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

**Meeting Report  
for  
TSG SA WG3  
meeting: 103**

**Electronic meeting, Online, 17/05/2021 to 28/05/2021**

Contents:

1 Agenda and Meeting Objectives 3

2 Meeting Reports 3

3 Reports and Liaisons from other Groups 4

4 Work Areas 13

4.1 Integration of GBA into 5GC (Rel-17) 13

4.2 Security Assurance Specification for IMS (Rel-17) 15

4.3 Security Assurance Specification Enhancements for 5G (Rel-17) 16

4.4 Security Assurance Specification for Service Communication Proxy (SECOP) (Rel-17) 20

4.5 Security Assurance Specification for 5G NWDAF (Rel-17) 23

4.6 Security Assurance Specification for Non-3GPP InterWorking Function (N3IWF) (Rel- 17) 24

4.7 Security Assurance Specification for Inter PLMN UP Security (Rel-17) 24

4.8 eSCAS\_5G for Network Slice-Specific Authentication and Authorization Function (NSSAAF) (Rel-17) 26

4.9 Mission critical security enhancements phase 2 (Rel-17) 26

4.10 Enhancements to User Plane Integrity Protection Support in 5GS (Rel-17) 27

4.11 Adapting BEST for use in 5G networks (Rel-17) 27

4.12 Authentication and key management for applications based on 3GPP credential in 5G (Rel-17) 28

4.13 User Plane Integrity Protection for LTE (Rel-17) 32

4.14 Enhancements of 3GPP profiles for cryptographic algorithms and security protocols (Rel- 17) 33

4.15 Security Assurance Specification for 5G (Rel-16) 35

4.16 Security Aspects of the 5G Service Based Architecture (Rel-16) 36

4.17 Evolution of Cellular IoT security for the 5G System (Rel-16) 41

4.18 Security of the Wireless and Wireline Convergence for the 5G system architecture (Rel-16) 41

4.19 Security aspects of Enhancement of Network Slicing (Rel-16) 42

4.20 Security Aspects of 3GPP support for Advanced V2X Services (Rel-16) 45

4.21 New work item proposals 46

4.22 Other work areas (no release restrictions) 48

5 Study Areas 58

5.1 Study on 5G security enhancement against false base stations 58

5.2 Study on SECAM and SCAS for 3GPP virtualized network products 61

5.3 Study on User Plane Integrity Protection 63

5.4 Study on Security Impacts of Virtualisation 67

5.5 Study on authentication enhancements in 5GS 68

5.6 Study on storage and transport of 5GC security parameters for ARPF authentication 75

5.7 Study on security aspects of Unmanned Aerial Systems 76

5.8 Study on Security Aspects of Enhancement of Support for Edge Computing in 5GC 80

5.9 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS 93

5.10 Study on security for enhanced support of Industrial IoT 107

5.11 Study on Security Aspects of Enhancements for 5G Multicast-Broadcast Services 108

5.12 Study on enhanced security support for Non-Public Networks 113

5.13 Study on security aspects of the Disaggregated gNB Architecture 122

5.14 Study on User Consent for 3GPP services 122

5.15 Study on security aspects of the 5GMSG Service 124

5.16 Study on security aspects of enablers for Network Automation (eNA) for the 5G system (5GS) Phase 2 126

5.17 Study on the security of AMF re-allocation 132

5.18 Study on Security for NR Integrated Access and Backhaul 137

5.19 Study on the security of the system enablers for devices having multiple Universal Subscriber Identity Modules 138

5.20 Study on enhanced Security Aspects of the 5G Service Based Architecture 141

5.21 Study on enhanced security for network slicing Phase 2 145

5.22 Study on non-seamless WLAN Offload in 5GS using 3GPP credentials 148

5.23 New study item proposals 150

5.24 Other study areas (no release restrictions) 150

6 CVD and research 150

7 Any Other Business 153

Annex A: Contribution documents and status 154

A1: List of TDocs 154

A2: Tdoc decision timing 179

Annex B: List of change requests 191

Annex C: Lists of liaisons 198

C1: Incoming liaison statements 198

C2: Outgoing liaison statements 200

Annex D: List of agreed/approved new and revised Work Items 201

Annex E: List of draft Technical Specifications and Reports 202

Annex F: List of participants 203

Annex G: List of future meetings 209

## 1 Agenda and Meeting Objectives

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

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

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

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

The attention of the delegates to the meeting was drawn to the fact that 3GPP activities were subject to all applicable antitrust and competition laws and that compliance with said laws was therefore required by any participant of the meeting, including the Chairman and Vice-Chairmen and were invited to seek any clarification needed with their legal counsel. The leadership would conduct the present meeting with impartiality and in the interests of 3GPP. Delegates were reminded that timely submission of work items in advance of TSG/WG meetings was important to allow for full and fair consideration of such matters.

**NOTE: A summary on the discussions for every document can be seen in tdoc S3-212396. This is captured by the SA3 leadership and agenda item rapporteurs.**

**S3-211350 Agenda**

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

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

**S3-211352 Process for SA3#103e meeting**

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

**Decision:** The document was **revised to S3-211989**.

**S3-211354 Process and agenda presentation for SA3#103-e**

*Type: other For: Information  
 Source: SA3 VC*

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

**S3-211989 Process for SA3#103e meeting**

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

(Replaces S3-211352)

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

## 2 Meeting Reports

**S3-211351 Report from SA3#102Bis-e meeting**

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

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

**S3-211353 Report from last SA**

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

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

**S3-211361 Report from SA3#102e**

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

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

**S3-212396 Chair notes of the e-meeting**

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

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

## 3 Reports and Liaisons from other Groups

**S3-211881 Clarification to SoR transparent container**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1120 Cat: F (Rel-17)  
  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212339**.

**S3-211366 5G capabilities exposure for factories of the future - revised**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: 5G Alliance for Connected Industries and Automation (5G-ACIA)*

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

**S3-211367 Misalignment on usage of OAuth within 3GPP 29.510**

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

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

**S3-211368 AMF transparency for SOR**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-207736*

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

**S3-211369 Reply LS on AMF transparency for SOR**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4- 211701*

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

**S3-211370 LS on extraterritorial use of MCC for satellite access**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-210439*

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

**S3-211371 Reply LS on extraterritorial use of MCC for satellite access**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S1-210358*

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

**S3-211372 LS on broadcasting from other PLMN in case of Disaster Condition**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-211189*

**Decision:** The document was **replied to in S3-212258**.

**S3-211375 Reply LS on storage of KAUSF**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-211518*

**Discussion:**

The following change captured the CRs S3-212103 (7th change) & S3-212104 (7th change) to TS 33.501 needs to be revisited (for updating it or removing it), based on the feedback from CT1 (c.f., S3-211375 LS from SA3 to CT1).

If UE receives more than one authentication requests via different access types simultaneously (e.g. initial registration after UE powers on, UE initiate the service request procedures simultaneously via both NAS connections), the UE should process the authentication challenges in sequence. The UE should respond to the second authentication challenge after completion of the first authentication procedure. In case if the first authentication procedure is 5G-AKA, then after sending the Authentication Response message to the network the UE should respond to the second authentication challenge and in case if the first authentication procedure is EAP-AKA', then after receiving EAP Success/Failure from the network the UE should respond to the second authentication challenge.

**Decision:** The document was **replied to in S3-212291**.

**S3-211376 LS on Secondary AUTH for 5GS interworking with EPS**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C3-210377*

**Decision:** The document was **replied to in S3-212366**.

**S3-211377 LS on Changes to SoR Delivery Mechanism**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-205696*

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

**S3-211378 LS on the Security consideration to support L2TP with CUPS**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-210171*

**Decision:** The document was **replied to in S3-212365**.

**S3-211379 LS on the support of L2TP with CUPS**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-211624*

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

**S3-211380 LS on Header Enrichment for HTTPS in PFCP**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-211662*

**Decision:** The document was **replied to in S3-212344**.

**S3-211381 Reply LS on port allocation for the W1 interface**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-211700*

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

**S3-211384 Attack preventing NAS procedures to succeed**

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

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

**S3-211387 LS on UE location aspects in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2102055*

**Decision:** The document was **replied to in S3-212306**.

**S3-211388 Reply LS on broadcasting gNB ID length in system information block**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2102449*

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

**S3-211389 Remove the user message size limitation for DTLS over SCTP**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-211274*

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

**S3-211397 Reply LS on Secondary AUTH for 5GS interworking with EPS**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2101305*

**Decision:** The document was **replied to in S3-212366**.

**S3-211399 LS on PAP/CHAP and other point-to-point protocols usage in 5GS**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2101309*

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

**S3-211407 256-bit algorithms based on SNOW 3G or SNOW V**

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

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

**S3-211408 Choice of cryptographic algorithm in 256-bit Milenage**

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

**Decision:** The document was **replied to in S3-212329**.

**S3-211410 LS on progress of ongoing work item ITU-T TR-USSD**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: ITU-T SG11*

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

**S3-211411 Reply LS on UE location aspects in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S3i210282*

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

**S3-211416 Reply LS on the support of L2TP with CUPS**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2103232*

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

**S3-211419 Reply to LS on UE location aspects in NTN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2103550*

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

**S3-211420 Reply LS to SA2 on UE Data Collection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S4-210644*

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

**S3-211421 LS on Media-Related Services and Requirements**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S4-210680*

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

**S3-211426 LS to SA3 on Small data transmissions**

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

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

**S3-211430 Reply LS on the support of L2TP with CUPS**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C3-212569*

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

**S3-211438 Reply LS on choice of cryptographic algorithm in 256-bit Milenage**

*Type: LS out For: Approval  
 to ETSI SAGE  
 Source: THALES, Idemia*

**Abstract:**

Proposal for Reply LS on choice of cryptographic algorithm in 256-bit Milenage

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

**S3-211440 LS on integrity protection between the UE and the HPLMN of additional fields in SOR transparent container carrying SOR acknowledgement**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-212523*

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

**S3-211456 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 2021.

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

**S3-211497 DRAFT Response LS on 256-bit algorithms based on SNOW 3G or SNOW V**

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

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

**S3-212397 Response LS on 256-bit algorithms based on SNOW 3G or SNOW V**

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

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

**S3-211498 Alternative 1 DRAFT Response LS on 256-bit Milenage**

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

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

**S3-211499 Alternative 2 DRAFT Response LS on 256-bit Milenage**

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

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

**S3-211500 Alternative 3 DRAFT Response LS on 256-bit Milenage**

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

**Decision:** The document was **revised to S3-212329**.

**S3-211523 Reply LS to LS on broadcasting from other PLMN in case of Disaster Condition**

*Type: LS out For: Approval  
 to CT1, cc RAN2  
 Source: LG Electronics Inc.*

**Decision:** The document was **revised to S3-212258**.

**S3-211530 Discussion document on replies to ETSI SAGE**

*Type: discussion For: Information  
 Source: VODAFONE Group Plc*

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

**S3-211537 LS on PAP/CHAP and other point-to-point protocols usage in 5GS**

*Type: LS out For: (not specified)  
 to SA2, CT1, CT3, cc CT4  
 Source: China Telecommunications*

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

**S3-211539 Discussion on security of Small data transmissions**

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

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

**S3-211540 Reply LS on Header Enrichment for HTTPS in PFCP**

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

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

**S3-211541 Reply LS on Small data transmissions**

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

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

**S3-211545 Reply LS on Small data transmission**

*Type: LS out For: Approval  
 to RAN2  
 Source: Intel K.K.*

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

**S3-211549 Discussion on Security Issues with SDT**

*Type: discussion For: Agreement  
 Source: Intel K.K.*

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

**S3-211639 Reply LS on UE location aspects in NTN**

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

**Decision:** The document was **revised to S3-212306**.

**S3-211660 Reply LS on Security of Small Data Transmissions**

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

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

**S3-211716 MINT-Discussion paper on MINT**

*Type: discussion For: Endorsement  
 Source: Apple*

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

**S3-211717 MINT-draft Reply LS to CT1 on MINT.**

*Type: LS out For: Approval  
 to CT1  
 Source: Apple*

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

**S3-211745 Discussion on Security consideration to support L2TP with CUPS**

*Type: discussion For: Discussion  
 Source: Ericsson*

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

**S3-211746 [DRAFT] Reply-LS on the Security consideration to support L2TP with CUPS**

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

**Decision:** The document was **revised to S3-212365**.

**S3-211747 [DRAFT] Reply-LS on Secondary AUTH for 5GS interworking with EPS**

*Type: LS out For: Approval  
 to CT3, SA2, cc CT1  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212366**.

**S3-211750 Discussion on integrity protection between the UE and the HPLMN of additional fields in SOR transparent container carrying SOR acknowledgement**

*Type: discussion For: Discussion  
 Source: Ericsson*

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

**S3-211751 [Draft] Reply-LS on integrity protection between the UE and the HPLMN of additional fields in SOR transparent container carrying SOR acknowledgement**

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

**Decision:** The document was **revised to S3-212272**.

**S3-211884 Draft Reply LS on Security consideration to support L2TP with CUPS**

*Type: LS out For: Approval  
 to CT4, cc SA2, CT3  
 Source: Huawei, Hisilicon*

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

**S3-211899 Draft LS on TAU reject issue during MME handover**

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

**Decision:** The document was **revised to S3-212343**.

**S3-211900 Draft Reply LS on Header Enrichment for HTTPS in PFCP**

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

**Decision:** The document was **revised to S3-212344**.

**S3-211992 Discussion on 256-bit algorithms based on SNOW 3G or SNOW V**

*Type: discussion For: Discussion  
 Source: Ericsson, AT&T, BT plc, Deutsche Telekom AG*

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

**S3-212025 Reply LS on 256-bit algorithms based on SNOW 3G or SNOW V**

*Type: LS out For: Approval  
 to ETSI SAGE  
 Source: Ericsson, AT&T, BT plc, Deutsche Telekom AG*

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

**S3-212257 LS reply on Small data transmissions**

*Type: LS out For: (not specified)  
 to RAN2  
 Source: InterDigital, Inc.*

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

**S3-212258 Reply LS to LS on broadcasting from other PLMN in case of Disaster Condition**

*Type: LS out For: Approval  
 to CT1, cc RAN2  
 Source: LG Electronics Inc.*

(Replaces S3-211523)

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

**S3-212272 Reply-LS on integrity protection between the UE and the HPLMN of additional fields in SOR transparent container carrying SOR acknowledgement**

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

(Replaces S3-211751)

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

**S3-212291 Reply LS on Storage of KAUSF**

*Type: LS out For: Approval  
 to CT1, cc CT4  
 Source: Samsung*

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

**S3-212305 Reply LS on User location identification from Carrier Aggregation secondary cell activation messages**

*Type: LS out For: Approval  
 to GSMA FSAG, cc RAN2  
 Source: Huawei, Hisilicon*

(Replaces S3-211638)

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

**S3-212306 Reply LS on UE location aspects in NTN**

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

(Replaces S3-211639)

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

**S3-212329 Response LS on 256-bit Milenage**

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

(Replaces S3-211500)

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

**S3-212343 LS on TAU reject issue during MME handover**

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

(Replaces S3-211899)

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

**S3-212344 Reply LS on Header Enrichment for HTTPS in PFCP**

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

(Replaces S3-211900)

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

**S3-212365 Reply-LS on the Security consideration to support L2TP with CUPS**

*Type: LS out For: Approval  
 to CT4, cc SA2, CT3  
 Source: Ericsson*

(Replaces S3-211746)

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

**S3-212366 Reply-LS on Secondary AUTH for 5GS interworking with EPS**

*Type: LS out For: Approval  
 to CT3, SA2, cc CT1  
 Source: Ericsson*

(Replaces S3-211747)

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

## 4 Work Areas

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

**S3-211356 Living document for TS 33.220: UDM services for GBA**

*Type: draftCR For: Approval  
 33.220 v17.0.0  
 Source: THALES*

**Abstract:**

Living document for TS 33.220: UDM services for GBA

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

**S3-211357 Living document for TS 33.223: UDM services for GBA**

*Type: draftCR For: Approval  
 33.223 v16.0.0  
 Source: THALES*

**Abstract:**

Living document for TS 33.223: UDM services for GBA

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

**S3-211875 Discussion paper on GBA authentication vector service**

*Type: discussion For: Approval  
 33.220 v..  
 Source: Huawei, Hisilicon*

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

**S3-211876 UDM support of GBA service**

*Type: draftCR For: Approval  
 33.220 v17.0.0  
 Source: Huawei, Hisilicon*

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

**S3-211925 Living document for GBA\_5G: draftCR to TS 33.220: SBA support for Zh and Zn interfaces**

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

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

**S3-211926 Living document for GBA\_5G: draftCR to TS 33.223: SBA support for Zpn**

*Type: draftCR For: Approval  
 33.223 v16.0.0  
 Source: Ericsson*

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

**S3-211927 Discussion on GBA support in UDM**

*Type: discussion For: Endorsement  
 Source: Ericsson*

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

**S3-211928 pCR to living document for TS 33.220: Support for GBA in UDM**

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

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

**S3-211929 pCR to living document for TS 33.223: Support for GBA in UDM**

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

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

**S3-211930 DRAFT LS on SBA for GBA**

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

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

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

**S3-211534 Adding test case on the confidentiality configuration in P-CSCF**

*Type: pCR For: Approval  
 33.226 v0.4.0  
 Source: China Telecommunications*

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

**S3-211536 Adding a new threat related to SPI allocation in the P-CSCF**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: China Telecommunications*

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

**S3-211538 Adding a new threat related to SPI allocation in the P-CSCF**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: China Telecommunications*

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

**S3-211902 IMS SCAS: living doc for the threats**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: Huawei, Hisilicon*

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

**S3-211903 IMS SCAS: Adding the assets and threats of the new NFs and update existing threats**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: Huawei, Hisilicon*

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

**S3-211904 IMS SCAS: living doc for the threats**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: Huawei, Hisilicon*

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

**S3-211905 Update the test case on bidding down and add reqirements on new NFs**

*Type: pCR For: Approval  
 33.226 v0.4.0  
 Source: Huawei, Hisilicon*

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

**S3-211906 Editorial change on TS 33.516**

*Type: pCR For: Approval  
 33.226 v0.4.0  
 Source: Huawei, Hisilicon*

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

**S3-211907 Presentation of Specification to TSG:**

**TS 33.226, Version 0.5.0**

*Type: pCR For: Approval  
 33.226 v0.4.0  
 Source: Huawei, Hisilicon*

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

**S3-212262 IMS SCAS: Adding the assets and threats**

*Type: CR For: Approval  
 33.926 v17.0.0 CR-0044 Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-212263 Presentation of Specification to TSG: TS 33.226 for approval**

*Type: TS or TR cover For: Approval  
 33.226 v0.4.0  
 Source: Huawei, HiSilicon*

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

**S3-212345 Draft TS 33.226**

*Type: draft TS For: Approval  
 33.226 v0.5.0  
 Source: Huawei, Hisilicon*

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

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

**S3-211409 LS re Penetration Testing of SCAS**

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

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

**S3-211542 Add a new test case in clause 4.2.2.1.18**

*Type: draftCR For: Approval  
 33.511 v16.6.0  
 Source: ZTE Corporation*

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

**S3-211673 liviing CR to 33.511**

*Type: draftCR For: Approval  
 33.511 v16.6.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212375**.

**S3-211674 liviing CR to 33.512**

*Type: draftCR For: Approval  
 33.512 v16.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212376**.

**S3-211675 liviing CR to 33.514**

*Type: draftCR For: Approval  
 33.514 v16.4.0  
 Source: Huawei, HiSilicon,Nokia,Nokia Shanghai Bell*

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

**S3-211676 liviing CR to 33.517**

*Type: draftCR For: Approval  
 33.517 v16.2.0  
 Source: Huawei, HiSilicon,Nokia, Nokia Shanghai Bell*

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

**S3-211677 liviing CR to 33.117**

*Type: draftCR For: Approval  
 33.117 v16.6.0  
 Source: Huawei, HiSilicon,Nokia, Nokia Shanghai Bell*

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

**S3-211678 liviing CR to 33.926**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: Huawei, HiSilicon,Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212377**.

**S3-211679 Add textcase of NAS based redirection**

*Type: draftCR For: Approval  
 33.511 v16.6.0  
 Source: Huawei, HiSilicon*

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

**S3-211680 Add testcase to UP security activation in Inactive scenario**

*Type: draftCR For: Approval  
 33.511 v16.6.0  
 Source: Huawei, HiSilicon*

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

**S3-211792 Discussion on adding SCAS for the various split gNB cases**

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

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

**S3-211793 Adding SCAS for the various split gNB cases**

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

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

**S3-211857 Threats related to session establishment procedure**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: Huawei, Hisilicon*

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

**S3-211858 New test case on validation of S-NSSAIs in PDU session establishment**

*Type: draftCR For: Approval  
 33.512 v16.5.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212332**.

**S3-211870 New test case on de-registering UE after NSSAA revocation**

*Type: draftCR For: Approval  
 33.512 v16.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211871 New security threats on unauthorized slice access**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: Huawei, Hisilicon*

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

**S3-212332 New test case on validation of S-NSSAIs in PDU session establishment**

*Type: draftCR For: Approval  
 33.512 v16.5.0  
 Source: Huawei, Hisilicon*

(Replaces S3-211858)

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

**S3-212375 living CR to 33.511**

*Type: draftCR For: Approval  
 33.511 v16.6.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211673)

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

**S3-212376 living CR to 33.512**

*Type: draftCR For: Approval  
 33.512 v16.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211674)

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

**S3-212377 living CR to 33.926**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211678)

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

**S3-212379 CR to include R-16 feature of gNB to 33.511**

*Type: CR For: Approval  
 33.511 v16.6.0 CR-0024 Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-212380 CR to include R-16 feature of AMF to 33.512**

*Type: CR For: Approval  
 33.512 v16.5.0 CR-0010 Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-212381 CR to include R-16 feature of UDM to 33.514**

*Type: CR For: Approval  
 33.514 v16.4.0 CR-0005 Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-212382 CR to include R-16 feature of SEPP to 33.517**

*Type: CR For: Approval  
 33.517 v16.2.0 CR-0009 Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-212383 CR to include new test cases and fix editorial in33.117**

*Type: CR For: Approval  
 33.117 v16.6.0 CR-0072 Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-212384 CR to add threat related to R-16 features of network products to 33.926**

*Type: CR For: Approval  
 33.926 v17.0.0 CR-0045 Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

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

**S3-211936 SCP-specific adaptations - technical baseline**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211937 SCP-specific adaptations - Operating systems**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211938 SCP-specific adaptations - Web servers**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211939 SCP-specific adaptations - Network devices**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211940 SCP-specific adaptations - NFs in SBA**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211941 SCP test cases**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell, NTT Docomo*

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

**S3-211942 Assets and Threats specific to SCP**

*Type: CR For: Agreement  
 33.926 v17.0.0 CR-0042 Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211943 SCP Test on Token forwarded to the correct NFp**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211944 SCP Test on Correct token forwarded to NFp**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211945 SCP-specific adaptations - technical baseline**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211946 SCP-specific adaptations - Operating systems**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211947 SCP-specific adaptations - Web servers**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211948 SCP-specific adaptations - Network devices**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211949 SCP-specific adaptations - NFs in SBA**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211950 SCP test cases**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell, NTT Docomo*

**Decision:** The document was **revised to S3-212121**.

**S3-211951 Assets and Threats specific to SCP**

*Type: CR For: Agreement  
 33.926 v17.0.0 CR-0043 Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211952 SCP Test on Token forwarded to the correct NFp**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211953 SCP Test on Correct token forwarded to NFp**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211955 SCP Requirement and test case for protection over internal interfaces**

*Type: pCR For: (not specified)  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212121 SCP test cases**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell, NTT Docomo*

(Replaces S3-211950)

**Decision:** The document was **revised to S3-212295**.

**S3-212293 Living CR on SCP to 33.926**

*Type: draftCR For: (not specified)  
 33.926 v17.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212294 TS 33.522 SCAS SCP**

*Type: draft TS For: (not specified)  
 33.522 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212295 SCP test cases**

*Type: pCR For: Approval  
 33.522 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell, NTT Docomo*

(Replaces S3-212121)

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

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

**S3-211640 Corrections on TS 33.521**

*Type: pCR For: Approval  
 33.521 v0.3.0  
 Source: Huawei, HiSilicon, China Mobile*

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

**S3-211641 Execution Step for Finding the right NF instance serving the UE**

*Type: pCR For: Approval  
 33.521 v0.3.0  
 Source: Huawei, HiSilicon, China Mobile*

**Decision:** The document was **revised to S3-212307**.

**S3-211842 Adding asset, description and threats to TR 33.926 for NWDAF SCAS**

*Type: CR For: Approval  
 33.926 v17.0.0 CR-0041 Cat: B (Rel-17)  
  
 Source: China Mobile*

(Replaces S3-210775)

**Decision:** The document was **revised to S3-212321**.

**S3-211843 Execution Step for Data Masking on Integration Analysis**

*Type: pCR For: Approval  
 33.521 v0.3.0  
 Source: China Mobile*

**Decision:** The document was **revised to S3-212322**.

**S3-211844 Address ENs in TS 33.521**

*Type: pCR For: Approval  
 33.521 v0.3.0  
 Source: China Mobile, Huawei, HiSilicon*

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

**S3-211845 Presentation of TR33.521 to SA plenary**

*Type: TS or TR cover For: Approval  
 33.521 v0.4.0  
 Source: China Mobile*

**Decision:** The document was **revised to S3-212387**.

**S3-212307 Execution Step for Finding the right NF instance serving the UE**

*Type: draftCR For: Approval  
 33.521 v0.3.0  
 Source: Huawei, HiSilicon, China Mobile, Nokia, Nokia Shanghai Bell*

(Replaces S3-211641)

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

**S3-212321 Adding asset, description and threats to TR 33.926 for NWDAF SCAS**

*Type: CR For: Approval  
 33.926 v17.0.0 CR-0041 rev 1 Cat: B (Rel-17)  
  
 Source: China Mobile*

(Replaces S3-211842)

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

**S3-212322 Execution Step for Data Masking on Integration Analysis**

*Type: pCR For: Approval  
 33.521 v0.3.0  
 Source: China Mobile*

(Replaces S3-211843)

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

**S3-212323 TS 33.521 v0.4.0**

*Type: draft TS For: Approval  
 33.521 v0.4.0  
 Source: China Mobile Com. Corporation*

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

**S3-212387 Presentation of TS33.521 to SA plenary**

*Type: TS or TR cover For: Approval  
 33.521 v0.4.0  
 Source: China Mobile*

(Replaces S3-211845)

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

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

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

**S3-211543 Living document for SCAS\_5G\_IPUPS draftCR to TR 33.926**

*Type: other For: Approval  
 33.926 v..  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212385**.

**S3-211544 Living document for SCAS\_5G\_IPUPS draftCR to TS 33.513**

*Type: other For: Approval  
 33.513 v..  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212386**.

**S3-211868 New test case on malformatted message for IPUPS**

*Type: draftCR For: Approval  
 33.513 v16.2.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212334**.

**S3-211869 New security threats on IPUPS malformatted message**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212335**.

**S3-212334 New test case on malformatted message for IPUPS**

*Type: draftCR For: Approval  
 33.513 v16.2.0  
 Source: Huawei, Hisilicon*

(Replaces S3-211868)

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

**S3-212335 New security threats on IPUPS malformatted message**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: Huawei, Hisilicon*

(Replaces S3-211869)

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

**S3-212385 Living document for SCAS\_5G\_IPUPS draftCR to TR 33.926**

*Type: draftCR For: Approval  
 33.926 v17.0.0  
 Source: ZTE Corporation*

(Replaces S3-211543)

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

**S3-212386 Living document for SCAS\_5G\_IPUPS draftCR to TS 33.513**

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

(Replaces S3-211544)

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

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

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

**S3-211404 LS on Plugtest issues**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-210203*

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

**S3-211479 [33.180] R17 Group subscription**

*Type: CR For: Agreement  
 33.180 v17.2.0 CR-0167 Cat: F (Rel-17)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

Correction to group subscribe for implicit affiliation

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

**S3-211480 [33.180] R17 Limited Service**

*Type: CR For: Agreement  
 33.180 v17.2.0 CR-0168 Cat: B (Rel-17)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

Add limited service feature

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

**S3-211481 [33.180] R17 Preconfigured group clarification**

*Type: CR For: Agreement  
 33.180 v17.2.0 CR-0169 Cat: F (Rel-17)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

Clarify existing preconfigured group security

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

**S3-211625 Security solution for temporary group – broadcast group call procedure**

*Type: CR For: Approval  
 33.180 v17.2.0 CR-0170 Cat: B (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-212053 Security for user regroup**

*Type: CR For: Agreement  
 33.180 v17.2.0 CR-0171 Cat: B (Rel-17)  
  
 Source: CATT*

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

**S3-212091 CR on signalling Algorithm Selection**

*Type: CR For: Agreement  
 33.180 v17.2.0 CR-0172 Cat: F (Rel-17)  
  
 Source: Samsung*

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

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

**S3-211820 UP integrity protection in options 4,5 and 7**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1115 Cat: F (Rel-17)  
  
 Source: Ericsson*

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

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

**S3-211412 Living document for TS 33.163**

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

**Decision:** The document was **revised to S3-212271**.

**S3-211429 Discussion paper BEST key hierarchy based on AKMA**

*Type: discussion For: Discussion  
 33.163 v..  
 Source: Deutsche Telekom AG*

**Abstract:**

Discussion paper on potential ways for a BEST key hierarchy based on AKMA.

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

**S3-211461 pCR to Living document for TS 33.163: update for 3G, 4G, and 5G key agreement**

*Type: other For: Approval  
 33.163 v..  
 Source: KPN N.V.*

**Abstract:**

Update of living document in order to add 3G, 4G, and 5G key agreement

**Decision:** The document was **revised to S3-212270**.

**S3-211934 Work Item Exception sheet for BEST\_5G Rel 17**

*Type: WI exception request For: Agreement  
 Source: VODAFONE Group Plc*

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

**S3-212270 pCR to Living document for TS 33.163: update for 3G, 4G, and 5G key agreement**

*Type: other For: Approval  
 33.163 v..  
 Source: KPN N.V.*

(Replaces S3-211461)

**Abstract:**

Update of living document in order to add 3G, 4G, and 5G key agreement

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

**S3-212271 Living document for TS 33.163**

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

(Replaces S3-211412)

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

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

**S3-211546 Clarification on how AF select AAnF**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0068 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-211547 Clarification on how AUSF select AAnF**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0069 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-211671 Clarification on AAnF Selection**

*Type: CR For: Approval  
 33.535 v17.1.0 CR-0076 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212313**.

**S3-211908 AKMA Anchor Function selection clause**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0079 Cat: F (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212359**.

**S3-211550 Resolution of EN on other parameter in clause 6.3**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0071 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-211817 Sending UE identifier to the AKMA AF**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0078 Cat: F (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

**S3-211585 Add an abbreviation to AKMA**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0075 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212320**.

**S3-211672 Editoral change in clause 6.1**

*Type: CR For: Approval  
 33.535 v17.1.0 CR-0077 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-211785 Profiling the GBA TLS protocols for use with AKMA**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0066 rev 1 Cat: B (Rel-17)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-210477)

**Decision:** The document was **revised to S3-212353**.

**S3-211910 IETF OSCORE as AKMA Ua\* protocol**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0080 Cat: B (Rel-17)  
  
 Source: Ericsson, DT*

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

**S3-211911 Extending the Ua security protocol namespace to include AKMA Ua\* protocols**

*Type: CR For: Agreement  
 33.220 v17.0.0 CR-0210 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-211913 AKMA UE aspects**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0081 Cat: F (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212328**.

**S3-211548 Clarification on how the AUSF get RID**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0070 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-211551 UDM notifies AAnF AKMA context removal**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0072 Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212319**.

**S3-211552 Update clause 6.1 refer to Kausf stored in AUSF**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0073 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-211553 Add Routing indicator in Authentication response**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1084 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-211575 Handle the failure cause by UE**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0074 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-212074 Refresh of Kaf and Kakma**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0082 Cat: B (Rel-17)  
  
 Source: Samsung*

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

**S3-212076 Network provides authorization to AF for Kaf key refresh**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0083 Cat: B (Rel-17)  
  
 Source: Samsung*

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

**S3-211396 Reply LS on AKMA Anchor Function selection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2101304*

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

**S3-211912 Handling of AKMA keys in the UE**

*Type: discussion For: Discussion  
 33.535 v..  
 Source: Ericsson*

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

**S3-212073 Discussion on refresh of Kaf and Kakma**

*Type: discussion For: Discussion  
 33.535 v..  
 Source: Samsung*

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

**S3-212075 Discussion on authorization of Kaf refresh**

*Type: discussion For: Discussion  
 33.535 v..  
 Source: Samsung*

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

**S3-212313 Clarification on AAnF Selection**

*Type: CR For: Approval  
 33.535 v17.1.0 CR-0076 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-211671)

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

**S3-212319 UDM notifies AAnF AKMA context removal**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0072 rev 1 Cat: B (Rel-17)  
  
 Source: ZTE Corporation*

(Replaces S3-211551)

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

**S3-212320 Add an abbreviation to AKMA**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0075 rev 1 Cat: F (Rel-17)  
  
 Source: ZTE Corporation*

(Replaces S3-211585)

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

**S3-212328 AKMA UE aspects**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0081 rev 1 Cat: F (Rel-17)  
  
 Source: Ericsson*

(Replaces S3-211913)

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

**S3-212353 Profiling the GBA TLS protocols for use with AKMA**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0066 rev 2 Cat: B (Rel-17)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-211785)

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

**S3-212359 AKMA Anchor Function selection clause**

*Type: CR For: Agreement  
 33.535 v17.1.0 CR-0079 rev 1 Cat: F (Rel-17)  
  
 Source: Ericsson*

(Replaces S3-211908)

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

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

**S3-211374 Reply LS on User Plane Integrity Protection for eUTRA connected to EPC**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-211461*

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

**S3-211398 Reply LS on User Plane Integrity Protection for eUTRA connected to EPC**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2101306*

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

**S3-211472 CR to TS 33.401 - addition of UPIP to LTE**

*Type: CR For: Agreement  
 33.401 v16.3.0 CR-0698 Cat: B (Rel-16)  
  
 Source: VODAFONE Group Plc*

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

**S3-211642 User Plane Integrity Protection Policy Handling in LTE**

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

**Decision:** The document was **revised to S3-212308**.

**S3-211643 UP Integrity protection Handling for Option 3**

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

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

**S3-212308 User Plane Integrity Protection Policy Handling in LTE**

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

(Replaces S3-211642)

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

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

**S3-211855 recommendation of SHA256 in SIP digest**

*Type: CR For: Approval  
 33.203 v16.1.0 CR-0257 Cat: B (Rel-17)  
  
 Source: Huawei, Hisilicon*

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

**S3-212061 Security updates for algorithms and protocols in 33.220**

*Type: CR For: Agreement  
 33.220 v17.0.0 CR-0211 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-212062 Security updates for algorithms and protocols in 33.222**

*Type: CR For: Agreement  
 33.222 v16.1.0 CR-0054 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-212063 Security updates for algorithms and protocols in 33.223**

*Type: CR For: Agreement  
 33.223 v16.0.0 CR-0030 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-212064 Security updates for algorithms and protocols in 33.210**

*Type: CR For: Agreement  
 33.210 v16.4.0 CR-0071 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-212065 Security updates for algorithms and protocols in 33.203**

*Type: CR For: Agreement  
 33.203 v16.1.0 CR-0258 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-212066 Security updates for algorithms and protocols in 33.310**

*Type: CR For: Agreement  
 33.310 v16.7.0 CR-0119 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-212067 Security updates for algorithms and protocols in 33.501**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1136 Cat: B (Rel-17)  
  
 Source: Ericsson*

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

**S3-212261 recommendation of SHA256 in SIP digest**

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

**Decision:** The document was **revised to S3-212333**.

**S3-212264 Security updates for algorithms and protocols in 33.310**

*Type: draftCR For: Approval  
 33.310 v16.7.0  
 Source: Ericsson*

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

**S3-212269 Security updates for algorithms and protocols in 33.210**

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

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

**S3-212333 recommendation of SHA256 in SIP digest**

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

(Replaces S3-212261)

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

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

**S3-211554 Clarification on external file system mount restrictions R16**

*Type: CR For: Agreement  
 33.117 v16.6.0 CR-0069 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-211555 Clarification on external file system mount restrictions R17**

*Type: CR For: Agreement  
 33.117 v16.6.0 CR-0070 Cat: A (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-211556 Editorial correction in clause 4.2.2.1.5 R16**

*Type: CR For: Agreement  
 33.511 v16.6.0 CR-0021 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-211557 Editorial correction in clause 4.2.2.1.5 R17**

*Type: CR For: Agreement  
 33.511 v16.6.0 CR-0022 Cat: A (Rel-17)  
  
 Source: ZTE Corporation*

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

**S3-211681 Update testcases in gNB SCAS**

*Type: CR For: Approval  
 33.511 v16.6.0 CR-0023 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212314**.

**S3-211883 Resolving EN on the error handling**

*Type: CR For: Approval  
 33.517 v16.2.0 CR-0008 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-211935 Alignment of requirements with specification updates**

*Type: CR For: Agreement  
 33.117 v16.6.0 CR-0071 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212395**.

**S3-212395 Alignment of requirements with specification updates**

*Type: CR For: Agreement  
 33.117 v16.6.0 CR-0071 rev 1 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211935)

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

**S3-212314 Update testcases in gNB SCAS**

*Type: CR For: Approval  
 33.511 v16.6.0 CR-0023 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-211681)

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

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

**S3-211459 CR to 33.501 R16 - Clarification on the number of PLMN IDuse by SEPP over N32**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1080 Cat: F (Rel-16)  
  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212287**.

**S3-211460 CR to 33.501 R17 - Clarification on the number of PLMN IDuse by SEPP over N32**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1081 Cat: A (Rel-17)  
  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212288**.

**S3-211980 N32-c and N32-f clarification R16**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1127 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212282**.

**S3-211981 N32-c and N32-f clarification R17**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1128 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212284**.

**S3-211759 Clarify the usage of TLS and PRINS between SEPPs**

*Type: CR For: Agreement  
 33.501 v15.12.0 CR-1105 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212367**.

**S3-211760 Clarify the usage of TLS and PRINS between SEPPs**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1106 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212368**.

**S3-211761 Clarify the usage of TLS and PRINS between SEPPs**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1107 Cat: A (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212369**.

**S3-211626 Correction to Authorization for indirect communication with delegated discovery procedure**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1088 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-211762 Correction to NF Certificate profile: Format of the apiRoot**

*Type: CR For: Agreement  
 33.310 v16.7.0 CR-0118 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-211763 Correction to JOSE profile Reference**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1108 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-211764 Correction to JOSE profile Reference**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1109 Cat: A (Rel-17)  
  
 Source: Ericsson*

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

**S3-211982 Deployment models R16**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1129 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212285**.

**S3-211983 Deployment models R17**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1130 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212286**.

**S3-211446 LS to 3GPP SA3 N32 and multiple PLMN IDs**

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

**Decision:** The document was **replied to in S3-211458**.

**S3-211457 Discussion on SEPP to SEPP communication on 5GSA networks**

*Type: discussion For: Discussion  
 Source: VODAFONE Group Plc*

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

**S3-211458 draft response LS to GSMA on 3GPP SA3 N32 and multiple PLMN IDs**

*Type: LS out For: Agreement  
 to GSMA, cc CT4  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212392**.

