for Data Integrity Verification Service in IOT | S1-220185 | revised | (none) |
| S3-220636 |  | Reply LS on secondary authentication for multicast PDU session | S2-2201311 | revised | (none) |
| S3-220637 |  | Reply LS to GSMA OPG on Further Operator Platform Group questions following SDO Workshop | SP-220346 | revised | (none) |
| S3-220638 |  | Reply LS on Further GSMA OPAG questions following SDO Workshop | S2-2201721 | revised | (none) |
| S3-220639 |  | LS reply on RAN2 agreements for paging with service indication | S2-2201838 | revised | (none) |
| S3-220640 |  | Reply to LS on new reference point name for the interface between PKMF and UDM in 5G ProSe | S2-2203018 | revised | (none) |
| S3-220641 |  | LS on MINT functionality for Disaster Roaming | S5-222575 | revised | (none) |
| S3-220642 |  | Reply LS to ETSI MEC on MEC Federation and interest to collaborate | S6-220931 | revised | (none) |
| S3-220648 |  | LS on new parameters for SOR | C1-214118 | noted | (none) |
| S3-220649 |  | Reply LS on User Controlled PLMN Selector with Access Technology in Control plane solution for steering of roaming in 5GS | S1-220187 | noted | (none) |
| S3-220650 |  | LS on the impact of MSK update on MBS multicast session update procedure | C1-221747 | noted | (none) |
| S3-220651 |  | Reply LS on UE capabilities indication in UPU | C1-223177 | noted | (none) |
| S3-220652 |  | LS on AF specific UE ID retrieval | C3-221735 | replied to | S3-221161 |
| S3-220653 |  | Reply LS on AF specific UE ID retrieval | S6-220976 | noted | (none) |
| S3-220654 |  | Reply LS on AF specific UE ID retrieval | S2-2203426 | noted | (none) |
| S3-220655 |  | LS on 5G NSWO roaming aspects | S2-2203253 | replied to | S3-221220 |
| S3-220656 |  | Reply LS on 5G NSWO roaming aspects | C3-222487 | noted | (none) |
| S3-220657 |  | Reply LS on 5G NSWO roaming aspects | C4-222436 | noted | (none) |
| S3-220658 |  | LS on Clarification on MBS Security Context (MSK/MTK) Definitions | C4-222303 | replied to | S3-221155 |
| S3-220659 |  | LS on Indication of Network Assisted Positioning method | C4-222306 | replied to | S3-221254 |
| S3-220660 |  | LS on 3GPP TS 29.244 | BBF | noted | (none) |
| S3-220661 |  | Reply LS on NTN specific User Consent | R2-2201754 | noted | (none) |
| S3-220662 |  | LS on UE location during initial access in NTN | R2-2201881 | noted | (none) |
| S3-220663 |  | LS on UE location during initial access in NTN | R2-2202057 | withdrawn | (none) |
| S3-220664 |  | Reply LS on UE location during initial access in NTN | R3-222861 | noted | (none) |
| S3-220665 |  | LS on UE location in connected mode in NTN | R2-2204257 | replied to | S3-221268 |
| S3-220666 |  | Reply LS on LTE User Plane Integrity Protection | R2-2203663 | noted | (none) |
| S3-220667 |  | LS on EPS fallback enhancements | R2-2204236 | replied to | S3-221162 |
| S3-220668 |  | Reply LS on EPS fallback enhancements | S2-2203590 | noted | (none) |
| S3-220669 |  | Reply LS on User Plane Integrity Protection for eUTRA connected to EPC | R3-222610 | noted | (none) |
| S3-220670 |  | Reply LS on UE providing Location Information for NB-IoT | C1-222100 | noted | (none) |
| S3-220671 |  | Reply LS on UE providing Location Information for NB-IoT | R3-222858 | noted | (none) |
| S3-220672 |  | LS Response to LS on UE providing Location Information for NB-IoT | S2-2201333 | noted | (none) |
| S3-220673 |  | LS on V2X PC5 link for unicast communication with null security algorithm | R5-222035 | postponed | (none) |
| S3-220674 |  | Reply LS on reply to SA6 about new SID on Application Enablement for Data Integrity Verification Service in IOT | S1-220185 | noted | (none) |
| S3-220675 |  | Reply LS on secondary authentication for multicast PDU session | S2-2201311 | revised | (none) |
| S3-220676 |  | Reply LS to GSMA OPG on Further Operator Platform Group questions following SDO Workshop | SP-220346 | noted | (none) |
| S3-220677 |  | Reply LS on Further GSMA OPAG questions following SDO Workshop | S2-2201721 | noted | (none) |
| S3-220678 |  | LS reply on RAN2 agreements for paging with service indication | S2-2201838 | noted | (none) |
| S3-220679 |  | Reply to LS on new reference point name for the interface between PKMF and UDM in 5G ProSe | S2-2203018 | noted | (none) |
| S3-220680 |  | LS on MINT functionality for Disaster Roaming | S5-222575 | noted | (none) |
| S3-220681 |  | Reply LS to ETSI MEC on MEC Federation and interest to collaborate | S6-220931 | noted | (none) |
| S3-220682 |  | LS on Inter-PLMN Handover of VoLTE calls and idle mode mobility of IMS sessions | S3i220244 | noted | (none) |
| S3-221145 |  | LS on Security architecture for 5G multicast/broadcast services | S4-220531 | replied to | S3-221158 |
| S3-221146 |  | Response LS on Clarifications on Nmbstf\_MBCDistributionSession service | S4-220575 | noted | (none) |
| S3-221147 |  | LS on 3GPP TS 29.244 | BBF | noted | (none) |
| S3-221148 |  | Reply LS on secondary authentication for multicast PDU session | S2-2201311 | noted | (none) |
| S3-221151 |  | LS on authentication type and related information of MSGin5G service | C1-223957 | replied to | S3-221152 |
| S3-221153 |  | LS on Clarification on MBS Security Keys | C4-223302 | replied to | S3-221262 |

### C2: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| S3-220647 | LS on ETSI Plugtest #6 Observation 10.1.11 | TSG CT WG1 | - |  |
| S3-221152 | Reply to: LS on authentication type and related information of MSGin5G service | CT1 | - | S3-221151 |
| S3-221155 | Reply LS on Clarification on MBS Security Context (MSK/MTK) Definitions | CT4 | CT1 | S3-220658 |
| S3-221158 | Reply LS on security architecture for 5G multicast-broadcast services | SA4 | SA2 | S3-221145 |
| S3-221161 | Reply LS on AF specific UE ID retrieval | CT3 | SA2, SA6 | S3-220652 |
| S3-221162 | Reply LS on EPS fallback enhancements | RAN2 | SA2, CT1 | - |
| S3-221163 | LS on handling of the modification policy in the IPX and receiving SEPP | CT4 | - |  |
| S3-221164 | LS to SA2 on NSAC | SA2 | - |  |
| S3-221165 | LS on TNAP mobility security aspect | SA2 | - |  |
| S3-221214 | LS on PLMN ID used in Roaming Scenarios | CT4, SA2 | - |  |