**S3-212392 Response LS to GSMA on 3GPP SA3 N32 and multiple PLMN IDs**

*Type: LS out For: Approval  
 to GSMA, cc CT4  
 Source: VODAFONE Group Plc*

(Replaces S3-211458)

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

**S3-211462 Draft CR to TS 33.501 to resolve security hole when IPX SEPP is used**

*Type: draftCR For: Discussion  
 33.501 v17.1.0  
 Source: VODAFONE Group Plc*

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

**S3-211748 Discussion on "LS to 3GPP SA3 N32 and multiple PLMN IDs"**

*Type: discussion For: Discussion  
 Source: Ericsson*

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

**S3-211749 [DRAFT] Reply-LS on N32 and multiple PLMN IDs**

*Type: LS out For: Approval  
 to GSMA 5GJA, cc CT4  
 Source: Ericsson*

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

**S3-212282 N32-c and N32-f clarification R16**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1127 rev 1 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211980)

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

**S3-212284 N32-c and N32-f clarification R17**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1128 rev 1 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211981)

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

**S3-212285 Deployment models R16**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1129 rev 1 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211982)

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

**S3-212286 Deployment models R17**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1130 rev 1 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211983)

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

**S3-212287 CR to 33.501 R16 - Clarification on the number of PLMN IDuse by SEPP over N32**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1080 rev 1 Cat: F (Rel-16)  
  
 Source: VODAFONE Group Plc, Nokia, Nokia Shanghai Bell, Mavenir*

(Replaces S3-211459)

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

**S3-212288 CR to 33.501 R17 - Clarification on the number of PLMN IDuse by SEPP over N32**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1081 rev 1 Cat: A (Rel-17)  
  
 Source: VODAFONE Group Plc, Nokia, Nokia Shanghai Bell, Mavenir*

(Replaces S3-211460)

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

**S3-212367 Clarify the usage of TLS and PRINS between SEPPs**

*Type: CR For: Agreement  
 33.501 v15.12.0 CR-1105 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell, Mavenir*

(Replaces S3-211759)

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

**S3-212368 Clarify the usage of TLS and PRINS between SEPPs**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1106 rev 1 Cat: A (Rel-16)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell, Mavenir*

(Replaces S3-211760)

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

**S3-212369 Clarify the usage of TLS and PRINS between SEPPs**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1107 rev 1 Cat: A (Rel-17)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell, Mavenir*

(Replaces S3-211761)

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

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

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

**S3-211644 Assign FC Value for KTIPSec and KTNAP Derivation in R16**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1089 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212309**.

**S3-211645 Assign FC Value for KTIPSec and KTNAP Derivation in R17**

*Type: CR For: Approval  
 33.501 v17.1.0 CR-1090 Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212310**.

**S3-211646 FC Value Change because of KTIPSec and KTNAP Derivation in R16**

*Type: CR For: Approval  
 33.220 v16.3.0 CR-0208 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-211647 FC Value Change because of KTIPSec and KTNAP Derivation in R17**

*Type: CR For: Approval  
 33.220 v17.0.0 CR-0209 Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212311**.

**S3-212309 Assign FC Value for KTIPSec and KTNAP Derivation in R16**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1089 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-211644)

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

**S3-212310 Assign FC Value for KTIPSec and KTNAP Derivation in R17**

*Type: CR For: Approval  
 33.501 v17.1.0 CR-1090 rev 1 Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

(Replaces S3-211645)

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

**S3-212311 FC Value Change because of KTIPSec and KTNAP Derivation in R17**

*Type: CR For: Approval  
 33.220 v17.0.0 CR-0209 rev 1 Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon, Samsung*

(Replaces S3-211647)

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

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

**S3-211512 CR to Delete NSSAA Editor Notes (Rel-16)**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1082 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shangahai-Bell*

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

**S3-211513 CR to Delete NSSAA Editor Notes (Rel-17)**

*Type: CR For: Approval  
 33.501 v17.1.0 CR-1083 Cat: F (Rel-17)  
  
 Source: Nokia, Nokia Shanghai-Bell*

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

**S3-211624 Slice privacy protection in NSSAA related procedures**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1087 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212280**.

**S3-211602 Serving network ID in NSSAA**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1085 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-211603 validity peirod of NSSAA result**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1086 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-211662 Change the procedure of network slice re-authentication and revocation by AAA-S**

*Type: CR For: Approval  
 33.501 v17.1.0 CR-1091 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212312**.

**S3-211685 Addressing impersonate attack from AAA-S**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1093 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-211686 Mirror- Addressing impersonate attack from AAA-S**

*Type: CR For: Approval  
 33.501 v17.1.0 CR-1094 Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon*

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

**S3-211985 Prevention of attacks on slice core by CCA modifications - Rel-16**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1131 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211986 Prevention of attacks on slice core by CCA modifications - Rel-17**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1132 Cat: A (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211383 Prevention of attacks on sliced core network**

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

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

**S3-211393 Reply LS on NSSAA at inter-PLMN mobility**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2101052*

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

**S3-211415 Reply LS on Prevention of attacks on sliced core network**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2103213*

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

**S3-211511 Discussion paper on ENs in Network Slicing clause 16.3**

*Type: discussion For: Endorsement  
 Source: Nokia, Nokia Shanghai-Bell*

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

**S3-211527 Reply LS to GSMA on prevention of attacks on sliced core network**

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

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

**S3-211601 Discussion on SN-ID in NSSAA**

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

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

**S3-211611 Discussion on slice issues in core networks**

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

**Decision:** The document was **revised to S3-212187**.

**S3-211689 EAP ID Request in NSSAA Procedure**

*Type: CR For: (not specified)  
 33.501 v16.6.0 CR-1095 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Abstract:**

The EAP ID request within the NSSAA procedure is made mandatory. In this way it is ensured that the AMF will always get the EAP ID with no impact on current stage 3 specifications.

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

**S3-211700 EAP ID Request in NSSAA Procedure (Rel-17)**

*Type: CR For: (not specified)  
 33.501 v17.1.0 CR-1096 Cat: A (Rel-17)  
  
 Source: Ericsson*

**Abstract:**

The EAP ID request within the NSSAA procedure is made mandatory. In this way it is ensured that the AMF will always get the EAP ID with no impact on current stage 3 specifications.

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

**S3-211984 Discussion of GSMA LS S3-211383 Prevention of attacks on sliced core**

*Type: discussion For: Endorsement  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212187 Discussion on slice issues in core networks**

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

(Replaces S3-211611)

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

**S3-212280 Slice privacy protection in NSSAA related procedures**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1087 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon, Nokia, Nokia Shangahai-Bell*

(Replaces S3-211624)

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

**S3-212281 Slice privacy protection in NSSAA related procedures (Rel-17)**

*Type: CR For: (not specified)  
 33.501 v17.1.0 CR-1142 Cat: A (Rel-17)  
  
 Source: Huawei, HiSilicon, Nokia, Nokia Shangahai-Bell*

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

**S3-212312 Change the procedure of network slice re-authentication and revocation by AAA-S**

*Type: CR For: Approval  
 33.501 v17.1.0 CR-1091 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, HiSilicon, Ericsson*

(Replaces S3-211662)

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

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

**S3-211373 Reply LS on the re-keying procedure and security indication for NR SL**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-211228*

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

**S3-211413 LS on the latest results on the Vehicular Multimedia deliverables from ITU FG-VM**

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

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

**S3-211882 Clarification on a figure and the key activation**

*Type: CR For: Approval  
 33.536 v16.3.0 CR-0025 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212341**.

**S3-212341 Clarification on a figure and the key activation**

*Type: CR For: Approval  
 33.536 v16.3.0 CR-0025 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

(Replaces S3-211882)

**Decision:** The document was **revised to S3-212348**.

**S3-212348 Clarification on a figure and the key activation**

*Type: CR For: Approval  
 33.536 v16.3.0 CR-0025 rev 2 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon, Interdigtal*

(Replaces S3-212341)

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

### 4.21 New work item proposals

**S3-211452 WID on IIoT**

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

**Decision:** The document was **revised to S3-212318**.

**S3-211630 New WID on Security enhancements for 5G multicast-broadcast services (5MBS)**

*Type: WID new For: Approval  
 Source: Huawei, Hisilicon,China Broadcasting Network*

**Decision:** The document was **revised to S3-212304**.

**S3-211701 5GFBS-WID for 5GFBS**

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

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

**S3-211771 Security aspects of eNPN: draft skeleton for draft CR**

*Type: discussion For: Discussion  
 Source: Ericsson, Huawei, InterDigital*

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

**S3-211772 New WID on Security Aspects of eNPN**

*Type: WID new For: Agreement  
 Source: Ericsson, Alibaba, China Mobile, InterDigital, ZTE*

**Decision:** The document was **revised to S3-212371**.

**S3-211773 New WID on certificate profiles for SBA**

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

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

**S3-211774 New WID on Security aspects of Uncrewed Aerial Systems**

*Type: WID new For: Agreement  
 Source: Qualcomm Incorporated, Interdigital, Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212354**.

**S3-211783 Information on the updates to the proposed WID on TLS protocol profiles for AKMA**

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

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

**S3-211784 New WID on TLS protocols profiles for AKMA**

*Type: WID new For: Agreement  
 Source: Qualcomm Incorporated*

(Replaces S3-210479)

**Decision:** The document was **revised to S3-212352**.

**S3-211892 New WID on Study on Security Aspects of Enhancement of Support for Edge Computing in 5GC**

*Type: WID new For: Approval  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212342**.

**S3-211909 New WID on IoT Ua\* protocol profiles for AKMA**

*Type: WID new For: Agreement  
 Source: Ericsson, China Mobile*

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

**S3-211919 New WID on the security of AMF re-allocation**

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

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

**S3-211923 New WID on Authentication enhancements in 5GS**

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

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

**S3-212304 New WID on Security enhancements for 5G multicast-broadcast services (5MBS)**

*Type: WID new For: Approval  
 Source: Huawei, Hisilicon,China Broadcasting Network*

(Replaces S3-211630)

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

**S3-212318 WID on IIoT**

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

(Replaces S3-211452)

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

**S3-212342 New WID on Security Aspects of Enhancement of Support for Edge Computing in 5GC**

*Type: WID new For: Approval  
 Source: Huawei, Hisilicon*

(Replaces S3-211892)

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

**S3-212352 New WID on TLS protocols profiles for AKMA**

*Type: WID new For: Agreement  
 Source: Qualcomm Incorporated, Ericsson, CMCC, ZTE, Nokia*

(Replaces S3-211784)

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

**S3-212354 New WID on Security aspects of Uncrewed Aerial Systems**

*Type: WID new For: Agreement  
 Source: Qualcomm Incorporated, Interdigital, Huawei, HiSilicon, Ericsson, Lenovo, Motorola Mobility, Nokia, Nokia Shanghai Bell*

(Replaces S3-211774)

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

**S3-212371 New WID on Security Aspects of eNPN**

*Type: WID new For: Agreement  
 Source: Ericsson, Alibaba, China Mobile, InterDigital, ZTE*

(Replaces S3-211772)

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

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

**S3-211988 Removal of ENs for draft-ietf-emu-rfc5448bis - Rel-15**

*Type: CR For: Agreement  
 33.501 v15.12.0 CR-1133 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212330**.

**S3-211990 Removal of ENs for draft-ietf-emu-rfc5448bis -Rel-16**

*Type: CR For: (not specified)  
 33.501 v16.6.0 CR-1134 Cat: A (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212331**.

**S3-211991 Removal of ENs for draft-ietf-emu-rfc5448bis- Rel-17**

*Type: CR For: (not specified)  
 33.501 v17.1.0 CR-1135 Cat: A (Rel-17)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212346**.

**S3-211474 [33.180] R14 UID encoding**

*Type: CR For: Agreement  
 33.180 v14.9.0 CR-0163 Cat: F (Rel-14)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

33.180 fails to define the encoding of the MIKEY-SAKKE UID.

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

**S3-211475 [33.180] R15 UID encoding (mirror)**

*Type: CR For: Agreement  
 33.180 v15.9.0 CR-0164 Cat: A (Rel-15)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

33.180 fails to define the encoding of the MIKEY-SAKKE UID (mirror)

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

**S3-211476 [33.180] R16 UID encoding (mirror)**

*Type: CR For: Agreement  
 33.180 v16.6.0 CR-0165 Cat: A (Rel-16)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

33.180 fails to define the encoding of the MIKEY-SAKKE UID (mirror).

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

**S3-211478 [33.180] R17 UID encoding (mirror)**

*Type: CR For: Agreement  
 33.180 v17.2.0 CR-0166 Cat: A (Rel-17)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

33.180 fails to define the encoding of the MIKEY-SAKKE UID (mirror).

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

**S3-211720 UE procedures at TAU reject in idle mode mobility from 5GS to EPS over N26**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1097 Cat: F (Rel-16)  
  
 Source: MediaTek Inc. / Marko*

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

**S3-211722 UE procedures at TAU reject in idle mode mobility from 5GS to EPS over N26**

*Type: CR For: Approval  
 33.501 v17.1.0 CR-1098 Cat: A (Rel-17)  
  
 Source: MediaTek Inc. / Marko*

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

**S3-211753 Clarification on the NRF services authorization**

*Type: CR For: Agreement  
 33.501 v15.12.0 CR-1099 Cat: F (Rel-15)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

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

**S3-211754 Clarification on the NRF services authorization**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1100 Cat: F (Rel-16)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

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

**S3-211755 Clarification on the NRF services authorization**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1101 Cat: A (Rel-17)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

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

**S3-211756 Clarification on the OAuth 2.0 client registration**

*Type: CR For: Agreement  
 33.501 v15.12.0 CR-1102 Cat: F (Rel-15)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

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

**S3-211757 Clarification on the OAuth 2.0 client registration**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1103 Cat: A (Rel-16)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

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

**S3-211758 Clarification on the OAuth 2.0 client registration**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1104 Cat: A (Rel-17)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

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

**S3-211888 Clarification on the Oauth client registration**

*Type: CR For: Agreement  
 33.501 v15.12.0 CR-1124 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

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

**S3-211889 Clarification on the Oauth client registration and authorization**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1125 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-211891 Clarification on the static authorization**

*Type: CR For: Approval  
 33.501 v17.1.0 CR-1126 Cat: F (Rel-17)  
  
 Source: Huawei, Hisilicon*

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

**S3-211795 Downlink NAS COUNT handling after creating NAS container in EPS to 5GS Handover**

*Type: CR For: Agreement  
 33.501 v15.12.0 CR-1110 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated, Huawei, HiSilicon, CATT, ZTE*

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

**S3-211796 Downlink NAS COUNT handling after creating NAS container in EPS to 5GS Handover**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1111 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated, Huawei, HiSilicon, CATT, ZTE*

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

**S3-211797 Downlink NAS COUNT handling after creating NAS container in EPS to 5GS Handover**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1112 Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated, Huawei, HiSilicon, CATT, ZTE*

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

**S3-211818 Clarifying the support for authentication methods in an SNPN**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1113 Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

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

**S3-211819 Clarifying the support for authentication methods in an SNPN**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1114 Cat: A (Rel-17)  
  
 Source: Qualcomm Incorporated*

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

**S3-211886 Editor's note of the security of 5GLAN services removal in R16**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1122 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-211887 Editor's note of the security of 5GLAN services removal in R17**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1123 Cat: A (Rel-17)  
  
 Source: Huawei, Hisilicon*

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

**S3-211684 Clarify on ngKSI used in NAS SMC in Kausf storage**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1092 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-212103 Rel16-Handling of Kausf upon successful primary authentication**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1137 Cat: F (Rel-16)  
  
 Source: Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel*

**Decision:** The document was **revised to S3-212289**.

**S3-212104 Rel17-Handling of Kausf upon successful primary authentication**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1138 Cat: A (Rel-17)  
  
 Source: Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel*

**Decision:** The document was **revised to S3-212290**.

**S3-211648 Address ENs in TS 33.216**

*Type: CR For: Approval  
 33.216 v16.5.0 CR-0022 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-211822 Correction of Annex A.13**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1117 Cat: A (Rel-17)  
  
 Source: Ericsson*

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

**S3-212119 Correction of Annex A.13**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1139 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-211873 Clarifications to 5G CIoT K\_NG-RAN derivation**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1118 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-211874 Claifications on mapped security**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1119 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212337**.

**S3-211885 UP Security policy requirement on the IMS data network**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1121 Cat: F (Rel-17)  
  
 Source: Huawei, Hisilicon*

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

**S3-212092 Correction to FC values in range for future use in 3GPP specifications**

*Type: CR For: Agreement  
 33.220 v17.0.0 CR-0212 Cat: F (Rel-17)  
  
 Source: Samsung*

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

**S3-211355 Agenda and notes from the SA3/IETF joint call**

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

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

**S3-211453 WID IIoT Draft CR PTP aspects**

*Type: draftCR For: Endorsement  
 33.501 v17.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212316**.

**S3-211454 WID IIoT Draft CR NEF-AF aspects**

*Type: draftCR For: Endorsement  
 33.501 v17.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212317**.

**S3-211455 WID IIoT Draft CR Security considerations - informative**

*Type: draftCR For: Endorsement  
 33.501 v17.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211683 EAP ID Request in NSSAA procedure**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Discussion around the optionality of EAP ID request in NSSAA procedure

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

**S3-211687 EAP ID Request in NSSAA procedure**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Abstract:**

Discussion around the optionality of EAP ID request in NSSAA procedure

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

**S3-211719 DRAFT LS on EAP ID Request in NSSAA Procedure**

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

**Abstract:**

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

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

**S3-211752 NRF services authorization and OAuth 2.0 client registration from Rel-15 onwards**

*Type: discussion For: Discussion  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

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

**S3-211821 Correction of Annex A.13**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1116 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-211872 Reply LS on changes to SoR**

*Type: LS out For: Approval  
 to CT1, CT4  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212336**.

**S3-211965 Way forward for draft-ietf-emu-rfc5448bis**

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

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

**S3-212249 Summary of discussion: NRF services authorization and OAuth 2.0 client registration from Rel-15 onwards**

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

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

**S3-212260 WID IIoT CR NEF-AF aspects**

*Type: draftCR For: Endorsement  
 33.501 v17.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212265 PTP aspects**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1140 Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212266 NEF-AF aspects**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1141 Cat: B (Rel-17)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212289 Rel16-Handling of Kausf upon successful primary authentication**

*Type: CR For: Agreement  
 33.501 v16.6.0 CR-1137 rev 1 Cat: F (Rel-16)  
  
 Source: Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel, Ericsson*

(Replaces S3-212103)

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

**S3-212290 Rel17-Handling of Kausf upon successful primary authentication**

*Type: CR For: Agreement  
 33.501 v17.1.0 CR-1138 rev 1 Cat: A (Rel-17)  
  
 Source: Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel, Ericsson*

(Replaces S3-212104)

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

**S3-212316 WID IIoT Draft CR PTP aspects**

*Type: draftCR For: Endorsement  
 33.501 v17.1.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211453)

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

**S3-212317 WID IIoT Draft CR NEF-AF aspects**

*Type: draftCR For: Endorsement  
 33.501 v17.1.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211454)

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

**S3-212330 Removal of ENs for draft-ietf-emu-rfc5448bis - Rel-15**

*Type: CR For: Agreement  
 33.501 v15.12.0 CR-1133 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson*

(Replaces S3-211988)

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

**S3-212331 Removal of ENs for draft-ietf-emu-rfc5448bis -Rel-16**

*Type: CR For: (not specified)  
 33.501 v16.6.0 CR-1134 rev 1 Cat: A (Rel-16)  
  
 Source: Ericsson*

(Replaces S3-211990)

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

**S3-212336 Reply LS on changes to SoR**

*Type: LS out For: Approval  
 to CT1, CT4  
 Source: Huawei, Hisilicon*

(Replaces S3-211872)

**Decision:** The document was **revised to S3-212378**.

**S3-212393 Reply LS on changes to SoR**

*Type: LS out For: Approval  
 to CT1, CT4  
 Source: Huawei, Hisilicon*

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

**S3-212337 Claifications on mapped security**

*Type: CR For: Approval  
 33.501 v16.6.0 CR-1119 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

(Replaces S3-211874)

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

**S3-212338 Claifications on mapped security**

*Type: CR For: Approval  
 33.501 v17.1.0 CR-1143 Cat: A (Rel-17)  
  
 Source: Huawei, Hisilicon*

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

**S3-212339 Clarification to SoR transparent container**

*Type: CR For: Approval  
 33.501 v17.1.0 CR-1120 rev 1 Cat: F (Rel-17)  
  
 Source: Huawei, Hisilicon*

(Replaces S3-211881)

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

**S3-212340 Clarifications to 5G CIoT K\_NG-RAN derivation**

*Type: CR For: Approval  
 33.501 v17.1.0 CR-1144 Cat: A (Rel-17)  
  
 Source: Huawei, Hisilicon*

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

**S3-212346 Removal of ENs for draft-ietf-emu-rfc5448bis- Rel-17**

*Type: CR For: (not specified)  
 33.501 v17.1.0 CR-1135 rev 1 Cat: A (Rel-17)  
  
 Source: Ericsson*

(Replaces S3-211991)

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

**S3-212378 Reply LS on changes to SoR**

*Type: LS out For: Approval  
 to CT1, CT4  
 Source: Huawei, Hisilicon*

(Replaces S3-212336)

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

## 5 Study Areas

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

**S3-211427 Reply LS to SA3 on FBS detection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2104626*

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

**S3-211522 Updating annex B in TR 33.809**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: CableLabs*

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

**S3-211576 Additions in Solution #25**

*Type: pCR For: (not specified)  
 33.809 v0.14.0  
 Source: Philips International B.V.*

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

**S3-211582 Updates in Solution #23**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-212358**.

**S3-211584 Updates in Appendix B**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Philips International B.V.*

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

**S3-211586 Remarks\_in\_Solution\_14**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-212356**.

**S3-211588 Update\_in\_solution\_26**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-212357**.

**S3-211598 Update to solution #25**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212283**.

**S3-211599 Evaluation of solution #4**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Huawei, HiSilicon*

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

**S3-211600 Conclusion for KI#3**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Huawei, HiSilicon*

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

**S3-211702 5GFBS-Adding evaluation for solution#4**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Apple*

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

**S3-211703 5GFBS-Adding a new clause on Evaluations for key issues**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Apple*

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

**S3-211704 5GFBS-Conclusion for key issue#2**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Apple*

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

**S3-211705 5GFBS-Conclusion for key issue#3**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Apple*

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

**S3-211706 5GFBS-Draft LS to RAN2 on Solution#17**

*Type: LS out For: Approval  
 to RAN2  
 Source: Apple*

**Decision:** The document was **revised to S3-212349**.

**S3-212105 Updates to KI#1 & KI#7**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Samsung*

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

**S3-212106 [Draft] LS on feasibility of addressing the attacks against 5G UE over radio interfaces**

*Type: LS out For: Approval  
 to RAN2  
 Source: Samsung*

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

**S3-212283 Update to solution #25**

*Type: pCR For: Approval  
 33.809 v0.14.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211598)

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

**S3-212349 5GFBS-LS to RAN2 on Solution#17**

*Type: LS out For: Approval  
 to RAN2  
 Source: Apple*

(Replaces S3-211706)

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

**S3-212351 draft TR 33.809**

*Type: draft TR For: Approval  
 33.809 v0.15.0  
 Source: Apple (UK) Limited*

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

**S3-212356 Remarks\_in\_Solution\_14**

*Type: pCR For: (not specified)  
 33.809 v0.14.0  
 Source: Philips International B.V.*

(Replaces S3-211586)

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

**S3-212357 Update\_in\_solution\_26**

*Type: pCR For: (not specified)  
 33.809 v0.14.0  
 Source: Philips International B.V.*

(Replaces S3-211588)

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

**S3-212358 Updates in Solution #23**

*Type: pCR For: (not specified)  
 33.809 v0.14.0  
 Source: Philips International B.V.*

(Replaces S3-211582)

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

### 5.2 Study on SECAM and SCAS for 3GPP virtualized network products

**S3-211825 Clarification on GVNP and 3GPP functinoality in 4.1.1**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: China Mobile*

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

**S3-211826 resolving EN about the GVNP lifecycle in clause 5.2.5.5.7.1**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: China Mobile*

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

**S3-211827 editorial modification in clause 5.2.5.6.8.5.3 and 5.2.5.7.6**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: China Mobile*

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

**S3-211828 Adding threat reference in clause 5.2.5.7.7.2 and 5.2.5.7.7.3**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: China Mobile*

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

**S3-211829 Modifying contents about decoupling scenarios**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: China Mobile*

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

**S3-211830 Resolving EN about Figure 5.2.5.1-1**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: China Mobile*

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

**S3-211831 Adding vendor development and product lifecycle processes and test laboratory accreditation into Clause 6**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: China Mobile*

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

**S3-211832 proposal for way forward**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: China Mobile*

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

**S3-211833 Clean up to existing editor's note**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: China Mobile*

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

**S3-211834 Presentation of TR33.818 to SA plenary**

*Type: TS or TR cover For: Approval  
 33.818 v0.12.0  
 Source: China Mobile*

**Decision:** The document was **revised to S3-212324, S3-212326**.

**S3-212069 Type 1 threat**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: Futurewei Technologies*

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

**S3-212070 Typye 2 Threats**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: Futurewei Technologies*

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

**S3-212071 Type 3 Threats**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: Futurewei Technologies*

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

**S3-212110 Clause 6.1**

*Type: pCR For: Approval  
 33.818 v0.11.0  
 Source: Futurewei Technologies*

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

**S3-212324 Presentation of TR33.818 to SA plenary**

*Type: TS or TR cover For: Approval  
 33.818 v0.13.0  
 Source: China Mobile*

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

**S3-212325 TR 33.818 v0.12.0**

*Type: draft TR For: Approval  
 33.818 v0.12.0  
 Source: China Mobile Com. Corporation*

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

**S3-212326 Presentation of TR33.818 to SA plenary**

*Type: TS or TR cover For: Approval  
 33.818 v0.12.0  
 Source: China Mobile*

(Replaces S3-211834)

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

### 5.3 Study on User Plane Integrity Protection

**S3-211425 Reply LS on User Plane Integrity Protection for eUTRA connected to EPC**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2104349*

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

**S3-211468 pCR to 33.853 - update to 7.2 following liaisons**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211469 pCR to 33.853 - Removal of template sections ready for specification approval**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211470 pCR to 33.853: editorial updates**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211587 pCR to TR33.853 - editorial corrections**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211593 Cover sheet for approval of TR33.853**

*Type: TS or TR cover For: Agreement  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211612 pCR to TR33.845 - Resolution of editors notes for solution#2**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211613 pCR to TR33.845 - Resolution of editors notes for solution#3**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211614 pCR to TR33.845 - Resolution of editors notes for solutions 5 and 6**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211616 pCR to TR33.845 - Resolution of editors notes for solutions 9 and 10**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211649 Solution Update for Solution #28**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212194**.

**S3-211650 Conclusion for Key Issue #7**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212195**.

**S3-211651 LS on Supporting UP Integrity Protection Policy Handling for Interworking from 5GS to EPS**

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

**Decision:** The document was **revised to S3-212196**.

**S3-211682 pCR to TR33.845 - Resolution of editors notes for solutions 11 13 14 and 15**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211688 pCR to TR33.845 - Resolution of editors notes for solutions 18 19 20 and 21**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211690 pCR to TR33.845 - Resolution of editors notes for solutions 22 23 24 26**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211718 pCR to TR33.845 - Resolution of editors notes for solutions 28 29 30**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212217**.

**S3-211721 pCR to TR33.853 - removal of template sections**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211736 pCR to TR33.853 - Resolution of editors notes in Conclusions and Recommendations**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212218**.

**S3-212115 UP IP: Update to solution #21 (Interworking handover from EPS to 5GS)**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212133**.

**S3-212116 UP IP: Update to solution #24 Interworking handover from 5GS to EPS**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212134**.

**S3-212117 UP IP: Update to solution #30**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: Ericsson*

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

**S3-212133 UP IP: Update to solution #21 (Interworking handover from EPS to 5GS)**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: Ericsson*

(Replaces S3-212115)

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

**S3-212134 UP IP: Update to solution #24 Interworking handover from 5GS to EPS**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: Ericsson*

(Replaces S3-212116)

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

**S3-212194 Solution Update for Solution #28**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211649)

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

**S3-212195 Conclusion for Key Issue #7**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211650)

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

**S3-212196 LS on Supporting UP Integrity Protection Policy Handling for Interworking from 5GS to EPS**

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

(Replaces S3-211651)

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

**S3-212217 pCR to TR33.845 - Resolution of editors notes for solutions 28 29 30**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

(Replaces S3-211718)

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

**S3-212218 pCR to TR33.853 - Resolution of editors notes in Conclusions and Recommendations**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

(Replaces S3-211736)

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

**S3-212219 new draft TR33.853 v1.6.0**

*Type: draft TR For: Agreement  
 33.853 v1.6.0  
 Source: VODAFONE Group Plc*

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

### 5.4 Study on Security Impacts of Virtualisation

**S3-212120 Addition of Key Issue 26 Text**

*Type: pCR For: Agreement  
 33.848 v0.7.0  
 Source: BT plc*

**Decision:** The document was **revised to S3-212388**.

**S3-212122 Addition of Key Issue 25 Text**

*Type: pCR For: Agreement  
 33.848 v0.7.0  
 Source: BT plc*

**Decision:** The document was **revised to S3-212389**.

**S3-212388 Addition of Key Issue 26 Text**

*Type: pCR For: Agreement  
 33.848 v0.7.0  
 Source: BT plc*

(Replaces S3-212120)

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

**S3-212389 Addition of Key Issue 25 Text**

*Type: pCR For: Agreement  
 33.848 v0.7.0  
 Source: BT plc*

(Replaces S3-212122)

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

**S3-212391 TR 33.848**

*Type: draft TR For: Approval  
 33.848 v0.8.0  
 Source: BT*

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

### 5.5 Study on authentication enhancements in 5GS

**S3-211364 Reply to LS on Resynchronisations**

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

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

**S3-211434 pCR to TR 33.846: Clarification on Key Issue #2.2**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: THALES*

**Abstract:**

pCR to 3GPP TR 33.846: Clarification on Key Issue #2.2

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

**S3-211435 pCR to TR 33.846: Clarification on Key Issue #3.2**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: THALES*

**Abstract:**

pCR to 3GPP TR 33.846: clarification on key issue #3.2

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

**S3-211436 pCR to TR 33.846: update of assessment of attack risk**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: THALES, Nokia, Nokia Shanghai Bell*

**Abstract:**

pCR to 3GPP TR 33.846: update of assessment of attack risk

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

**S3-211437 pCR to 33.846: update of impact of solutions**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: THALES*

**Abstract:**

pCR to 3GPP TR 33.846: update of impact of solutions

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

**S3-211442 pCR to 33.846: update to solution #2.4**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: THALES*

**Abstract:**

pCR to 3GPP TR 33.846: update of solution #2.4 to address editor's note

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

**S3-211471 pCR to TR 33.853 - resolution of editors notes**

*Type: pCR For: Approval  
 33.853 v1.5.0  
 Source: VODAFONE Group Plc*

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

**S3-211496 Draft reply to ETSI SAGE on Resynchronisations**

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

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

**S3-211503 Discussion on the solution#4.1 in TR 33.846**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211504 Evaluation of sol#4.1 using MACS as freshness in calculation of AK**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211505 Editor note removal on solution #2.9 MAC, SYNCH failure cause concealment**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212267**.

**S3-211506 Conclusion on Key issue #2.1**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211507 Conclusion on Key issue #3.2 SUPI guessing attack**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell,THALES*

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

**S3-211508 Conclusion on Key issue #4.1**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211509 EN removal on SUCI generation by legitimate SUPI owner using KSUCI**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211510 LS on Security risk evaluation of using long term key for another key derivation than AKA**

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

**Decision:** The document was **revised to S3-212268**.

**S3-211528 Resolving ENs of solution 6.2.10**

*Type: pCR For: Agreement  
 33.846 v0.11.0  
 Source: NEC Corporation*

**Decision:** The document was **revised to S3-212296**.

**S3-211529 Evaluation of key issue 2.2 SUCI replay attack.**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: NEC Corporation*

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

**S3-211535 Evaluation of solution #2.10**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: NEC Corporation*

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

**S3-211558 Add evaluation and update comparison table for solution 3.2**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212276**.

**S3-211559 Add evaluation for solution 4.5**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212277**.

**S3-211560 EN resolution on null scheme for solution 2.7**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212274**.

**S3-211561 Update to mapping table**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212273**.

**S3-211562 Update to solution 2.7 and evaluation table**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212275**.

**S3-211563 Update to solution 4.5 for the scenario of UE triggered service request**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212278**.

**S3-211564 Conclusion for the key issue#4.1**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

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

**S3-211636 Update to the solution 3.3**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212327**.

**S3-211786 Some proposed text for the assessment of attack risk table**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Qualcomm Incorporated, Vodafone*

(Replaces S3-211057)

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

**S3-211787 Proposed conclusion for key issue #4.1**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Qualcomm Incorporated, Vodafone*

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

**S3-211788 Proposed conclusion for the linkability parts of key issues #2.1 and 2.2**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Qualcomm Incorporated, Vodafone, DoCoMo*

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

**S3-211835 Assessment of attack risk**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: China Mobile*

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

**S3-211836 Solution to mitgate the SUPI guessing attack without changing the format of SUCI**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: China Mobile*

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

**S3-211837 Solution to mitigate the SUPI guessing attack and SUCI replay attack by adding new MAC tag in SUCI**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: China Mobile*

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

**S3-211921 Authentication enhancements: TR editorials**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Ericsson*

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

**S3-211922 Authentication enhancements: Clause 4**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Ericsson*

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

**S3-211924 Authentication enhancements: Discussion about the WID**

*Type: discussion For: Discussion  
 33.846 v..  
 Source: Ericsson*

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

**S3-211966 pCR to 33.846: conclusion for KI #2.1**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: THALES*

**Abstract:**

pCR to 3GPP TR 33.846: conclusion for KI #2.1

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

**S3-211967 pCR to 33.846: conclusion for KI#4.1**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: THALES*

**Abstract:**

pCR to 3GPP TR 33.846: conclusion for KI#4.1

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

**S3-212267 Editor note removal on solution #2.9 MAC, SYNCH failure cause concealment**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211505)

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

**S3-212268 LS on Security risk evaluation of using long term key for another key derivation than AKA**

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

(Replaces S3-211510)

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

**S3-212273 Update to mapping table**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

(Replaces S3-211561)

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

**S3-212274 EN resolution on null scheme for solution 2.7**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

(Replaces S3-211560)

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

**S3-212275 Update to solution 2.7 and evaluation table**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

(Replaces S3-211562)

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

**S3-212276 Add evaluation and update comparison table for solution 3.2**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

(Replaces S3-211558)

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

**S3-212277 Add evaluation for solution 4.5**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

(Replaces S3-211559)

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

**S3-212278 Update to solution 4.5 for the scenario of UE triggered service request**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: ZTE Corporation*

(Replaces S3-211563)

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

**S3-212296 Resolving ENs of solution 6.2.10**

*Type: pCR For: Agreement  
 33.846 v0.11.0  
 Source: NEC Corporation*

(Replaces S3-211528)

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

**S3-212315 Draft TR 33.846 v0.12.0 Study on authentication enhancements in the 5G System (5GS)**

*Type: draft TR For: Approval  
 33.846 v0.12.0  
 Source: Ericsson España S.A.*

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

**S3-212327 Update to the solution 3.3**

*Type: pCR For: Approval  
 33.846 v0.11.0  
 Source: Huawei, Hisilicon*

(Replaces S3-211636)

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

### 5.6 Study on storage and transport of 5GC security parameters for ARPF authentication

**S3-211531 pCR to TR 33.845 - editorial corrections**

*Type: pCR For: Approval  
 33.845 v1.0.0  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212347**.

**S3-211532 Cover Sheet for approval of TR 33.845**

*Type: TS or TR cover For: Agreement  
 33.845 v1.0.0  
 Source: VODAFONE Group Plc*

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

**S3-211533 pCR to TR 33.845 - removal of template sections**

*Type: pCR For: Approval  
 33.845 v1.0.0  
 Source: VODAFONE Group Plc*

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

**S3-211581 pCR to TR33.845 - removal of editors notes**

*Type: pCR For: Approval  
 33.845 v1.0.0  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212350**.

**S3-212347 pCR to TR 33.845 - editorial corrections**

*Type: pCR For: Approval  
 33.845 v1.0.0  
 Source: VODAFONE Group Plc*

(Replaces S3-211531)

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

**S3-212350 pCR to TR33.845 - removal of editors notes**

*Type: pCR For: Approval  
 33.845 v1.0.0  
 Source: VODAFONE Group Plc*

(Replaces S3-211581)

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

**S3-212360 TR33.845 v1.1.0**

*Type: draft TR For: Approval  
 33.845 v1.1.0  
 Source: VODAFONE Group Plc*

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

### 5.7 Study on security aspects of Unmanned Aerial Systems

**S3-211385 Support of UAVs authentication/authorization in 3GPP systems and interfacing with USS/UTM**

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

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

**S3-211386 3GPP SA1 clarifications on problematic UAV**

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

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

**S3-211487 TR 33.854 KI#1 conclusion**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

TR 33.854 KI#1 conclusion

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

**S3-211488 TR 33.854 KI#2 conclusion**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

TR 33.854 KI#2 conclusion

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

**S3-211489 TR 33.854 KI#4 conclusion**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

TR 33.854 KI#4 conclusion

**Decision:** The document was **revised to S3-212128**.

**S3-211606 Evaluation of solution #3**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212181**.

**S3-211607 Evaluation of solution #5**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212211**.

**S3-211608 Conclusion for KI#1 (AA)**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212183**.

**S3-211609 Conclusion for KI#2 (pairing)**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212184**.

**S3-211610 Conclusion for KI#7 (C2)**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212185**.

**S3-211617 propose evaluation to Solution #16**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-211740 Mapping of Key Issues**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR updates clause 6.0 Mapping of solutions to key issues in TR 33.854 and provides editorial corrections to Clause 6.7 and 6.15 respectively.

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

**S3-211775 Update to solution #6 on obtaining UAV location information from the PLMN**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-212244**.

**S3-211776 Update to solution #10 on authentication and authorisation of UAVs**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211777 Update to solution #13 on authorisation of UAV/UAVC when connected to EPS**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-212245**.

**S3-211778 Update to solution #14 on authorisation of UAV/UAVC pairing when connected to 5GS**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-212246**.

**S3-212050 Update to solution #2**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212222**.

**S3-212128 TR 33.854 KI#4 conclusion**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: InterDigital, Europe, Ltd., Huawei, HiSilicon*

(Replaces S3-211489)

**Abstract:**

TR 33.854 KI#4 conclusion

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

**S3-212181 Evaluation of solution #3**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon, InterDigital*

(Replaces S3-211606)

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

**S3-212182 Evaluation of solution #5**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon, InterDigital*

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

**S3-212183 Conclusion for KI#1 (AA)**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon, InterDigital, Lenovo, Motorola Mobility*

(Replaces S3-211608)

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

**S3-212184 Conclusion for KI#2 (pairing)**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon, InterDigital, Lenovo, Motorola Mobility*

(Replaces S3-211609)

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

**S3-212185 Conclusion for KI#7 (C2)**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon, InterDigital, Lenovo, Motorola Mobility*

(Replaces S3-211610)

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

**S3-212211 Evaluation of solution #5**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Huawei, HiSilicon, InterDigital*

(Replaces S3-211607)

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

**S3-212222 Update to solution #2**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Ericsson*

(Replaces S3-212050)

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

**S3-212244 Update to solution #6 on obtaining UAV location information from the PLMN**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Qualcomm Incorporated*

(Replaces S3-211775)

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

**S3-212245 Update to solution #13 on authorisation of UAV/UAVC when connected to EPS**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Qualcomm Incorporated*

(Replaces S3-211777)

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

**S3-212246 Update to solution #14 on authorisation of UAV/UAVC pairing when connected to 5GS**

*Type: pCR For: Approval  
 33.854 v0.5.0  
 Source: Qualcomm Incorporated*

(Replaces S3-211778)

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

**S3-212247 Draft TR 33.854**

*Type: draft TR For: Approval  
 33.854 v0.6.0  
 Source: Qualcomm*

(Replaces S3-211346)

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

### 5.8 Study on Security Aspects of Enhancement of Support for Edge Computing in 5GC

**S3-211363 Reply LS on IP address to GPSI translation**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2009339*

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

**S3-211365 Reply LS on IP address to GPSI translation**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2101307*

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

**S3-211391 Reply LS on IP address to GPSI translation**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2009339*

**Decision:** The document was **replied to in S3-212048**.

**S3-211392 Reply LS on IP address to GPSI translation**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2101307*

**Decision:** The document was **replied to in S3-212048**.

**S3-211405 LS on EDGEAPP**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-210630*

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

**S3-211406 Reply LS on clarification regarding EEC ID**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-210707*

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

**S3-211423 3GPP Edge Computing coordination**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-210978*

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

**S3-211424 Reply LS on IP address to GPSI translation**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-211082*

**Decision:** The document was **replied to in S3-212048**.

**S3-211444 pCR to 33.839: GBA-based solution for EEC authentication and authorization framework with ECS and EES**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: THALES*

**Abstract:**

pCR to 3GPP TR 33.839: GBA-based solution for EEC authentication and authorization framework with ECS and EES

**Decision:** The document was **revised to S3-212223**.

**S3-211445 pCR to 33.839: Using TLS with GBA to protect edge interfaces**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: THALES*

**Abstract:**

pCR to 3GPP TR 33.839: Using TLS with GBA to protect edge interfaces

**Decision:** The document was **revised to S3-212224**.

**S3-211501 Changes to TR 33.839**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: InterDigital, Inc.*

**Abstract:**

This pCR proposes editorial changes for clauses 4 through 6.1 of TR 33.847.

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

**S3-211514 Discussion on UE IP address to GPSI translation**

*Type: discussion For: Endorsement  
 Source: Nokia, Nokia Shanghai-Bell*

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

**S3-211565 S3-21XXXX Authentication and Authorization with ECS EES EAS**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: ZTE Corporation*

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

**S3-211566 Conclusion for the key issue#6**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212180**.

**S3-211567 Editorial correction in the references clause**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: ZTE Corporation*

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

**S3-211568 Evaluation of solution #13**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: ZTE Corporation*

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

**S3-211580 Updates to solution 4**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Intel K.K.*

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

**S3-211583 Proposal for conclusion for Key Issue 1,2,4,6**

*Type: pCR For: (not specified)  
 33.839 v0.5.0  
 Source: Intel K.K.*

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

**S3-211589 Updates to solution 12**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Intel K.K.*

**Decision:** The document was **revised to S3-212167**.

**S3-211628 Solution Evaluation for solution 8**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212190**.

**S3-211629 Solution Evaluation for solution 11**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212191**.

**S3-211707 MEC-New key issue on EEC ID privacy protection**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Apple*

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

**S3-211708 MEC-Adding evaluation on Solution#8**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Apple*

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

**S3-211709 MEC-Adding evaluation on Solution#9**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Apple*

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

**S3-211710 MEC-Adding evaluation on Solution#11**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Apple*

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

**S3-211711 MEC-Adding evaluation on Solution#17**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Apple*

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

**S3-211712 MEC-New solution on authentication between EEC and ECS**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Apple*

**Decision:** The document was **revised to S3-212253**.

**S3-211713 MEC-Kedge ID generation method**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Apple*

**Decision:** The document was **revised to S3-212254**.

**S3-211779 Discussion on an SA2 LS on IP address to GPSI translation**

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

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

**S3-211780 Proposed reply LS on IP address to GPSI translation**

*Type: LS out For: Approval  
 to SA2, cc SA6  
 Source: Qualcomm Incorporated*

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

**S3-211781 Proposed evaluation text for solution #23**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211782 Proposed evaluation for solution #24 and partial conclusion for key issue #6**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-212243**.

**S3-211853 add evaluation to solution #23**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212234**.

**S3-211859 EN removal of solution #9**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212235**.

**S3-211890 Discussion on the Authentication, Authorization and Data Protection between EEC and EES/ECS**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211893 EC: Conclusion for Key issue #1**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211894 EC: Conclusion for Key issue #2**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211895 EC: Conclusion for Key issue #3**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211896 EC: Conclusion for Key issue #4 and Key issue #5**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212236**.

**S3-211897 EC: Conclusion for Key issue #7**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211898 EC: Conclusion for Key issue #10**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211987 pCR to TR 33.839: Using TLS with Edge Security Service to protect edge interfaces**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: THALES*

**Abstract:**

pCR to 3GPP TR 33.839: Using TLS with Edge Security Service to protect edge interfaces

**Decision:** The document was **revised to S3-212225**.

**S3-211993 eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #5**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes additional editor’e notes to be resolved for solutiosn #5, as well as additional evaluation.

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

**S3-211994 eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #6**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes additional editor’e notes to be resolved for solutiosn #6, as well as additional evaluation.

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

**S3-211995 eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #7**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a couple of more editor’e notes to be resolved for solutiosn #7, as well as additional evaluation.

**Decision:** The document was **revised to S3-212206**.

**S3-211996 eEDGE: Conclusion for Key Issue #4**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to conclude on key issue #4 by endorsing solution #19 for normative phase.

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

**S3-212009 eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #5**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes additional editor’e notes to be resolved for solutiosn #5, as well as additional evaluation.

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

**S3-212010 eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #6**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes additional editor’e notes to be resolved for solutiosn #6, as well as additional evaluation.

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

**S3-212011 eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #7**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a couple of more editor’e notes to be resolved for solutiosn #7, as well as additional evaluation.

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

**S3-212012 eEDGE: Conclusion for Key Issue #4**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to conclude on key issue #4 by endorsing solution #19 for normative phase.

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

**S3-212026 eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #6**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes additional editor’e notes to be resolved for solutiosn #6, as well as additional evaluation.

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

**S3-212027 eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #7**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a couple of more editor’e notes to be resolved for solutiosn #7, as well as additional evaluation.

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

**S3-212028 eEDGE: Conclusion for Key Issue #4**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to conclude on key issue #4 by endorsing solution #19 for normative phase.

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

**S3-212041 Conclusions for KI#10 "Authorization during Edge Data Network change"**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Ericsson*

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

**S3-212042 Conclusions for KI#7 "Security of Network Information Provisioning to Local Applications with low latency procedure"**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Ericsson*

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

**S3-212043 Update Solution #17: Resolving EN on TLS ID**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Ericsson*

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

**S3-212044 Update to Solution #17: Resolving EN on Token Usage**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Ericsson*

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

**S3-212045 Update to Solution #17: Resolving EN on Multiple GPSI**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212226**.

**S3-212046 Evaluation of Solution #17**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212227**.

**S3-212047 Discussion on IP address to GPSI translation**

*Type: discussion For: Discussion  
 Source: Ericsson*

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

**S3-212048 Reply LS on IP address to GPSI translation**

*Type: LS out For: Approval  
 to SA2, SA6, cc SA1  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212355**.

**S3-212049 LS on EAS and ECS identifiers**

*Type: LS out For: Approval  
 to SA6  
 Source: Ericsson*

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

**S3-212051 Update to Solution #17: Handling multiple GPSI in IP address to GPSI translation**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Ericsson*

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

**S3-212068 Removal of Editor’s Notes**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This tdoc removes the Editor’s Notes from solution #7.

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

**S3-212082 [EDGE] Resolving EN1 in Solution#3**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Samsung*

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

**S3-212083 [EDGE] Resolving EN3 in Solution#3**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Samsung*

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

**S3-212084 [EDGE] Evaluation for solution#3**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Samsung*

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

**S3-212109 [EDGE] Conclusion for KI#1, KI#2 and KI#6**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Samsung*

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

**S3-212112 eEDGE: Additional Threat and Requirement for KI #10**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

The pCR proposes to add the threat analysis and requirement for authentication between the UE and the target EDN during EDN change in key issue #10.

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

**S3-212167 Updates to solution 12**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Intel K.K.,Huawei*

(Replaces S3-211589)

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

**S3-212180 Conclusion for the key issue#6**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: ZTE Corporation*

(Replaces S3-211566)

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

**S3-212190 Solution Evaluation for solution 8**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211628)

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

**S3-212191 Solution Evaluation for solution 11**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211629)

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

**S3-212206 eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #7**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Xiaomi Technology*

(Replaces S3-211995)

**Abstract:**

This pCR proposes a couple of more editor’e notes to be resolved for solutiosn #7, as well as additional evaluation.

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

**S3-212223 pCR to 33.839: GBA-based solution for EEC authentication and authorization framework with ECS and EES**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: THALES*

(Replaces S3-211444)

**Abstract:**

pCR to 3GPP TR 33.839: GBA-based solution for EEC authentication and authorization framework with ECS and EES

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

**S3-212224 pCR to 33.839: Using TLS with GBA to protect edge interfaces**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: THALES*

(Replaces S3-211445)

**Abstract:**

pCR to 3GPP TR 33.839: Using TLS with GBA to protect edge interfaces

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

**S3-212225 pCR to TR 33.839: Using TLS with Edge Security Service to protect edge interfaces**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: THALES*

(Replaces S3-211987)

**Abstract:**

pCR to 3GPP TR 33.839: Using TLS with Edge Security Service to protect edge interfaces

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

**S3-212226 Update to Solution #17: Resolving EN on Multiple GPSI**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Ericsson*

(Replaces S3-212045)

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

**S3-212227 Evaluation of Solution #17**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Ericsson*

(Replaces S3-212046)

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

**S3-212234 add evaluation to solution #23**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon, Qualcomm*

(Replaces S3-211853)

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

**S3-212235 EN removal of solution #9**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon*

(Replaces S3-211859)

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

**S3-212236 EC: Conclusion for Key issue #4 and Key issue #5**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Huawei, Hisilicon,Xiaomi*

(Replaces S3-211896)

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

**S3-212240 Draft TR 33.839 v0.6.0**

*Type: draft TR For: Approval  
 33.839 v0.6.0  
 Source: Huawei, HiSilicon*

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

**S3-212243 Proposed evaluation for solution #24 and partial conclusion for key issue #6**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Qualcomm Incorporated*

(Replaces S3-211782)

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

**S3-212251 MEC-Adding evaluation on Solution#9**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Apple*

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

**S3-212252 MEC-Adding evaluation on Solution#9**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Apple*

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

**S3-212253 MEC-New solution on authentication between EEC and ECS**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Apple*

(Replaces S3-211712)

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

**S3-212254 MEC-Kedge ID generation method**

*Type: pCR For: Approval  
 33.839 v0.5.0  
 Source: Apple*

(Replaces S3-211713)

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

**S3-212355 Reply LS on IP address to GPSI translation**

*Type: LS out For: Approval  
 to SA2, SA6, cc SA1  
 Source: Ericsson, Qualcomm Incorporated*

(Replaces S3-212048)

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

### 5.9 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS

**S3-211358 New KI: Secure Direct Discovery codes and filters renewal for the out-of-coverage scenario**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: MITRE Corporation*

**Abstract:**

New KI: Secure Direct Discovery codes and filters renewal for the out-of-coverage scenario

**Discussion:**

MITRE asked to be recorded in the minutes the following statement: The companies who supported the contribution were KPN, CATT, and Interdigital. Meanwhile, Qualcomm proposed to note the document with the reasoning being that it should be addressed in SA2, and only then, security could be addressed in SA3

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

**S3-211401 LS on Layer-3 UE-to-Network Relay authentication and authorization**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2101623*

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

**S3-211432 LS on R17 Layer-2 SL Relay of UE ID exposure in paging mechanism**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2104654*

**Decision:** The document was **replied to in S3-212204**.

**S3-211443 pCR to 33.847: editorial correction to solution #11**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: THALES*

**Abstract:**

pCR to 3GPP 33.847: editorial correction to solution #11

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

**S3-211463 Updated Solution #22: Representation of identities during broadcast**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: KPN N.V.*

**Decision:** The document was **revised to S3-212132**.

**S3-211483 Changes to TR 33.847**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: InterDigital, Inc.*

**Abstract:**

This pCR proposes editorial changes for clauses 3.2 through 5 of TR 33.847.

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

**S3-211484 TR 33.847 sol#10 update**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

Provides an update to clear ENs

**Decision:** The document was **revised to S3-212129**.

**S3-211485 TR 33.847 sol#24 evaluation**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

adds evaluation for sol#24

**Decision:** The document was **revised to S3-212130**.

**S3-211486 TR 33.847 sol#25 evaluation**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: InterDigital, Europe, Ltd.*

**Abstract:**

adds evaluation for sol#25

**Decision:** The document was **revised to S3-212131**.

**S3-211524 Updates in Solution 4**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: LG Electronics Inc.*

**Decision:** The document was **revised to S3-212176**.

**S3-211525 Evaluation of Solution 13**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: LG Electronics Inc.*

**Decision:** The document was **revised to S3-212175**.

**S3-211526 Remove editor's notes in key issue 1**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: LG Electronics Inc.*

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

**S3-211569 New solution for Key issue#4**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212177**.

**S3-211591 Remark\_in\_solution\_4**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-212231**.

**S3-211592 Updated Solution #23: Initial key with validity time**

*Type: pCR For: Approval  
 33.847 v0.4.0  
 Source: TNO*

(Replaces S3-211185)

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

**S3-211597 Updated Solution #23: Initial key with validity time**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: KPN N.V.*

**Decision:** The document was **revised to S3-212127**.

**S3-211618 New solution for one-to-one communication**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-211619 Resolve EN and add evaluation to Solution #27**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-211620 Resolve EN and add evaluation to Solution #28**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-211621 Propose evaluation to Solution #32**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212188**.

**S3-211622 Address Ens in Solution #33**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-211623 Add conclusions about UE-to-Network relay**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-211627 Solution Evaluation for solution 15**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212189**.

**S3-211663 Add conclusion to KI#10**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212203**.

**S3-211664 Discussion on security of 5G-TMSI-RNTI used for paging and UE ID in adaptation layer in 5G Prose**

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

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

**S3-211665 Draft rely LS on R17 Layer-2 SL Relay**

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

**Decision:** The document was **revised to S3-212204**.

**S3-211743 LS reply on R17 Layer-2 SL Relay of UE ID exposure in paging mechanism**

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

**Abstract:**

Reply to the LS R2-2104654 on R17 Layer-2 SL Relay of UE ID exposure in paging mechanism

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

**S3-211798 Evaluation of Solution #18**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-212169**.

**S3-211799 Evaluation of Solution #19**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211800 Conclusion of KI #1**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211801 Evaluation of Solution #13**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211802 EN resolution of Solution #19**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-212170**.

**S3-211803 New Key Issue on security policy handling for 5G Prose services**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated, Huawei, Hisilicon, Ericsson*

**Decision:** The document was **revised to S3-212171**.

**S3-211804 EN resolution of Solution #34**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-212172**.

**S3-211805 Conclusion of PC5 security setup for the Layer-3 UE-to-Network relay scenario**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211806 Evaluation of Solution #24**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211807 Add an evaluation for solution #10**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-212213**.

**S3-211808 Add an evaluation for solution #15**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211809 Update an evaluation for solution #30**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211810 Update of solution #18 to support privacy protection**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211811 Add an evaluation for solution #32**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211824 pCR to TR33.847- Update Solution#3**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: CATT*

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

**S3-211846 pCR to TR33.847- Update Solution#4**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: CATT*

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

**S3-211847 pCR to TR33.847- Update Solution#29**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: CATT*

**Decision:** The document was **revised to S3-212152**.

**S3-211848 pCR to TR33.847- Update Solution#30**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: CATT*

**Decision:** The document was **revised to S3-212153**.

**S3-211849 pCR to TR33.847- Conclusion of KI#1**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: CATT*

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

**S3-211850 pCR to TR33.847- Conclusion of KI#3**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: CATT*

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

**S3-211851 pCR to TR33.847- Conclusion of KI#10**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: CATT*

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

**S3-211931 pCR to TR33.847- Conclusion of KI#12**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: CATT*

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

**S3-211956 Update to solution #6**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212143**.

**S3-211957 Update to solution #21**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212144**.

**S3-211958 Update to solution #35**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212145**.

**S3-211959 Conclusion on key issue #3 and key issue #4**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

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

**S3-211960 Update to evaluation to solution #1**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

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

**S3-211961 Update to evaluation to solution #15**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

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

**S3-211962 Update to evaluation to solution #10**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212146**.

**S3-211963 Update to evaluation to solution #13**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

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

**S3-211964 Conclusion on key issue #2**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

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

**S3-211997 ProSe: Resolving an Editor’s Note in KI #1**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to update the threat analysis which is currently not sufficiently correct and clear.

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

**S3-211998 ProSe: New Key Issue on Security Policies for PC5 Connection**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

The pCR proposes to add a new key issue in TR 33.847 addressing the identified finding with threat analysis as well as the potential requirements.

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

**S3-211999 ProSe: New Key Issue on UP Security Policy Handling for Indirect Network Communication**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add a new key issue in TR 33.847 addressing the identified finding with threat analysis as well as the potential requirements.

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

**S3-212013 ProSe: Resolving an Editor’s Note in KI #1**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to update the threat analysis which is currently not sufficiently correct and clear.

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

**S3-212014 ProSe: New Key Issue on Security Policies for PC5 Connection**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

The pCR proposes to add a new key issue in TR 33.847 addressing the identified finding with threat analysis as well as the potential requirements.

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

**S3-212015 ProSe: New Key Issue on UP Security Policy Handling for Indirect Network Communication**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add a new key issue in TR 33.847 addressing the identified finding with threat analysis as well as the potential requirements.

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

**S3-212029 ProSe: Resolving an Editor’s Note in KI #1**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to update the threat analysis which is currently not sufficiently correct and clear.

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

**S3-212030 ProSe: New Key Issue on Security Policies for PC5 Connection**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

The pCR proposes to add a new key issue in TR 33.847 addressing the identified finding with threat analysis as well as the potential requirements.

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

**S3-212031 ProSe: New Key Issue on UP Security Policy Handling for Indirect Network Communication**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add a new key issue in TR 33.847 addressing the identified finding with threat analysis as well as the potential requirements.

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

**S3-212085 Update for solution#1: Optimized Authorization**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-212135**.

**S3-212114 Update to solution #32**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-212147**.

**S3-212127 Updated Solution #23: Initial key with validity time**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: KPN N.V.*

(Replaces S3-211597)

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

**S3-212129 TR 33.847 sol#10 update**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: InterDigital, Europe, Ltd.*

(Replaces S3-211484)

**Abstract:**

Provides an update to clear ENs

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

**S3-212130 TR 33.847 sol#24 evaluation**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: InterDigital, Europe, Ltd.*

(Replaces S3-211485)

**Abstract:**

adds evaluation for sol#24

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

**S3-212131 TR 33.847 sol#25 evaluation**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: InterDigital, Europe, Ltd.*

(Replaces S3-211486)

**Abstract:**

adds evaluation for sol#25

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

**S3-212132 Updated Solution #22: Representation of identities during broadcast**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: KPN N.V.*

(Replaces S3-211463)

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

**S3-212135 Update for solution#1: Optimized Authorization**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Samsung*

(Replaces S3-212085)

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

**S3-212143 Update to solution #6**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

(Replaces S3-211956)

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

**S3-212144 Update to solution #21**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

(Replaces S3-211957)

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

**S3-212145 Update to solution #35**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

(Replaces S3-211958)

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

**S3-212146 Update to evaluation to solution #10**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Ericsson*

(Replaces S3-211962)

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

**S3-212147 Update to solution #32**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Philips International B.V.*

(Replaces S3-212114)

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

**S3-212152 pCR to TR33.847- Update Solution#29**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: CATT*

(Replaces S3-211847)

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

**S3-212153 pCR to TR33.847- Update Solution#30**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: CATT*

(Replaces S3-211848)

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

**S3-212154 Draft TR 33.847 v0.6.0 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS**

*Type: draft TR For: Approval  
 33.847 v0.6.0  
 Source: CATT*

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

**S3-212169 Evaluation of Solution #18**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

(Replaces S3-211798)

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

**S3-212170 EN resolution of Solution #19**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

(Replaces S3-211802)

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

**S3-212171 New Key Issue on security policy handling for 5G Prose services**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated, Huawei, Hisilicon, Ericsson*

(Replaces S3-211803)

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

**S3-212172 EN resolution of Solution #34**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

(Replaces S3-211804)

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

**S3-212175 Evaluation of Solution 13**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: LG Electronics Inc.*

(Replaces S3-211525)

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

**S3-212176 Updates in Solution 4**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: LG Electronics Inc.*

(Replaces S3-211524)

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

**S3-212177 New solution for Key issue#4**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: ZTE Corporation*

(Replaces S3-211569)

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

**S3-212188 Propose evaluation to Solution #32**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211621)

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

**S3-212189 Solution Evaluation for solution 15**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Huawei, HiSilicon, Ericsson, Qualcomm Incorporated*

(Replaces S3-211627)

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

**S3-212203 Add conclusion to KI#10**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211663)

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

**S3-212204 Reply LS on R17 Layer-2 SL Relay**

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

(Replaces S3-211665)

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

**S3-212213 Add an evaluation for solution #10**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Qualcomm Incorporated*

(Replaces S3-211807)

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

**S3-212231 Remark to address a potential security issue in Solution #4 (LTE security-based mechanism for 5G ProSe restricted discovery)**

*Type: pCR For: Approval  
 33.847 v0.5.0  
 Source: Philips International B.V.*

(Replaces S3-211591)

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

### 5.10 Study on security for enhanced support of Industrial IoT

**S3-211447 Presentation of Report TR 33.851**

*Type: pCR For: Presentation  
 33.851 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211448 Conclusion on UE-UE**

*Type: pCR For: Approval  
 33.851 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212125**.

**S3-211449 Update of solution applicability to KI**

*Type: pCR For: Approval  
 33.851 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211450 Update of mapping table related to documented solution in Annex**

*Type: pCR For: Approval  
 33.851 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211451 Update to asymmetric delay attacks annex**

*Type: pCR For: Approval  
 33.851 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell,*

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

**S3-212125 Conclusion on UE-UE**

*Type: pCR For: Approval  
 33.851 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211448)

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

**S3-212126 TR\_33.851\_IIoT\_Sec**

*Type: draft TR For: (not specified)  
 33.851 v0.6.0  
 Source: Nokia, Nokia Shanghai Bell*

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

### 5.11 Study on Security Aspects of Enhancements for 5G Multicast-Broadcast Services

**S3-211403 Reply LS on 5MBS progress and issues to address**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2102077*

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

**S3-211590 Update\_in\_solution\_9**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Philips International B.V.*

**Decision:** The document was **revised to S3-212232**.

**S3-211631 Discussion paper on MBS traffic protection**

*Type: discussion For: Endorsement  
 33.850 v..  
 Source: Huawei, Hisilicon*

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

**S3-211632 Update to the solution 11**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Huawei, Hisilicon,China Broadcasting Network*

**Decision:** The document was **revised to S3-212192**.

**S3-211633 Conclusion for key issue 2**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211634 Conclusion for key issue 3**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Huawei, Hisilicon,China Broadcasting Network*

**Decision:** The document was **revised to S3-212193**.

**S3-211635 Update to the overview**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211714 MBS-New solution on Key distribution**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Apple*

**Decision:** The document was **revised to S3-212255**.

**S3-211723 MBS conclusions**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Ericsson*

**Abstract:**

MBS conclusions

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

**S3-211812 EN resolution of Solution #12**

*Type: pCR For: (not specified)  
 33.850 v0.5.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-212173**.

**S3-211813 Evaluation of Solution #2**

*Type: pCR For: (not specified)  
 33.850 v0.5.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-212174**.

**S3-211814 Evaluation of Solution #11**

*Type: pCR For: (not specified)  
 33.850 v0.5.0  
 Source: Qualcomm Incorporated*

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

**S3-211877 Updates to solutoin #3**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212239**.

**S3-211878 Updates to solutoin #4**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211879 Updates to solutoin #5**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211880 Add conclusion for key issue #1**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-211932 Editor Note removal for Solution#10**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Nokia, Nokia Shanghai-Bell*

**Decision:** The document was **revised to S3-212250**.

**S3-211933 Evaluation for Solution#10**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Nokia, Nokia Shanghai-Bell*

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

**S3-212096 Updates to solution#13 on Key refresh mechanism**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Samsung*

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

**S3-212097 Updates to solution#13 on support for multiple MB-SMF**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-212139**.

**S3-212098 Updates to solution#13 on MBS security algorithm selection**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-212140**.

**S3-212139 Updates to solution#13 on support for multiple MB-SMF**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Samsung*

(Replaces S3-212097)

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

**S3-212140 Updates to solution#13 on MBS security algorithm selection**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Samsung*

(Replaces S3-212098)

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

**S3-212173 EN resolution of Solution #12**

*Type: pCR For: (not specified)  
 33.850 v0.5.0  
 Source: Qualcomm Incorporated*

(Replaces S3-211812)

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

**S3-212174 Evaluation of Solution #2**

*Type: pCR For: (not specified)  
 33.850 v0.5.0  
 Source: Qualcomm Incorporated*

(Replaces S3-211813)

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

**S3-212178 TR 33.850 for MBS security**

*Type: draft TR For: Approval  
 33.850 v0.6.0  
 Source: Huawei, Hisilicon*

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

**S3-212192 Update to the solution 11**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Huawei, Hisilicon*

(Replaces S3-211632)

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

**S3-212193 Conclusion for key issue 3**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Huawei, Hisilicon*

(Replaces S3-211634)

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

**S3-212232 Additions in Solution #9**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Philips International B.V.*

(Replaces S3-211590)

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

**S3-212239 Updates to solutoin #3**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Huawei, Hisilicon*

(Replaces S3-211877)

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

**S3-212250 Editor Note removal for Solution#10**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Nokia, Nokia Shanghai-Bell*

(Replaces S3-211932)

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

**S3-212255 MBS-New solution on Key distribution**

*Type: pCR For: Approval  
 33.850 v0.5.0  
 Source: Apple*

(Replaces S3-211714)

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

### 5.12 Study on enhanced security support for Non-Public Networks

**S3-211390 LS on support of PWS over SNPN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S1-210368*

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

**S3-211394 LS on UE capabilities indication in UPU**

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

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

**S3-211395 LS on updating the Credentials Holder controlled lists for SNPN selection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2101077*

**Decision:** The document was **replied to in S3-212208**.

**S3-211414 Reply LS on support of PWS over SNPN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2102963*

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

**S3-211428 Reply LS on support of PWS over SNPN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2104640*

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

**S3-211439 Reply LS on updating the Credentials Holder controlled lists for SNPN selection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-212419*

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

**S3-211441 Reply LS on UE capabilities indication in UPU**

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

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

**S3-211467 Changes to TR 33.857**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: InterDigital, Inc.*

**Abstract:**

This pCR proposes editorial changes for clauses Introduction through 5 of TR 33.857.

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

**S3-211521 Further conclusions for KI #1**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: CableLabs*

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

**S3-211570 New solution on control plane based provisioning PS to AUSF**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: ZTE Corporation*

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

**S3-211571 New solution on control plane based provisioning PS to UDM**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: ZTE Corporation*

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

**S3-211573 Updates to solution 14: Removal of Editor's notes: Certificate Handling**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Intel K.K.*

**Decision:** The document was **revised to S3-212166**.

**S3-211574 Updates to solution 14: Removal of Editor’s notes: One-Way**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Intel K.K.*

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

**S3-211577 Proposal for conclusion for Key Issue 4**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Intel K.K.*

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

**S3-211578 Proposal for conclusion for Key Issue 4**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Intel K.K.*

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

**S3-211579 Updates to solution 14: Removal of Editor’s notes: Three Authentication**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Intel K.K.*

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

**S3-211652 Solution Update for Solution #5**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212197**.

**S3-211653 Evaluation for Solution #12**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212198**.

**S3-211724 Solution for privacy protection during initial access**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211725 Analysis of security properties of architectural options**

*Type: pCR For: Endorsement  
 33.857 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211726 Proposal for a conclusion on KI#4**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211727 Resolution of editor’s note in solution 19 related to bidding down attacks.**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211728 Resolution of Editor's Note in Solution 19 related to provisioning of server certificate the the onboarding UE.**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212241**.

**S3-211729 Resolution of an Editor's Note in Solution 19 related to security implications of the solution**

*Type: pCR For: Approval  
 33.867 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211730 Resolution of Editor's Note in Solution 19 related to construction of SUCI.**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211731 Resolution of Editor's Note in Solution 19 related to UDM involvementUpdate**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211732 Evalution and system impact for soluiton 19**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212248**.

**S3-211733 Update to Solution**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211734 LS on Feedback on Key Issue #1 "Enhancements to Support SNPN along with credentials owned by an entity separate from the SNPN"**

*Type: LS out For: Approval  
 to SA2  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211735 LS on architectural clarifications related to onboarding without client authentication**

*Type: LS out For: Approval  
 to SA2  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211741 Discussion capability negotiation for the parameters contained in UPU**

*Type: discussion For: Discussion  
 Source: Ericsson Japan K.K.*

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

**S3-211744 draft LS reply: UE capabilities indication in UPU**

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

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

**S3-211767 Conclusions for KI#1 (external entity) on SUPI privacy and usage of MSK**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Ericsson, Huawei, Interdigital, Lenovo, Motorola Mobility, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated*

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

**S3-211768 Conclusions for KI#1 (external entity) on AAA interworking**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Ericsson, China Mobile, Huawei, InterDigital, Qualcomm Incorporated*

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

**S3-211769 Conclusions for KI#4 (initial access)**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Ericsson, Huawei, InterDigital, Lenovo, Motorola Mobility, Qualcomm Incorporated*

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

**S3-211770 Conclusions for KI#2 on secure provisioning of PNI-NPN credentials**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Ericsson*

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

**S3-211815 Discussion on SA2 LS on UE capabilities indication in UPU**

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

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

**S3-211816 pCR: Additional conclusions for KI #1**

*Type: pCR For: (not specified)  
 33.857 v0.4.0  
 Source: Qualcomm Incorporated*

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

**S3-211856 reply LS on UE capabilities indication in UPU**

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

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

**S3-211860 Discussion on UE capabilities indication in UPU**

*Type: discussion For: Endorsement  
 Source: Huawei, Hisilicon*

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

**S3-211861 Conclusion on KI#5**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Huawei, Hisilicon*

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

**S3-212000 eNPN: Conclusion on KI#8 with Solution#18 Updating**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to complete solution #18 by adding the missing step and also updates the system impact accordingly. Consequently, it is proposed to conclude on key issue #8 by adopting solution #18.

**Decision:** The document was **revised to S3-212207**.

**S3-212001 eNPN: Solution of Security Mechansim for UP Provisioning of Credentials**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a solution addressing one of the requirements in Key Issue #2, which reuses the mechanism of UP security policy configuration and UP security activation defined in TS 33.501.

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

**S3-212002 eNPN: New KI of Security Protection for the Update of Preferred SNPN List**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR is proposed add a new key issue in TR 33.857 with threat analysis and potential requirement addressing the above issue, and then make a conclusion on reusing the exsiting security mechanisms defined in TS 33.501 for the procedure options proposed

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

**S3-212003 Reply LS on updating the Credentials Holder controlled lists for SNPN selection**

*Type: LS out For: Approval  
 to SG2, cc CT1  
 Source: Xiaomi Technology*

**Decision:** The document was **revised to S3-212208**.

**S3-212016 eNPN: Conclusion on KI#8 with Solution#18 Updating**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to complete solution #18 by adding the missing step and also updates the system impact accordingly. Consequently, it is proposed to conclude on key issue #8 by adopting solution #18.

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

**S3-212017 eNPN: Solution of Security Mechansim for UP Provisioning of Credentials**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a solution addressing one of the requirements in Key Issue #2, which reuses the mechanism of UP security policy configuration and UP security activation defined in TS 33.501.

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

**S3-212018 eNPN: New KI of Security Protection for the Update of Preferred SNPN List**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR is proposed add a new key issue in TR 33.857 with threat analysis and potential requirement addressing the above issue, and then make a conclusion on reusing the exsiting security mechanisms defined in TS 33.501 for the procedure options proposed

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

**S3-212019 Reply LS on updating the Credentials Holder controlled lists for SNPN selection**

*Type: LS out For: Approval  
 to SG2, cc CT1  
 Source: Xiaomi Technology*

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

**S3-212032 eNPN: Conclusion on KI#8 with Solution#18 Updating**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to complete solution #18 by adding the missing step and also updates the system impact accordingly. Consequently, it is proposed to conclude on key issue #8 by adopting solution #18.

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

**S3-212033 eNPN: Solution of Security Mechansim for UP Provisioning of Credentials**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a solution addressing one of the requirements in Key Issue #2, which reuses the mechanism of UP security policy configuration and UP security activation defined in TS 33.501.

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

**S3-212034 eNPN: New KI of Security Protection for the Update of Preferred SNPN List**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR is proposed add a new key issue in TR 33.857 with threat analysis and potential requirement addressing the above issue, and then make a conclusion on reusing the exsiting security mechanisms defined in TS 33.501 for the procedure options proposed

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

**S3-212035 Reply LS on updating the Credentials Holder controlled lists for SNPN selection**

*Type: LS out For: Approval  
 to SG2, cc CT1  
 Source: Xiaomi Technology*

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

**S3-212054 pCR: Conclusion for KI #1 on addressing security threat against KAUSF**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: CableLabs*

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

**S3-212056 pCR: Conclusion for KI #1 on addressing security threat against KAUSF**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: CableLabs*

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

**S3-212072 A new onboarding solution addressing KI#2**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

A new onboarding solution addressing KI#2.

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

**S3-212166 Updates to solution 14: Removal of Editor's notes: Certificate Handling**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Intel K.K.*

(Replaces S3-211573)

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

**S3-212197 Solution Update for Solution #5**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211652)

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

**S3-212198 Evaluation for Solution #12**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211653)

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

**S3-212207 eNPN: Conclusion on KI#8 with Solution#18 Updating**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Xiaomi Technology,Huawei*

(Replaces S3-212000)

**Abstract:**

This pCR proposes to complete solution #18 by adding the missing step and also updates the system impact accordingly. Consequently, it is proposed to conclude on key issue #8 by adopting solution #18.

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

**S3-212208 Reply LS on updating the Credentials Holder controlled lists for SNPN selection**

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

(Replaces S3-212003)

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

**S3-212220 draft TR 33.857 v0.6.0**

*Type: draft TR For: Approval  
 33.857 v0.6.0  
 Source: Ericsson*

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

**S3-212241 Resolution of Editor's Note in Solution 19 related to provisioning of server certificate the the onboarding UE.**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211728)

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

**S3-212248 Evalution and system impact for soluiton 19**

*Type: pCR For: Approval  
 33.857 v0.5.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211732)

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

### 5.13 Study on security aspects of the Disaggregated gNB Architecture

### 5.14 Study on User Consent for 3GPP services

**S3-211654 Solution Update for Solution #2**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212199**.

**S3-211655 Update on Observations related to Regulations**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212200**.

**S3-211656 Add Security Requirement for Key Issue #3**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212201**.

**S3-211715 UC3S-Requirement on revoking user consent**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Apple*

**Decision:** The document was **revised to S3-212256**.

**S3-211852 Address ENs for User Consent for Exposure of information to Edge Applications in Real Time**

*Type: pCR For: (not specified)  
 33.867 v0.4.0  
 Source: China Unicom*

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

**S3-212052 Intro update**

*Type: pCR For: (not specified)  
 33.867 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-212080 Solution on user's consent for exposure of information to Edge Applications**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Samsung*

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

**S3-212081 Solution on user consent for UE data collection**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Samsung*

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

**S3-212108 [UC3S] Update to Conclusion**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-212142**.

**S3-212123 S on user consent revocation to SA2**

*Type: LS out For: (not specified)  
 to SA2  
 Source: Nokia*

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

**S3-212142 [UC3S] Update to Conclusion**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Samsung*

(Replaces S3-212108)

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

**S3-212199 Solution Update for Solution #2**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211654)

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

**S3-212200 Update on Observations related to Regulations**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211655)

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

**S3-212201 Add Security Requirement for Key Issue #3**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Huawei, HiSilicon, Apple, Nokia, Nokia Shanghai Bell*

(Replaces S3-211656)

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

**S3-212205 Draft TR 33.867**

*Type: draft TR For: Approval  
 33.867 v0.5.0  
 Source: Huawei, HiSilicon*

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

**S3-212256 UC3S-Requirement on revoking user consent**

*Type: pCR For: Approval  
 33.867 v0.4.0  
 Source: Apple*

(Replaces S3-211715)

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

### 5.15 Study on security aspects of the 5GMSG Service

**S3-211838 Add evaluation to solution #4**

*Type: pCR For: Approval  
 33.862 v0.4.0  
 Source: China Mobile*

**Decision:** The document was **revised to S3-212216**.

**S3-212086 [5gmsg] Transport security protection for MSGin5G-3 interface**

*Type: pCR For: Approval  
 33.862 v0.4.0  
 Source: Samsung*

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

**S3-212087 [5gmsg] Resolving ENs in solution#1**

*Type: pCR For: Approval  
 33.862 v0.4.0  
 Source: Samsung*

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

**S3-212088 [5gmsg] Resolving ENs in solution#5**

*Type: pCR For: Approval  
 33.862 v0.4.0  
 Source: Samsung*

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

**S3-212089 [5gmsg] Resolving ENs in solution#6**

*Type: pCR For: Approval  
 33.862 v0.4.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-212136**.

**S3-212090 [5gmsg] Resolving ENs in solution#7**

*Type: pCR For: Approval  
 33.862 v0.4.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-212137**.

**S3-212136 [5gmsg] Resolving ENs in solution#6**

*Type: pCR For: Approval  
 33.862 v0.4.0  
 Source: Samsung*

(Replaces S3-212089)

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

**S3-212137 [5gmsg] Resolving ENs in solution#7**

*Type: pCR For: Approval  
 33.862 v0.4.0  
 Source: Samsung*

(Replaces S3-212090)

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

**S3-212215 draft TR 33.862 0.5.0**

*Type: draft TR For: Approval  
 33.862 v0.5.0  
 Source: China Mobile E-Commerce Co.*

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

**S3-212216 Add evaluation to solution #4**

*Type: pCR For: Approval  
 33.862 v0.4.0  
 Source: China Mobile*

(Replaces S3-211838)

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

### 5.16 Study on security aspects of enablers for Network Automation (eNA) for the 5G system (5GS) Phase 2

**S3-211400 LS Response on Network Slice PA Charging per maximum utilized bandwidth**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-21001347*

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

**S3-211417 Reply LS on RAT type for network monitoring**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2103237*

**Decision:** The document was **replied to in S3-212158**.

**S3-211418 LS on security aspects for the method of collection of data from the UE**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-213263*

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

**S3-211422 LS on Transaction Information - Dispersion Analytics**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2103268*

**Decision:** The document was **replied to in S3-212159**.

**S3-211464 Solution on Remote Attestation for 5GS**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Johns Hopkins University APL, US National Security Agency, CISA ECD, InterDigital, Fraunhofer SIT, CableLabs, AT&T, Verizon Wireless, NIST*

**Abstract:**

This document proposes remote attestation as a new candidate solution for the FS\_eNA\_SEC study item for inclusion in TR 33.866. It addresses 2 key issues: KI #1.2 on "Processing of tampered data" and KI #2.2 on "Anomalous NF behaviour detection by NWDAF

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

**S3-211465 Discussion on Remote Attestation for 5GS**

*Type: discussion For: Discussion  
 33.866 v..  
 Source: Johns Hopkins University APL, US National Security Agency, CISA ECD, InterDigital, Fraunhofer SIT, CableLabs, AT&T, Verizon Wireless, NIST*

**Abstract:**

This discussion paper supports the new candidate solution for FS\_eNA\_SEC proposed in S3-211464. It provides additional technical background on remote attestation.

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

**S3-211466 Changes to TR 33.866**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: InterDigital, Inc.*

**Abstract:**

This pCR proposes editorial changes for Clauses 4-5 of TR 33.866.

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

**S3-211657 Conclusion for Key Issue #3.1**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Huawei, HiSilicon*

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

**S3-211658 Conclusion for Key Issue #3.2**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Huawei, HiSilicon*

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

**S3-211659 Conclusion for Key Issue #1.1**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Huawei, HiSilicon*

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

**S3-211661 Delete EN of Solution#2**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212202**.

**S3-211691 EN Resolution Anomolous NF Behaviour**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212163**.

**S3-211692 Output analytics from NWDAF to detect Anomalous NF Behaviour**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211693 Solution on Processing of tampered data**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212160**.

**S3-211694 EN on solution relation with user consent study**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211695 EN resolution on solution privacy preservation of transmitted data**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211696 Solution on Authorization of NF Service Consumers for data access via DCCF**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212161**.

**S3-211697 Solution on Authorization of NF Service Consumers to access data from ADRF via DCCF**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212162**.

**S3-211698 Reply LS on Transaction Information - Dispersion Analytics**

*Type: LS out For: Approval  
 to SA2  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212159**.

**S3-211699 KI update Dispersion Analytics against DDoS**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-211823 Reply-LS on security aspects for the method of collection of data from the UE**

*Type: LS out For: Approval  
 to SA WG2  
 Source: OPPO*

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

**S3-211839 Add evaluation to solution #1**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: China Mobile*

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

**S3-211840 Add deatails to solution #6**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: China Mobile*

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

**S3-211841 Add evaluation to solution #6**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: China Mobile*

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

**S3-211854 add ENs to solution#5**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **noted**.

**S3-211865 New solution to key issue #3.3**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212237**.

**S3-211866 New solution to key issue #2.1**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **noted**.

**S3-211867 New solution to key issue #1.5**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212238**.

**S3-212055 Removal of Editor’s Note of Solution#5**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This tdoc removes the Editor’s Notes form solution #5.

**Decision:** The document was **noted**.

**S3-212057 Solution on Authorization of Data Consumers for data access via DCCF**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212221**.