| S3-221220 | LS reply on 5G NSWO roaming aspects | SA2 | CT3, CT4, TSG CT | S3-220655 |
| S3-221254 | Reply LS on the Indication of Network Assisted Positioning method | CT4, SA2 | SA1 | S3-220659 |
| S3-221262 | Reply LS on Clarification on MBS Security Keys | CT4 | CT1, CT3, SA2 |  |
| S3-221268 | LS reply on Reply LS on NTN specific User Consent and UE location in connected mode in NTN | RAN2 | SA2, RAN3, CT1, CT4 | S3-220665 |

## Annex D: List of agreed/approved new and revised Work Items

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | Source | new/revised |
| S3-220956 | New SID on security aspects of enhanced support of Non-Public Networks phase 2 | Ericsson, CableLabs, InterDigital, Intel, Xiaomi, Nokia, Nokia Shanghai Bell, ZTE, China Mobile, LGE, Philips, Lenovo, Samsung | SID new |
| S3-221071 | New Study to enable URSP rules to securely identify Applications (FS\_USIA) | Lenovo, AT&T, Broadcom, CableLabs, CATT, China Mobile, China Telecom, Deutsche Telekom, Intel, LG Electronics, Motorola Solutions MSI, NEC, PCCW Global B.V., Verizon, Xiaomi | SID new |
| S3-221172 | Study on Zero Trust Security | Lenovo, Motorola Mobility, Interdigital, Verizon, Cablelabs, Mavenir, Johns Hopkins University APL, LG Electronics, Telefonica, NEC, Telia Company, AT&T, Samsung, PCCW Global B.V, China Mobile, Motorola Solutions, Inc, Nokia, Nokia Shanghai Bell, Intel,.. | SID new |
| S3-221178 | Rel-18 study for network slicing security | Huawei, HiSilicon, Lenovo, CATT, CAICT, China Mobile, China Unicom, InterDigital, NEC, Nokia, Deutsche Telekom, ZTE | SID new |
| S3-221179 | New SID: Study on SNAAPP securitY | NTT DOCOMO INC. | SID new |
| S3-221188 | New SID on Security and Privacy of AI/ML-based services and applications in 5G | OPPO, Apple, vivo, Inter Digital, China Mobile, Samsung, Nokia, Nokia Shanghai Bell | SID new |
| S3-221200 | New Study on on Security for Phase 2 for UAS, UAV and UAM | Qualcomm Incorporated | SID new |
| S3-221209 | New SID on Security Aspects of Ranging Based Services and Sidelink Positioning | Xiaomi, Apple, China Mobile, CATT, Huawei, Hisilicon, InterDigital, LGE, Philips, vivo, ZTE, Lenovo, Ericsson, Nokia, Nokia Shanghai Bell, China Telecom | SID new |
| S3-221217 | New SID on Security aspects for 5WWC Phase 2 | Nokia Solutions & Networks (I) | SID new |
| S3-221229 | New SID on NGRTC | Huawei,HiSilicon | SID new |
| S3-221246 | New SID on security enhancements for 5G multicast-broadcast services Phase 2 | Huawei, HiSilicon | SID new |
| S3-221251 | New SID on Enhancement of User Consent for 3GPP Services | Huawei, HiSilicon | SID new |
| S3-221265 | New SID on Personal IoT Networks Security Aspects | vivo, Apple, ZTE, Xiaomi, CATT, OPPO, China Unicom, China Telecom, CableLabs, InterDigital, LGE, Nokia, Nokia Shanghai Bell, Lenovo, Motorola mobility, Philips, China Mobile, Qualcomm | SID new |
| S3-221276 | New SID on the security aspects of Artificial Intelligence (AI)/Machine Learning (ML) for the NR Air Interface and NG-RAN | Ericsson | SID new |
| S3-221185 | 5GFBS - new WID on 5GFBS | Apple, US National Security Agency, AT&T, Deutsche Telekom, Ericsson, Huawei, Hisilicon, CableLabs, Intel, InterDigital, Johns Hopkins University APL, NIST, Xiaomi, OPPO, ZTE | WID new |

## Annex E: List of draft Technical Specifications and Reports

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Spec | vers | Doc title |
| S3-220771 | 33.738 | 0.0.0 | draft\_TR\_33.738- skeleton for eNA security ph3 |
| S3-220808 | 33.537 | 0.0.0 | Skeleton for TS33.537(SCAS for AAnF) |
| S3-220810 | 33.737 | 0.0.0 | Skeleton for TR 33.737(AKMA ph2) |
| S3-221021 | 33.740 | 0.0.0 | Draft skeleton of TR 33.740 |
| S3-221095 | 33.739 | 0.0.0 | The Skeleton of the FS\_EDGE\_Ph2 |
| S3-221166 | 33.526 | 0.2.0 | new draft TS 33.526 MnF SCAS |
| S3-221168 | 33.537 | 0.1.0 | draft TS 33.537 |
| S3-221169 | 33.737 | 0.1.0 | draft TR 33.737 |
| S3-221187 | 33.874 | 0.7.0 | draft TR 33.874 |
| S3-221196 | 33.742 | 0.0.0 | Proposed skeleton for TR 33.742 |
| S3-221201 | 33.742 | 0.1.0 | TS 33.742 v1.0.0 |
| S3-221235 | 33.739 | 0.1.0 | Draft TR 33.739 0.1.0 |
| S3-221264 | 33.741 | 0.1.0 | TR 33.741 |
| S3-221266 | 33.809 | 0.19.0 | TR 33.809 |
| S3-221270 | 33.876 | 0.2.0 | Draft TR 33.876 Study on Standardising Automated Certificate Management in SBA |
| S3-221279 | 33.738 | 0.1.0 | Draft TR 33.738 |
| S3-221280 | 33.875 | 1.2.0 | TR 33.875-120 |
| S3-221286 | 33.503 | 0.4.0 | Draft TS 33.503 v0.4.0 Security Aspects of Proximity based Services (ProSe) in the 5G System (5GS) |
| S3-221290 | 33.870 | 0.2.0 | TR 33.870-020 |

## Annex H: List of participants

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Mr. | Achter | Johannes | Deutsche Telekom AG | Telekom Deutschland GmbH |
| Mr. | Aghili | Behrouz | Apple GmbH | Apple Italia S.R.L. |
| Mr. | Ahmad | Saad | InterDigital, Inc. | InterDigital Belgium. LLC |
| Dr. | Aldén | Magnus | Telia Company AB | Telia Company AB |
| Mr. | Alsterlid | Stefan | Sectra Communications AB | Sectra Communications AB |
| Mr. | Ashton | Tim | National Technical Assistance | National Technical Assistance |
| Dr. | Baboescu | Florin | BROADCOM CORPORATION | BROADCOM CORPORATION |
| Dr. | BAGAYOKO | Abdoulaye | Ericsson France S.A.S | Ericsson Inc. |
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| Dr. | Ben Henda | Noamen | Huawei Technologies Sweden AB | Huawei Technologies Sweden AB |
| Mr. | Bhatt | Rakshesh P. | Nokia Corporation | Nokia Corporation |
| Mr. | Bhatt | Rakshesh P. | Nokia Japan | Nokia Japan |
| Mr. | Bjerrum | Bo Holm | Nokia Corporation | Nokia Corporation |
| Mr. | Brusilovsky | Alec | InterDigital, Inc. | InterDigital, Inc. |
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| Dr. | Chan | Yee Sin | Meta Ireland | Facebook India |
| Mr. | Chen | Jingran | OPPO Beijing | OnePlus |
| Ms. | Chen | Yuqin | Apple R&D | Apple Poland Sp. z.o.o. |
| Dr. | Cheng | Peng | Apple | Apple (UK) Limited |
| Dr. | Chiba | Tsunehiko | VIAVI Solutions | VIAVI Solutions |
| Dr. | Choe | HyunJung | LG Electronics UK | LG Electronics France |
| Mr. | Choi | Hongjin | Samsung R&D Institute UK | Harman GmbH |
| Miss | chong | vivian | VIVO TECH GmbH | VIVO TECH GmbH |