**S3-212058 Solution on Authorization of Data Consumers for data access via DCCF through Messaging Framework**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-212059 New KI Untrusted DCCF for secure data collection**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-212060 Solution for Untrusted DCCF for secure data collection**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-212077 Discussion on detection of MitM attack using NWDAF**

*Type: discussion For: Discussion  
 33.866 v..  
 Source: Samsung*

**Decision:** The document was **noted**.

**S3-212078 Solution on analytics for MitM attack detection**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Samsung*

**Decision:** The document was **noted**.

**S3-212079 Solution on analytics for DoS attack detection**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Samsung*

**Decision:** The document was **noted**.

**S3-212118 Removal of Editor’s Note of Solution#4**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Lenovo, Motorola Mobility*

**Decision:** The document was **noted**.

**S3-212158 Reply LS on RAT type for network monitoring**

*Type: LS out For: (not specified)  
 to SA WG2; SA WG6  
 Source: S2-2103237*

**Decision:** The document was **approved**.

**S3-212159 Reply LS on Transaction Information - Dispersion Analytics**

*Type: LS out For: Approval  
 to SA WG2  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211698)

**Abstract:**

Response to: S3-211422/2103268

**Decision:** The document was **approved**.

**S3-212160 Solution on Processing of tampered data**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211693)

**Abstract:**

S3-211693-r3 approved

**Decision:** The document was **approved**.

**S3-212161 Solution on Authorization of NF Service Consumers for data access via DCCF**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211696)

**Abstract:**

S3-211696-r3 approved

**Decision:** The document was **approved**.

**S3-212162 Solution on Authorization of NF Service Consumers to access data from ADRF via DCCF**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211697)

**Abstract:**

S3-211697-r1 approved

**Decision:** The document was **approved**.

**S3-212163 EN Resolution Anomolous NF Behaviour**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211691)

**Abstract:**

S3-211691-r2 approved

**Decision:** The document was **approved**.

**S3-212202 Delete EN of Solution#2**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Huawei, HiSilicon*

(Replaces S3-211661)

**Decision:** The document was **approved**.

**S3-212214 draft TR 33.866 0.5.0**

*Type: draft TR For: Approval  
 33.866 v0.5.0  
 Source: China Mobile E-Commerce Co.*

**Decision:** The document was **approved**.

**S3-212221 Solution on Authorization of Data Consumers for data access via DCCF**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

(Replaces S3-212057)

**Decision:** The document was **approved**.

**S3-212237 New solution to key issue #3.3**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Huawei, Hisilicon*

(Replaces S3-211865)

**Decision:** The document was **approved**.

**S3-212238 New solution to key issue #1.5**

*Type: pCR For: Approval  
 33.866 v0.4.0  
 Source: Huawei, Hisilicon*

(Replaces S3-211867)

**Decision:** The document was **approved**.

### 5.17 Study on the security of AMF re-allocation

**S3-211502 Solution#8 Clarifications**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **noted**.

**S3-211572 New solution for AMF re-allocation**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-212179**.

**S3-211737 Update to Solution #4**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR provides an update to solution #4 in TR 33.864.

**Decision:** The document was **revised to S3-212228**.

**S3-211738 Update to Solution #6**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR provides an update to solution #6 in TR 33.864.

**Decision:** The document was **revised to S3-212229**.

**S3-211739 Update to Solution #7**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR provides an update to solution #7 in TR 33.864.

**Decision:** The document was **revised to S3-212230**.

**S3-211742 Conclusion on Key Issue #1**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This pCR provides the conclusion to Key Issue #1 in TR 33.864.

**Decision:** The document was **noted**.

**S3-211789 Addressing the Editors’ Note in solution #1**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-212242**.

**S3-211790 Missing details on handling of possible unprotected messages in solution #3**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **noted**.

**S3-211791 ABBA parameter handling in solutions #6 and #7**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **noted**.

**S3-211914 Update to solution #2**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212156**.

**S3-211915 AMF reallocation via direct NAS reroute: handling of UL NAS COUNT corresponding to RR message derivation**

*Type: discussion For: Discussion  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-211916 AMF re-allocation: Analysis of solutions**

*Type: discussion For: Discussion  
 33.864 v..  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-211917 AMF re-allocation: Conclusion**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-211918 AMF re-allocation: Solution #9 updates**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212157**.

**S3-211920 AMF re-allocation: Discussion about the WID**

*Type: discussion For: Discussion  
 33.864 v..  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-212093 Update to solution#9**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-212138**.

**S3-212099 Comparison of solutions and propose way forward**

*Type: discussion For: Discussion  
 33.864 v..  
 Source: Samsung*

**Decision:** The document was **noted**.

**S3-212100 Updates to solution#5**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Samsung*

**Decision:** The document was **approved**.

**S3-212101 Removal of Editor's Note in Solution#5**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Samsung*

**Decision:** The document was **noted**.

**S3-212102 Updates to evaluation in solution#5**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Samsung*

**Decision:** The document was **noted**.

**S3-212124 LS on Clarification of AMF Reallocation and network slice selection**

*Type: LS out For: Approval  
 to SA2  
 Source: Lenovo*

**Decision:** The document was **approved**.

**S3-212138 Solution to reroute 5G NAS security context via RAN**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Samsung*

(Replaces S3-212093)

**Decision:** The document was **approved**.

**S3-212155 Draft TR 33.864 v0.5.0 Study on the security of Access and Mobility Management Function (AMF) re-allocation**

*Type: draft TR For: Approval  
 33.864 v0.5.0  
 Source: Ericsson España S.A.*

**Decision:** The document was **approved**.

**S3-212156 Update to solution #2**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Ericsson*

(Replaces S3-211914)

**Decision:** The document was **approved**.

**S3-212157 AMF re-allocation: Solution #9 updates**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Ericsson*

(Replaces S3-211918)

**Decision:** The document was **approved**.

**S3-212179 New solution for AMF re-allocation**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: ZTE Corporation*

(Replaces S3-211572)

**Decision:** The document was **approved**.

**S3-212228 Update to Solution #4**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Lenovo, Motorola Mobility*

(Replaces S3-211737)

**Abstract:**

This pCR provides an update to solution #4 in TR 33.864.

**Decision:** The document was **approved**.

**S3-212229 Update to Solution #6**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Lenovo, Motorola Mobility*

(Replaces S3-211738)

**Abstract:**

This pCR provides an update to solution #6 in TR 33.864.

**Decision:** The document was **approved**.

**S3-212230 Update to Solution #7**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Lenovo, Motorola Mobility*

(Replaces S3-211739)

**Abstract:**

This pCR provides an update to solution #7 in TR 33.864.

**Decision:** The document was **approved**.

**S3-212242 Addressing the Editors’ Note in solution #1**

*Type: pCR For: Approval  
 33.864 v0.4.0  
 Source: Qualcomm Incorporated*

(Replaces S3-211789)

**Decision:** The document was **approved**.

### 5.18 Study on Security for NR Integrated Access and Backhaul

**S3-211362 LS on using MOBIKE in Integrated Access and Backhaul system**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-211297*

**Decision:** The document was **replied to in S3-212164**.

**S3-211519 Discussion on R3 LS on MOBIKE**

*Type: discussion For: Endorsement  
 Source: Nokia, Nokia Shanghai-Bell*

**Decision:** The document was **endorsed**.

**S3-211520 REly LS on MOBIKE usage in IAB**

*Type: LS out For: Approval  
 to RAN3  
 Source: Nokia, Nokia Shanghai-Bell*

**Decision:** The document was **revised to S3-212164**.

**S3-211637 Clarification to protect F1 interface security for IAB in NR-DC mode**

*Type: draftCR For: Approval  
 33.501 v17.1.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **noted**.

**S3-212107 [IAB] Unprotected BAP Control PDU exchange**

*Type: pCR For: Approval  
 33.824 v0.8.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-212141**.

**S3-212141 [IAB] Unprotected BAP Control PDU exchange**

*Type: pCR For: Approval  
 33.824 v0.8.0  
 Source: Samsung*

(Replaces S3-212107)

**Decision:** The document was **approved**.

**S3-212164 Reply LS on MOBIKE usage in IAB**

*Type: LS out For: Approval  
 to RAN3  
 Source: Nokia, Nokia Shanghai-Bell*

(Replaces S3-211520)

**Decision:** The document was **approved**.

**S3-212233 Draft 33.824 v0.9.0**

*Type: draft TR For: Approval  
 33.824 v0.9.0  
 Source: Samsung*

**Decision:** The document was **approved**.

### 5.19 Study on the security of the system enablers for devices having multiple Universal Subscriber Identity Modules

**S3-211402 LS on System support for Multi-USIM devices**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2102039*

**Decision:** The document was **noted**.

**S3-211431 LS on NAS-based busy indication**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2104354*

**Decision:** The document was **noted**.

**S3-211594 Updates to solution 1**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Intel K.K.*

**Decision:** The document was **approved**.

**S3-211595 Conclusion to Key issue 1,2**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Intel K.K.*

**Decision:** The document was **revised to S3-212165**.

**S3-211596 Key issue on security aspects of Paging Cause**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Intel K.K.*

**Decision:** The document was **noted**.

**S3-211666 A new Key issue on paging cause**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-211667 A new solution to paging cause**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-212004 MUSIM: New Solution for Key Issue #1 for RRC\_Idle UE**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a new solution addressing key issue #1 in TR 33.873 for RRC\_Idle UE.

**Decision:** The document was **noted**.

**S3-212005 MUSIM: New Solution for Key Issue #1 for RRC\_Inactive UE**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a solution addressing key issue #1 in TR 33.873 for RRC\_Inactive UE.

**Decision:** The document was **noted**.

**S3-212006 MUSIM: Conclusion for Key Issue #2**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to conclude on key issue #2 of TR 33.873 that none solution is needed for this key issue, at least not in Rel-17.

**Decision:** The document was **revised to S3-212209**.

**S3-212020 MUSIM: New Solution for Key Issue #1 for RRC\_Idle UE**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a new solution addressing key issue #1 in TR 33.873 for RRC\_Idle UE.

**Decision:** The document was **withdrawn**.

**S3-212021 MUSIM: New Solution for Key Issue #1 for RRC\_Inactive UE**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a solution addressing key issue #1 in TR 33.873 for RRC\_Inactive UE.

**Decision:** The document was **withdrawn**.

**S3-212022 MUSIM: Conclusion for Key Issue #2**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to conclude on key issue #2 of TR 33.873 that none solution is needed for this key issue, at least not in Rel-17.

**Decision:** The document was **withdrawn**.

**S3-212036 MUSIM: New Solution for Key Issue #1 for RRC\_Idle UE**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a new solution addressing key issue #1 in TR 33.873 for RRC\_Idle UE.

**Decision:** The document was **withdrawn**.

**S3-212037 MUSIM: New Solution for Key Issue #1 for RRC\_Inactive UE**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes a solution addressing key issue #1 in TR 33.873 for RRC\_Inactive UE.

**Decision:** The document was **withdrawn**.

**S3-212038 MUSIM: Conclusion for Key Issue #2**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to conclude on key issue #2 of TR 33.873 that none solution is needed for this key issue, at least not in Rel-17.

**Decision:** The document was **withdrawn**.

**S3-212165 Conclusion to Key issue 1,2**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Intel K.K.*

(Replaces S3-211595)

**Decision:** The document was **approved**.

**S3-212168 draft TR Study on the security of the system enablers for devices having multiple Universal Subscriber Identity Modules**

*Type: draft TR For: Approval  
 33.873 v0.4.0  
 Source: Intel K.K.*

**Decision:** The document was **approved**.

**S3-212209 MUSIM: Conclusion for Key Issue #2**

*Type: pCR For: Approval  
 33.873 v0.3.0  
 Source: Xiaomi Technology*

(Replaces S3-212006)

**Abstract:**

This pCR proposes to conclude on key issue #2 of TR 33.873 that none solution is needed for this key issue, at least not in Rel-17.

**Decision:** The document was **approved**.

**S3-212259 Cover sheet TR 33.873**

*Type: TS or TR cover For: (not specified)  
 33.873 v0.4.0  
 Source: Intel K.K.*

**Decision:** The document was **revised to S3-212374**.

**S3-212374 Cover sheet TR 33.873**

*Type: TS or TR cover For: (not specified)  
 33.873 v0.4.0  
 Source: Intel K.K.*

(Replaces S3-212259)

**Decision:** The document was **approved**.

### 5.20 Study on enhanced Security Aspects of the 5G Service Based Architecture

**S3-211765 Update Solution #5: End-to-end integrity protection of HTTP body and method**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Ericsson*

**Decision:** The document was **noted**.

**S3-211766 Evaluation of Solution #3 "Using existing procedures for authorization of SCP to act on behalf of an NF Consumer"**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-212372**.

**S3-211862 Discussion on NF Domain granularity authorization**

*Type: discussion For: Approval  
 33.875 v..  
 Source: Huawei, Hisilicon*

**Decision:** The document was **noted**.

**S3-211863 Update to the SID of eSBA for NF Domain granularity authorization**

*Type: SID revised For: Approval  
 Source: Huawei, Hisilicon*

**Decision:** The document was **noted**.

**S3-211864 New KI on NF Domain granularity authorization**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **noted**.

**S3-211901 Requirement of subscribe-notification key issue**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **noted**.

**S3-211968 KI1 Security requirements for authentication of NRF and NFp in indirect commuication**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **noted**.

**S3-211969 Sol1 deployment scenarios**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212298**.

**S3-211970 ENs on Sol1 Service response verification in model C**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212299**.

**S3-211971 Threats and requirements to KI3 on Service access authorization in Subscribe-Notify**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **noted**.

**S3-211972 Solution on URI verification and notification acceptance**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **noted**.

**S3-211973 KI on Access token usage by all NFs of an NF Set**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **approved**.

**S3-211974 Solution on Access token request for NF Set**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212302**.

**S3-211975 EN resolution on sol 2 - NFc authorizing SCP to act on its behalf**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212300**.

**S3-211976 Evaluation on sol 2 - NFc authorizing SCP to act on its behalf**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212301**.

**S3-211977 Evaluation to sol 3 - proof of possession of CCA NFc authorizes the SCP to act on behalf of an NFc**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **merged**.

**S3-211978 KI on Roaming case for token-based authorization**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **noted**.

**S3-211979 Trust model**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-212303**.

**S3-212094 New solution for key issue#1: Authentication of NF service producer in indirect communication**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Samsung*

**Decision:** The document was **revised to S3-212292**.

**S3-212095 New solution for key issue#3: Authorization of notification request**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Samsung*

**Decision:** The document was **noted**.

**S3-212292 New solution for key issue#1: Authentication of NF service producer in indirect communication**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Samsung*

(Replaces S3-212094)

**Decision:** The document was **approved**.

**S3-212297 TR 33.875-030**

*Type: draft TR For: (not specified)  
 33.875 v0.3.0  
 Source: Nokia Germany*

**Decision:** The document was **approved**.

**S3-212298 Sol1 deployment scenarios**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211969)

**Decision:** The document was **approved**.

**S3-212299 ENs on Sol1 Service response verification in model C**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211970)

**Decision:** The document was **approved**.

**S3-212300 EN resolution on sol 2 - NFc authorizing SCP to act on its behalf**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211975)

**Decision:** The document was **approved**.

**S3-212301 Evaluation on sol 2 - NFc authorizing SCP to act on its behalf**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211976)

**Decision:** The document was **approved**.

**S3-212302 Solution on Access token request for NF Set**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211974)

**Decision:** The document was **revised to S3-212394**.

**S3-212394 Solution on Access token request for NF Set**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-212302)

**Decision:** The document was **approved**.

**S3-212303 Trust model**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S3-211979)

**Decision:** The document was **approved**.

**S3-212372 Evaluation of Solution #3 "Using existing procedures for authorization of SCP to act on behalf of an NF Consumer"**

*Type: pCR For: Approval  
 33.875 v0.2.0  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

(Replaces S3-211766)

**Decision:** The document was **approved**.

### 5.21 Study on enhanced security for network slicing Phase 2

**S3-211482 New KI: DoS on Network Slice Quota**

*Type: pCR For: Approval  
 33.874 v0.0.0  
 Source: US National Security Agency, Johns Hopkins University APL, CISA ECD, NIST*

**Abstract:**

This contribution proposes a new key issue on preventing or mitigating a potential resource exhaustion Denial of Service (DoS) attack against the newly defined Network Slice Quota functionality. The Network Slice Quota is defined to cap the number of UEs

**Decision:** The document was **withdrawn**.

**S3-211604 update to KI#1**

*Type: pCR For: Approval  
 33.874 v0.1.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **merged**.

**S3-211605 new key issue proposal**

*Type: pCR For: Approval  
 33.874 v0.1.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-211794 Some analysis for key issue #1**

*Type: other For: Approval  
 Source: Qualcomm Incorporated*

**Decision:** The document was **noted**.

**S3-211954 New KI: DoS on Network Slice Quota**

*Type: pCR For: Approval  
 33.874 v0.0.0  
 Source: US National Security Agency, Johns Hopkins University APL, CISA ECD, NIST*

**Abstract:**

This contribution proposes a new key issue on preventing or mitigating a potential resource exhaustion Denial of Service (DoS) attack against the newly defined Network Slice Quota functionality. The Network Slice Quota is defined to cap the number of UEs

**Decision:** The document was **noted**.

**S3-212007 eNS2: Add Threat Analysis to KI #1**

*Type: pCR For: Approval  
 33.874 v0.1.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to update the examples of slice related information in key issue details and add threat analysis.

**Decision:** The document was **revised to S3-212210**.

**S3-212008 eNS2: New Key Issue on Primary Authentication with NSAC**

*Type: pCR For: Approval  
 33.874 v0.1.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add a new key issue in TR 33.874 to discuss the risks and threats of triggering NSAC before primary authentication.

**Decision:** The document was **noted**.

**S3-212023 eNS2: Add Threat Analysis to KI #1**

*Type: pCR For: Approval  
 33.874 v0.1.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to update the examples of slice related information in key issue details and add threat analysis.

**Decision:** The document was **withdrawn**.

**S3-212024 eNS2: New Key Issue on Primary Authentication with NSAC**

*Type: pCR For: Approval  
 33.874 v0.1.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add a new key issue in TR 33.874 to discuss the risks and threats of triggering NSAC before primary authentication.

**Decision:** The document was **withdrawn**.

**S3-212039 eNS2: Add Threat Analysis to KI #1**

*Type: pCR For: Approval  
 33.874 v0.1.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to update the examples of slice related information in key issue details and add threat analysis.

**Decision:** The document was **withdrawn**.

**S3-212040 eNS2: New Key Issue on Primary Authentication with NSAC**

*Type: pCR For: Approval  
 33.874 v0.1.0  
 Source: Xiaomi Technology*

**Abstract:**

This pCR proposes to add a new key issue in TR 33.874 to discuss the risks and threats of triggering NSAC before primary authentication.

**Decision:** The document was **withdrawn**.

**S3-212186 Draft TR33.874 eNS2\_SEC**

*Type: draft TR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-212279**.

**S3-212210 eNS2: Add Threat Analysis to KI #1**

*Type: pCR For: Approval  
 33.874 v0.1.0  
 Source: Xiaomi Technology*

(Replaces S3-212007)

**Abstract:**

This pCR proposes to update the examples of slice related information in key issue details and add threat analysis.

**Decision:** The document was **revised to S3-212212**.

**S3-212212 eNS2: Add Threat Analysis to KI #1**

*Type: pCR For: Approval  
 33.874 v0.1.0  
 Source: Xiaomi Technology*

(Replaces S3-212210)

**Abstract:**

This pCR proposes to update the examples of slice related information in key issue details and add threat analysis.

**Decision:** The document was **approved**.

**S3-212279 draft TR 33.874**

*Type: draft TR For: Approval  
 33.874 v0.2.0  
 Source: Huawei, HiSilicon*

(Replaces S3-212186)

**Decision:** The document was **approved**.

### 5.22 Study on non-seamless WLAN Offload in 5GS using 3GPP credentials

**S3-211515 Skeleton for 5G NSWO TR**

*Type: draft TR For: (not specified)  
 33.881 v0.0.0  
 Source: Nokia, Nokia Shanghai-Bell*

**Decision:** The document was **approved**.

**S3-211516 Scope for 5G NSWO TR**

*Type: pCR For: Approval  
 33.881 v0.0.0  
 Source: Nokia, Nokia Shanghai-Bell*

**Decision:** The document was **revised to S3-212148**.

**S3-211517 Introduction for 5G NSWO TR**

*Type: pCR For: Approval  
 33.881 v0.0.0  
 Source: Nokia, Nokia Shanghai-Bell*

**Decision:** The document was **revised to S3-212149**.

**S3-211518 KI: Support of EAP Authentication for 5G NSWO**

*Type: pCR For: Approval  
 33.881 v0.0.0  
 Source: Nokia, Nokia Shanghai-Bell*

**Decision:** The document was **revised to S3-212150**.

**S3-212111 Key Issue on subscription identifier privacy**

*Type: pCR For: Approval  
 33.881 v0.0.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This tdoc provides a key issue on subscription identifier privacy.

**Decision:** The document was **merged**.

**S3-212113 Solution on NSWO authentication**

*Type: pCR For: Approval  
 33.881 v0.0.0  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

This tdoc provides a solution on NSWO authentication.

**Decision:** The document was **noted**.

**S3-212148 Scope for 5G NSWO TR**

*Type: pCR For: Approval  
 33.881 v0.0.0  
 Source: Nokia, Nokia Shanghai-Bell*

(Replaces S3-211516)

**Decision:** The document was **approved**.

**S3-212149 Introduction for 5G NSWO TR**

*Type: pCR For: Approval  
 33.881 v0.0.0  
 Source: Nokia, Nokia Shanghai-Bell*

(Replaces S3-211517)

**Decision:** The document was **approved**.

**S3-212150 KI: Support of EAP Authentication for 5G NSWO**

*Type: pCR For: Approval  
 33.881 v0.0.0  
 Source: Nokia, Nokia Shanghai-Bell*

(Replaces S3-211518)

**Decision:** The document was **approved**.

**S3-212151 New TR33.811 for 5G NSWO**

*Type: draft TR For: Approval  
 33.881 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **approved**.

### 5.23 New study item proposals

**S3-211477 Standardising Automated TLS Certificate Management in SBA**

*Type: SID new For: Discussion  
 Source: BT plc*

**Abstract:**

Standardise automation of TLS certificate life cycle management using existing certificate management protocol. Proposal is to conduct study that leads to uplift of specification ts33.310 to cover automated secure bootstrap, certificate request/response/r

**Decision:** The document was **revised to S3-212390**.

**S3-212390 Standardising Automated TLS Certificate Management in SBA**

*Type: SID new For: Agreement  
 Source: BT plc*

(Replaces S3-211477)

**Decision:** The document was **agreed**.

**S3-211668 Discussion on penetration testing**

*Type: discussion For: Endorsement  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-211669 A new SID - penetration testing**

*Type: SID new For: Approval  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

**S3-211670 Draft rely LS to GSMA on penetration testing**

*Type: LS out For: Approval  
 to GSMA  
 Source: Huawei, HiSilicon*

**Decision:** The document was **noted**.

### 5.24 Other study areas (no release restrictions)

## 6 CVD and research

**S3-211382 User location identification from Carrier Aggregation secondary cell activation messages**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: GSMA*

**Decision:** The document was **replied to in S3-212305**.

**S3-211473 CR to TS 43.020 - R16 - Removal of support for GEA2**

*Type: CR For: Agreement  
 43.020 v16.0.0 CR-0058 Cat: F (Rel-16)  
  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212361**.

**S3-211490 Discussion document on the use of GEA1 and GEA2**

*Type: discussion For: Information  
 Source: VODAFONE Group Plc*

**Decision:** The document was **noted**.

**S3-211491 CR to TS 43.020 - R11 - Removal of GEA1 and GEA2 due to security concerns**

*Type: CR For: Agreement  
 43.020 v11.2.0 CR-0059 Cat: F (Rel-11)  
  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212362**.

**S3-211492 CR to TS 43.020 - R12 - Depreciation of GEA2 due to security concerns**

*Type: CR For: Agreement  
 43.020 v12.1.0 CR-0060 Cat: F (Rel-12)  
  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212363**.

**S3-211493 CR to TS 43.020 - R13 - Removal of GEA1 and GEA2 due to security concerns - mirror**

*Type: CR For: Agreement  
 43.020 v13.6.0 CR-0061 Cat: A (Rel-13)  
  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212364**.

**S3-211494 CR to TS 43.020 - R14 - Removal of GEA1 and GEA2 due to security concerns - mirror**

*Type: CR For: Agreement  
 43.020 v14.3.0 CR-0062 Cat: A (Rel-14)  
  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212370**.

**S3-211495 CR to TS 43.020 - R15 - Removal of GEA1 and GEA2 due to security concerns - mirror**

*Type: CR For: Agreement  
 43.020 v15.0.0 CR-0063 Cat: A (Rel-15)  
  
 Source: VODAFONE Group Plc*

**Decision:** The document was **revised to S3-212373**.

**S3-211615 Reply LS on SLIC**

*Type: LS out For: Approval  
 to GSMA FSAG, RAN2  
 Source: Nanjing Ericsson Panda Com Ltd*

**Decision:** The document was **merged**.

**S3-211638 Reply LS on User location identification from Carrier Aggregation secondary cell activation messages**

*Type: LS out For: Approval  
 to GSMA FSAG, cc RAN2  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-212305**.

**S3-212361 CR to TS 43.020 - R16 - Removal of support for GEA2**

*Type: CR For: Agreement  
 43.020 v16.0.0 CR-0058 rev 1 Cat: A (Rel-16)  
  
 Source: VODAFONE Group Plc*

(Replaces S3-211473)

**Decision:** The document was **agreed**.

**S3-212362 CR to TS 43.020 - R11 - Removal of GEA1 and GEA2 due to security concerns**

*Type: CR For: Agreement  
 43.020 v11.2.0 CR-0059 rev 1 Cat: F (Rel-11)  
  
 Source: VODAFONE Group Plc*

(Replaces S3-211491)

**Decision:** The document was **agreed**.

**S3-212363 CR to TS 43.020 - R12 - Depreciation of GEA2 due to security concerns**

*Type: CR For: Agreement  
 43.020 v12.1.0 CR-0060 rev 1 Cat: F (Rel-12)  
  
 Source: VODAFONE Group Plc*

(Replaces S3-211492)

**Decision:** The document was **agreed**.

**S3-212364 CR to TS 43.020 - R13 - Removal of GEA1 and GEA2 due to security concerns - mirror**

*Type: CR For: Agreement  
 43.020 v13.6.0 CR-0061 rev 1 Cat: A (Rel-13)  
  
 Source: VODAFONE Group Plc*

(Replaces S3-211493)

**Decision:** The document was **agreed**.

**S3-212370 CR to TS 43.020 - R14 - Removal of GEA1 and GEA2 due to security concerns - mirror**

*Type: CR For: Agreement  
 43.020 v14.3.0 CR-0062 rev 1 Cat: A (Rel-14)  
  
 Source: VODAFONE Group Plc*

(Replaces S3-211494)

**Decision:** The document was **agreed**.

**S3-212373 CR to TS 43.020 - R15 - Removal of GEA1 and GEA2 due to security concerns - mirror**

*Type: CR For: Agreement  
 43.020 v15.0.0 CR-0063 rev 1 Cat: A (Rel-15)  
  
 Source: VODAFONE Group Plc*

(Replaces S3-211495)

**Decision:** The document was **agreed**.

## 7 Any Other Business

Elections for new SA3 Chair were held during this e-meeting to replace the previous Chair, Noamen Ben Henda, who had previously resigned from his position.

The group thanked the former Chair for his excellent performance and hard work during this term, and wished him all the best in his future career.

Two candidatures were received:

Suresh Nair (Nokia)

MinPeng Qi (China Mobile Communications Corporation)

The election was performed electronically, following the 3GPP Working procedures.

The results were:

**S3-211359 SA3 meeting calendar**

*Type: other For: Information  
 Source: SA WG3 Chair*

**Decision:** The document was **revised to S3-211433**.

**S3-211360 Draft agenda for SA3 104-e**

*Type: agenda For: Discussion  
 Source: SA WG3 Chair*

**Decision:** The document was **withdrawn**.

**S3-211433 SA3 meeting calendar**

*Type: other For: Information  
 Source: SA WG3 Chair*

(Replaces S3-211359)