| Mr. | Cichonski | Jeffrey | NIST | NIST |
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| Mr. | Eckel | Charles | Cisco Systems Belgium | Cisco Systems Belgium |
| Mr. | Ennesser | Francois | Huawei Technologies France | Huawei Technologies France |
| Mr. | Erickson | Mark | Oracle Corporation | Oracle Corporation |
| Dr. | Escott | Adrian | Qualcomm CDMA Technologies | Qualcomm Austria RFFE GmbH |
| Mr. | Espi | Sergi | G+D MS | G+D MS |
| Mr. | Evans | Tim P. | VODAFONE Group Plc | Vodafone GmbH |
| Mr. | Everett | Jared | Johns Hopkins University APL | Johns Hopkins University APL |
| Dr. | Falk | Rainer | Siemens AG | Siemens AG |
| Mrs. | Fan | Ning | China Telecom Corporation Ltd. | Chinatelecom Cloud |
| Mr. | Ferdi | Samir | InterDigital, Inc. | InterDigital, Europe, Ltd. |
| Miss | Flygare | Helena | Ericsson LM | Ericsson India Private Limited |
| Mr. | Gabay | David | MITRE Corporation | MITRE Corporation |
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| Mr. | Gao | Weihan | China Telecom Corporation Ltd. | China Telecomunication Corp. |
| Mr. | Gholmieh | Aziz | Qualcomm Technologies Int | Qualcomm France |
| Mr. | Goldberg | Martin | U.S. National Security Agency | U.S. National Security Agency |
| Mr. | Guo | Boren | OPPO Beijing | Hangzhou Douku |
| Ms. | Guo | Ivy | Apple Computer Trading Co. Ltd | Apple Computer Trading Co. Ltd |
| Mr. | Guo | Longhua | HUAWEI TECH. GmbH | HUAWEI Technologies Japan K.K. |
| Ms. | Guo | Yali | OPPO Beijing | Shenzhen Heytap |
| Mr. | Guo | Yi | Intel Corporation (UK) Ltd | Intel Belgium SA/NV |
| Mr. | Gupta | Varini | Samsung R&D Institute India | BEIJING SAMSUNG TELECOM R&D |
| Mr. | Gupta | Vivek | Apple Gesellschaft m.b.H. | Apple Gesellschaft m.b.H. |
| Mr. | Gustafsson | Sune | Ericsson LM | Ericsson Telecomunicazioni SpA |
| Mr. | Hanhisalo | Markus | Ericsson LM | Ericsson LM |
| Mr. | Hasselquist | David | Sectra Communications AB | Sectra Communications AB |
| Ms. | Heng | Xin | China Telecom Corporation Ltd. | Esurfing IoT |
| Mr. | Hoffpauir | Dusty | Charter Communications, Inc | Charter Communications, Inc |
| Ms. | Hu | Haijing | Apple Switzerland AG | Apple Switzerland AG |
| Mr. | Hu | Li | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Device Co., Ltd |
| Miss | Huang | Xiaoting | China Mobile Com. Corporation | China Mobile E-Commerce Co. |
| Miss | Jerichow | Anja | Nokia Germany | Nokia UK |
| Dr. | Jost | Christine | Ericsson LM | Ericsson Hungary Ltd |
| Dr. | Jung | Kyunghun | Meta Ireland | Facebook India |
| Dr. | Karakoc | Ferhat | Ericsson LM | Ericsson GmbH, Eurolab |
| Miss | Kedalagudde | Meghashree D | Intel Deutschland GmbH | Intel Corporation SAS |
| Dr. | Keesmaat | Iko | TNO | TNO |
| Mr. | khare | saurabh | Nokia Germany | Nokia Solutions & Networks (I) |
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| Mr. | Lazara | Dominic | Motorola Solutions UK Ltd. | Motorola Solutions Germany |
| Mr. | Leadbeater | Alex | BT plc | BT plc |
| Dr. | Lee | Duckey | Samsung R&D Institute UK | Samsung Electronics Benelux BV |
| Dr. | Lee | Soo Bum | Qualcomm Incorporated | Qualcomm Korea |
| Mr. | Lee | Xiaoyang | CISA ECD | CISA ECD |
| Mr. | Lehtovirta | Vesa | Ericsson LM | L.M. Ericsson Limited |
| Dr. | Lei | Ao | HUAWEI TECHNOLOGIES Co. Ltd. | HuaWei Technologies Co., Ltd |
| Dr. | Lei | Zander (Zhongding) | HuaWei Technologies Co., Ltd | Huawei Technologies R&D UK |
| Ms. | Li | Chenyi | China Unicom | Unicompay |
| Mr. | Li | Fei | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies (Korea) |
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| Miss | Li | JinHui | China Telecomunication Corp. | China Telecomunication Corp. |
| Dr. | Li | Lun | HuaWei Technologies Co., Ltd | Huawei Telecommunication India |
| Mr. | Li | Michael | Ericsson LM | Ericsson France S.A.S |
| Miss | Li | Yan | ZTE Corporation | ZTE Corporation |
| Dr. | Liang | Haoran | Xiaomi Communications | Xiaomi Communications |
| Ms. | Liang | Huarui | Apple GmbH | Apple R&D |
| Dr. | Liao | Ellen C. | Google Inc. | Google Inc. |
| Mr. | Libunao | Gerardo | Verizon UK Ltd | Verizon UK Ltd |
| Miss | Lin | Lin | China Unicom | Unicom Broadband Online |
| Mrs. | Lin | Yanfei | China Telecom Corporation Ltd. | E-surfing Digital |
| Mr. | Lin | Zhaoji | ZTE Corporation | ZTE Corporation |
| Mr. | Liu | Chang | China Mobile Research Inst. | China Mobile Group Device Co. |
| Dr. | Liu | Fuwen | China Mobile Com. Corporation | China Mobile M2M Company Ltd. |
| Mr. | Liu | Guorong | CTSI | CTSI |
| Mr. | Liu | Hongjun | ZTE Corporation | Nubia Technology Co.,Ltd |
| Mr. | LIU | Jianning(Carry) | Beijing Xiaomi Software Tech | Beijing Xiaomi Software Tech |
| Mr. | Liu | Yuze | ZTE Corporation | ShenZhen Zhongxing Shitong |
| Mr. | Lopez | Luis | Oracle Corporation | Oracle Corporation |
| Mr. | Loushine | Mike | AT&T | AT&T |
| Mr. | Lu | Fei | Guangdong OPPO Mobile Telecom. | Chongqing Angying |
| Ms. | Lu | Wei | Xiaomi Technology | Xiaomi Technology |
| Dr. | Lu | Yang | Vodafone GmbH | Vodafone España SA |
| Mr. | Luetzenkirchen | Thomas | Intel Deutschland GmbH | Intel Deutschland GmbH |
| Mr. | Ly | Quang | InterDigital, Inc. | Convida Wireless |
| Mr. | Lyu | Huazhang | vivo Mobile Communication Co., | vivo Mobile Communication (H) |
| Mr. | M Vamanan | Sudeep | Apple AB | Apple Benelux B.V. |
| Mr. | Ma | Ruitao | China Unicom | VSENS |
| Mr. | Ma | Wei | ZTE Corporation | Sanechips |
| Mr. | Manganahalli Jayaprakash | Sandesh | TNO | KPN N.V. |
| Mr. | Markman | Alexander | Rogers Communications Canada | Rogers Communications Canada |
| Miss | Martinez Tarradell | Marta | Intel | Intel Corporation Italia SpA |
| Dr. | MTITA | Collins | Ericsson France S.A.S | Oy LM Ericsson AB |
| Dr. | Muhanna | Ahmad | Mavenir | Mavenir |
| Dr. | Mustapha | Mona | Apple France | Apple France |
| Mr. | Nair | Suresh | Nokia Germany | Nokia Corporation |
| Mr. | Nayak | Ashok Kumar | Samsung R&D Institute India | Samsung Electronics GmbH |
| Mrs. | Nisbeth | Daphanie | U.S. National Security Agency | U.S. National Security Agency |
| Mr. | Norton | Mark | U.S. Department of Defense | U.S. Department of Defense |