**Decision:** The document was **noted**.

## Annex A: Contribution documents and status

### A1: List of TDocs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| * S3-211350 | * Agenda | * SA WG3 Chair | * approved |  |  |
| * S3-211351 | * Report from SA3#102Bis-e meeting | * MCC | * approved |  |  |
| * S3-211352 | * Process for SA3#103e meeting | * SA WG3 Chair | * revised |  | * S3-211989 |
| * S3-211353 | * Report from last SA | * SA WG3 Chair | * noted |  |  |
| * S3-211354 | * Process and agenda presentation for SA3#103-e | * SA3 VC | * noted |  |  |
| * S3-211355 | * Agenda and notes from the SA3/IETF joint call | * SA WG3 Chair | * noted |  |  |
| * S3-211356 | * Living document for TS 33.220: UDM services for GBA | * THALES | * noted |  |  |
| * S3-211357 | * Living document for TS 33.223: UDM services for GBA | * THALES | * noted |  |  |
| * S3-211358 | * New KI: Secure Direct Discovery codes and filters renewal for the out-of-coverage scenario | * MITRE Corporation | * noted |  |  |
| * S3-211359 | * SA3 meeting calendar | * SA WG3 Chair | * revised |  | * S3-211433 |
| * S3-211360 | * Draft agenda for SA3 104-e | * SA WG3 Chair | * withdrawn |  |  |
| * S3-211361 | * Report from SA3#102e | * MCC | * approved |  |  |
| * S3-211362 | * LS on using MOBIKE in Integrated Access and Backhaul system | * R3-211297 | * replied to |  |  |
| * S3-211363 | * Reply LS on IP address to GPSI translation | * S2-2009339 | * withdrawn |  |  |
| * S3-211364 | * Reply to LS on Resynchronisations | * ETSI SAGE | * postponed |  |  |
| * S3-211365 | * Reply LS on IP address to GPSI translation | * S2-2101307 | * withdrawn |  |  |
| * S3-211366 | * 5G capabilities exposure for factories of the future - revised | * 5G Alliance for Connected Industries and Automation (5G-ACIA) | * noted |  |  |
| * S3-211367 | * Misalignment on usage of OAuth within 3GPP 29.510 | * GSMA | * postponed |  |  |
| * S3-211368 | * AMF transparency for SOR | * C1-207736 | * noted |  |  |
| * S3-211369 | * Reply LS on AMF transparency for SOR | * C4- 211701 | * noted |  |  |
| * S3-211370 | * LS on extraterritorial use of MCC for satellite access | * C1-210439 | * noted |  |  |
| * S3-211371 | * Reply LS on extraterritorial use of MCC for satellite access | * S1-210358 | * noted |  |  |
| * S3-211372 | * LS on broadcasting from other PLMN in case of Disaster Condition | * C1-211189 | * replied to |  |  |
| * S3-211373 | * Reply LS on the re-keying procedure and security indication for NR SL | * C1-211228 | * noted |  |  |
| * S3-211374 | * Reply LS on User Plane Integrity Protection for eUTRA connected to EPC | * C1-211461 | * noted |  |  |
| * S3-211375 | * Reply LS on storage of KAUSF | * C1-211518 | * replied to |  |  |
| * S3-211376 | * LS on Secondary AUTH for 5GS interworking with EPS | * C3-210377 | * replied to |  |  |
| * S3-211377 | * LS on Changes to SoR Delivery Mechanism | * C4-205696 | * noted |  |  |
| * S3-211378 | * LS on the Security consideration to support L2TP with CUPS | * C4-210171 | * replied to |  |  |
| * S3-211379 | * LS on the support of L2TP with CUPS | * C4-211624 | * noted |  |  |
| * S3-211380 | * LS on Header Enrichment for HTTPS in PFCP | * C4-211662 | * replied to |  |  |
| * S3-211381 | * Reply LS on port allocation for the W1 interface | * C4-211700 | * noted |  |  |
| * S3-211382 | * User location identification from Carrier Aggregation secondary cell activation messages | * GSMA | * replied to |  |  |
| * S3-211383 | * Prevention of attacks on sliced core network | * GSMA | * postponed |  |  |
| * S3-211384 | * Attack preventing NAS procedures to succeed | * GSMA | * noted |  |  |
| * S3-211385 | * Support of UAVs authentication/authorization in 3GPP systems and interfacing with USS/UTM | * GSMA | * postponed |  |  |
| * S3-211386 | * 3GPP SA1 clarifications on problematic UAV | * GSMA | * noted |  |  |
| * S3-211387 | * LS on UE location aspects in NTN | * R2-2102055 | * replied to |  |  |
| * S3-211388 | * Reply LS on broadcasting gNB ID length in system information block | * R2-2102449 | * noted |  |  |
| * S3-211389 | * Remove the user message size limitation for DTLS over SCTP | * R3-211274 | * noted |  |  |
| * S3-211390 | * LS on support of PWS over SNPN | * S1-210368 | * postponed |  |  |
| * S3-211391 | * Reply LS on IP address to GPSI translation | * S2-2009339 | * replied to |  |  |
| * S3-211392 | * Reply LS on IP address to GPSI translation | * S2-2101307 | * replied to |  |  |
| * S3-211393 | * Reply LS on NSSAA at inter-PLMN mobility | * S2-2101052 | * noted |  |  |
| * S3-211394 | * LS on UE capabilities indication in UPU | * S2-2101072 | * postponed |  |  |
| * S3-211395 | * LS on updating the Credentials Holder controlled lists for SNPN selection | * S2-2101077 | * replied to |  |  |
| * S3-211396 | * Reply LS on AKMA Anchor Function selection | * S2-2101304 | * noted |  |  |
| * S3-211397 | * Reply LS on Secondary AUTH for 5GS interworking with EPS | * S2-2101305 | * replied to |  |  |
| * S3-211398 | * Reply LS on User Plane Integrity Protection for eUTRA connected to EPC | * S2-2101306 | * noted |  |  |
| * S3-211399 | * LS on PAP/CHAP and other point-to-point protocols usage in 5GS | * S2-2101309 | * noted |  |  |
| * S3-211400 | * LS Response on Network Slice PA Charging per maximum utilized bandwidth | * S2-21001347 | * withdrawn |  |  |
| * S3-211401 | * LS on Layer-3 UE-to-Network Relay authentication and authorization | * S2-2101623 | * postponed |  |  |
| * S3-211402 | * LS on System support for Multi-USIM devices | * S2-2102039 | * noted |  |  |
| * S3-211403 | * Reply LS on 5MBS progress and issues to address | * S2-2102077 | * withdrawn |  |  |
| * S3-211404 | * LS on Plugtest issues | * S6-210203 | * noted |  |  |
| * S3-211405 | * LS on EDGEAPP | * S6-210630 | * noted |  |  |
| * S3-211406 | * Reply LS on clarification regarding EEC ID | * S6-210707 | * noted |  |  |
| * S3-211407 | * 256-bit algorithms based on SNOW 3G or SNOW V | * ETSI SAGE | * postponed |  |  |
| * S3-211408 | * Choice of cryptographic algorithm in 256-bit Milenage | * ETSI SAGE | * replied to |  |  |
| * S3-211409 | * LS re Penetration Testing of SCAS | * GSMA | * postponed |  |  |
| * S3-211410 | * LS on progress of ongoing work item ITU-T TR-USSD | * ITU-T SG11 | * noted |  |  |
| * S3-211411 | * Reply LS on UE location aspects in NTN | * S3i210282 | * noted |  |  |
| * S3-211412 | * Living document for TS 33.163 | * KPN N.V. | * revised |  | * S3-212271 |
| * S3-211413 | * LS on the latest results on the Vehicular Multimedia deliverables from ITU FG-VM | * ITU-T Focus Group on Vehicular Multimedia (FG-VM) | * noted |  |  |
| * S3-211414 | * Reply LS on support of PWS over SNPN | * S2-2102963 | * noted |  |  |
| * S3-211415 | * Reply LS on Prevention of attacks on sliced core network | * S2-2103213 | * noted |  |  |
| * S3-211416 | * Reply LS on the support of L2TP with CUPS | * S2-2103232 | * noted |  |  |
| * S3-211417 | * Reply LS on RAT type for network monitoring | * S2-2103237 | * replied to |  | * - |
| * S3-211418 | * LS on security aspects for the method of collection of data from the UE | * S2-213263 | * postponed |  |  |
| * S3-211419 | * Reply to LS on UE location aspects in NTN | * S2-2103550 | * noted |  |  |
| * S3-211420 | * Reply LS to SA2 on UE Data Collection | * S4-210644 | * noted |  |  |
| * S3-211421 | * LS on Media-Related Services and Requirements | * S4-210680 | * withdrawn |  |  |
| * S3-211422 | * LS on Transaction Information - Dispersion Analytics | * S2-2103268 | * replied to |  |  |
| * S3-211423 | * 3GPP Edge Computing coordination | * S6-210978 | * noted |  |  |
| * S3-211424 | * Reply LS on IP address to GPSI translation | * S6-211082 | * replied to |  |  |
| * S3-211425 | * Reply LS on User Plane Integrity Protection for eUTRA connected to EPC | * R2-2104349 | * noted |  |  |
| * S3-211426 | * LS to SA3 on Small data transmissions | * R2-2104401 | * postponed |  |  |
| * S3-211427 | * Reply LS to SA3 on FBS detection | * R2-2104626 | * noted |  |  |
| * S3-211428 | * Reply LS on support of PWS over SNPN | * R2-2104640 | * noted |  |  |
| * S3-211429 | * Discussion paper BEST key hierarchy based on AKMA | * Deutsche Telekom AG | * noted |  |  |
| * S3-211430 | * Reply LS on the support of L2TP with CUPS | * C3-212569 | * noted |  |  |
| * S3-211431 | * LS on NAS-based busy indication | * R2-2104354 | * noted |  |  |
| * S3-211432 | * LS on R17 Layer-2 SL Relay of UE ID exposure in paging mechanism | * R2-2104654 | * replied to |  |  |
| * S3-211433 | * SA3 meeting calendar | * SA WG3 Chair | * noted | * S3-211359 |  |
| * S3-211434 | * pCR to TR 33.846: Clarification on Key Issue #2.2 | * THALES | * approved |  |  |
| * S3-211435 | * pCR to TR 33.846: Clarification on Key Issue #3.2 | * THALES | * approved |  |  |
| * S3-211436 | * pCR to TR 33.846: update of assessment of attack risk | * THALES, Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211437 | * pCR to 33.846: update of impact of solutions | * THALES | * approved |  |  |
| * S3-211438 | * Reply LS on choice of cryptographic algorithm in 256-bit Milenage | * THALES, Idemia | * merged |  | * S3‑211500 |
| * S3-211439 | * Reply LS on updating the Credentials Holder controlled lists for SNPN selection | * C1-212419 | * noted |  |  |
| * S3-211440 | * LS on integrity protection between the UE and the HPLMN of additional fields in SOR transparent container carrying SOR acknowledgement | * C1-212523 | * noted |  |  |
| * S3-211441 | * Reply LS on UE capabilities indication in UPU | * C1-212599 | * postponed |  |  |
| * S3-211442 | * pCR to 33.846: update to solution #2.4 | * THALES | * approved |  |  |
| * S3-211443 | * pCR to 33.847: editorial correction to solution #11 | * THALES | * approved |  |  |
| * S3-211444 | * pCR to 33.839: GBA-based solution for EEC authentication and authorization framework with ECS and EES | * THALES | * revised |  | * S3-212223 |
| * S3-211445 | * pCR to 33.839: Using TLS with GBA to protect edge interfaces | * THALES | * revised |  | * S3-212224 |
| * S3-211446 | * LS to 3GPP SA3 N32 and multiple PLMN IDs | * GSMA | * replied to |  |  |
| * S3-211447 | * Presentation of Report TR 33.851 | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211448 | * Conclusion on UE-UE | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212125 |
| * S3-211449 | * Update of solution applicability to KI | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211450 | * Update of mapping table related to documented solution in Annex | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211451 | * Update to asymmetric delay attacks annex | * Nokia, Nokia Shanghai Bell, | * approved |  |  |
| * S3-211452 | * WID on IIoT | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212318 |
| * S3-211453 | * WID IIoT Draft CR PTP aspects | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212316 |
| * S3-211454 | * WID IIoT Draft CR NEF-AF aspects | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212317 |
| * S3-211455 | * WID IIoT Draft CR Security considerations - informative | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211456 | * TCG progress - report from TCG rapporteur | * InterDigital, Inc. | * noted |  |  |
| * S3-211457 | * Discussion on SEPP to SEPP communication on 5GSA networks | * VODAFONE Group Plc | * noted |  |  |
| * S3-211458 | * draft response LS to GSMA on 3GPP SA3 N32 and multiple PLMN IDs | * VODAFONE Group Plc | * revised |  | * S3-212392 |
| * S3-211459 | * CR to 33.501 R16 - Clarification on the number of PLMN IDuse by SEPP over N32 | * VODAFONE Group Plc | * revised |  | * S3-212287 |
| * S3-211460 | * CR to 33.501 R17 - Clarification on the number of PLMN IDuse by SEPP over N32 | * VODAFONE Group Plc | * revised |  | * S3-212288 |
| * S3-211461 | * pCR to Living document for TS 33.163: update for 3G, 4G, and 5G key agreement | * KPN N.V. | * revised |  | * S3-212270 |
| * S3-211462 | * Draft CR to TS 33.501 to resolve security hole when IPX SEPP is used | * VODAFONE Group Plc | * noted |  |  |
| * S3-211463 | * Updated Solution #22: Representation of identities during broadcast | * KPN N.V. | * revised |  | * S3-212132 |
| * S3-211464 | * Solution on Remote Attestation for 5GS | * Johns Hopkins University APL, US National Security Agency, CISA ECD, InterDigital, Fraunhofer SIT, CableLabs, AT&T, Verizon Wireless, NIST | * noted |  |  |
| * S3-211465 | * Discussion on Remote Attestation for 5GS | * Johns Hopkins University APL, US National Security Agency, CISA ECD, InterDigital, Fraunhofer SIT, CableLabs, AT&T, Verizon Wireless, NIST | * noted |  |  |
| * S3-211466 | * Changes to TR 33.866 | * InterDigital, Inc. | * approved |  |  |
| * S3-211467 | * Changes to TR 33.857 | * InterDigital, Inc. | * noted |  |  |
| * S3-211468 | * pCR to 33.853 - update to 7.2 following liaisons | * VODAFONE Group Plc | * withdrawn |  |  |
| * S3-211469 | * pCR to 33.853 - Removal of template sections ready for specification approval | * VODAFONE Group Plc | * withdrawn |  |  |
| * S3-211470 | * pCR to 33.853: editorial updates | * VODAFONE Group Plc | * withdrawn |  |  |
| * S3-211471 | * pCR to TR 33.853 - resolution of editors notes | * VODAFONE Group Plc | * withdrawn |  |  |
| * S3-211472 | * CR to TS 33.401 - addition of UPIP to LTE | * VODAFONE Group Plc | * not pursued |  |  |
| * S3-211473 | * CR to TS 43.020 - R16 - Removal of support for GEA2 | * VODAFONE Group Plc | * revised |  | * S3-212361 |
| * S3-211474 | * [33.180] R14 UID encoding | * Motorola Solutions Danmark A/S | * agreed |  |  |
| * S3-211475 | * [33.180] R15 UID encoding (mirror) | * Motorola Solutions Danmark A/S | * agreed |  |  |
| * S3-211476 | * [33.180] R16 UID encoding (mirror) | * Motorola Solutions Danmark A/S | * agreed |  |  |
| * S3-211477 | * Standardising Automated TLS Certificate Management in SBA | * BT plc | * revised |  | * S3-212390 |
| * S3-211478 | * [33.180] R17 UID encoding (mirror) | * Motorola Solutions Danmark A/S | * agreed |  |  |
| * S3-211479 | * [33.180] R17 Group subscription | * Motorola Solutions Danmark A/S | * not pursued |  |  |
| * S3-211480 | * [33.180] R17 Limited Service | * Motorola Solutions Danmark A/S | * not pursued |  |  |
| * S3-211481 | * [33.180] R17 Preconfigured group clarification | * Motorola Solutions Danmark A/S | * not pursued |  |  |
| * S3-211482 | * New KI: DoS on Network Slice Quota | * US National Security Agency, Johns Hopkins University APL, CISA ECD, NIST | * withdrawn |  |  |
| * S3-211483 | * Changes to TR 33.847 | * InterDigital, Inc. | * approved |  |  |
| * S3-211484 | * TR 33.847 sol#10 update | * InterDigital, Europe, Ltd. | * revised |  | * S3-212129 |
| * S3-211485 | * TR 33.847 sol#24 evaluation | * InterDigital, Europe, Ltd. | * revised |  | * S3-212130 |
| * S3-211486 | * TR 33.847 sol#25 evaluation | * InterDigital, Europe, Ltd. | * revised |  | * S3-212131 |
| * S3-211487 | * TR 33.854 KI#1 conclusion | * InterDigital, Europe, Ltd. | * merged |  | * S3-212183 |
| * S3-211488 | * TR 33.854 KI#2 conclusion | * InterDigital, Europe, Ltd. | * merged |  | * S3-212184 |
| * S3-211489 | * TR 33.854 KI#4 conclusion | * InterDigital, Europe, Ltd. | * revised |  | * S3-212128 |
| * S3-211490 | * Discussion document on the use of GEA1 and GEA2 | * VODAFONE Group Plc | * noted |  |  |
| * S3-211491 | * CR to TS 43.020 - R11 - Removal of GEA1 and GEA2 due to security concerns | * VODAFONE Group Plc | * revised |  | * S3-212362 |
| * S3-211492 | * CR to TS 43.020 - R12 - Depreciation of GEA2 due to security concerns | * VODAFONE Group Plc | * revised |  | * S3-212363 |
| * S3-211493 | * CR to TS 43.020 - R13 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * revised |  | * S3-212364 |
| * S3-211494 | * CR to TS 43.020 - R14 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * revised |  | * S3-212370 |
| * S3-211495 | * CR to TS 43.020 - R15 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * revised |  | * S3-212373 |
| * S3-211496 | * Draft reply to ETSI SAGE on Resynchronisations | * VODAFONE Group Plc | * noted |  |  |
| * S3-211497 | * DRAFT Response LS on 256-bit algorithms based on SNOW 3G or SNOW V | * VODAFONE Group Plc | * noted |  | * - |
| * S3-211498 | * Alternative 1 DRAFT Response LS on 256-bit Milenage | * VODAFONE Group Plc | * noted |  |  |
| * S3-211499 | * Alternative 2 DRAFT Response LS on 256-bit Milenage | * VODAFONE Group Plc | * noted |  |  |
| * S3-211500 | * Alternative 3 DRAFT Response LS on 256-bit Milenage | * VODAFONE Group Plc | * revised |  | * S3-212329 |
| * S3-211501 | * Changes to TR 33.839 | * InterDigital, Inc. | * approved |  |  |
| * S3-211502 | * Solution#8 Clarifications | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211503 | * Discussion on the solution#4.1 in TR 33.846 | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211504 | * Evaluation of sol#4.1 using MACS as freshness in calculation of AK | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211505 | * Editor note removal on solution #2.9 MAC, SYNCH failure cause concealment | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212267 |
| * S3-211506 | * Conclusion on Key issue #2.1 | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211507 | * Conclusion on Key issue #3.2 SUPI guessing attack | * Nokia, Nokia Shanghai Bell,THALES | * noted |  |  |
| * S3-211508 | * Conclusion on Key issue #4.1 | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211509 | * EN removal on SUCI generation by legitimate SUPI owner using KSUCI | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211510 | * LS on Security risk evaluation of using long term key for another key derivation than AKA | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212268 |
| * S3-211511 | * Discussion paper on ENs in Network Slicing clause 16.3 | * Nokia, Nokia Shanghai-Bell | * noted |  |  |
| * S3-211512 | * CR to Delete NSSAA Editor Notes (Rel-16) | * Nokia, Nokia Shangahai-Bell | * merged |  | * S3-212280 |
| * S3-211513 | * CR to Delete NSSAA Editor Notes (Rel-17) | * Nokia, Nokia Shanghai-Bell | * merged |  | * S3-212281 |
| * S3-211514 | * Discussion on UE IP address to GPSI translation | * Nokia, Nokia Shanghai-Bell | * noted |  |  |
| * S3-211515 | * Skeleton for 5G NSWO TR | * Nokia, Nokia Shanghai-Bell | * approved |  |  |
| * S3-211516 | * Scope for 5G NSWO TR | * Nokia, Nokia Shanghai-Bell | * revised |  | * S3-212148 |
| * S3-211517 | * Introduction for 5G NSWO TR | * Nokia, Nokia Shanghai-Bell | * revised |  | * S3-212149 |
| * S3-211518 | * KI: Support of EAP Authentication for 5G NSWO | * Nokia, Nokia Shanghai-Bell | * revised |  | * S3-212150 |
| * S3-211519 | * Discussion on R3 LS on MOBIKE | * Nokia, Nokia Shanghai-Bell | * endorsed |  |  |
| * S3-211520 | * REly LS on MOBIKE usage in IAB | * Nokia, Nokia Shanghai-Bell | * revised |  | * S3-212164 |
| * S3-211521 | * Further conclusions for KI #1 | * CableLabs | * noted |  |  |
| * S3-211522 | * Updating annex B in TR 33.809 | * CableLabs | * noted |  |  |
| * S3-211523 | * Reply LS to LS on broadcasting from other PLMN in case of Disaster Condition | * LG Electronics Inc. | * revised |  | * S3-212258 |
| * S3-211524 | * Updates in Solution 4 | * LG Electronics Inc. | * revised |  | * S3-212176 |
| * S3-211525 | * Evaluation of Solution 13 | * LG Electronics Inc. | * revised |  | * S3-212175 |
| * S3-211526 | * Remove editor's notes in key issue 1 | * LG Electronics Inc. | * noted |  |  |
| * S3-211527 | * Reply LS to GSMA on prevention of attacks on sliced core network | * CableLabs | * noted |  |  |
| * S3-211528 | * Resolving ENs of solution 6.2.10 | * NEC Corporation | * revised |  | * S3-212296 |
| * S3-211529 | * Evaluation of key issue 2.2 SUCI replay attack. | * NEC Corporation | * approved |  |  |
| * S3-211530 | * Discussion document on replies to ETSI SAGE | * VODAFONE Group Plc | * noted |  |  |
| * S3-211531 | * pCR to TR 33.845 - editorial corrections | * VODAFONE Group Plc | * revised |  | * S3-212347 |
| * S3-211532 | * Cover Sheet for approval of TR 33.845 | * VODAFONE Group Plc | * approved |  |  |
| * S3-211533 | * pCR to TR 33.845 - removal of template sections | * VODAFONE Group Plc | * approved |  |  |
| * S3-211534 | * Adding test case on the confidentiality configuration in P-CSCF | * China Telecommunications | * approved |  |  |
| * S3-211535 | * Evaluation of solution #2.10 | * NEC Corporation | * noted |  |  |
| * S3-211536 | * Adding a new threat related to SPI allocation in the P-CSCF | * China Telecommunications | * withdrawn |  |  |
| * S3-211537 | * LS on PAP/CHAP and other point-to-point protocols usage in 5GS | * China Telecommunications | * noted |  |  |
| * S3-211538 | * Adding a new threat related to SPI allocation in the P-CSCF | * China Telecommunications | * approved |  |  |
| * S3-211539 | * Discussion on security of Small data transmissions | * ZTE Corporation | * noted |  |  |
| * S3-211540 | * Reply LS on Header Enrichment for HTTPS in PFCP | * ZTE Corporation | * merged |  | * S3-212344 |
| * S3-211541 | * Reply LS on Small data transmissions | * ZTE Corporation | * noted |  |  |
| * S3-211542 | * Add a new test case in clause 4.2.2.1.18 | * ZTE Corporation | * approved |  |  |
| * S3-211543 | * Living document for SCAS\_5G\_IPUPS draftCR to TR 33.926 | * ZTE Corporation | * revised |  | * S3-212385 |
| * S3-211544 | * Living document for SCAS\_5G\_IPUPS draftCR to TS 33.513 | * ZTE Corporation | * revised |  | * S3-212386 |
| * S3-211545 | * Reply LS on Small data transmission | * Intel K.K. | * noted |  |  |
| * S3-211546 | * Clarification on how AF select AAnF | * ZTE Corporation | * merged |  | * S3-212313 |
| * S3-211547 | * Clarification on how AUSF select AAnF | * ZTE Corporation | * merged |  | * S3-212313 |
| * S3-211548 | * Clarification on how the AUSF get RID | * ZTE Corporation | * not pursued |  |  |
| * S3-211549 | * Discussion on Security Issues with SDT | * Intel K.K. | * noted |  |  |
| * S3-211550 | * Resolution of EN on other parameter in clause 6.3 | * ZTE Corporation | * not pursued |  |  |
| * S3-211551 | * UDM notifies AAnF AKMA context removal | * ZTE Corporation | * revised |  | * S3-212319 |
| * S3-211552 | * Update clause 6.1 refer to Kausf stored in AUSF | * ZTE Corporation | * not pursued |  |  |
| * S3-211553 | * Add Routing indicator in Authentication response | * ZTE Corporation | * not pursued |  |  |
| * S3-211554 | * Clarification on external file system mount restrictions R16 | * ZTE Corporation | * agreed |  |  |
| * S3-211555 | * Clarification on external file system mount restrictions R17 | * ZTE Corporation | * not pursued |  |  |
| * S3-211556 | * Editorial correction in clause 4.2.2.1.5 R16 | * ZTE Corporation | * agreed |  |  |
| * S3-211557 | * Editorial correction in clause 4.2.2.1.5 R17 | * ZTE Corporation | * not pursued |  |  |
| * S3-211558 | * Add evaluation and update comparison table for solution 3.2 | * ZTE Corporation | * revised |  | * S3-212276 |
| * S3-211559 | * Add evaluation for solution 4.5 | * ZTE Corporation | * revised |  | * S3-212277 |
| * S3-211560 | * EN resolution on null scheme for solution 2.7 | * ZTE Corporation | * revised |  | * S3-212274 |
| * S3-211561 | * Update to mapping table | * ZTE Corporation | * revised |  | * S3-212273 |
| * S3-211562 | * Update to solution 2.7 and evaluation table | * ZTE Corporation | * revised |  | * S3-212275 |
| * S3-211563 | * Update to solution 4.5 for the scenario of UE triggered service request | * ZTE Corporation | * revised |  | * S3-212278 |
| * S3-211564 | * Conclusion for the key issue#4.1 | * ZTE Corporation | * noted |  |  |
| * S3-211565 | * S3-21XXXX Authentication and Authorization with ECS EES EAS | * ZTE Corporation | * noted |  |  |
| * S3-211566 | * Conclusion for the key issue#6 | * ZTE Corporation | * revised |  | * S3-212180 |
| * S3-211567 | * Editorial correction in the references clause | * ZTE Corporation | * approved |  |  |
| * S3-211568 | * Evaluation of solution #13 | * ZTE Corporation | * approved |  |  |
| * S3-211569 | * New solution for Key issue#4 | * ZTE Corporation | * revised |  | * S3-212177 |
| * S3-211570 | * New solution on control plane based provisioning PS to AUSF | * ZTE Corporation | * noted |  |  |
| * S3-211571 | * New solution on control plane based provisioning PS to UDM | * ZTE Corporation | * noted |  |  |
| * S3-211572 | * New solution for AMF re-allocation | * ZTE Corporation | * revised |  | * S3-212179 |
| * S3-211573 | * Updates to solution 14: Removal of Editor's notes: Certificate Handling | * Intel K.K. | * revised |  | * S3-212166 |
| * S3-211574 | * Updates to solution 14: Removal of Editor’s notes: One-Way | * Intel K.K. | * noted |  |  |
| * S3-211575 | * Handle the failure cause by UE | * ZTE Corporation | * not pursued |  |  |
| * S3-211576 | * Additions in Solution #25 | * Philips International B.V. | * noted |  |  |
| * S3-211577 | * Proposal for conclusion for Key Issue 4 | * Intel K.K. | * withdrawn |  |  |
| * S3-211578 | * Proposal for conclusion for Key Issue 4 | * Intel K.K. | * noted |  |  |
| * S3-211579 | * Updates to solution 14: Removal of Editor’s notes: Three Authentication | * Intel K.K. | * noted |  |  |
| * S3-211580 | * Updates to solution 4 | * Intel K.K. | * noted |  |  |
| * S3-211581 | * pCR to TR33.845 - removal of editors notes | * VODAFONE Group Plc | * revised |  | * S3-212350 |
| * S3-211582 | * Updates in Solution #23 | * Philips International B.V. | * revised |  | * S3-212358 |
| * S3-211583 | * Proposal for conclusion for Key Issue 1,2,4,6 | * Intel K.K. | * noted |  |  |
| * S3-211584 | * Updates in Appendix B | * Philips International B.V. | * noted |  |  |
| * S3-211585 | * Add an abbreviation to AKMA | * ZTE Corporation | * revised |  | * S3-212320 |
| * S3-211586 | * Remarks\_in\_Solution\_14 | * Philips International B.V. | * revised |  | * S3-212356 |
| * S3-211587 | * pCR to TR33.853 - editorial corrections | * VODAFONE Group Plc | * approved |  |  |
| * S3-211588 | * Update\_in\_solution\_26 | * Philips International B.V. | * revised |  | * S3-212357 |
| * S3-211589 | * Updates to solution 12 | * Intel K.K. | * revised |  | * S3-212167 |
| * S3-211590 | * Update\_in\_solution\_9 | * Philips International B.V. | * revised |  | * S3-212232 |
| * S3-211591 | * Remark\_in\_solution\_4 | * Philips International B.V. | * revised |  | * S3-212231 |
| * S3-211592 | * Updated Solution #23: Initial key with validity time | * TNO | * withdrawn | * S3-211185 |  |
| * S3-211593 | * Cover sheet for approval of TR33.853 | * VODAFONE Group Plc | * approved |  |  |
| * S3-211594 | * Updates to solution 1 | * Intel K.K. | * approved |  |  |
| * S3-211595 | * Conclusion to Key issue 1,2 | * Intel K.K. | * revised |  | * S3-212165 |
| * S3-211596 | * Key issue on security aspects of Paging Cause | * Intel K.K. | * noted |  |  |
| * S3-211597 | * Updated Solution #23: Initial key with validity time | * KPN N.V. | * revised |  | * S3-212127 |
| * S3-211598 | * Update to solution #25 | * Huawei, HiSilicon | * revised |  | * S3-212283 |
| * S3-211599 | * Evaluation of solution #4 | * Huawei, HiSilicon | * noted |  |  |
| * S3-211600 | * Conclusion for KI#3 | * Huawei, HiSilicon | * noted |  |  |
| * S3-211601 | * Discussion on SN-ID in NSSAA | * Huawei, HiSilicon | * noted |  |  |
| * S3-211602 | * Serving network ID in NSSAA | * Huawei, HiSilicon | * not pursued |  |  |
| * S3-211603 | * validity peirod of NSSAA result | * Huawei, HiSilicon | * not pursued |  |  |
| * S3-211604 | * update to KI#1 | * Huawei, HiSilicon | * merged |  | * S3-212212 |
| * S3-211605 | * new key issue proposal | * Huawei, HiSilicon | * noted |  |  |
| * S3-211606 | * Evaluation of solution #3 | * Huawei, HiSilicon | * revised |  | * S3-212181 |
| * S3-211607 | * Evaluation of solution #5 | * Huawei, HiSilicon | * revised |  | * S3-212211 |
| * S3-211608 | * Conclusion for KI#1 (AA) | * Huawei, HiSilicon | * revised |  | * S3-212183 |
| * S3-211609 | * Conclusion for KI#2 (pairing) | * Huawei, HiSilicon | * revised |  | * S3-212184 |
| * S3-211610 | * Conclusion for KI#7 (C2) | * Huawei, HiSilicon | * revised |  | * S3-212185 |
| * S3-211611 | * Discussion on slice issues in core networks | * Huawei, HiSilicon | * revised |  | * S3-212187 |
| * S3-211612 | * pCR to TR33.845 - Resolution of editors notes for solution#2 | * VODAFONE Group Plc | * approved |  |  |
| * S3-211613 | * pCR to TR33.845 - Resolution of editors notes for solution#3 | * VODAFONE Group Plc | * approved |  |  |
| * S3-211614 | * pCR to TR33.845 - Resolution of editors notes for solutions 5 and 6 | * VODAFONE Group Plc | * approved |  |  |
| * S3-211615 | * Reply LS on SLIC | * Nanjing Ericsson Panda Com Ltd | * merged |  | * S3-212305 |
| * S3-211616 | * pCR to TR33.845 - Resolution of editors notes for solutions 9 and 10 | * VODAFONE Group Plc | * approved |  |  |
| * S3-211617 | * propose evaluation to Solution #16 | * Huawei, HiSilicon | * approved |  |  |
| * S3-211618 | * New solution for one-to-one communication | * Huawei, HiSilicon | * noted |  |  |
| * S3-211619 | * Resolve EN and add evaluation to Solution #27 | * Huawei, HiSilicon | * noted |  |  |
| * S3-211620 | * Resolve EN and add evaluation to Solution #28 | * Huawei, HiSilicon | * noted |  |  |
| * S3-211621 | * Propose evaluation to Solution #32 | * Huawei, HiSilicon | * revised |  | * S3-212188 |
| * S3-211622 | * Address Ens in Solution #33 | * Huawei, HiSilicon | * approved |  |  |
| * S3-211623 | * Add conclusions about UE-to-Network relay | * Huawei, HiSilicon | * noted |  |  |
| * S3-211624 | * Slice privacy protection in NSSAA related procedures | * Huawei, HiSilicon | * revised |  | * S3-212280 |
| * S3-211625 | * Security solution for temporary group – broadcast group call procedure | * Huawei, HiSilicon | * not pursued |  |  |
| * S3-211626 | * Correction to Authorization for indirect communication with delegated discovery procedure | * Huawei, HiSilicon | * not pursued |  |  |
| * S3-211627 | * Solution Evaluation for solution 15 | * Huawei, HiSilicon | * revised |  | * S3-212189 |
| * S3-211628 | * Solution Evaluation for solution 8 | * Huawei, HiSilicon | * revised |  | * S3-212190 |
| * S3-211629 | * Solution Evaluation for solution 11 | * Huawei, HiSilicon | * revised |  | * S3-212191 |
| * S3-211630 | * New WID on Security enhancements for 5G multicast-broadcast services (5MBS) | * Huawei, Hisilicon,China Broadcasting Network | * revised |  | * S3-212304 |
| * S3-211631 | * Discussion paper on MBS traffic protection | * Huawei, Hisilicon | * noted |  |  |
| * S3-211632 | * Update to the solution 11 | * Huawei, Hisilicon,China Broadcasting Network | * revised |  | * S3-212192 |
| * S3-211633 | * Conclusion for key issue 2 | * Huawei, Hisilicon | * noted |  |  |
| * S3-211634 | * Conclusion for key issue 3 | * Huawei, Hisilicon,China Broadcasting Network | * revised |  | * S3-212193 |
| * S3-211635 | * Update to the overview | * Huawei, Hisilicon | * approved |  |  |
| * S3-211636 | * Update to the solution 3.3 | * Huawei, Hisilicon | * revised |  | * S3-212327 |
| * S3-211637 | * Clarification to protect F1 interface security for IAB in NR-DC mode | * Huawei, Hisilicon | * noted |  |  |
| * S3-211638 | * Reply LS on User location identification from Carrier Aggregation secondary cell activation messages | * Huawei, Hisilicon | * revised |  | * S3-212305 |
| * S3-211639 | * Reply LS on UE location aspects in NTN | * Huawei, Hisilicon | * revised |  | * S3-212306 |
| * S3-211640 | * Corrections on TS 33.521 | * Huawei, HiSilicon, China Mobile | * approved |  |  |
| * S3-211641 | * Execution Step for Finding the right NF instance serving the UE | * Huawei, HiSilicon, China Mobile | * revised |  | * S3-212307 |
| * S3-211642 | * User Plane Integrity Protection Policy Handling in LTE | * Huawei, HiSilicon | * revised |  | * S3-212308 |
| * S3-211643 | * UP Integrity protection Handling for Option 3 | * Huawei, HiSilicon | * withdrawn |  |  |
| * S3-211644 | * Assign FC Value for KTIPSec and KTNAP Derivation in R16 | * Huawei, HiSilicon | * revised |  | * S3-212309 |
| * S3-211645 | * Assign FC Value for KTIPSec and KTNAP Derivation in R17 | * Huawei, HiSilicon | * revised |  | * S3-212310 |
| * S3-211646 | * FC Value Change because of KTIPSec and KTNAP Derivation in R16 | * Huawei, HiSilicon | * agreed |  |  |
| * S3-211647 | * FC Value Change because of KTIPSec and KTNAP Derivation in R17 | * Huawei, HiSilicon | * revised |  | * S3-212311 |
| * S3-211648 | * Address ENs in TS 33.216 | * Huawei, HiSilicon | * agreed |  |  |
| * S3-211649 | * Solution Update for Solution #28 | * Huawei, HiSilicon | * revised |  | * S3-212194 |
| * S3-211650 | * Conclusion for Key Issue #7 | * Huawei, HiSilicon | * revised |  | * S3-212195 |
| * S3-211651 | * LS on Supporting UP Integrity Protection Policy Handling for Interworking from 5GS to EPS | * Huawei, HiSilicon | * revised |  | * S3-212196 |
| * S3-211652 | * Solution Update for Solution #5 | * Huawei, HiSilicon | * revised |  | * S3-212197 |
| * S3-211653 | * Evaluation for Solution #12 | * Huawei, HiSilicon | * revised |  | * S3-212198 |
| * S3-211654 | * Solution Update for Solution #2 | * Huawei, HiSilicon | * revised |  | * S3-212199 |
| * S3-211655 | * Update on Observations related to Regulations | * Huawei, HiSilicon | * revised |  | * S3-212200 |
| * S3-211656 | * Add Security Requirement for Key Issue #3 | * Huawei, HiSilicon | * revised |  | * S3-212201 |
| * S3-211657 | * Conclusion for Key Issue #3.1 | * Huawei, HiSilicon | * noted |  |  |
| * S3-211658 | * Conclusion for Key Issue #3.2 | * Huawei, HiSilicon | * noted |  |  |
| * S3-211659 | * Conclusion for Key Issue #1.1 | * Huawei, HiSilicon | * approved |  |  |
| * S3-211660 | * Reply LS on Security of Small Data Transmissions | * Huawei, HiSilicon | * noted |  |  |
| * S3-211661 | * Delete EN of Solution#2 | * Huawei, HiSilicon | * revised |  | * S3-212202 |
| * S3-211662 | * Change the procedure of network slice re-authentication and revocation by AAA-S | * Huawei, HiSilicon | * revised |  | * S3-212312 |
| * S3-211663 | * Add conclusion to KI#10 | * Huawei, HiSilicon | * revised |  | * S3-212203 |
| * S3-211664 | * Discussion on security of 5G-TMSI-RNTI used for paging and UE ID in adaptation layer in 5G Prose | * Huawei, HiSilicon | * noted |  |  |
| * S3-211665 | * Draft rely LS on R17 Layer-2 SL Relay | * Huawei, HiSilicon | * revised |  | * S3-212204 |
| * S3-211666 | * A new Key issue on paging cause | * Huawei, HiSilicon | * noted |  |  |
| * S3-211667 | * A new solution to paging cause | * Huawei, HiSilicon | * noted |  |  |
| * S3-211668 | * Discussion on penetration testing | * Huawei, HiSilicon | * noted |  |  |
| * S3-211669 | * A new SID - penetration testing | * Huawei, HiSilicon | * noted |  |  |
| * S3-211670 | * Draft rely LS to GSMA on penetration testing | * Huawei, HiSilicon | * noted |  |  |
| * S3-211671 | * Clarification on AAnF Selection | * Huawei, HiSilicon | * revised |  | * S3-212313 |
| * S3-211672 | * Editoral change in clause 6.1 | * Huawei, HiSilicon | * agreed |  |  |
| * S3-211673 | * liviing CR to 33.511 | * Huawei, HiSilicon | * revised |  | * S3-212375 |
| * S3-211674 | * liviing CR to 33.512 | * Huawei, HiSilicon | * revised |  | * S3-212376 |
| * S3-211675 | * liviing CR to 33.514 | * Huawei, HiSilicon,Nokia,Nokia Shanghai Bell | * approved |  |  |
| * S3-211676 | * liviing CR to 33.517 | * Huawei, HiSilicon,Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211677 | * liviing CR to 33.117 | * Huawei, HiSilicon,Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211678 | * liviing CR to 33.926 | * Huawei, HiSilicon,Nokia, Nokia Shanghai Bell | * revised |  | * S3-212377 |
| * S3-211679 | * Add textcase of NAS based redirection | * Huawei, HiSilicon | * approved |  |  |
| * S3-211680 | * Add testcase to UP security activation in Inactive scenario | * Huawei, HiSilicon | * approved |  |  |
| * S3-211681 | * Update testcases in gNB SCAS | * Huawei, HiSilicon | * revised |  | * S3-212314 |
| * S3-211682 | * pCR to TR33.845 - Resolution of editors notes for solutions 11 13 14 and 15 | * VODAFONE Group Plc | * approved |  |  |
| * S3-211683 | * EAP ID Request in NSSAA procedure | * Ericsson | * withdrawn |  |  |
| * S3-211684 | * Clarify on ngKSI used in NAS SMC in Kausf storage | * Huawei, HiSilicon | * not pursued |  |  |
| * S3-211685 | * Addressing impersonate attack from AAA-S | * Huawei, HiSilicon | * agreed |  |  |
| * S3-211686 | * Mirror- Addressing impersonate attack from AAA-S | * Huawei, HiSilicon | * agreed |  |  |
| * S3-211687 | * EAP ID Request in NSSAA procedure | * Ericsson | * noted |  |  |
| * S3-211688 | * pCR to TR33.845 - Resolution of editors notes for solutions 18 19 20 and 21 | * VODAFONE Group Plc | * approved |  |  |
| * S3-211689 | * EAP ID Request in NSSAA Procedure | * Ericsson | * not pursued |  |  |
| * S3-211690 | * pCR to TR33.845 - Resolution of editors notes for solutions 22 23 24 26 | * VODAFONE Group Plc | * approved |  |  |
| * S3-211691 | * EN Resolution Anomolous NF Behaviour | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212163 |
| * S3-211692 | * Output analytics from NWDAF to detect Anomalous NF Behaviour | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211693 | * Solution on Processing of tampered data | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212160 |
| * S3-211694 | * EN on solution relation with user consent study | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211695 | * EN resolution on solution privacy preservation of transmitted data | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211696 | * Solution on Authorization of NF Service Consumers for data access via DCCF | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212161 |
| * S3-211697 | * Solution on Authorization of NF Service Consumers to access data from ADRF via DCCF | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212162 |
| * S3-211698 | * Reply LS on Transaction Information - Dispersion Analytics | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212159 |
| * S3-211699 | * KI update Dispersion Analytics against DDoS | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211700 | * EAP ID Request in NSSAA Procedure (Rel-17) | * Ericsson | * not pursued |  |  |
| * S3-211701 | * 5GFBS-WID for 5GFBS | * Apple | * noted |  |  |
| * S3-211702 | * 5GFBS-Adding evaluation for solution#4 | * Apple | * noted |  |  |
| * S3-211703 | * 5GFBS-Adding a new clause on Evaluations for key issues | * Apple | * noted |  |  |
| * S3-211704 | * 5GFBS-Conclusion for key issue#2 | * Apple | * noted |  |  |
| * S3-211705 | * 5GFBS-Conclusion for key issue#3 | * Apple | * noted |  |  |
| * S3-211706 | * 5GFBS-Draft LS to RAN2 on Solution#17 | * Apple | * revised |  | * S3-212349 |
| * S3-211707 | * MEC-New key issue on EEC ID privacy protection | * Apple | * noted |  |  |
| * S3-211708 | * MEC-Adding evaluation on Solution#8 | * Apple | * noted |  |  |
| * S3-211709 | * MEC-Adding evaluation on Solution#9 | * Apple | * approved |  | * - |
| * S3-211710 | * MEC-Adding evaluation on Solution#11 | * Apple | * noted |  |  |
| * S3-211711 | * MEC-Adding evaluation on Solution#17 | * Apple | * noted |  |  |