| Mr. | Palanigounder | Anand | Qualcomm Technologies Int | QUALCOMM Europe Inc. - Italy |
| Dr. | Palat | Sudeep | Intel Corporation (UK) Ltd | Intel Corporation (UK) Ltd |
| Mr. | Palle | Naveen | Apple Hungary Kft. | Apple Hungary Kft. |
| Ms. | Parambath Sasi | NIvedya | Samsung R&D Institute India | Samsung R&D Institute India |
| Dr. | Park | Junhyun | Samsung R&D Institute UK | Samsung Electronics Czech |
| Dr. | Pashalidis | Andreas | BMWK | BSI (DE) |
| Mr. | Pätzold | Thomas | Deutsche Telekom AG | Deutsche Telekom AG |
| Mrs. | Pauliac | Mireille | THALES | THALES |
| Mr. | Peinado | German | Nokia Germany | Nokia Poland |
| Miss | Ping | Jing | Nokia Germany | Nokia Korea |
| Dr. | Polak | Adam | Qualcomm CDMA Technologies | QUALCOMM Europe Inc. - Spain |
| Mr. | Pudney | Chris | VODAFONE Group Plc | VODAFONE Group Plc |
| Mr. | Qi | Minpeng | China Mobile Com. Corporation | China Mobile Com. Corporation |
| Dr. | Qu | Zhicheng | ZTE Corporation | ZONSON |
| Mr. | Rajadurai | Rajavelsamy | Samsung R&D Institute UK | Samsung Electronics Co., Ltd |
| Ms. | Rajendran | Rohini | Samsung R&D Institute India | SAMSUNG R&D INSTITUTE JAPAN |
| Mr. | Rath | Paresh | U.S. Department of Defense | U.S. Department of Defense |
| Mr. | Ren | Chi | China Unicom | CITC |
| Mrs. | Rong | Wu | HUAWEI TECHNOLOGIES Co. Ltd. | HUAWEI TECH. GmbH |
| Mr. | Rossbach | Ralf | Apple GmbH | Apple GmbH |
| Ing. | Sánchez | Antonio | KEYSIGHT TECHNOLOGIES | Keysight Technologies UK Ltd |
| Mrs. | Schmitz | Yvonne | BMWK | BSI (DE) |
| Dr. | Shailendra | Samar | Intel Technology India Pvt Ltd | Intel Technology India Pvt Ltd |
| Mr. | Shan | Changhong | Intel Corporation (UK) Ltd | Intel China Ltd. |
| Miss | shang | zhengyi | Beijing Xiaomi Mobile Software | Beijing Xiaomi Mobile Software |
| Ms. | Shen | Jun | China Telecommunications | China Telecommunications |
| Ms. | Shen | Yang | Beijing Xiaomi Mobile Software | Beijing Xiaomi Mobile Softwar |
| Mr. | Sirotkin | Sasha | Apple Benelux B.V. | Apple Marketing Iberia |
| Ms. | So | Tricci | OPPO | Orope Germany GmbH |
| Mrs. | song | hua | China Mobile Com. Corporation | China Mobile (Hangzhou) Inf. |
| Mr. | Srinivasan | Suresh | Intel | Intel K.K. |
| Mrs. | Stanetsky | Nataliya | Google Inc. | Google Inc. |
| Mr. | Starsinic | Michael | InterDigital, Inc. | InterDigital France R&D, SAS |
| Dr. | Staufer | Markus | Nokia Germany | Nokia Hungary |
| Mr. | Stojanovski | Saso | Intel Deutschland GmbH | Intel Finland Oy |
| Dr. | Suh | Kyungjoo Grace | Samsung R&D Institute UK | Samsung R&D Institute UK |
| Mr. | Syrett | Mark | Hewlett-Packard Enterprise | Hewlett-Packard Enterprise |
| Mr. | Tang | CanHui | Xidian University | Xidian University |
| Mr. | Tangudu | Narendranath Durga | Samsung R&D Institute India | Samsung Guangzhou Mobile R&D |
| Dr. | Tsiatsis | Vlasios | Ericsson LM | Ericsson España S.A. |
| Mrs. | Vahidi | Helena | Ericsson LM | Ericsson Japan K.K. |
| Mr. | Vujcic | Dragan | IDEMIA | IDEMIA |
| Dr. | Wan | Tao | CableLabs | CableLabs |
| Mr. | Wang | Guanzhou | InterDigital Communications | InterDigital Finland Oy |