| * S3-211712 | * MEC-New solution on authentication between EEC and ECS | * Apple | * revised |  | * S3-212253 |
| * S3-211713 | * MEC-Kedge ID generation method | * Apple | * revised |  | * S3-212254 |
| * S3-211714 | * MBS-New solution on Key distribution | * Apple | * revised |  | * S3-212255 |
| * S3-211715 | * UC3S-Requirement on revoking user consent | * Apple | * revised |  | * S3-212256 |
| * S3-211716 | * MINT-Discussion paper on MINT | * Apple | * noted |  |  |
| * S3-211717 | * MINT-draft Reply LS to CT1 on MINT. | * Apple | * merged |  | * S3-212258 |
| * S3-211718 | * pCR to TR33.845 - Resolution of editors notes for solutions 28 29 30 | * VODAFONE Group Plc | * revised |  | * S3-212217 |
| * S3-211719 | * DRAFT LS on EAP ID Request in NSSAA Procedure | * Ericsson | * noted |  |  |
| * S3-211720 | * UE procedures at TAU reject in idle mode mobility from 5GS to EPS over N26 | * MediaTek Inc. / Marko | * not pursued |  |  |
| * S3-211721 | * pCR to TR33.853 - removal of template sections | * VODAFONE Group Plc | * approved |  |  |
| * S3-211722 | * UE procedures at TAU reject in idle mode mobility from 5GS to EPS over N26 | * MediaTek Inc. / Marko | * not pursued |  |  |
| * S3-211723 | * MBS conclusions | * Ericsson | * noted |  |  |
| * S3-211724 | * Solution for privacy protection during initial access | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211725 | * Analysis of security properties of architectural options | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211726 | * Proposal for a conclusion on KI#4 | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211727 | * Resolution of editor’s note in solution 19 related to bidding down attacks. | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211728 | * Resolution of Editor's Note in Solution 19 related to provisioning of server certificate the the onboarding UE. | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212241 |
| * S3-211729 | * Resolution of an Editor's Note in Solution 19 related to security implications of the solution | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211730 | * Resolution of Editor's Note in Solution 19 related to construction of SUCI. | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211731 | * Resolution of Editor's Note in Solution 19 related to UDM involvementUpdate | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211732 | * Evalution and system impact for soluiton 19 | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212248 |
| * S3-211733 | * Update to Solution | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211734 | * LS on Feedback on Key Issue #1 "Enhancements to Support SNPN along with credentials owned by an entity separate from the SNPN" | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211735 | * LS on architectural clarifications related to onboarding without client authentication | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211736 | * pCR to TR33.853 - Resolution of editors notes in Conclusions and Recommendations | * VODAFONE Group Plc | * revised |  | * S3-212218 |
| * S3-211737 | * Update to Solution #4 | * Lenovo, Motorola Mobility | * revised |  | * S3-212228 |
| * S3-211738 | * Update to Solution #6 | * Lenovo, Motorola Mobility | * revised |  | * S3-212229 |
| * S3-211739 | * Update to Solution #7 | * Lenovo, Motorola Mobility | * revised |  | * S3-212230 |
| * S3-211740 | * Mapping of Key Issues | * Lenovo, Motorola Mobility | * approved |  |  |
| * S3-211741 | * Discussion capability negotiation for the parameters contained in UPU | * Ericsson Japan K.K. | * noted |  |  |
| * S3-211742 | * Conclusion on Key Issue #1 | * Lenovo, Motorola Mobility | * noted |  |  |
| * S3-211743 | * LS reply on R17 Layer-2 SL Relay of UE ID exposure in paging mechanism | * OPPO | * noted |  |  |
| * S3-211744 | * draft LS reply: UE capabilities indication in UPU | * Ericsson Japan K.K. | * noted |  |  |
| * S3-211745 | * Discussion on Security consideration to support L2TP with CUPS | * Ericsson | * noted |  |  |
| * S3-211746 | * [DRAFT] Reply-LS on the Security consideration to support L2TP with CUPS | * Ericsson | * revised |  | * S3-212365 |
| * S3-211747 | * [DRAFT] Reply-LS on Secondary AUTH for 5GS interworking with EPS | * Ericsson | * revised |  | * S3-212366 |
| * S3-211748 | * Discussion on "LS to 3GPP SA3 N32 and multiple PLMN IDs" | * Ericsson | * noted |  |  |
| * S3-211749 | * [DRAFT] Reply-LS on N32 and multiple PLMN IDs | * Ericsson | * noted |  | * - |
| * S3-211750 | * Discussion on integrity protection between the UE and the HPLMN of additional fields in SOR transparent container carrying SOR acknowledgement | * Ericsson | * noted |  |  |
| * S3-211751 | * [Draft] Reply-LS on integrity protection between the UE and the HPLMN of additional fields in SOR transparent container carrying SOR acknowledgement | * Ericsson | * revised |  | * S3-212272 |
| * S3-211752 | * NRF services authorization and OAuth 2.0 client registration from Rel-15 onwards | * Ericsson, Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211753 | * Clarification on the NRF services authorization | * Ericsson, Nokia, Nokia Shanghai Bell | * not pursued |  |  |
| * S3-211754 | * Clarification on the NRF services authorization | * Ericsson, Nokia, Nokia Shanghai Bell | * not pursued |  |  |
| * S3-211755 | * Clarification on the NRF services authorization | * Ericsson, Nokia, Nokia Shanghai Bell | * not pursued |  |  |
| * S3-211756 | * Clarification on the OAuth 2.0 client registration | * Ericsson, Nokia, Nokia Shanghai Bell | * not pursued |  |  |
| * S3-211757 | * Clarification on the OAuth 2.0 client registration | * Ericsson, Nokia, Nokia Shanghai Bell | * not pursued |  |  |
| * S3-211758 | * Clarification on the OAuth 2.0 client registration | * Ericsson, Nokia, Nokia Shanghai Bell | * not pursued |  |  |
| * S3-211759 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson | * revised |  | * S3-212367 |
| * S3-211760 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson | * revised |  | * S3-212368 |
| * S3-211761 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson | * revised |  | * S3-212369 |
| * S3-211762 | * Correction to NF Certificate profile: Format of the apiRoot | * Ericsson | * agreed |  |  |
| * S3-211763 | * Correction to JOSE profile Reference | * Ericsson | * agreed |  |  |
| * S3-211764 | * Correction to JOSE profile Reference | * Ericsson | * agreed |  |  |
| * S3-211765 | * Update Solution #5: End-to-end integrity protection of HTTP body and method | * Ericsson | * noted |  |  |
| * S3-211766 | * Evaluation of Solution #3 "Using existing procedures for authorization of SCP to act on behalf of an NF Consumer" | * Ericsson | * revised |  | * S3-212372 |
| * S3-211767 | * Conclusions for KI#1 (external entity) on SUPI privacy and usage of MSK | * Ericsson, Huawei, Interdigital, Lenovo, Motorola Mobility, Nokia, Nokia Shanghai Bell, Qualcomm Incorporated | * noted |  |  |
| * S3-211768 | * Conclusions for KI#1 (external entity) on AAA interworking | * Ericsson, China Mobile, Huawei, InterDigital, Qualcomm Incorporated | * noted |  |  |
| * S3-211769 | * Conclusions for KI#4 (initial access) | * Ericsson, Huawei, InterDigital, Lenovo, Motorola Mobility, Qualcomm Incorporated | * noted |  |  |
| * S3-211770 | * Conclusions for KI#2 on secure provisioning of PNI-NPN credentials | * Ericsson | * noted |  |  |
| * S3-211771 | * Security aspects of eNPN: draft skeleton for draft CR | * Ericsson, Huawei, InterDigital | * noted |  |  |
| * S3-211772 | * New WID on Security Aspects of eNPN | * Ericsson, Alibaba, China Mobile, InterDigital, ZTE | * revised |  | * S3-212371 |
| * S3-211773 | * New WID on certificate profiles for SBA | * Ericsson | * noted |  |  |
| * S3-211774 | * New WID on Security aspects of Uncrewed Aerial Systems | * Qualcomm Incorporated, Interdigital, Huawei, HiSilicon | * revised |  | * S3-212354 |
| * S3-211775 | * Update to solution #6 on obtaining UAV location information from the PLMN | * Qualcomm Incorporated | * revised |  | * S3-212244 |
| * S3-211776 | * Update to solution #10 on authentication and authorisation of UAVs | * Qualcomm Incorporated | * approved |  |  |
| * S3-211777 | * Update to solution #13 on authorisation of UAV/UAVC when connected to EPS | * Qualcomm Incorporated | * revised |  | * S3-212245 |
| * S3-211778 | * Update to solution #14 on authorisation of UAV/UAVC pairing when connected to 5GS | * Qualcomm Incorporated | * revised |  | * S3-212246 |
| * S3-211779 | * Discussion on an SA2 LS on IP address to GPSI translation | * Qualcomm Incorporated | * noted |  |  |
| * S3-211780 | * Proposed reply LS on IP address to GPSI translation | * Qualcomm Incorporated | * merged |  | * S3-212355 |
| * S3-211781 | * Proposed evaluation text for solution #23 | * Qualcomm Incorporated | * merged |  | * S3-212234 |
| * S3-211782 | * Proposed evaluation for solution #24 and partial conclusion for key issue #6 | * Qualcomm Incorporated | * revised |  | * S3-212243 |
| * S3-211783 | * Information on the updates to the proposed WID on TLS protocol profiles for AKMA | * Qualcomm Incorporated | * noted |  |  |
| * S3-211784 | * New WID on TLS protocols profiles for AKMA | * Qualcomm Incorporated | * revised | * S3-210479 | * S3-212352 |
| * S3-211785 | * Profiling the GBA TLS protocols for use with AKMA | * Qualcomm Incorporated | * revised | * S3-210477 | * S3-212353 |
| * S3-211786 | * Some proposed text for the assessment of attack risk table | * Qualcomm Incorporated, Vodafone | * noted | * S3-211057 |  |
| * S3-211787 | * Proposed conclusion for key issue #4.1 | * Qualcomm Incorporated, Vodafone | * noted |  |  |
| * S3-211788 | * Proposed conclusion for the linkability parts of key issues #2.1 and 2.2 | * Qualcomm Incorporated, Vodafone, DoCoMo | * noted |  |  |
| * S3-211789 | * Addressing the Editors’ Note in solution #1 | * Qualcomm Incorporated | * revised |  | * S3-212242 |
| * S3-211790 | * Missing details on handling of possible unprotected messages in solution #3 | * Qualcomm Incorporated | * noted |  |  |
| * S3-211791 | * ABBA parameter handling in solutions #6 and #7 | * Qualcomm Incorporated | * noted |  |  |
| * S3-211792 | * Discussion on adding SCAS for the various split gNB cases | * Qualcomm Incorporated | * noted |  |  |
| * S3-211793 | * Adding SCAS for the various split gNB cases | * Qualcomm Incorporated | * noted |  |  |
| * S3-211794 | * Some analysis for key issue #1 | * Qualcomm Incorporated | * noted |  |  |
| * S3-211795 | * Downlink NAS COUNT handling after creating NAS container in EPS to 5GS Handover | * Qualcomm Incorporated, Huawei, HiSilicon, CATT, ZTE | * agreed |  |  |
| * S3-211796 | * Downlink NAS COUNT handling after creating NAS container in EPS to 5GS Handover | * Qualcomm Incorporated, Huawei, HiSilicon, CATT, ZTE | * agreed |  |  |
| * S3-211797 | * Downlink NAS COUNT handling after creating NAS container in EPS to 5GS Handover | * Qualcomm Incorporated, Huawei, HiSilicon, CATT, ZTE | * agreed |  |  |
| * S3-211798 | * Evaluation of Solution #18 | * Qualcomm Incorporated | * revised |  | * S3-212169 |
| * S3-211799 | * Evaluation of Solution #19 | * Qualcomm Incorporated | * approved |  |  |
| * S3-211800 | * Conclusion of KI #1 | * Qualcomm Incorporated | * noted |  |  |
| * S3-211801 | * Evaluation of Solution #13 | * Qualcomm Incorporated | * noted |  |  |
| * S3-211802 | * EN resolution of Solution #19 | * Qualcomm Incorporated | * revised |  | * S3-212170 |
| * S3-211803 | * New Key Issue on security policy handling for 5G Prose services | * Qualcomm Incorporated, Huawei, Hisilicon, Ericsson | * revised |  | * S3-212171 |
| * S3-211804 | * EN resolution of Solution #34 | * Qualcomm Incorporated | * revised |  | * S3-212172 |
| * S3-211805 | * Conclusion of PC5 security setup for the Layer-3 UE-to-Network relay scenario | * Qualcomm Incorporated | * noted |  |  |
| * S3-211806 | * Evaluation of Solution #24 | * Qualcomm Incorporated | * noted |  |  |
| * S3-211807 | * Add an evaluation for solution #10 | * Qualcomm Incorporated | * revised |  | * S3-212213 |
| * S3-211808 | * Add an evaluation for solution #15 | * Qualcomm Incorporated | * merged |  | * S3-212189 |
| * S3-211809 | * Update an evaluation for solution #30 | * Qualcomm Incorporated | * approved |  |  |
| * S3-211810 | * Update of solution #18 to support privacy protection | * Qualcomm Incorporated | * noted |  |  |
| * S3-211811 | * Add an evaluation for solution #32 | * Qualcomm Incorporated | * approved |  |  |
| * S3-211812 | * EN resolution of Solution #12 | * Qualcomm Incorporated | * revised |  | * S3-212173 |
| * S3-211813 | * Evaluation of Solution #2 | * Qualcomm Incorporated | * revised |  | * S3-212174 |
| * S3-211814 | * Evaluation of Solution #11 | * Qualcomm Incorporated | * merged |  | * S3-212192 |
| * S3-211815 | * Discussion on SA2 LS on UE capabilities indication in UPU | * Qualcomm Incorporated | * noted |  |  |
| * S3-211816 | * pCR: Additional conclusions for KI #1 | * Qualcomm Incorporated | * noted |  |  |
| * S3-211817 | * Sending UE identifier to the AKMA AF | * Qualcomm Incorporated | * not pursued |  |  |
| * S3-211818 | * Clarifying the support for authentication methods in an SNPN | * Qualcomm Incorporated | * agreed |  |  |
| * S3-211819 | * Clarifying the support for authentication methods in an SNPN | * Qualcomm Incorporated | * agreed |  |  |
| * S3-211820 | * UP integrity protection in options 4,5 and 7 | * Ericsson | * not pursued |  |  |
| * S3-211821 | * Correction of Annex A.13 | * Ericsson | * withdrawn |  |  |
| * S3-211822 | * Correction of Annex A.13 | * Ericsson | * not pursued |  |  |
| * S3-211823 | * Reply-LS on security aspects for the method of collection of data from the UE | * OPPO | * noted |  |  |
| * S3-211824 | * pCR to TR33.847- Update Solution#3 | * CATT | * noted |  |  |
| * S3-211825 | * Clarification on GVNP and 3GPP functinoality in 4.1.1 | * China Mobile | * approved |  |  |
| * S3-211826 | * resolving EN about the GVNP lifecycle in clause 5.2.5.5.7.1 | * China Mobile | * approved |  |  |
| * S3-211827 | * editorial modification in clause 5.2.5.6.8.5.3 and 5.2.5.7.6 | * China Mobile | * approved |  |  |
| * S3-211828 | * Adding threat reference in clause 5.2.5.7.7.2 and 5.2.5.7.7.3 | * China Mobile | * approved |  |  |
| * S3-211829 | * Modifying contents about decoupling scenarios | * China Mobile | * approved |  |  |
| * S3-211830 | * Resolving EN about Figure 5.2.5.1-1 | * China Mobile | * approved |  |  |
| * S3-211831 | * Adding vendor development and product lifecycle processes and test laboratory accreditation into Clause 6 | * China Mobile | * approved |  |  |
| * S3-211832 | * proposal for way forward | * China Mobile | * approved |  |  |
| * S3-211833 | * Clean up to existing editor's note | * China Mobile | * approved |  |  |
| * S3-211834 | * Presentation of TR33.818 to SA plenary | * China Mobile | * revised |  | * S3-212324, S3-212326 |
| * S3-211835 | * Assessment of attack risk | * China Mobile | * noted |  |  |
| * S3-211836 | * Solution to mitgate the SUPI guessing attack without changing the format of SUCI | * China Mobile | * noted |  |  |
| * S3-211837 | * Solution to mitigate the SUPI guessing attack and SUCI replay attack by adding new MAC tag in SUCI | * China Mobile | * noted |  |  |
| * S3-211838 | * Add evaluation to solution #4 | * China Mobile | * revised |  | * S3-212216 |
| * S3-211839 | * Add evaluation to solution #1 | * China Mobile | * approved |  |  |
| * S3-211840 | * Add deatails to solution #6 | * China Mobile | * approved |  |  |
| * S3-211841 | * Add evaluation to solution #6 | * China Mobile | * approved |  |  |
| * S3-211842 | * Adding asset, description and threats to TR 33.926 for NWDAF SCAS | * China Mobile | * revised | * S3-210775 | * S3-212321 |
| * S3-211843 | * Execution Step for Data Masking on Integration Analysis | * China Mobile | * revised |  | * S3-212322 |
| * S3-211844 | * Address ENs in TS 33.521 | * China Mobile, Huawei, HiSilicon | * approved |  |  |
| * S3-211845 | * Presentation of TR33.521 to SA plenary | * China Mobile | * revised |  | * S3-212387 |
| * S3-211846 | * pCR to TR33.847- Update Solution#4 | * CATT | * noted |  |  |
| * S3-211847 | * pCR to TR33.847- Update Solution#29 | * CATT | * revised |  | * S3-212152 |
| * S3-211848 | * pCR to TR33.847- Update Solution#30 | * CATT | * revised |  | * S3-212153 |
| * S3-211849 | * pCR to TR33.847- Conclusion of KI#1 | * CATT | * noted |  |  |
| * S3-211850 | * pCR to TR33.847- Conclusion of KI#3 | * CATT | * noted |  |  |
| * S3-211851 | * pCR to TR33.847- Conclusion of KI#10 | * CATT | * merged |  | * S3-212203 |
| * S3-211852 | * Address ENs for User Consent for Exposure of information to Edge Applications in Real Time | * China Unicom | * noted |  |  |
| * S3-211853 | * add evaluation to solution #23 | * Huawei, Hisilicon | * revised |  | * S3-212234 |
| * S3-211854 | * add ENs to solution#5 | * Huawei, Hisilicon | * noted |  |  |
| * S3-211855 | * recommendation of SHA256 in SIP digest | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-211856 | * reply LS on UE capabilities indication in UPU | * Huawei, Hisilicon | * noted |  |  |
| * S3-211857 | * Threats related to session establishment procedure | * Huawei, Hisilicon | * approved |  |  |
| * S3-211858 | * New test case on validation of S-NSSAIs in PDU session establishment | * Huawei, Hisilicon | * revised |  | * S3-212332 |
| * S3-211859 | * EN removal of solution #9 | * Huawei, Hisilicon | * revised |  | * S3-212235 |
| * S3-211860 | * Discussion on UE capabilities indication in UPU | * Huawei, Hisilicon | * noted |  |  |
| * S3-211861 | * Conclusion on KI#5 | * Huawei, Hisilicon | * merged |  | * S3-212207 |
| * S3-211862 | * Discussion on NF Domain granularity authorization | * Huawei, Hisilicon | * noted |  |  |
| * S3-211863 | * Update to the SID of eSBA for NF Domain granularity authorization | * Huawei, Hisilicon | * noted |  |  |
| * S3-211864 | * New KI on NF Domain granularity authorization | * Huawei, Hisilicon | * noted |  |  |
| * S3-211865 | * New solution to key issue #3.3 | * Huawei, Hisilicon | * revised |  | * S3-212237 |
| * S3-211866 | * New solution to key issue #2.1 | * Huawei, Hisilicon | * noted |  |  |
| * S3-211867 | * New solution to key issue #1.5 | * Huawei, Hisilicon | * revised |  | * S3-212238 |
| * S3-211868 | * New test case on malformatted message for IPUPS | * Huawei, Hisilicon | * revised |  | * S3-212334 |
| * S3-211869 | * New security threats on IPUPS malformatted message | * Huawei, Hisilicon | * revised |  | * S3-212335 |
| * S3-211870 | * New test case on de-registering UE after NSSAA revocation | * Huawei, Hisilicon | * approved |  |  |
| * S3-211871 | * New security threats on unauthorized slice access | * Huawei, Hisilicon | * approved |  |  |
| * S3-211872 | * Reply LS on changes to SoR | * Huawei, Hisilicon | * revised |  | * S3-212336 |
| * S3-211873 | * Clarifications to 5G CIoT K\_NG-RAN derivation | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-211874 | * Claifications on mapped security | * Huawei, Hisilicon | * revised |  | * S3-212337 |
| * S3-211875 | * Discussion paper on GBA authentication vector service | * Huawei, Hisilicon | * noted |  |  |
| * S3-211876 | * UDM support of GBA service | * Huawei, Hisilicon | * noted |  |  |
| * S3-211877 | * Updates to solutoin #3 | * Huawei, Hisilicon | * revised |  | * S3-212239 |
| * S3-211878 | * Updates to solutoin #4 | * Huawei, Hisilicon | * approved |  |  |
| * S3-211879 | * Updates to solutoin #5 | * Huawei, Hisilicon | * approved |  |  |
| * S3-211880 | * Add conclusion for key issue #1 | * Huawei, Hisilicon | * noted |  |  |
| * S3-211881 | * Clarification to SoR transparent container | * Huawei, Hisilicon | * revised |  | * S3-212339 |
| * S3-211882 | * Clarification on a figure and the key activation | * Huawei, Hisilicon | * revised |  | * S3-212341 |
| * S3-211883 | * Resolving EN on the error handling | * Huawei, Hisilicon | * agreed |  |  |
| * S3-211884 | * Draft Reply LS on Security consideration to support L2TP with CUPS | * Huawei, Hisilicon | * merged |  | * S3-212365 |
| * S3-211885 | * UP Security policy requirement on the IMS data network | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-211886 | * Editor's note of the security of 5GLAN services removal in R16 | * Huawei, Hisilicon | * agreed |  |  |
| * S3-211887 | * Editor's note of the security of 5GLAN services removal in R17 | * Huawei, Hisilicon | * agreed |  |  |
| * S3-211888 | * Clarification on the Oauth client registration | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-211889 | * Clarification on the Oauth client registration and authorization | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-211890 | * Discussion on the Authentication, Authorization and Data Protection between EEC and EES/ECS | * Huawei, Hisilicon | * noted |  |  |
| * S3-211891 | * Clarification on the static authorization | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-211892 | * New WID on Study on Security Aspects of Enhancement of Support for Edge Computing in 5GC | * Huawei, Hisilicon | * revised |  | * S3-212342 |
| * S3-211893 | * EC: Conclusion for Key issue #1 | * Huawei, Hisilicon | * noted |  |  |
| * S3-211894 | * EC: Conclusion for Key issue #2 | * Huawei, Hisilicon | * noted |  |  |
| * S3-211895 | * EC: Conclusion for Key issue #3 | * Huawei, Hisilicon | * merged |  | * S3-212167 |
| * S3-211896 | * EC: Conclusion for Key issue #4 and Key issue #5 | * Huawei, Hisilicon | * revised |  | * S3-212236 |
| * S3-211897 | * EC: Conclusion for Key issue #7 | * Huawei, Hisilicon | * noted |  |  |
| * S3-211898 | * EC: Conclusion for Key issue #10 | * Huawei, Hisilicon | * noted |  |  |
| * S3-211899 | * Draft LS on TAU reject issue during MME handover | * Huawei, Hisilicon | * revised |  | * S3-212343 |
| * S3-211900 | * Draft Reply LS on Header Enrichment for HTTPS in PFCP | * Huawei, Hisilicon | * revised |  | * S3-212344 |
| * S3-211901 | * Requirement of subscribe-notification key issue | * Huawei, Hisilicon | * noted |  |  |
| * S3-211902 | * IMS SCAS: living doc for the threats | * Huawei, Hisilicon | * approved |  |  |
| * S3-211903 | * IMS SCAS: Adding the assets and threats of the new NFs and update existing threats | * Huawei, Hisilicon | * approved |  |  |
| * S3-211904 | * IMS SCAS: living doc for the threats | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-211905 | * Update the test case on bidding down and add reqirements on new NFs | * Huawei, Hisilicon | * approved |  |  |
| * S3-211906 | * Editorial change on TS 33.516 | * Huawei, Hisilicon | * approved |  |  |
| * S3-211907 | * Presentation of Specification to TSG: * TS 33.226, Version 0.5.0 | * Huawei, Hisilicon | * noted |  |  |
| * S3-211908 | * AKMA Anchor Function selection clause | * Ericsson | * revised |  | * S3-212359 |
| * S3-211909 | * New WID on IoT Ua\* protocol profiles for AKMA | * Ericsson, China Mobile | * noted |  |  |
| * S3-211910 | * IETF OSCORE as AKMA Ua\* protocol | * Ericsson, DT | * not pursued |  |  |
| * S3-211911 | * Extending the Ua security protocol namespace to include AKMA Ua\* protocols | * Ericsson | * not pursued |  |  |
| * S3-211912 | * Handling of AKMA keys in the UE | * Ericsson | * noted |  |  |
| * S3-211913 | * AKMA UE aspects | * Ericsson | * revised |  | * S3-212328 |
| * S3-211914 | * Update to solution #2 | * Ericsson | * revised |  | * S3-212156 |
| * S3-211915 | * AMF reallocation via direct NAS reroute: handling of UL NAS COUNT corresponding to RR message derivation | * Ericsson | * noted |  |  |
| * S3-211916 | * AMF re-allocation: Analysis of solutions | * Ericsson | * noted |  |  |
| * S3-211917 | * AMF re-allocation: Conclusion | * Ericsson | * noted |  |  |
| * S3-211918 | * AMF re-allocation: Solution #9 updates | * Ericsson | * revised |  | * S3-212157 |
| * S3-211919 | * New WID on the security of AMF re-allocation | * Ericsson | * noted |  |  |
| * S3-211920 | * AMF re-allocation: Discussion about the WID | * Ericsson | * noted |  |  |
| * S3-211921 | * Authentication enhancements: TR editorials | * Ericsson | * approved |  |  |
| * S3-211922 | * Authentication enhancements: Clause 4 | * Ericsson | * approved |  |  |
| * S3-211923 | * New WID on Authentication enhancements in 5GS | * Ericsson | * noted |  |  |
| * S3-211924 | * Authentication enhancements: Discussion about the WID | * Ericsson | * noted |  |  |
| * S3-211925 | * Living document for GBA\_5G: draftCR to TS 33.220: SBA support for Zh and Zn interfaces | * Ericsson | * approved |  |  |
| * S3-211926 | * Living document for GBA\_5G: draftCR to TS 33.223: SBA support for Zpn | * Ericsson | * approved |  |  |
| * S3-211927 | * Discussion on GBA support in UDM | * Ericsson | * noted |  |  |
| * S3-211928 | * pCR to living document for TS 33.220: Support for GBA in UDM | * Ericsson | * noted |  |  |
| * S3-211929 | * pCR to living document for TS 33.223: Support for GBA in UDM | * Ericsson | * noted |  |  |
| * S3-211930 | * DRAFT LS on SBA for GBA | * Ericsson | * noted |  |  |
| * S3-211931 | * pCR to TR33.847- Conclusion of KI#12 | * CATT | * noted |  |  |
| * S3-211932 | * Editor Note removal for Solution#10 | * Nokia, Nokia Shanghai-Bell | * revised |  | * S3-212250 |
| * S3-211933 | * Evaluation for Solution#10 | * Nokia, Nokia Shanghai-Bell | * noted |  |  |
| * S3-211934 | * Work Item Exception sheet for BEST\_5G Rel 17 | * VODAFONE Group Plc | * agreed |  |  |
| * S3-211935 | * Alignment of requirements with specification updates | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212395 |
| * S3-211936 | * SCP-specific adaptations - technical baseline | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-211937 | * SCP-specific adaptations - Operating systems | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-211938 | * SCP-specific adaptations - Web servers | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-211939 | * SCP-specific adaptations - Network devices | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-211940 | * SCP-specific adaptations - NFs in SBA | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-211941 | * SCP test cases | * Nokia, Nokia Shanghai Bell, NTT Docomo | * withdrawn |  |  |
| * S3-211942 | * Assets and Threats specific to SCP | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-211943 | * SCP Test on Token forwarded to the correct NFp | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-211944 | * SCP Test on Correct token forwarded to NFp | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-211945 | * SCP-specific adaptations - technical baseline | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211946 | * SCP-specific adaptations - Operating systems | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211947 | * SCP-specific adaptations - Web servers | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211948 | * SCP-specific adaptations - Network devices | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211949 | * SCP-specific adaptations - NFs in SBA | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211950 | * SCP test cases | * Nokia, Nokia Shanghai Bell, NTT Docomo | * revised |  | * S3-212121 |
| * S3-211951 | * Assets and Threats specific to SCP | * Nokia, Nokia Shanghai Bell | * not pursued |  |  |
| * S3-211952 | * SCP Test on Token forwarded to the correct NFp | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211953 | * SCP Test on Correct token forwarded to NFp | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211954 | * New KI: DoS on Network Slice Quota | * US National Security Agency, Johns Hopkins University APL, CISA ECD, NIST | * noted |  |  |
| * S3-211955 | * SCP Requirement and test case for protection over internal interfaces | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211956 | * Update to solution #6 | * Ericsson | * revised |  | * S3-212143 |
| * S3-211957 | * Update to solution #21 | * Ericsson | * revised |  | * S3-212144 |
| * S3-211958 | * Update to solution #35 | * Ericsson | * revised |  | * S3-212145 |
| * S3-211959 | * Conclusion on key issue #3 and key issue #4 | * Ericsson | * noted |  |  |
| * S3-211960 | * Update to evaluation to solution #1 | * Ericsson | * approved |  |  |
| * S3-211961 | * Update to evaluation to solution #15 | * Ericsson | * merged |  | * S3-212189 |
| * S3-211962 | * Update to evaluation to solution #10 | * Ericsson | * revised |  | * S3-212146 |
| * S3-211963 | * Update to evaluation to solution #13 | * Ericsson | * noted |  |  |
| * S3-211964 | * Conclusion on key issue #2 | * Ericsson | * noted |  |  |
| * S3-211965 | * Way forward for draft-ietf-emu-rfc5448bis | * Ericsson | * noted |  |  |
| * S3-211966 | * pCR to 33.846: conclusion for KI #2.1 | * THALES | * noted |  |  |
| * S3-211967 | * pCR to 33.846: conclusion for KI#4.1 | * THALES | * noted |  |  |
| * S3-211968 | * KI1 Security requirements for authentication of NRF and NFp in indirect commuication | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211969 | * Sol1 deployment scenarios | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212298 |
| * S3-211970 | * ENs on Sol1 Service response verification in model C | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212299 |
| * S3-211971 | * Threats and requirements to KI3 on Service access authorization in Subscribe-Notify | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211972 | * Solution on URI verification and notification acceptance | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211973 | * KI on Access token usage by all NFs of an NF Set | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-211974 | * Solution on Access token request for NF Set | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212302 |
| * S3-211975 | * EN resolution on sol 2 - NFc authorizing SCP to act on its behalf | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212300 |
| * S3-211976 | * Evaluation on sol 2 - NFc authorizing SCP to act on its behalf | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212301 |
| * S3-211977 | * Evaluation to sol 3 - proof of possession of CCA NFc authorizes the SCP to act on behalf of an NFc | * Nokia, Nokia Shanghai Bell | * merged |  | * S3-212372 |
| * S3-211978 | * KI on Roaming case for token-based authorization | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211979 | * Trust model | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212303 |
| * S3-211980 | * N32-c and N32-f clarification R16 | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212282 |
| * S3-211981 | * N32-c and N32-f clarification R17 | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212284 |
| * S3-211982 | * Deployment models R16 | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212285 |
| * S3-211983 | * Deployment models R17 | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-212286 |
| * S3-211984 | * Discussion of GSMA LS S3-211383 Prevention of attacks on sliced core | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-211985 | * Prevention of attacks on slice core by CCA modifications - Rel-16 | * Nokia, Nokia Shanghai Bell | * not pursued |  |  |
| * S3-211986 | * Prevention of attacks on slice core by CCA modifications - Rel-17 | * Nokia, Nokia Shanghai Bell | * not pursued |  |  |
| * S3-211987 | * pCR to TR 33.839: Using TLS with Edge Security Service to protect edge interfaces | * THALES | * revised |  | * S3-212225 |
| * S3-211988 | * Removal of ENs for draft-ietf-emu-rfc5448bis - Rel-15 | * Ericsson | * revised |  | * S3-212330 |
| * S3-211989 | * Process for SA3#103e meeting | * SA WG3 Vice Chairs | * noted | * S3-211352 |  |
| * S3-211990 | * Removal of ENs for draft-ietf-emu-rfc5448bis -Rel-16 | * Ericsson | * revised |  | * S3-212331 |
| * S3-211991 | * Removal of ENs for draft-ietf-emu-rfc5448bis- Rel-17 | * Ericsson | * revised |  | * S3-212346 |
| * S3-211992 | * Discussion on 256-bit algorithms based on SNOW 3G or SNOW V | * Ericsson, AT&T, BT plc, Deutsche Telekom AG | * noted |  |  |
| * S3-211993 | * eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #5 | * Xiaomi Technology | * approved |  |  |
| * S3-211994 | * eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #6 | * Xiaomi Technology | * approved |  |  |
| * S3-211995 | * eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #7 | * Xiaomi Technology | * revised |  | * S3-212206 |
| * S3-211996 | * eEDGE: Conclusion for Key Issue #4 | * Xiaomi Technology | * merged |  | * S3-212236 |
| * S3-211997 | * ProSe: Resolving an Editor’s Note in KI #1 | * Xiaomi Technology | * approved |  |  |
| * S3-211998 | * ProSe: New Key Issue on Security Policies for PC5 Connection | * Xiaomi Technology | * merged |  | * S3-212171 |
| * S3-211999 | * ProSe: New Key Issue on UP Security Policy Handling for Indirect Network Communication | * Xiaomi Technology | * noted |  |  |
| * S3-212000 | * eNPN: Conclusion on KI#8 with Solution#18 Updating | * Xiaomi Technology | * revised |  | * S3-212207 |
| * S3-212001 | * eNPN: Solution of Security Mechansim for UP Provisioning of Credentials | * Xiaomi Technology | * noted |  |  |
| * S3-212002 | * eNPN: New KI of Security Protection for the Update of Preferred SNPN List | * Xiaomi Technology | * noted |  |  |
| * S3-212003 | * Reply LS on updating the Credentials Holder controlled lists for SNPN selection | * Xiaomi Technology | * revised |  | * S3-212208 |
| * S3-212004 | * MUSIM: New Solution for Key Issue #1 for RRC\_Idle UE | * Xiaomi Technology | * noted |  |  |
| * S3-212005 | * MUSIM: New Solution for Key Issue #1 for RRC\_Inactive UE | * Xiaomi Technology | * noted |  |  |
| * S3-212006 | * MUSIM: Conclusion for Key Issue #2 | * Xiaomi Technology | * revised |  | * S3-212209 |
| * S3-212007 | * eNS2: Add Threat Analysis to KI #1 | * Xiaomi Technology | * revised |  | * S3-212210 |
| * S3-212008 | * eNS2: New Key Issue on Primary Authentication with NSAC | * Xiaomi Technology | * noted |  |  |
| * S3-212009 | * eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #5 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212010 | * eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #6 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212011 | * eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #7 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212012 | * eEDGE: Conclusion for Key Issue #4 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212013 | * ProSe: Resolving an Editor’s Note in KI #1 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212014 | * ProSe: New Key Issue on Security Policies for PC5 Connection | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212015 | * ProSe: New Key Issue on UP Security Policy Handling for Indirect Network Communication | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212016 | * eNPN: Conclusion on KI#8 with Solution#18 Updating | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212017 | * eNPN: Solution of Security Mechansim for UP Provisioning of Credentials | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212018 | * eNPN: New KI of Security Protection for the Update of Preferred SNPN List | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212019 | * Reply LS on updating the Credentials Holder controlled lists for SNPN selection | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212020 | * MUSIM: New Solution for Key Issue #1 for RRC\_Idle UE | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212021 | * MUSIM: New Solution for Key Issue #1 for RRC\_Inactive UE | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212022 | * MUSIM: Conclusion for Key Issue #2 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212023 | * eNS2: Add Threat Analysis to KI #1 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212024 | * eNS2: New Key Issue on Primary Authentication with NSAC | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212025 | * Reply LS on 256-bit algorithms based on SNOW 3G or SNOW V | * Ericsson, AT&T, BT plc, Deutsche Telekom AG | * merged |  | * S3‑211497 |
| * S3-212026 | * eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #6 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212027 | * eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #7 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212028 | * eEDGE: Conclusion for Key Issue #4 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212029 | * ProSe: Resolving an Editor’s Note in KI #1 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212030 | * ProSe: New Key Issue on Security Policies for PC5 Connection | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212031 | * ProSe: New Key Issue on UP Security Policy Handling for Indirect Network Communication | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212032 | * eNPN: Conclusion on KI#8 with Solution#18 Updating | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212033 | * eNPN: Solution of Security Mechansim for UP Provisioning of Credentials | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212034 | * eNPN: New KI of Security Protection for the Update of Preferred SNPN List | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212035 | * Reply LS on updating the Credentials Holder controlled lists for SNPN selection | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212036 | * MUSIM: New Solution for Key Issue #1 for RRC\_Idle UE | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212037 | * MUSIM: New Solution for Key Issue #1 for RRC\_Inactive UE | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212038 | * MUSIM: Conclusion for Key Issue #2 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212039 | * eNS2: Add Threat Analysis to KI #1 | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212040 | * eNS2: New Key Issue on Primary Authentication with NSAC | * Xiaomi Technology | * withdrawn |  |  |
| * S3-212041 | * Conclusions for KI#10 "Authorization during Edge Data Network change" | * Ericsson | * noted |  |  |
| * S3-212042 | * Conclusions for KI#7 "Security of Network Information Provisioning to Local Applications with low latency procedure" | * Ericsson | * noted |  |  |
| * S3-212043 | * Update Solution #17: Resolving EN on TLS ID | * Ericsson | * approved |  |  |
| * S3-212044 | * Update to Solution #17: Resolving EN on Token Usage | * Ericsson | * noted |  |  |
| * S3-212045 | * Update to Solution #17: Resolving EN on Multiple GPSI | * Ericsson | * revised |  | * S3-212226 |
| * S3-212046 | * Evaluation of Solution #17 | * Ericsson | * revised |  | * S3-212227 |
| * S3-212047 | * Discussion on IP address to GPSI translation | * Ericsson | * noted |  |  |
| * S3-212048 | * Reply LS on IP address to GPSI translation | * Ericsson | * revised |  | * S3-212355 |
| * S3-212049 | * LS on EAS and ECS identifiers | * Ericsson | * noted |  |  |
| * S3-212050 | * Update to solution #2 | * Ericsson | * revised |  | * S3-212222 |
| * S3-212051 | * Update to Solution #17: Handling multiple GPSI in IP address to GPSI translation | * Ericsson | * approved |  |  |
| * S3-212052 | * Intro update | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-212053 | * Security for user regroup | * CATT | * not pursued |  |  |
| * S3-212054 | * pCR: Conclusion for KI #1 on addressing security threat against KAUSF | * CableLabs | * withdrawn |  |  |
| * S3-212055 | * Removal of Editor’s Note of Solution#5 | * Lenovo, Motorola Mobility | * noted |  |  |
| * S3-212056 | * pCR: Conclusion for KI #1 on addressing security threat against KAUSF | * CableLabs | * noted |  |  |
| * S3-212057 | * Solution on Authorization of Data Consumers for data access via DCCF | * Ericsson | * revised |  | * S3-212221 |
| * S3-212058 | * Solution on Authorization of Data Consumers for data access via DCCF through Messaging Framework | * Ericsson | * noted |  |  |
| * S3-212059 | * New KI Untrusted DCCF for secure data collection | * Ericsson | * noted |  |  |
| * S3-212060 | * Solution for Untrusted DCCF for secure data collection | * Ericsson | * noted |  |  |
| * S3-212061 | * Security updates for algorithms and protocols in 33.220 | * Ericsson | * agreed |  |  |
| * S3-212062 | * Security updates for algorithms and protocols in 33.222 | * Ericsson | * agreed |  |  |
| * S3-212063 | * Security updates for algorithms and protocols in 33.223 | * Ericsson | * agreed |  |  |
| * S3-212064 | * Security updates for algorithms and protocols in 33.210 | * Ericsson | * not pursued |  |  |
| * S3-212065 | * Security updates for algorithms and protocols in 33.203 | * Ericsson | * not pursued |  |  |
| * S3-212066 | * Security updates for algorithms and protocols in 33.310 | * Ericsson | * not pursued |  |  |
| * S3-212067 | * Security updates for algorithms and protocols in 33.501 | * Ericsson | * not pursued |  |  |
| * S3-212068 | * Removal of Editor’s Notes | * Lenovo, Motorola Mobility | * approved |  |  |
| * S3-212069 | * Type 1 threat | * Futurewei Technologies | * approved |  |  |
| * S3-212070 | * Typye 2 Threats | * Futurewei Technologies | * approved |  |  |
| * S3-212071 | * Type 3 Threats | * Futurewei Technologies | * approved |  |  |
| * S3-212072 | * A new onboarding solution addressing KI#2 | * Lenovo, Motorola Mobility | * noted |  |  |
| * S3-212073 | * Discussion on refresh of Kaf and Kakma | * Samsung | * noted |  |  |
| * S3-212074 | * Refresh of Kaf and Kakma | * Samsung | * not pursued |  |  |
| * S3-212075 | * Discussion on authorization of Kaf refresh | * Samsung | * noted |  |  |
| * S3-212076 | * Network provides authorization to AF for Kaf key refresh | * Samsung | * not pursued |  |  |
| * S3-212077 | * Discussion on detection of MitM attack using NWDAF | * Samsung | * noted |  |  |
| * S3-212078 | * Solution on analytics for MitM attack detection | * Samsung | * noted |  |  |
| * S3-212079 | * Solution on analytics for DoS attack detection | * Samsung | * noted |  |  |
| * S3-212080 | * Solution on user's consent for exposure of information to Edge Applications | * Samsung | * noted |  |  |
| * S3-212081 | * Solution on user consent for UE data collection | * Samsung | * noted |  |  |
| * S3-212082 | * [EDGE] Resolving EN1 in Solution#3 | * Samsung | * approved |  |  |
| * S3-212083 | * [EDGE] Resolving EN3 in Solution#3 | * Samsung | * approved |  |  |
| * S3-212084 | * [EDGE] Evaluation for solution#3 | * Samsung | * approved |  |  |
| * S3-212085 | * Update for solution#1: Optimized Authorization | * Samsung | * revised |  | * S3-212135 |
| * S3-212086 | * [5gmsg] Transport security protection for MSGin5G-3 interface | * Samsung | * approved |  |  |
| * S3-212087 | * [5gmsg] Resolving ENs in solution#1 | * Samsung | * approved |  |  |
| * S3-212088 | * [5gmsg] Resolving ENs in solution#5 | * Samsung | * approved |  |  |
| * S3-212089 | * [5gmsg] Resolving ENs in solution#6 | * Samsung | * revised |  | * S3-212136 |
| * S3-212090 | * [5gmsg] Resolving ENs in solution#7 | * Samsung | * revised |  | * S3-212137 |
| * S3-212091 | * CR on signalling Algorithm Selection | * Samsung | * agreed |  |  |
| * S3-212092 | * Correction to FC values in range for future use in 3GPP specifications | * Samsung | * merged |  | * S3-212311 |
| * S3-212093 | * Update to solution#9 | * Samsung | * revised |  | * S3-212138 |
| * S3-212094 | * New solution for key issue#1: Authentication of NF service producer in indirect communication | * Samsung | * revised |  | * S3-212292 |
| * S3-212095 | * New solution for key issue#3: Authorization of notification request | * Samsung | * noted |  |  |
| * S3-212096 | * Updates to solution#13 on Key refresh mechanism | * Samsung | * approved |  |  |
| * S3-212097 | * Updates to solution#13 on support for multiple MB-SMF | * Samsung | * revised |  | * S3-212139 |
| * S3-212098 | * Updates to solution#13 on MBS security algorithm selection | * Samsung | * revised |  | * S3-212140 |
| * S3-212099 | * Comparison of solutions and propose way forward | * Samsung | * noted |  |  |
| * S3-212100 | * Updates to solution#5 | * Samsung | * approved |  |  |
| * S3-212101 | * Removal of Editor's Note in Solution#5 | * Samsung | * noted |  |  |
| * S3-212102 | * Updates to evaluation in solution#5 | * Samsung | * noted |  |  |
| * S3-212103 | * Rel16-Handling of Kausf upon successful primary authentication | * Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel | * revised |  | * S3-212289 |
| * S3-212104 | * Rel17-Handling of Kausf upon successful primary authentication | * Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel | * revised |  | * S3-212290 |
| * S3-212105 | * Updates to KI#1 & KI#7 | * Samsung | * noted |  |  |
| * S3-212106 | * [Draft] LS on feasibility of addressing the attacks against 5G UE over radio interfaces | * Samsung | * noted |  |  |
| * S3-212107 | * [IAB] Unprotected BAP Control PDU exchange | * Samsung | * revised |  | * S3-212141 |
| * S3-212108 | * [UC3S] Update to Conclusion | * Samsung | * revised |  | * S3-212142 |
| * S3-212109 | * [EDGE] Conclusion for KI#1, KI#2 and KI#6 | * Samsung | * noted |  |  |
| * S3-212110 | * Clause 6.1 | * Futurewei Technologies | * approved |  |  |
| * S3-212111 | * Key Issue on subscription identifier privacy | * Lenovo, Motorola Mobility | * merged |  | * S3-212150 |
| * S3-212112 | * eEDGE: Additional Threat and Requirement for KI #10 | * Xiaomi Technology | * approved |  |  |
| * S3-212113 | * Solution on NSWO authentication | * Lenovo, Motorola Mobility | * noted |  |  |
| * S3-212114 | * Update to solution #32 | * Philips International B.V. | * revised |  | * S3-212147 |
| * S3-212115 | * UP IP: Update to solution #21 (Interworking handover from EPS to 5GS) | * Ericsson | * revised |  | * S3-212133 |
| * S3-212116 | * UP IP: Update to solution #24 Interworking handover from 5GS to EPS | * Ericsson | * revised |  | * S3-212134 |
| * S3-212117 | * UP IP: Update to solution #30 | * Ericsson | * approved |  |  |
| * S3-212118 | * Removal of Editor’s Note of Solution#4 | * Lenovo, Motorola Mobility | * noted |  |  |
| * S3-212119 | * Correction of Annex A.13 | * Ericsson | * not pursued |  |  |
| * S3-212120 | * Addition of Key Issue 26 Text | * BT plc | * revised |  | * S3-212388 |
| * S3-212121 | * SCP test cases | * Nokia, Nokia Shanghai Bell, NTT Docomo | * revised | * S3-211950 | * S3-212295 |
| * S3-212122 | * Addition of Key Issue 25 Text | * BT plc | * revised |  | * S3-212389 |
| * S3-212123 | * S on user consent revocation to SA2 | * Nokia | * approved |  |  |
| * S3-212124 | * LS on Clarification of AMF Reallocation and network slice selection | * Lenovo | * approved |  |  |
| * S3-212125 | * Conclusion on UE-UE | * Nokia, Nokia Shanghai Bell | * approved | * S3-211448 |  |
| * S3-212126 | * TR\_33.851\_IIoT\_Sec | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-212127 | * Updated Solution #23: Initial key with validity time | * KPN N.V. | * approved | * S3-211597 |  |
| * S3-212128 | * TR 33.854 KI#4 conclusion | * InterDigital, Europe, Ltd., Huawei, HiSilicon | * approved | * S3-211489 |  |
| * S3-212129 | * TR 33.847 sol#10 update | * InterDigital, Europe, Ltd. | * approved | * S3-211484 |  |
| * S3-212130 | * TR 33.847 sol#24 evaluation | * InterDigital, Europe, Ltd. | * approved | * S3-211485 |  |
| * S3-212131 | * TR 33.847 sol#25 evaluation | * InterDigital, Europe, Ltd. | * approved | * S3-211486 |  |
| * S3-212132 | * Updated Solution #22: Representation of identities during broadcast | * KPN N.V. | * approved | * S3-211463 |  |
| * S3-212133 | * UP IP: Update to solution #21 (Interworking handover from EPS to 5GS) | * Ericsson | * approved | * S3-212115 |  |
| * S3-212134 | * UP IP: Update to solution #24 Interworking handover from 5GS to EPS | * Ericsson | * approved | * S3-212116 |  |
| * S3-212135 | * Update for solution#1: Optimized Authorization | * Samsung | * approved | * S3-212085 |  |
| * S3-212136 | * [5gmsg] Resolving ENs in solution#6 | * Samsung | * approved | * S3-212089 |  |
| * S3-212137 | * [5gmsg] Resolving ENs in solution#7 | * Samsung | * approved | * S3-212090 |  |
| * S3-212138 | * Solution to reroute 5G NAS security context via RAN | * Samsung | * approved | * S3-212093 |  |
| * S3-212139 | * Updates to solution#13 on support for multiple MB-SMF | * Samsung | * approved | * S3-212097 |  |
| * S3-212140 | * Updates to solution#13 on MBS security algorithm selection | * Samsung | * approved | * S3-212098 |  |
| * S3-212141 | * [IAB] Unprotected BAP Control PDU exchange | * Samsung | * approved | * S3-212107 |  |
| * S3-212142 | * [UC3S] Update to Conclusion | * Samsung | * approved | * S3-212108 |  |
| * S3-212143 | * Update to solution #6 | * Ericsson | * approved | * S3-211956 |  |
| * S3-212144 | * Update to solution #21 | * Ericsson | * approved | * S3-211957 |  |
| * S3-212145 | * Update to solution #35 | * Ericsson | * approved | * S3-211958 |  |
| * S3-212146 | * Update to evaluation to solution #10 | * Ericsson | * approved | * S3-211962 |  |
| * S3-212147 | * Update to solution #32 | * Philips International B.V. | * approved | * S3-212114 |  |
| * S3-212148 | * Scope for 5G NSWO TR | * Nokia, Nokia Shanghai-Bell | * approved | * S3-211516 |  |
| * S3-212149 | * Introduction for 5G NSWO TR | * Nokia, Nokia Shanghai-Bell | * approved | * S3-211517 |  |
| * S3-212150 | * KI: Support of EAP Authentication for 5G NSWO | * Nokia, Nokia Shanghai-Bell | * approved | * S3-211518 |  |
| * S3-212151 | * New TR33.811 for 5G NSWO | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-212152 | * pCR to TR33.847- Update Solution#29 | * CATT | * approved | * S3-211847 |  |
| * S3-212153 | * pCR to TR33.847- Update Solution#30 | * CATT | * approved | * S3-211848 |  |
| * S3-212154 | * Draft TR 33.847 v0.6.0 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS | * CATT | * approved |  |  |
| * S3-212155 | * Draft TR 33.864 v0.5.0 Study on the security of Access and Mobility Management Function (AMF) re-allocation | * Ericsson España S.A. | * approved |  |  |
| * S3-212156 | * Update to solution #2 | * Ericsson | * approved | * S3-211914 |  |
| * S3-212157 | * AMF re-allocation: Solution #9 updates | * Ericsson | * approved | * S3-211918 |  |
| * S3-212158 | * Reply LS on RAT type for network monitoring | * S2-2103237 | * approved | * - |  |
| * S3-212159 | * Reply LS on Transaction Information - Dispersion Analytics | * Nokia, Nokia Shanghai Bell | * approved | * S3-211698 |  |
| * S3-212160 | * Solution on Processing of tampered data | * Nokia, Nokia Shanghai Bell | * approved | * S3-211693 |  |
| * S3-212161 | * Solution on Authorization of NF Service Consumers for data access via DCCF | * Nokia, Nokia Shanghai Bell | * approved | * S3-211696 |  |
| * S3-212162 | * Solution on Authorization of NF Service Consumers to access data from ADRF via DCCF | * Nokia, Nokia Shanghai Bell | * approved | * S3-211697 |  |
| * S3-212163 | * EN Resolution Anomolous NF Behaviour | * Nokia, Nokia Shanghai Bell | * approved | * S3-211691 |  |
| * S3-212164 | * Reply LS on MOBIKE usage in IAB | * Nokia, Nokia Shanghai-Bell | * approved | * S3-211520 |  |
| * S3-212165 | * Conclusion to Key issue 1,2 | * Intel K.K. | * approved | * S3-211595 |  |
| * S3-212166 | * Updates to solution 14: Removal of Editor's notes: Certificate Handling | * Intel K.K. | * approved | * S3-211573 |  |
| * S3-212167 | * Updates to solution 12 | * Intel K.K.,Huawei | * approved | * S3-211589 |  |
| * S3-212168 | * draft TR Study on the security of the system enablers for devices having multiple Universal Subscriber Identity Modules | * Intel K.K. | * approved |  |  |
| * S3-212169 | * Evaluation of Solution #18 | * Qualcomm Incorporated | * approved | * S3-211798 |  |
| * S3-212170 | * EN resolution of Solution #19 | * Qualcomm Incorporated | * approved | * S3-211802 |  |
| * S3-212171 | * New Key Issue on security policy handling for 5G Prose services | * Qualcomm Incorporated, Huawei, Hisilicon, Ericsson | * approved | * S3-211803 |  |
| * S3-212172 | * EN resolution of Solution #34 | * Qualcomm Incorporated | * approved | * S3-211804 |  |
| * S3-212173 | * EN resolution of Solution #12 | * Qualcomm Incorporated | * approved | * S3-211812 |  |
| * S3-212174 | * Evaluation of Solution #2 | * Qualcomm Incorporated | * approved | * S3-211813 |  |
| * S3-212175 | * Evaluation of Solution 13 | * LG Electronics Inc. | * approved | * S3-211525 |  |
| * S3-212176 | * Updates in Solution 4 | * LG Electronics Inc. | * approved | * S3-211524 |  |
| * S3-212177 | * New solution for Key issue#4 | * ZTE Corporation | * approved | * S3-211569 |  |
| * S3-212178 | * TR 33.850 for MBS security | * Huawei, Hisilicon | * approved |  |  |
| * S3-212179 | * New solution for AMF re-allocation | * ZTE Corporation | * approved | * S3-211572 |  |
| * S3-212180 | * Conclusion for the key issue#6 | * ZTE Corporation | * approved | * S3-211566 |  |
| * S3-212181 | * Evaluation of solution #3 | * Huawei, HiSilicon, InterDigital | * approved | * S3-211606 |  |
| * S3-212182 | * Evaluation of solution #5 | * Huawei, HiSilicon, InterDigital | * withdrawn | * - |  |
| * S3-212183 | * Conclusion for KI#1 (AA) | * Huawei, HiSilicon, InterDigital, Lenovo, Motorola Mobility | * approved | * S3-211608 |  |
| * S3-212184 | * Conclusion for KI#2 (pairing) | * Huawei, HiSilicon, InterDigital, Lenovo, Motorola Mobility | * approved | * S3-211609 |  |
| * S3-212185 | * Conclusion for KI#7 (C2) | * Huawei, HiSilicon, InterDigital, Lenovo, Motorola Mobility | * approved | * S3-211610 |  |
| * S3-212186 | * Draft TR33.874 eNS2\_SEC | * Huawei, HiSilicon | * revised |  | * S3-212279 |
| * S3-212187 | * Discussion on slice issues in core networks | * Huawei, HiSilicon | * noted | * S3-211611 |  |
| * S3-212188 | * Propose evaluation to Solution #32 | * Huawei, HiSilicon | * approved | * S3-211621 |  |
| * S3-212189 | * Solution Evaluation for solution 15 | * Huawei, HiSilicon, Ericsson, Qualcomm Incorporated | * approved | * S3-211627 |  |
| * S3-212190 | * Solution Evaluation for solution 8 | * Huawei, HiSilicon | * approved | * S3-211628 |  |
| * S3-212191 | * Solution Evaluation for solution 11 | * Huawei, HiSilicon | * approved | * S3-211629 |  |
| * S3-212192 | * Update to the solution 11 | * Huawei, Hisilicon | * approved | * S3-211632 |  |
| * S3-212193 | * Conclusion for key issue 3 | * Huawei, Hisilicon | * noted | * S3-211634 |  |
| * S3-212194 | * Solution Update for Solution #28 | * Huawei, HiSilicon | * approved | * S3-211649 |  |
| * S3-212195 | * Conclusion for Key Issue #7 | * Huawei, HiSilicon | * approved | * S3-211650 |  |
| * S3-212196 | * LS on Supporting UP Integrity Protection Policy Handling for Interworking from 5GS to EPS | * Huawei, HiSilicon | * approved | * S3-211651 |  |
| * S3-212197 | * Solution Update for Solution #5 | * Huawei, HiSilicon | * approved | * S3-211652 |  |
| * S3-212198 | * Evaluation for Solution #12 | * Huawei, HiSilicon | * approved | * S3-211653 |  |
| * S3-212199 | * Solution Update for Solution #2 | * Huawei, HiSilicon | * approved | * S3-211654 |  |
| * S3-212200 | * Update on Observations related to Regulations | * Huawei, HiSilicon | * approved | * S3-211655 |  |
| * S3-212201 | * Add Security Requirement for Key Issue #3 | * Huawei, HiSilicon, Apple, Nokia, Nokia Shanghai Bell | * approved | * S3-211656 |  |
| * S3-212202 | * Delete EN of Solution#2 | * Huawei, HiSilicon | * approved | * S3-211661 |  |
| * S3-212203 | * Add conclusion to KI#10 | * Huawei, HiSilicon | * approved | * S3-211663 |  |
| * S3-212204 | * Reply LS on R17 Layer-2 SL Relay | * Huawei, HiSilicon | * approved | * S3-211665 |  |
| * S3-212205 | * Draft TR 33.867 | * Huawei, HiSilicon | * approved |  |  |
| * S3-212206 | * eEDGE: Add Editor’s Notes and Additional Evaluation to Solution #7 | * Xiaomi Technology | * approved | * S3-211995 |  |
| * S3-212207 | * eNPN: Conclusion on KI#8 with Solution#18 Updating | * Xiaomi Technology,Huawei | * approved | * S3-212000 |  |
| * S3-212208 | * Reply LS on updating the Credentials Holder controlled lists for SNPN selection | * Xiaomi Technology | * approved | * S3-212003 |  |
| * S3-212209 | * MUSIM: Conclusion for Key Issue #2 | * Xiaomi Technology | * approved | * S3-212006 |  |
| * S3-212210 | * eNS2: Add Threat Analysis to KI #1 | * Xiaomi Technology | * revised | * S3-212007 | * S3-212212 |
| * S3-212211 | * Evaluation of solution #5 | * Huawei, HiSilicon, InterDigital | * approved | * S3-211607 |  |
| * S3-212212 | * eNS2: Add Threat Analysis to KI #1 | * Xiaomi Technology | * approved | * S3-212210 |  |
| * S3-212213 | * Add an evaluation for solution #10 | * Qualcomm Incorporated | * approved | * S3-211807 |  |
| * S3-212214 | * draft TR 33.866 0.5.0 | * China Mobile E-Commerce Co. | * approved |  |  |
| * S3-212215 | * draft TR 33.862 0.5.0 | * China Mobile E-Commerce Co. | * approved |  |  |
| * S3-212216 | * Add evaluation to solution #4 | * China Mobile | * approved | * S3-211838 |  |
| * S3-212217 | * pCR to TR33.845 - Resolution of editors notes for solutions 28 29 30 | * VODAFONE Group Plc | * approved | * S3-211718 |  |
| * S3-212218 | * pCR to TR33.853 - Resolution of editors notes in Conclusions and Recommendations | * VODAFONE Group Plc | * approved | * S3-211736 |  |
| * S3-212219 | * new draft TR33.853 v1.6.0 | * VODAFONE Group Plc | * approved |  |  |
| * S3-212220 | * draft TR 33.857 v0.6.0 | * Ericsson | * approved |  |  |
| * S3-212221 | * Solution on Authorization of Data Consumers for data access via DCCF | * Ericsson, Nokia, Nokia Shanghai Bell | * approved | * S3-212057 |  |
| * S3-212222 | * Update to solution #2 | * Ericsson | * approved | * S3-212050 |  |
| * S3-212223 | * pCR to 33.839: GBA-based solution for EEC authentication and authorization framework with ECS and EES | * THALES | * approved | * S3-211444 |  |
| * S3-212224 | * pCR to 33.839: Using TLS with GBA to protect edge interfaces | * THALES | * approved | * S3-211445 |  |
| * S3-212225 | * pCR to TR 33.839: Using TLS with Edge Security Service to protect edge interfaces | * THALES | * approved | * S3-211987 |  |
| * S3-212226 | * Update to Solution #17: Resolving EN on Multiple GPSI | * Ericsson | * approved | * S3-212045 |  |
| * S3-212227 | * Evaluation of Solution #17 | * Ericsson | * approved | * S3-212046 |  |
| * S3-212228 | * Update to Solution #4 | * Lenovo, Motorola Mobility | * approved | * S3-211737 |  |
| * S3-212229 | * Update to Solution #6 | * Lenovo, Motorola Mobility | * approved | * S3-211738 |  |
| * S3-212230 | * Update to Solution #7 | * Lenovo, Motorola Mobility | * approved | * S3-211739 |  |
| * S3-212231 | * Remark to address a potential security issue in Solution #4 (LTE security-based mechanism for 5G ProSe restricted discovery) | * Philips International B.V. | * approved | * S3-211591 |  |
| * S3-212232 | * Additions in Solution #9 | * Philips International B.V. | * approved | * S3-211590 |  |
| * S3-212233 | * Draft 33.824 v0.9.0 | * Samsung | * approved |  |  |
| * S3-212234 | * add evaluation to solution #23 | * Huawei, Hisilicon, Qualcomm | * approved | * S3-211853 |  |
| * S3-212235 | * EN removal of solution #9 | * Huawei, Hisilicon | * approved | * S3-211859 |  |
| * S3-212236 | * EC: Conclusion for Key issue #4 and Key issue #5 | * Huawei, Hisilicon,Xiaomi | * approved | * S3-211896 |  |
| * S3-212237 | * New solution to key issue #3.3 | * Huawei, Hisilicon | * approved | * S3-211865 |  |
| * S3-212238 | * New solution to key issue #1.5 | * Huawei, Hisilicon | * approved | * S3-211867 |  |
| * S3-212239 | * Updates to solutoin #3 | * Huawei, Hisilicon | * approved | * S3-211877 |  |
| * S3-212240 | * Draft TR 33.839 v0.6.0 | * Huawei, HiSilicon | * approved |  |  |
| * S3-212241 | * Resolution of Editor's Note in Solution 19 related to provisioning of server certificate the the onboarding UE. | * Nokia, Nokia Shanghai Bell | * approved | * S3-211728 |  |
| * S3-212242 | * Addressing the Editors’ Note in solution #1 | * Qualcomm Incorporated | * approved | * S3-211789 |  |
| * S3-212243 | * Proposed evaluation for solution #24 and partial conclusion for key issue #6 | * Qualcomm Incorporated | * approved | * S3-211782 |  |
| * S3-212244 | * Update to solution #6 on obtaining UAV location information from the PLMN | * Qualcomm Incorporated | * approved | * S3-211775 |  |
| * S3-212245 | * Update to solution #13 on authorisation of UAV/UAVC when connected to EPS | * Qualcomm Incorporated | * approved | * S3-211777 |  |
| * S3-212246 | * Update to solution #14 on authorisation of UAV/UAVC pairing when connected to 5GS | * Qualcomm Incorporated | * approved | * S3-211778 |  |
| * S3-212247 | * Draft TR 33.854 | * Qualcomm | * approved | * S3-211346 |  |
| * S3-212248 | * Evalution and system impact for soluiton 19 | * Nokia, Nokia Shanghai Bell | * approved | * S3-211732 |  |
| * S3-212249 | * Summary of discussion: NRF services authorization and OAuth 2.0 client registration from Rel-15 onwards | * Nokia, Nokia Shanghai Bell | * not treated |  |  |
| * S3-212250 | * Editor Note removal for Solution#10 | * Nokia, Nokia Shanghai-Bell | * approved | * S3-211932 |  |
| * S3-212251 | * MEC-Adding evaluation on Solution#9 | * Apple | * withdrawn | * - |  |
| * S3-212252 | * MEC-Adding evaluation on Solution#9 | * Apple | * withdrawn | * - |  |
| * S3-212253 | * MEC-New solution on authentication between EEC and ECS | * Apple | * approved | * S3-211712 |  |
| * S3-212254 | * MEC-Kedge ID generation method | * Apple | * approved | * S3-211713 |  |
| * S3-212255 | * MBS-New solution on Key distribution | * Apple | * approved | * S3-211714 |  |
| * S3-212256 | * UC3S-Requirement on revoking user consent | * Apple | * approved | * S3-211715 |  |
| * S3-212257 | * LS reply on Small data transmissions | * InterDigital, Inc. | * noted |  | * - |
| * S3-212258 | * Reply LS to LS on broadcasting from other PLMN in case of Disaster Condition | * LG Electronics Inc. | * approved | * S3-211523 |  |
| * S3-212259 | * Cover sheet TR 33.873 | * Intel K.K. | * revised |  | * S3-212374 |
| * S3-212260 | * WID IIoT CR NEF-AF aspects | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-212261 | * recommendation of SHA256 in SIP digest | * Huawei, HiSilicon | * revised |  | * S3-212333 |
| * S3-212262 | * IMS SCAS: Adding the assets and threats | * Huawei, HiSilicon | * agreed |  |  |
| * S3-212263 | * Presentation of Specification to TSG: TS 33.226 for approval | * Huawei, HiSilicon | * approved |  |  |
| * S3-212264 | * Security updates for algorithms and protocols in 33.310 | * Ericsson | * approved |  |  |
| * S3-212265 | * PTP aspects | * Nokia, Nokia Shanghai Bell | * agreed |  |  |
| * S3-212266 | * NEF-AF aspects | * Nokia, Nokia Shanghai Bell | * agreed |  |  |
| * S3-212267 | * Editor note removal on solution #2.9 MAC, SYNCH failure cause concealment | * Nokia, Nokia Shanghai Bell | * approved | * S3-211505 |  |
| * S3-212268 | * LS on Security risk evaluation of using long term key for another key derivation than AKA | * Nokia, Nokia Shanghai Bell | * approved | * S3-211510 |  |
| * S3-212269 | * Security updates for algorithms and protocols in 33.210 | * Ericsson | * approved |  |  |
| * S3-212270 | * pCR to Living document for TS 33.163: update for 3G, 4G, and 5G key agreement | * KPN N.V. | * approved | * S3-211461 |  |
| * S3-212271 | * Living document for TS 33.163 | * KPN N.V. | * approved | * S3-211412 |  |
| * S3-212272 | * Reply-LS on integrity protection between the UE and the HPLMN of additional fields in SOR transparent container carrying SOR acknowledgement | * Ericsson | * approved | * S3-211751 |  |
| * S3-212273 | * Update to mapping table | * ZTE Corporation | * approved | * S3-211561 |  |
| * S3-212274 | * EN resolution on null scheme for solution 2.7 | * ZTE Corporation | * approved | * S3-211560 |  |
| * S3-212275 | * Update to solution 2.7 and evaluation table | * ZTE Corporation | * approved | * S3-211562 |  |
| * S3-212276 | * Add evaluation and update comparison table for solution 3.2 | * ZTE Corporation | * approved | * S3-211558 |  |
| * S3-212277 | * Add evaluation for solution 4.5 | * ZTE Corporation | * approved | * S3-211559 |  |
| * S3-212278 | * Update to solution 4.5 for the scenario of UE triggered service request | * ZTE Corporation | * approved | * S3-211563 |  |
| * S3-212279 | * draft TR 33.874 | * Huawei, HiSilicon | * approved | * S3-212186 |  |
| * S3-212280 | * Slice privacy protection in NSSAA related procedures | * Huawei, HiSilicon, Nokia, Nokia Shangahai-Bell | * agreed | * S3-211624 |  |
| * S3-212281 | * Slice privacy protection in NSSAA related procedures (Rel-17) | * Huawei, HiSilicon, Nokia, Nokia Shangahai-Bell | * agreed |  |  |
| * S3-212282 | * N32-c and N32-f clarification R16 | * Nokia, Nokia Shanghai Bell | * agreed | * S3-211980 |  |
| * S3-212283 | * Update to solution #25 | * Huawei, HiSilicon | * approved | * S3-211598 |  |
| * S3-212284 | * N32-c and N32-f clarification R17 | * Nokia, Nokia Shanghai Bell | * agreed | * S3-211981 |  |
| * S3-212285 | * Deployment models R16 | * Nokia, Nokia Shanghai Bell | * agreed | * S3-211982 |  |
| * S3-212286 | * Deployment models R17 | * Nokia, Nokia Shanghai Bell | * agreed | * S3-211983 |  |
| * S3-212287 | * CR to 33.501 R16 - Clarification on the number of PLMN IDuse by SEPP over N32 | * VODAFONE Group Plc, Nokia, Nokia Shanghai Bell, Mavenir | * agreed | * S3-211459 |  |
| * S3-212288 | * CR to 33.501 R17 - Clarification on the number of PLMN IDuse by SEPP over N32 | * VODAFONE Group Plc, Nokia, Nokia Shanghai Bell, Mavenir | * agreed | * S3-211460 |  |
| * S3-212289 | * Rel16-Handling of Kausf upon successful primary authentication | * Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel, Ericsson | * agreed | * S3-212103 |  |
| * S3-212290 | * Rel17-Handling of Kausf upon successful primary authentication | * Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel, Ericsson | * agreed | * S3-212104 |  |
| * S3-212291 | * Reply LS on Storage of KAUSF | * Samsung | * approved |  |  |
| * S3-212292 | * New solution for key issue#1: Authentication of NF service producer in indirect communication | * Samsung | * approved | * S3-212094 |  |
| * S3-212293 | * Living CR on SCP to 33.926 | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-212294 | * TS 33.522 SCAS SCP | * Nokia, Nokia Shanghai Bell | * approved |  |  |
| * S3-212295 | * SCP test cases | * Nokia, Nokia Shanghai Bell, NTT Docomo | * approved | * S3-212121 |  |
| * S3-212296 | * Resolving ENs of solution 6.2.10 | * NEC Corporation | * approved | * S3-211528 |  |
| * S3-212297 | * TR 33.875-030 | * Nokia Germany | * approved |  |  |
| * S3-212298 | * Sol1 deployment scenarios | * Nokia, Nokia Shanghai Bell | * approved | * S3-211969 |  |
| * S3-212299 | * ENs on Sol1 Service response verification in model C | * Nokia, Nokia Shanghai Bell | * approved | * S3-211970 |  |
| * S3-212300 | * EN resolution on sol 2 - NFc authorizing SCP to act on its behalf | * Nokia, Nokia Shanghai Bell | * approved | * S3-211975 |  |
| * S3-212301 | * Evaluation on sol 2 - NFc authorizing SCP to act on its behalf | * Nokia, Nokia Shanghai Bell | * approved | * S3-211976 |  |
| * S3-212302 | * Solution on Access token request for NF Set | * Nokia, Nokia Shanghai Bell | * revised | * S3-211974 | * S3-212394 |
| * S3-212303 | * Trust model | * Nokia, Nokia Shanghai Bell | * approved | * S3-211979 |  |
| * S3-212304 | * New WID on Security enhancements for 5G multicast-broadcast services (5MBS) | * Huawei, Hisilicon,China Broadcasting Network | * agreed | * S3-211630 |  |
| * S3-212305 | * Reply LS on User location identification from Carrier Aggregation secondary cell activation messages | * Huawei, Hisilicon | * approved | * S3-211638 |  |
| * S3-212306 | * Reply LS on UE location aspects in NTN | * Huawei, Hisilicon | * approved | * S3-211639 |  |
| * S3-212307 | * Execution Step for Finding the right NF instance serving the UE | * Huawei, HiSilicon, China Mobile, Nokia, Nokia Shanghai Bell | * approved | * S3-211641 |  |
| * S3-212308 | * User Plane Integrity Protection Policy Handling in LTE | * Huawei, HiSilicon | * approved | * S3-211642 |  |
| * S3-212309 | * Assign FC Value for KTIPSec and KTNAP Derivation in R16 | * Huawei, HiSilicon | * agreed | * S3-211644 |  |
| * S3-212310 | * Assign FC Value for KTIPSec and KTNAP Derivation in R17 | * Huawei, HiSilicon | * agreed | * S3-211645 |  |
| * S3-212311 | * FC Value Change because of KTIPSec and KTNAP Derivation in R17 | * Huawei, HiSilicon, Samsung | * agreed | * S3-211647 |  |
| * S3-212312 | * Change the procedure of network slice re-authentication and revocation by AAA-S | * Huawei, HiSilicon, Ericsson | * agreed | * S3-211662 |  |
| * S3-212313 | * Clarification on AAnF Selection | * Huawei, HiSilicon | * agreed | * S3-211671 |  |
| * S3-212314 | * Update testcases in gNB SCAS | * Huawei, HiSilicon | * agreed | * S3-211681 |  |
| * S3-212315 | * Draft TR 33.846 v0.12.0 Study on authentication enhancements in the 5G System (5GS) | * Ericsson España S.A. | * approved |  |  |
| * S3-212316 | * WID IIoT Draft CR PTP aspects | * Nokia, Nokia Shanghai Bell | * approved | * S3-211453 |  |
| * S3-212317 | * WID IIoT Draft CR NEF-AF aspects | * Nokia, Nokia Shanghai Bell | * approved | * S3-211454 |  |
| * S3-212318 | * WID on IIoT | * Nokia, Nokia Shanghai Bell | * agreed | * S3-211452 |  |
| * S3-212319 | * UDM notifies AAnF AKMA context removal | * ZTE Corporation | * agreed | * S3-211551 |  |
| * S3-212320 | * Add an abbreviation to AKMA | * ZTE Corporation | * agreed | * S3-211585 |  |
| * S3-212321 | * Adding asset, description and threats to TR 33.926 for NWDAF SCAS | * China Mobile | * agreed | * S3-211842 |  |
| * S3-212322 | * Execution Step for Data Masking on Integration Analysis | * China Mobile | * approved | * S3-211843 |  |
| * S3-212323 | * TS 33.521 v0.4.0 | * China Mobile Com. Corporation | * approved |  |  |
| * S3-212324 | * Presentation of TR33.818 to SA plenary | * China Mobile | * withdrawn | * - |  |
| * S3-212325 | * TR 33.818 v0.12.0 | * China Mobile Com. Corporation | * approved |  |  |
| * S3-212326 | * Presentation of TR33.818 to SA plenary | * China Mobile | * approved | * S3-211834 |  |
| * S3-212327 | * Update to the solution 3.3 | * Huawei, Hisilicon | * approved | * S3-211636 |  |
| * S3-212328 | * AKMA UE aspects | * Ericsson | * agreed | * S3-211913 |  |
| * S3-212329 | * Response LS on 256-bit Milenage | * VODAFONE Group Plc | * approved | * S3-211500 |  |
| * S3-212330 | * Removal of ENs for draft-ietf-emu-rfc5448bis - Rel-15 | * Ericsson | * agreed | * S3-211988 |  |
| * S3-212331 | * Removal of ENs for draft-ietf-emu-rfc5448bis -Rel-16 | * Ericsson | * agreed | * S3-211990 |  |
| * S3-212332 | * New test case on validation of S-NSSAIs in PDU session establishment | * Huawei, Hisilicon | * approved | * S3-211858 |  |
| * S3-212333 | * recommendation of SHA256 in SIP digest | * Huawei, Hisilicon | * approved | * S3-212261 |  |
| * S3-212334 | * New test case on malformatted message for IPUPS | * Huawei, Hisilicon | * approved | * S3-211868 |  |
| * S3-212335 | * New security threats on IPUPS malformatted message | * Huawei, Hisilicon | * approved | * S3-211869 |  |
| * S3-212336 | * Reply LS on changes to SoR | * Huawei, Hisilicon | * revised | * S3-211872 | * S3-212378 |
| * S3-212337 | * Claifications on mapped security | * Huawei, Hisilicon | * agreed | * S3-211874 |  |
| * S3-212338 | * Claifications on mapped security | * Huawei, Hisilicon | * agreed |  |  |
| * S3-212339 | * Clarification to SoR transparent container | * Huawei, Hisilicon | * agreed | * S3-211881 |  |
| * S3-212340 | * Clarifications to 5G CIoT K\_NG-RAN derivation | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-212341 | * Clarification on a figure and the key activation | * Huawei, Hisilicon | * revised | * S3-211882 | * S3-212348 |
| * S3-212342 | * New WID on Security Aspects of Enhancement of Support for Edge Computing in 5GC | * Huawei, Hisilicon | * agreed | * S3-211892 |  |
| * S3-212343 | * LS on TAU reject issue during MME handover | * Huawei, Hisilicon | * approved | * S3-211899 |  |
| * S3-212344 | * Reply LS on Header Enrichment for HTTPS in PFCP | * Huawei, Hisilicon | * approved | * S3-211900 |  |
| * S3-212345 | * Draft TS 33.226 | * Huawei, Hisilicon | * approved |  |  |
| * S3-212346 | * Removal of ENs for draft-ietf-emu-rfc5448bis- Rel-17 | * Ericsson | * agreed | * S3-211991 |  |
| * S3-212347 | * pCR to TR 33.845 - editorial corrections | * VODAFONE Group Plc | * approved | * S3-211531 |  |
| * S3-212348 | * Clarification on a figure and the key activation | * Huawei, Hisilicon, Interdigtal | * agreed | * S3-212341 |  |
| * S3-212349 | * 5GFBS-LS to RAN2 on Solution#17 | * Apple | * approved | * S3-211706 |  |
| * S3-212350 | * pCR to TR33.845 - removal of editors notes | * VODAFONE Group Plc | * approved | * S3-211581 |  |
| * S3-212351 | * draft TR 33.809 | * Apple (UK) Limited | * approved |  |  |
| * S3-212352 | * New WID on TLS protocols profiles for AKMA | * Qualcomm Incorporated, Ericsson, CMCC, ZTE, Nokia | * agreed | * S3-211784 |  |
| * S3-212353 | * Profiling the GBA TLS protocols for use with AKMA | * Qualcomm Incorporated | * agreed | * S3-211785 |  |
| * S3-212354 | * New WID on Security aspects of Uncrewed Aerial Systems | * Qualcomm Incorporated, Interdigital, Huawei, HiSilicon, Ericsson, Lenovo, Motorola Mobility, Nokia, Nokia Shanghai Bell | * agreed | * S3-211774 |  |
| * S3-212355 | * Reply LS on IP address to GPSI translation | * Ericsson, Qualcomm Incorporated | * approved | * S3-212048 |  |
| * S3-212356 | * Remarks\_in\_Solution\_14 | * Philips International B.V. | * approved | * S3-211586 |  |
| * S3-212357 | * Update\_in\_solution\_26 | * Philips International B.V. | * approved | * S3-211588 |  |
| * S3-212358 | * Updates in Solution #23 | * Philips International B.V. | * approved | * S3-211582 |  |
| * S3-212359 | * AKMA Anchor Function selection clause | * Ericsson | * agreed | * S3-211908 |  |
| * S3-212360 | * TR33.845 v1.1.0 | * VODAFONE Group Plc | * approved |  |  |
| * S3-212361 | * CR to TS 43.020 - R16 - Removal of support for GEA2 | * VODAFONE Group Plc | * agreed | * S3-211473 |  |
| * S3-212362 | * CR to TS 43.020 - R11 - Removal of GEA1 and GEA2 due to security concerns | * VODAFONE Group Plc | * agreed | * S3-211491 |  |
| * S3-212363 | * CR to TS 43.020 - R12 - Depreciation of GEA2 due to security concerns | * VODAFONE Group Plc | * agreed | * S3-211492 |  |
| * S3-212364 | * CR to TS 43.020 - R13 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * agreed | * S3-211493 |  |
| * S3-212365 | * Reply-LS on the Security consideration to support L2TP with CUPS | * Ericsson | * approved | * S3-211746 |  |
| * S3-212366 | * Reply-LS on Secondary AUTH for 5GS interworking with EPS | * Ericsson | * approved | * S3-211747 |  |
| * S3-212367 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson, Nokia, Nokia Shanghai Bell, Mavenir | * agreed | * S3-211759 |  |
| * S3-212368 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson, Nokia, Nokia Shanghai Bell, Mavenir | * agreed | * S3-211760 |  |
| * S3-212369 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson, Nokia, Nokia Shanghai Bell, Mavenir | * agreed | * S3-211761 |  |
| * S3-212370 | * CR to TS 43.020 - R14 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * agreed | * S3-211494 |  |
| * S3-212371 | * New WID on Security Aspects of eNPN | * Ericsson, Alibaba, China Mobile, InterDigital, ZTE | * agreed | * S3-211772 |  |
| * S3-212372 | * Evaluation of Solution #3 "Using existing procedures for authorization of SCP to act on behalf of an NF Consumer" | * Ericsson, Nokia, Nokia Shanghai Bell | * approved | * S3-211766 |  |
| * S3-212373 | * CR to TS 43.020 - R15 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * agreed | * S3-211495 |  |
| * S3-212374 | * Cover sheet TR 33.873 | * Intel K.K. | * approved | * S3-212259 |  |
| * S3-212375 | * living CR to 33.511 | * Huawei, HiSilicon | * approved | * S3-211673 |  |
| * S3-212376 | * living CR to 33.512 | * Huawei, HiSilicon | * approved | * S3-211674 |  |
| * S3-212377 | * living CR to 33.926 | * Huawei, HiSilicon | * approved | * S3-211678 |  |
| * S3-212378 | * Reply LS on changes to SoR | * Huawei, Hisilicon | * approved | * S3-212336 |  |
| * S3-212379 | * CR to include R-16 feature of gNB to 33.511 | * Huawei, HiSilicon | * agreed |  |  |
| * S3-212380 | * CR to include R-16 feature of AMF to 33.512 | * Huawei, HiSilicon | * agreed |  |  |
| * S3-212381 | * CR to include R-16 feature of UDM to 33.514 | * Huawei, HiSilicon | * agreed |  |  |
| * S3-212382 | * CR to include R-16 feature of SEPP to 33.517 | * Huawei, HiSilicon | * agreed |  |  |
| * S3-212383 | * CR to include new test cases and fix editorial in33.117 | * Huawei, HiSilicon | * agreed |  |  |
| * S3-212384 | * CR to add threat related to R-16 features of network products to 33.926 | * Huawei, HiSilicon | * agreed |  |  |
| * S3-212385 | * Living document for SCAS\_5G\_IPUPS draftCR to TR 33.926 | * ZTE Corporation | * approved | * S3-211543 |  |
| * S3-212386 | * Living document for SCAS\_5G\_IPUPS draftCR to TS 33.513 | * ZTE Corporation | * approved | * S3-211544 |  |
| * S3-212387 | * Presentation of TS33.521 to SA plenary | * China Mobile | * approved | * S3-211845 |  |
| * S3-212388 | * Addition of Key Issue 26 Text | * BT plc | * approved | * S3-212120 |  |
| * S3-212389 | * Addition of Key Issue 25 Text | * BT plc | * approved | * S3-212122 |  |
| * S3-212390 | * Standardising Automated TLS Certificate Management in SBA | * BT plc | * agreed | * S3-211477 | * - |
| * S3-212391 | * TR 33.848 | * BT | * approved | * - | * - |
| * S3-212392 | * Response LS to GSMA on 3GPP SA3 N32 and multiple PLMN IDs | * VODAFONE Group Plc | * approved | * S3-211458 | * - |
| * S3-212393 | * Reply LS on changes to SoR | * Huawei, Hisilicon | * withdrawn | * - | * - |
| * S3-212394 | * Solution on Access token request for NF Set | * Nokia, Nokia Shanghai Bell | * approved | * S3-212302 | * - |
| * S3-212395 | * Alignment of requirements with specification updates | * Nokia, Nokia Shanghai Bell | * not pursued | * S3-211935 | * - |
| * S3-212396 | * Chair notes of the e-meeting | * WG Chair | * available | * - | * - |
| * S3-212397 | * Response LS on 256-bit algorithms based on SNOW 3G or SNOW V | * VODAFONE Group Plc | * withdrawn | * - | * - |