| Mrs. | WANG | KE | China Mobile International Ltd | China Mobile International Ltd |
| Miss | Wang | Qianran | China Telecommunications | China Telecom Corporation Ltd. |
| Mr. | Wang | Wen | vivo Mobile Communication Co., | vivo Mobile Com. (Chongqing) |
| Dr. | Wang | Zhaoning | China Unicom | CUG |
| Dr. | Wang | Zhibi | InterDigital Communications | InterDigital Communications |
| Ms. | WEI | QUN | China Unicom | BTPDI |
| Mr. | Wen | Wu | ZTE Corporation | CALTTA |
| Mr. | Whorlow | Colin | NCSC | HOME OFFICE |
| Ms. | Wifvesson | Monica | Ericsson LM | Ericsson Limited |
| Mr. | Wong | Marcus | OPPO | Chengdu OPPO Telecommunication |
| Mr. | Woodward | Tim | Motorola Solutions Danmark A/S | Motorola Solutions Danmark A/S |
| Miss | Wu | Yizhuang | HUAWEI TECHNOLOGIES Co. Ltd. | HUAWEI TECHNOLOGIES Co. Ltd. |
| Dr. | Xie | Shaowei | ZTE Corporation | ZXNE |
| Mr. | Xie | Zhenhua | vivo Mobile Communication Co., | vivo Mobile Communication (S) |
| Mr. | Xing | TianQi | China Unicom | CU Digital Technology |
| Ms. | Xing | Zhen | ZTE Corporation | ZTE Photonics |
| Miss | Xiong | Lihui | Guangdong OPPO Mobile Telecom. | Guangdong OPPO Mobile Telecom. |
| Mrs. | Xu | Dan | Ericsson LM | Nanjing Ericsson Panda Com Ltd |
| Ms. | Xu | Fangli | Apple Computer Trading Co. Ltd | Apple Portugal |
| Mr. | Xu | Yang | Guangdong OPPO Mobile Telecom. | Dongguan OPPO Precision Elec. |
| Miss | Yan | Ru | China Mobile Com. Corporation | China Mobile (Suzhou) Software |
| Miss | Yang | Haorui | OPPO Beijing | Hangzhou Mengyuxiang |
| Dr. | Yang | Tang | Apple AB | Apple AB |
| Dr. | Yao | Ge | China Unicom | China Unicom |
| Mr. | Yao | Yizhi | Intel Corporation (UK) Ltd | Intel Technology Poland SP Zoo |
| Mr. | You | Shilin | ZTE Corporation | ZTE Wistron Telecom AB |
| Mr. | Yu | Hang | vivo Mobile Com. (Chongqing) | vivo Communication Technology |
| Miss | Yuan | Liya | ZTE Corporation | Jetflow |
| Dr. | Zeng | Wei | Apple Europe Limited | Apple Europe Limited |
| Dr. | Zhang | Amy | vivo Japan KK | vivo Japan KK |
| Dr. | Zhang | Bo | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies Japan K.K. |
| Dr. | Zhang | Dawei | Apple France | Apple |
| Mr. | Zhang | Pengfei | vivo Mobile Communication Co., | vivo Mobile Communication (S) |
| Mr. | Zhang | Yizhong | vivo Mobile Communication (S) | vivo Mobile Communication Co., |
| Ms. | Zhang | Yuan | ZEKU | ZEKU |
| Dr. | Zhao | Shuai | Intel | Intel Sweden AB |
| Mr. | Zhao | Xuwen | Huawei Tech.(UK) Co.. Ltd | Huawei Tech.(UK) Co.. Ltd |
| Mr. | Zhou | Wei | CATT | CATT |
| Mr. | Zhu | Chunhui | Beijing Xiaomi Mobile Software | Beijing Xiaomi Electronics |
| Ms. | Zhuang | xiaojun | China Mobile Com. Corporation | CMDI |
| Dr. | Zugenmaier | Alf | NTT DOCOMO INC. | NTT DOCOMO INC. |

## Annex I: List of future meetings

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| --- | --- | --- | --- | --- | --- |
| Title | Start date | End date (OP) | Town | Country | Reference |
| SA3#107e-AdHoc | 27-06-2022 | 01-07-2022 | Online |  |  |
| SA3#108 | 22-08-2022 | 26-08-2022 | Online |  |  |