### A2: Tdoc decision timing

|  |  |  |
| --- | --- | --- |
| Document | Date/time UTC | Decision |
| * S3-211350 | * 17/05/2021 13:22:10 | * approved |
| * S3-211351 | * 17/05/2021 13:23:18 | * approved |
| * S3-211353 | * 17/05/2021 13:23:26 | * noted |
| * S3-211354 | * 17/05/2021 13:23:37 | * noted |
| * S3-211355 | * 31/05/2021 15:49:11 | * noted |
| * S3-211356 | * 02/06/2021 10:28:23 | * noted |
| * S3-211357 | * 02/06/2021 10:31:05 | * noted |
| * S3-211358 | * 01/06/2021 10:58:18 | * noted |
| * S3-211361 | * 17/05/2021 13:23:22 | * approved |
| * S3-211362 | * 01/06/2021 15:31:42 | * available |
| * S3-211364 | * 01/06/2021 10:29:39 | * postponed |
| * S3-211366 | * 31/05/2021 14:49:52 | * noted |
| * S3-211367 | * 31/05/2021 14:45:14 | * postponed |
| * S3-211368 | * 28/05/2021 14:53:40 | * noted |
| * S3-211369 | * 28/05/2021 14:53:43 | * noted |
| * S3-211370 | * 31/05/2021 14:10:25 | * noted |
| * S3-211371 | * 31/05/2021 14:10:30 | * noted |
| * S3-211372 | * 31/05/2021 14:37:40 | * available |
| * S3-211373 | * 31/05/2021 15:23:08 | * noted |
| * S3-211374 | * 31/05/2021 14:55:27 | * noted |
| * S3-211375 | * 31/05/2021 14:48:24 | * available |
| * S3-211376 | * 31/05/2021 15:09:22 | * available |
| * S3-211377 | * 31/05/2021 11:44:37 | * noted |
| * S3-211378 | * 31/05/2021 15:10:53 | * available |
| * S3-211379 | * 31/05/2021 13:15:32 | * noted |
| * S3-211380 | * 31/05/2021 14:12:36 | * available |
| * S3-211381 | * 31/05/2021 14:49:12 | * noted |
| * S3-211382 | * 02/06/2021 09:18:48 | * available |
| * S3-211383 | * 02/06/2021 12:48:13 | * postponed |
| * S3-211384 | * 31/05/2021 14:49:15 | * noted |
| * S3-211385 | * 31/05/2021 10:22:36 | * postponed |
| * S3-211386 | * 31/05/2021 10:22:40 | * noted |
| * S3-211387 | * 31/05/2021 14:35:43 | * available |
| * S3-211388 | * 31/05/2021 14:49:25 | * noted |
| * S3-211389 | * 31/05/2021 14:49:30 | * noted |
| * S3-211390 | * 01/06/2021 13:25:10 | * postponed |
| * S3-211391 | * 01/06/2021 10:37:53 | * available |
| * S3-211392 | * 01/06/2021 10:37:58 | * available |
| * S3-211393 | * 31/05/2021 15:18:10 | * noted |
| * S3-211394 | * 01/06/2021 13:25:38 | * postponed |
| * S3-211395 | * 01/06/2021 13:30:16 | * available |
| * S3-211396 | * 02/06/2021 11:12:06 | * noted |
| * S3-211397 | * 02/06/2021 10:11:34 | * available |
| * S3-211398 | * 31/05/2021 14:55:30 | * noted |
| * S3-211399 | * 31/05/2021 14:44:54 | * noted |
| * S3-211401 | * 01/06/2021 10:54:17 | * postponed |
| * S3-211402 | * 01/06/2021 15:33:12 | * noted |
| * S3-211403 | * 17/05/2021 12:13:56 | * withdrawn |
| * S3-211404 | * 31/05/2021 14:52:00 | * noted |
| * S3-211405 | * 01/06/2021 10:40:47 | * noted |
| * S3-211406 | * 01/06/2021 10:40:49 | * noted |
| * S3-211407 | * 07/06/2021 11:50:27 | * postponed |
| * S3-211408 | * 02/06/2021 10:05:23 | * available |
| * S3-211409 | * 02/06/2021 10:42:07 | * postponed |
| * S3-211410 | * 31/05/2021 14:49:41 | * noted |
| * S3-211411 | * 31/05/2021 14:36:48 | * noted |
| * S3-211413 | * 31/05/2021 15:23:13 | * noted |
| * S3-211414 | * 01/06/2021 13:25:21 | * noted |
| * S3-211415 | * 31/05/2021 15:13:16 | * noted |
| * S3-211416 | * 31/05/2021 13:15:40 | * noted |
| * S3-211417 | * 01/06/2021 14:07:29 | * revised |
| * S3-211418 | * 01/06/2021 14:07:45 | * postponed |
| * S3-211419 | * 31/05/2021 14:36:52 | * noted |
| * S3-211420 | * 31/05/2021 14:50:01 | * noted |
| * S3-211422 | * 01/06/2021 14:10:20 | * available |
| * S3-211423 | * 01/06/2021 10:40:53 | * noted |
| * S3-211424 | * 01/06/2021 10:38:18 | * available |
| * S3-211425 | * 01/06/2021 08:34:35 | * noted |
| * S3-211426 | * 31/05/2021 14:43:59 | * postponed |
| * S3-211427 | * 01/06/2021 08:28:38 | * noted |
| * S3-211428 | * 01/06/2021 13:25:29 | * noted |
| * S3-211429 | * 31/05/2021 14:53:29 | * noted |
| * S3-211430 | * 31/05/2021 13:15:47 | * noted |
| * S3-211431 | * 01/06/2021 15:33:16 | * noted |
| * S3-211432 | * 01/06/2021 10:54:40 | * noted |
| * S3-211433 | * 02/06/2021 09:59:16 | * noted |
| * S3-211434 | * 01/06/2021 10:22:49 | * approved |
| * S3-211435 | * 01/06/2021 10:24:02 | * approved |
| * S3-211436 | * 01/06/2021 10:25:33 | * approved |
| * S3-211437 | * 01/06/2021 10:25:37 | * approved |
| * S3-211438 | * 31/05/2021 11:49:54 | * available |
| * S3-211439 | * 01/06/2021 13:30:54 | * noted |
| * S3-211440 | * 31/05/2021 11:44:52 | * noted |
| * S3-211441 | * 01/06/2021 13:25:44 | * postponed |
| * S3-211442 | * 01/06/2021 10:22:09 | * approved |
| * S3-211443 | * 01/06/2021 11:31:48 | * approved |
| * S3-211446 | * 14/06/2021 15:02:48 | * available |
| * S3-211447 | * 01/06/2021 13:19:49 | * approved |
| * S3-211449 | * 01/06/2021 13:20:05 | * approved |
| * S3-211450 | * 01/06/2021 13:20:05 | * approved |
| * S3-211451 | * 01/06/2021 13:20:07 | * approved |
| * S3-211455 | * 31/05/2021 15:26:58 | * noted |
| * S3-211456 | * 31/05/2021 14:51:34 | * noted |
| * S3-211457 | * 31/05/2021 15:01:28 | * noted |
| * S3-211458 | * 02/06/2021 12:29:56 | * revised |
| * S3-211462 | * 31/05/2021 15:02:56 | * noted |
| * S3-211464 | * 02/06/2021 12:58:13 | * noted |
| * S3-211465 | * 01/06/2021 14:11:34 | * noted |
| * S3-211466 | * 01/06/2021 14:11:04 | * approved |
| * S3-211467 | * 01/06/2021 13:44:21 | * noted |
| * S3-211468 | * 01/06/2021 10:06:26 | * withdrawn |
| * S3-211470 | * 01/06/2021 10:06:32 | * withdrawn |
| * S3-211471 | * 01/06/2021 10:32:14 | * withdrawn |
| * S3-211472 | * 31/05/2021 14:55:33 | * available |
| * S3-211473 | * 02/06/2021 09:21:22 | * available |
| * S3-211474 | * 31/05/2021 15:50:50 | * agreed |
| * S3-211475 | * 31/05/2021 15:50:56 | * agreed |
| * S3-211476 | * 31/05/2021 15:50:56 | * agreed |
| * S3-211477 | * 01/06/2021 11:12:20 | * revised |
| * S3-211478 | * 31/05/2021 15:51:03 | * agreed |
| * S3-211479 | * 31/05/2021 14:52:08 | * available |
| * S3-211480 | * 31/05/2021 14:52:15 | * available |
| * S3-211481 | * 31/05/2021 14:52:25 | * available |
| * S3-211483 | * 01/06/2021 13:16:39 | * approved |
| * S3-211487 | * 31/05/2021 10:28:25 | * available |
| * S3-211488 | * 31/05/2021 10:28:58 | * available |
| * S3-211490 | * 02/06/2021 09:28:29 | * noted |
| * S3-211491 | * 02/06/2021 09:21:53 | * available |
| * S3-211492 | * 02/06/2021 09:39:06 | * available |
| * S3-211493 | * 02/06/2021 09:39:32 | * available |
| * S3-211494 | * 02/06/2021 09:39:50 | * available |
| * S3-211495 | * 02/06/2021 09:40:35 | * available |
| * S3-211496 | * 01/06/2021 10:31:35 | * noted |
| * S3-211497 | * 03/06/2021 13:20:48 | * revised |
| * S3-211497 | * 07/06/2021 11:50:10 | * noted |
| * S3-211498 | * 31/05/2021 11:50:38 | * noted |
| * S3-211499 | * 31/05/2021 11:50:39 | * noted |
| * S3-211501 | * 01/06/2021 10:53:15 | * approved |
| * S3-211502 | * 01/06/2021 14:50:02 | * noted |
| * S3-211503 | * 01/06/2021 10:24:36 | * noted |
| * S3-211504 | * 01/06/2021 10:24:40 | * noted |
| * S3-211506 | * 01/06/2021 10:28:05 | * noted |
| * S3-211507 | * 01/06/2021 10:28:08 | * noted |
| * S3-211508 | * 01/06/2021 10:28:11 | * noted |
| * S3-211509 | * 01/06/2021 10:23:01 | * noted |
| * S3-211511 | * 31/05/2021 15:18:17 | * noted |
| * S3-211512 | * 31/05/2021 15:18:45 | * available |
| * S3-211513 | * 31/05/2021 15:19:56 | * available |
| * S3-211514 | * 01/06/2021 10:42:05 | * noted |
| * S3-211515 | * 02/06/2021 09:13:47 | * approved |
| * S3-211519 | * 01/06/2021 15:32:15 | * available |
| * S3-211521 | * 01/06/2021 13:39:02 | * noted |
| * S3-211522 | * 01/06/2021 08:29:55 | * noted |
| * S3-211526 | * 01/06/2021 11:30:35 | * noted |
| * S3-211527 | * 02/06/2021 12:48:02 | * noted |
| * S3-211529 | * 01/06/2021 10:27:35 | * approved |
| * S3-211530 | * 31/05/2021 11:46:11 | * noted |
| * S3-211532 | * 01/06/2021 10:32:42 | * approved |
| * S3-211533 | * 01/06/2021 10:32:42 | * approved |
| * S3-211534 | * 02/06/2021 10:32:52 | * approved |
| * S3-211535 | * 01/06/2021 10:23:24 | * noted |
| * S3-211537 | * 31/05/2021 14:45:05 | * noted |
| * S3-211538 | * 02/06/2021 10:32:58 | * approved |
| * S3-211539 | * 31/05/2021 14:44:11 | * noted |
| * S3-211540 | * 31/05/2021 14:13:01 | * available |
| * S3-211541 | * 31/05/2021 14:44:17 | * noted |
| * S3-211542 | * 02/06/2021 10:42:11 | * approved |
| * S3-211543 | * 02/06/2021 11:07:49 | * available |
| * S3-211544 | * 02/06/2021 11:07:57 | * available |
| * S3-211545 | * 31/05/2021 14:44:32 | * noted |
| * S3-211546 | * 02/06/2021 11:12:29 | * available |
| * S3-211547 | * 02/06/2021 11:12:30 | * available |
| * S3-211548 | * 02/06/2021 11:14:51 | * available |
| * S3-211549 | * 31/05/2021 14:44:24 | * noted |
| * S3-211550 | * 02/06/2021 11:13:36 | * available |
| * S3-211552 | * 02/06/2021 11:15:09 | * available |
| * S3-211553 | * 02/06/2021 11:15:15 | * available |
| * S3-211554 | * 02/06/2021 12:10:37 | * agreed |
| * S3-211555 | * 31/05/2021 14:58:18 | * available |
| * S3-211556 | * 02/06/2021 12:10:44 | * agreed |
| * S3-211557 | * 31/05/2021 14:59:03 | * available |
| * S3-211564 | * 01/06/2021 10:28:23 | * noted |
| * S3-211565 | * 01/06/2021 10:43:11 | * noted |
| * S3-211567 | * 01/06/2021 10:53:24 | * approved |
| * S3-211568 | * 01/06/2021 10:51:52 | * approved |
| * S3-211570 | * 01/06/2021 13:40:30 | * noted |
| * S3-211571 | * 01/06/2021 13:40:35 | * noted |
| * S3-211574 | * 01/06/2021 13:41:22 | * noted |
| * S3-211575 | * 02/06/2021 11:15:22 | * available |
| * S3-211576 | * 01/06/2021 08:28:45 | * noted |
| * S3-211577 | * 01/06/2021 13:44:54 | * withdrawn |
| * S3-211578 | * 01/06/2021 13:41:29 | * noted |
| * S3-211579 | * 01/06/2021 13:41:37 | * noted |
| * S3-211580 | * 01/06/2021 10:43:19 | * noted |
| * S3-211583 | * 01/06/2021 10:44:05 | * noted |
| * S3-211584 | * 01/06/2021 08:30:05 | * noted |
| * S3-211587 | * 01/06/2021 10:06:41 | * approved |
| * S3-211593 | * 01/06/2021 10:06:44 | * approved |
| * S3-211594 | * 01/06/2021 15:33:22 | * approved |
| * S3-211596 | * 01/06/2021 15:33:47 | * noted |
| * S3-211599 | * 01/06/2021 08:29:28 | * noted |
| * S3-211600 | * 01/06/2021 08:29:34 | * noted |
| * S3-211601 | * 31/05/2021 15:21:19 | * noted |
| * S3-211602 | * 31/05/2021 15:21:30 | * available |
| * S3-211603 | * 31/05/2021 15:21:37 | * available |
| * S3-211604 | * 01/06/2021 16:40:11 | * available |
| * S3-211605 | * 01/06/2021 16:40:18 | * noted |
| * S3-211612 | * 01/06/2021 10:06:46 | * approved |
| * S3-211613 | * 01/06/2021 10:06:49 | * approved |
| * S3-211614 | * 01/06/2021 10:06:53 | * approved |
| * S3-211615 | * 02/06/2021 09:57:53 | * available |
| * S3-211616 | * 01/06/2021 10:06:54 | * approved |
| * S3-211617 | * 31/05/2021 10:26:56 | * approved |
| * S3-211618 | * 01/06/2021 11:33:18 | * noted |
| * S3-211619 | * 01/06/2021 11:33:24 | * noted |
| * S3-211620 | * 01/06/2021 11:33:26 | * noted |
| * S3-211622 | * 01/06/2021 11:33:54 | * approved |
| * S3-211623 | * 01/06/2021 12:53:38 | * noted |
| * S3-211625 | * 31/05/2021 14:52:30 | * available |
| * S3-211626 | * 31/05/2021 15:11:42 | * available |
| * S3-211631 | * 01/06/2021 13:21:16 | * noted |
| * S3-211633 | * 01/06/2021 13:21:23 | * noted |
| * S3-211635 | * 01/06/2021 13:22:27 | * approved |
| * S3-211637 | * 01/06/2021 15:32:52 | * noted |
| * S3-211640 | * 02/06/2021 11:01:10 | * approved |
| * S3-211646 | * 31/05/2021 15:12:43 | * agreed |
| * S3-211648 | * 31/05/2021 15:55:01 | * available |
| * S3-211648 | * 31/05/2021 15:57:04 | * agreed |
| * S3-211657 | * 01/06/2021 14:48:03 | * noted |
| * S3-211658 | * 01/06/2021 14:48:08 | * noted |
| * S3-211659 | * 01/06/2021 14:17:56 | * approved |
| * S3-211660 | * 31/05/2021 14:44:42 | * noted |
| * S3-211664 | * 01/06/2021 10:54:26 | * noted |
| * S3-211666 | * 01/06/2021 15:33:58 | * noted |
| * S3-211667 | * 01/06/2021 15:34:07 | * noted |
| * S3-211668 | * 02/06/2021 09:17:31 | * noted |
| * S3-211669 | * 02/06/2021 09:17:45 | * noted |
| * S3-211670 | * 02/06/2021 09:17:54 | * noted |
| * S3-211672 | * 02/06/2021 11:14:02 | * agreed |
| * S3-211673 | * 02/06/2021 10:42:56 | * available |
| * S3-211674 | * 02/06/2021 10:43:04 | * available |
| * S3-211675 | * 02/06/2021 12:53:49 | * approved |
| * S3-211676 | * 02/06/2021 10:46:05 | * approved |
| * S3-211677 | * 02/06/2021 10:46:06 | * approved |
| * S3-211678 | * 02/06/2021 10:43:12 | * available |
| * S3-211679 | * 02/06/2021 10:47:01 | * approved |
| * S3-211680 | * 02/06/2021 10:47:03 | * approved |
| * S3-211682 | * 01/06/2021 10:08:25 | * approved |
| * S3-211683 | * 31/05/2021 16:01:06 | * withdrawn |
| * S3-211684 | * 31/05/2021 15:54:30 | * available |
| * S3-211685 | * 31/05/2021 15:22:04 | * agreed |
| * S3-211686 | * 31/05/2021 15:22:07 | * agreed |
| * S3-211687 | * 31/05/2021 15:22:17 | * noted |
| * S3-211688 | * 01/06/2021 10:08:28 | * approved |
| * S3-211689 | * 31/05/2021 15:22:30 | * available |
| * S3-211690 | * 01/06/2021 10:08:31 | * approved |
| * S3-211692 | * 01/06/2021 14:46:42 | * approved |
| * S3-211694 | * 01/06/2021 14:47:12 | * noted |
| * S3-211695 | * 01/06/2021 14:47:19 | * noted |
| * S3-211699 | * 01/06/2021 14:46:13 | * approved |
| * S3-211700 | * 31/05/2021 15:22:35 | * available |
| * S3-211701 | * 31/05/2021 15:29:14 | * noted |
| * S3-211702 | * 01/06/2021 08:29:39 | * noted |
| * S3-211703 | * 01/06/2021 08:30:22 | * noted |
| * S3-211704 | * 01/06/2021 08:28:29 | * noted |
| * S3-211705 | * 01/06/2021 08:29:46 | * noted |
| * S3-211707 | * 01/06/2021 10:53:02 | * noted |
| * S3-211708 | * 01/06/2021 10:44:34 | * noted |
| * S3-211709 | * 01/06/2021 10:47:45 | * approved |
| * S3-211710 | * 01/06/2021 10:44:43 | * noted |
| * S3-211711 | * 01/06/2021 10:44:51 | * noted |
| * S3-211716 | * 31/05/2021 14:38:01 | * noted |
| * S3-211717 | * 31/05/2021 14:38:29 | * available |
| * S3-211719 | * 31/05/2021 15:22:59 | * noted |
| * S3-211720 | * 31/05/2021 15:51:14 | * available |
| * S3-211721 | * 01/06/2021 10:09:01 | * approved |
| * S3-211722 | * 31/05/2021 15:51:20 | * available |
| * S3-211723 | * 01/06/2021 13:21:32 | * noted |
| * S3-211724 | * 01/06/2021 13:41:57 | * noted |
| * S3-211725 | * 01/06/2021 13:39:28 | * noted |
| * S3-211726 | * 01/06/2021 13:42:04 | * noted |
| * S3-211727 | * 01/06/2021 13:42:11 | * approved |
| * S3-211729 | * 01/06/2021 13:42:30 | * approved |
| * S3-211730 | * 01/06/2021 13:42:35 | * approved |
| * S3-211731 | * 01/06/2021 13:42:36 | * approved |
| * S3-211733 | * 01/06/2021 13:42:50 | * approved |
| * S3-211734 | * 01/06/2021 13:39:37 | * noted |
| * S3-211735 | * 01/06/2021 13:42:57 | * noted |
| * S3-211740 | * 31/05/2021 10:30:33 | * approved |
| * S3-211741 | * 01/06/2021 13:25:55 | * noted |
| * S3-211742 | * 01/06/2021 15:30:29 | * noted |
| * S3-211743 | * 01/06/2021 10:55:41 | * noted |
| * S3-211744 | * 01/06/2021 13:26:01 | * noted |
| * S3-211745 | * 31/05/2021 13:15:57 | * noted |
| * S3-211746 | * 02/06/2021 10:23:45 | * available |
| * S3-211747 | * 31/05/2021 15:09:04 | * available |
| * S3-211748 | * 31/05/2021 15:01:14 | * noted |
| * S3-211749 | * 31/05/2021 15:01:43 | * available |
| * S3-211749 | * 02/06/2021 12:19:47 | * merged |
| * S3-211749 | * 03/06/2021 09:21:45 | * noted |
| * S3-211750 | * 31/05/2021 11:45:12 | * noted |
| * S3-211752 | * 31/05/2021 15:51:34 | * noted |
| * S3-211753 | * 31/05/2021 15:51:47 | * available |
| * S3-211754 | * 31/05/2021 15:51:51 | * available |
| * S3-211755 | * 31/05/2021 15:52:18 | * available |
| * S3-211756 | * 31/05/2021 15:52:22 | * available |
| * S3-211757 | * 31/05/2021 15:52:34 | * available |
| * S3-211758 | * 31/05/2021 15:53:04 | * available |
| * S3-211759 | * 31/05/2021 15:08:19 | * available |
| * S3-211760 | * 31/05/2021 15:08:06 | * available |
| * S3-211761 | * 31/05/2021 15:07:55 | * available |
| * S3-211762 | * 31/05/2021 15:11:48 | * agreed |
| * S3-211763 | * 31/05/2021 15:11:52 | * agreed |
| * S3-211764 | * 31/05/2021 15:11:58 | * agreed |
| * S3-211765 | * 01/06/2021 16:38:34 | * noted |
| * S3-211766 | * 01/06/2021 16:37:52 | * available |
| * S3-211767 | * 01/06/2021 13:39:46 | * noted |
| * S3-211768 | * 01/06/2021 13:39:55 | * noted |
| * S3-211769 | * 01/06/2021 13:43:06 | * noted |
| * S3-211770 | * 01/06/2021 13:40:44 | * noted |
| * S3-211771 | * 31/05/2021 15:30:14 | * noted |
| * S3-211772 | * 31/05/2021 15:43:22 | * available |
| * S3-211773 | * 31/05/2021 15:43:59 | * noted |
| * S3-211776 | * 31/05/2021 10:27:15 | * approved |
| * S3-211779 | * 01/06/2021 10:41:17 | * noted |
| * S3-211780 | * 01/06/2021 10:40:19 | * noted |
| * S3-211781 | * 01/06/2021 10:48:32 | * available |
| * S3-211783 | * 31/05/2021 15:45:25 | * noted |
| * S3-211786 | * 01/06/2021 10:27:45 | * noted |
| * S3-211787 | * 01/06/2021 10:28:44 | * noted |
| * S3-211788 | * 01/06/2021 10:28:53 | * noted |
| * S3-211790 | * 01/06/2021 14:49:08 | * noted |
| * S3-211791 | * 01/06/2021 14:49:38 | * approved |
| * S3-211791 | * 01/06/2021 14:49:39 | * noted |
| * S3-211792 | * 02/06/2021 10:47:10 | * noted |
| * S3-211793 | * 02/06/2021 10:47:11 | * noted |
| * S3-211794 | * 01/06/2021 16:40:22 | * noted |
| * S3-211795 | * 31/05/2021 15:53:37 | * agreed |
| * S3-211796 | * 31/05/2021 15:53:41 | * agreed |
| * S3-211797 | * 31/05/2021 15:53:50 | * agreed |
| * S3-211799 | * 01/06/2021 11:34:27 | * approved |
| * S3-211800 | * 01/06/2021 12:54:16 | * noted |
| * S3-211801 | * 01/06/2021 11:34:35 | * noted |
| * S3-211805 | * 01/06/2021 12:54:38 | * noted |
| * S3-211806 | * 01/06/2021 11:34:57 | * noted |
| * S3-211808 | * 01/06/2021 11:35:32 | * available |
| * S3-211809 | * 01/06/2021 11:35:40 | * approved |
| * S3-211810 | * 01/06/2021 11:35:44 | * noted |
| * S3-211811 | * 01/06/2021 12:49:57 | * approved |
| * S3-211814 | * 01/06/2021 13:24:50 | * available |
| * S3-211815 | * 01/06/2021 13:26:12 | * noted |
| * S3-211816 | * 01/06/2021 13:40:09 | * noted |
| * S3-211817 | * 02/06/2021 11:13:43 | * available |
| * S3-211818 | * 31/05/2021 15:53:58 | * agreed |
| * S3-211819 | * 31/05/2021 15:54:00 | * agreed |
| * S3-211820 | * 31/05/2021 14:53:14 | * available |
| * S3-211822 | * 31/05/2021 15:55:06 | * available |
| * S3-211823 | * 01/06/2021 14:08:06 | * noted |
| * S3-211824 | * 01/06/2021 12:50:02 | * noted |
| * S3-211825 | * 01/06/2021 08:32:03 | * approved |
| * S3-211826 | * 01/06/2021 08:32:09 | * approved |
| * S3-211827 | * 01/06/2021 08:32:15 | * approved |
| * S3-211828 | * 01/06/2021 08:32:21 | * approved |
| * S3-211829 | * 01/06/2021 08:32:26 | * approved |
| * S3-211830 | * 01/06/2021 08:32:30 | * approved |
| * S3-211831 | * 01/06/2021 08:32:38 | * approved |
| * S3-211832 | * 01/06/2021 08:32:43 | * approved |
| * S3-211833 | * 01/06/2021 08:32:49 | * approved |
| * S3-211835 | * 01/06/2021 10:27:56 | * noted |
| * S3-211836 | * 01/06/2021 10:25:21 | * noted |
| * S3-211837 | * 01/06/2021 10:25:25 | * noted |
| * S3-211839 | * 01/06/2021 14:17:44 | * approved |
| * S3-211840 | * 01/06/2021 14:17:34 | * approved |
| * S3-211841 | * 01/06/2021 14:17:43 | * approved |
| * S3-211844 | * 02/06/2021 11:02:21 | * approved |
| * S3-211845 | * 02/06/2021 11:02:24 | * approved |
| * S3-211846 | * 01/06/2021 12:50:06 | * noted |
| * S3-211849 | * 01/06/2021 12:54:56 | * noted |
| * S3-211850 | * 01/06/2021 12:55:03 | * noted |
| * S3-211851 | * 01/06/2021 12:55:23 | * available |
| * S3-211852 | * 01/06/2021 13:46:17 | * noted |
| * S3-211854 | * 01/06/2021 14:12:37 | * noted |
| * S3-211855 | * 01/06/2021 08:15:54 | * available |
| * S3-211856 | * 01/06/2021 13:26:27 | * noted |
| * S3-211857 | * 02/06/2021 10:47:19 | * approved |
| * S3-211860 | * 01/06/2021 13:26:38 | * noted |
| * S3-211861 | * 01/06/2021 13:43:44 | * available |
| * S3-211862 | * 01/06/2021 16:39:01 | * noted |
| * S3-211863 | * 01/06/2021 16:39:06 | * noted |
| * S3-211864 | * 01/06/2021 16:39:10 | * noted |
| * S3-211866 | * 01/06/2021 14:17:26 | * noted |
| * S3-211870 | * 02/06/2021 10:47:35 | * approved |
| * S3-211871 | * 02/06/2021 10:47:36 | * approved |
| * S3-211873 | * 31/05/2021 15:55:42 | * available |
| * S3-211875 | * 02/06/2021 10:31:15 | * noted |
| * S3-211876 | * 02/06/2021 10:31:16 | * noted |
| * S3-211878 | * 01/06/2021 13:23:37 | * approved |
| * S3-211879 | * 01/06/2021 13:23:42 | * approved |
| * S3-211880 | * 01/06/2021 13:21:05 | * noted |
| * S3-211883 | * 02/06/2021 12:11:00 | * agreed |
| * S3-211884 | * 02/06/2021 10:25:28 | * available |
| * S3-211885 | * 31/05/2021 15:59:46 | * available |
| * S3-211886 | * 31/05/2021 15:54:16 | * agreed |
| * S3-211887 | * 31/05/2021 15:54:21 | * agreed |
| * S3-211888 | * 31/05/2021 15:53:09 | * available |
| * S3-211889 | * 31/05/2021 15:53:19 | * available |
| * S3-211890 | * 01/06/2021 10:45:02 | * noted |
| * S3-211891 | * 31/05/2021 15:53:31 | * available |
| * S3-211893 | * 01/06/2021 10:45:03 | * noted |
| * S3-211894 | * 01/06/2021 10:49:29 | * noted |
| * S3-211895 | * 01/06/2021 10:50:06 | * available |
| * S3-211897 | * 01/06/2021 10:52:09 | * noted |
| * S3-211898 | * 01/06/2021 10:52:24 | * noted |
| * S3-211901 | * 01/06/2021 16:35:13 | * noted |
| * S3-211902 | * 02/06/2021 10:33:03 | * approved |
| * S3-211903 | * 02/06/2021 10:33:04 | * approved |
| * S3-211905 | * 02/06/2021 10:33:12 | * approved |
| * S3-211906 | * 02/06/2021 10:33:12 | * approved |
| * S3-211907 | * 02/06/2021 10:34:27 | * noted |
| * S3-211908 | * 02/06/2021 11:13:29 | * available |
| * S3-211909 | * 31/05/2021 15:48:51 | * noted |
| * S3-211910 | * 02/06/2021 11:14:18 | * available |
| * S3-211911 | * 02/06/2021 11:14:24 | * available |
| * S3-211912 | * 02/06/2021 11:14:33 | * noted |
| * S3-211915 | * 31/05/2021 15:52:06 | * noted |
| * S3-211916 | * 01/06/2021 15:29:59 | * noted |
| * S3-211917 | * 01/06/2021 15:30:40 | * noted |
| * S3-211919 | * 31/05/2021 15:48:55 | * noted |
| * S3-211920 | * 01/06/2021 15:30:08 | * noted |
| * S3-211921 | * 01/06/2021 10:29:25 | * approved |
| * S3-211922 | * 01/06/2021 10:29:26 | * approved |
| * S3-211923 | * 31/05/2021 15:48:59 | * noted |
| * S3-211924 | * 01/06/2021 10:29:29 | * noted |
| * S3-211925 | * 02/06/2021 10:31:26 | * approved |
| * S3-211926 | * 02/06/2021 10:31:26 | * approved |
| * S3-211927 | * 02/06/2021 10:31:46 | * noted |
| * S3-211928 | * 02/06/2021 10:31:47 | * noted |
| * S3-211929 | * 02/06/2021 10:31:48 | * noted |
| * S3-211930 | * 02/06/2021 10:31:49 | * noted |
| * S3-211931 | * 01/06/2021 13:15:54 | * noted |
| * S3-211933 | * 01/06/2021 13:25:01 | * noted |
| * S3-211934 | * 02/06/2021 11:11:02 | * agreed |
| * S3-211935 | * 03/06/2021 08:06:17 | * revised |
| * S3-211945 | * 02/06/2021 10:48:59 | * approved |
| * S3-211946 | * 02/06/2021 10:49:03 | * approved |
| * S3-211947 | * 02/06/2021 10:49:07 | * approved |
| * S3-211948 | * 02/06/2021 10:49:12 | * approved |
| * S3-211949 | * 02/06/2021 10:49:13 | * approved |
| * S3-211951 | * 02/06/2021 10:56:15 | * available |
| * S3-211952 | * 02/06/2021 10:54:06 | * noted |
| * S3-211953 | * 02/06/2021 10:54:07 | * noted |
| * S3-211954 | * 01/06/2021 16:40:34 | * noted |
| * S3-211955 | * 02/06/2021 10:54:08 | * noted |
| * S3-211959 | * 01/06/2021 13:16:16 | * noted |
| * S3-211960 | * 01/06/2021 12:50:59 | * approved |
| * S3-211961 | * 01/06/2021 12:51:21 | * available |
| * S3-211963 | * 01/06/2021 12:52:21 | * noted |
| * S3-211964 | * 01/06/2021 13:16:26 | * noted |
| * S3-211965 | * 31/05/2021 15:49:23 | * noted |
| * S3-211966 | * 01/06/2021 10:29:04 | * noted |
| * S3-211967 | * 01/06/2021 10:29:07 | * noted |
| * S3-211968 | * 31/05/2021 15:30:33 | * noted |
| * S3-211971 | * 01/06/2021 16:35:22 | * noted |
| * S3-211972 | * 01/06/2021 16:35:47 | * noted |
| * S3-211973 | * 01/06/2021 16:38:43 | * approved |
| * S3-211977 | * 01/06/2021 16:38:08 | * available |
| * S3-211978 | * 01/06/2021 16:39:33 | * noted |
| * S3-211984 | * 31/05/2021 15:17:03 | * noted |
| * S3-211985 | * 31/05/2021 15:17:46 | * available |
| * S3-211986 | * 31/05/2021 15:17:55 | * available |
| * S3-211989 | * 17/05/2021 13:23:29 | * noted |
| * S3-211992 | * 31/05/2021 11:46:25 | * noted |
| * S3-211993 | * 01/06/2021 10:45:16 | * approved |
| * S3-211994 | * 01/06/2021 10:45:17 | * approved |
| * S3-211996 | * 01/06/2021 10:50:57 | * available |
| * S3-211997 | * 01/06/2021 11:30:56 | * approved |
| * S3-211998 | * 01/06/2021 11:31:17 | * available |
| * S3-211999 | * 01/06/2021 11:31:36 | * noted |
| * S3-212001 | * 01/06/2021 13:40:55 | * noted |
| * S3-212002 | * 01/06/2021 13:38:48 | * noted |
| * S3-212004 | * 01/06/2021 15:34:15 | * noted |
| * S3-212005 | * 01/06/2021 15:34:20 | * noted |
| * S3-212008 | * 01/06/2021 16:40:41 | * noted |
| * S3-212025 | * 31/05/2021 11:47:28 | * available |
| * S3-212041 | * 01/06/2021 10:52:40 | * noted |
| * S3-212042 | * 01/06/2021 10:52:19 | * noted |
| * S3-212043 | * 01/06/2021 10:45:47 | * approved |
| * S3-212044 | * 01/06/2021 10:45:51 | * noted |
| * S3-212047 | * 01/06/2021 10:42:41 | * noted |
| * S3-212049 | * 01/06/2021 10:46:16 | * noted |
| * S3-212051 | * 01/06/2021 10:46:25 | * approved |
| * S3-212052 | * 01/06/2021 13:47:00 | * approved |
| * S3-212053 | * 31/05/2021 14:52:44 | * available |
| * S3-212055 | * 01/06/2021 14:14:04 | * noted |
| * S3-212056 | * 01/06/2021 13:40:19 | * noted |
| * S3-212058 | * 01/06/2021 14:13:26 | * noted |
| * S3-212059 | * 01/06/2021 14:11:15 | * noted |
| * S3-212060 | * 01/06/2021 14:11:22 | * noted |
| * S3-212061 | * 02/06/2021 12:05:43 | * agreed |
| * S3-212062 | * 02/06/2021 12:05:44 | * agreed |
| * S3-212063 | * 02/06/2021 12:05:45 | * agreed |
| * S3-212064 | * 01/06/2021 08:15:19 | * available |
| * S3-212065 | * 31/05/2021 14:57:25 | * available |
| * S3-212066 | * 01/06/2021 08:14:39 | * available |
| * S3-212067 | * 31/05/2021 14:57:55 | * available |
| * S3-212068 | * 01/06/2021 10:46:30 | * approved |
| * S3-212069 | * 01/06/2021 08:34:01 | * approved |
| * S3-212070 | * 01/06/2021 08:34:05 | * approved |
| * S3-212071 | * 01/06/2021 08:34:11 | * approved |
| * S3-212072 | * 01/06/2021 13:41:06 | * noted |
| * S3-212073 | * 02/06/2021 11:15:33 | * noted |
| * S3-212074 | * 02/06/2021 11:15:42 | * available |
| * S3-212075 | * 02/06/2021 11:15:52 | * noted |
| * S3-212076 | * 02/06/2021 11:15:59 | * available |
| * S3-212077 | * 01/06/2021 14:46:53 | * noted |
| * S3-212078 | * 01/06/2021 14:46:58 | * noted |
| * S3-212079 | * 01/06/2021 14:47:04 | * noted |
| * S3-212080 | * 01/06/2021 13:46:24 | * noted |
| * S3-212081 | * 01/06/2021 13:46:32 | * noted |
| * S3-212082 | * 01/06/2021 10:46:34 | * approved |
| * S3-212083 | * 01/06/2021 10:46:37 | * approved |
| * S3-212084 | * 01/06/2021 10:46:42 | * approved |
| * S3-212086 | * 01/06/2021 14:03:51 | * approved |
| * S3-212087 | * 01/06/2021 14:03:52 | * approved |
| * S3-212088 | * 01/06/2021 14:03:55 | * approved |
| * S3-212091 | * 31/05/2021 14:52:50 | * agreed |
| * S3-212092 | * 31/05/2021 16:00:32 | * available |
| * S3-212095 | * 01/06/2021 16:35:37 | * noted |
| * S3-212096 | * 01/06/2021 13:24:01 | * approved |
| * S3-212099 | * 01/06/2021 15:30:18 | * noted |
| * S3-212100 | * 01/06/2021 15:28:28 | * approved |
| * S3-212101 | * 01/06/2021 15:28:33 | * noted |
| * S3-212102 | * 01/06/2021 15:28:51 | * noted |
| * S3-212105 | * 31/05/2021 16:02:42 | * noted |
| * S3-212106 | * 01/06/2021 08:31:51 | * noted |
| * S3-212109 | * 01/06/2021 10:46:46 | * noted |
| * S3-212110 | * 01/06/2021 08:34:25 | * approved |
| * S3-212111 | * 02/06/2021 09:15:38 | * available |
| * S3-212112 | * 01/06/2021 10:52:51 | * approved |
| * S3-212113 | * 02/06/2021 09:16:12 | * noted |
| * S3-212117 | * 01/06/2021 10:11:08 | * approved |
| * S3-212118 | * 01/06/2021 14:17:12 | * noted |
| * S3-212119 | * 31/05/2021 15:55:11 | * available |
| * S3-212120 | * 01/06/2021 10:11:39 | * approved |
| * S3-212120 | * 02/06/2021 12:55:53 | * available |
| * S3-212120 | * 02/06/2021 12:55:56 | * reserved |
| * S3-212122 | * 02/06/2021 12:56:07 | * available |
| * S3-212123 | * 01/06/2021 13:48:07 | * approved |
| * S3-212124 | * 31/05/2021 15:41:21 | * approved |
| * S3-212125 | * 01/06/2021 13:19:57 | * approved |
| * S3-212126 | * 02/06/2021 12:56:53 | * approved |
| * S3-212127 | * 01/06/2021 11:33:08 | * approved |
| * S3-212128 | * 31/05/2021 10:30:12 | * approved |
| * S3-212129 | * 01/06/2021 11:32:09 | * approved |
| * S3-212130 | * 01/06/2021 11:32:15 | * approved |
| * S3-212131 | * 01/06/2021 11:32:19 | * approved |
| * S3-212132 | * 01/06/2021 11:31:53 | * approved |
| * S3-212133 | * 01/06/2021 10:10:50 | * approved |
| * S3-212134 | * 01/06/2021 10:10:58 | * approved |
| * S3-212135 | * 01/06/2021 12:52:38 | * approved |
| * S3-212136 | * 01/06/2021 14:04:04 | * approved |
| * S3-212137 | * 01/06/2021 14:04:07 | * approved |
| * S3-212138 | * 01/06/2021 15:29:29 | * approved |
| * S3-212139 | * 01/06/2021 13:24:08 | * approved |
| * S3-212140 | * 01/06/2021 13:24:15 | * approved |
| * S3-212141 | * 01/06/2021 15:32:58 | * approved |
| * S3-212142 | * 01/06/2021 13:46:43 | * approved |
| * S3-212143 | * 01/06/2021 12:50:33 | * approved |
| * S3-212144 | * 01/06/2021 12:50:40 | * approved |
| * S3-212145 | * 01/06/2021 12:50:46 | * approved |
| * S3-212146 | * 01/06/2021 12:51:58 | * approved |
| * S3-212147 | * 01/06/2021 12:53:06 | * approved |
| * S3-212148 | * 02/06/2021 09:14:04 | * approved |
| * S3-212149 | * 02/06/2021 09:14:23 | * approved |
| * S3-212150 | * 02/06/2021 09:14:30 | * approved |
| * S3-212151 | * 02/06/2021 09:14:41 | * approved |
| * S3-212152 | * 01/06/2021 12:50:14 | * approved |
| * S3-212153 | * 01/06/2021 12:50:19 | * approved |
| * S3-212154 | * 01/06/2021 13:18:29 | * approved |
| * S3-212155 | * 31/05/2021 15:39:01 | * approved |
| * S3-212156 | * 01/06/2021 14:48:57 | * approved |
| * S3-212157 | * 01/06/2021 15:29:15 | * approved |
| * S3-212158 | * 01/06/2021 14:06:01 | * approved |
| * S3-212159 | * 01/06/2021 14:08:53 | * approved |
| * S3-212160 | * 01/06/2021 14:11:46 | * approved |
| * S3-212161 | * 01/06/2021 14:12:23 | * approved |
| * S3-212162 | * 01/06/2021 14:12:26 | * approved |
| * S3-212163 | * 01/06/2021 14:46:33 | * approved |
| * S3-212164 | * 01/06/2021 15:31:33 | * approved |
| * S3-212165 | * 01/06/2021 15:33:39 | * approved |
| * S3-212166 | * 01/06/2021 13:41:13 | * approved |
| * S3-212167 | * 01/06/2021 10:49:42 | * approved |
| * S3-212168 | * 01/06/2021 15:34:52 | * approved |
| * S3-212169 | * 01/06/2021 11:34:18 | * approved |
| * S3-212170 | * 01/06/2021 11:34:42 | * approved |
| * S3-212171 | * 01/06/2021 11:30:46 | * approved |
| * S3-212172 | * 01/06/2021 11:34:50 | * approved |
| * S3-212173 | * 01/06/2021 13:23:15 | * approved |
| * S3-212174 | * 01/06/2021 13:24:24 | * approved |
| * S3-212175 | * 01/06/2021 11:32:38 | * approved |
| * S3-212176 | * 01/06/2021 11:32:31 | * approved |
| * S3-212177 | * 01/06/2021 11:32:44 | * approved |
| * S3-212178 | * 03/06/2021 11:59:43 | * approved |
| * S3-212179 | * 01/06/2021 15:29:42 | * approved |
| * S3-212180 | * 01/06/2021 10:51:44 | * approved |
| * S3-212181 | * 31/05/2021 10:26:22 | * approved |
| * S3-212183 | * 31/05/2021 10:28:50 | * approved |
| * S3-212184 | * 31/05/2021 10:28:51 | * approved |
| * S3-212185 | * 31/05/2021 10:29:38 | * approved |
| * S3-212187 | * 31/05/2021 15:16:53 | * noted |
| * S3-212188 | * 01/06/2021 11:33:39 | * approved |
| * S3-212189 | * 01/06/2021 11:34:04 | * approved |
| * S3-212190 | * 01/06/2021 10:44:20 | * approved |
| * S3-212191 | * 01/06/2021 10:47:00 | * approved |
| * S3-212192 | * 01/06/2021 13:23:05 | * approved |
| * S3-212193 | * 01/06/2021 13:21:43 | * noted |
| * S3-212194 | * 01/06/2021 10:07:18 | * approved |
| * S3-212195 | * 01/06/2021 10:07:43 | * approved |
| * S3-212196 | * 01/06/2021 10:07:48 | * approved |
| * S3-212197 | * 01/06/2021 13:39:15 | * approved |
| * S3-212198 | * 01/06/2021 13:41:46 | * approved |
| * S3-212199 | * 01/06/2021 13:46:08 | * approved |
| * S3-212200 | * 01/06/2021 13:46:49 | * approved |
| * S3-212201 | * 01/06/2021 13:45:45 | * approved |
| * S3-212202 | * 01/06/2021 14:46:25 | * approved |
| * S3-212203 | * 01/06/2021 12:53:48 | * approved |
| * S3-212204 | * 01/06/2021 10:56:06 | * approved |
| * S3-212205 | * 01/06/2021 13:50:50 | * approved |
| * S3-212206 | * 01/06/2021 10:45:28 | * approved |
| * S3-212207 | * 01/06/2021 13:44:10 | * approved |
| * S3-212208 | * 01/06/2021 13:27:06 | * approved |
| * S3-212209 | * 01/06/2021 15:34:31 | * approved |
| * S3-212211 | * 31/05/2021 10:26:43 | * approved |
| * S3-212212 | * 01/06/2021 16:39:59 | * approved |
| * S3-212213 | * 01/06/2021 11:35:06 | * approved |
| * S3-212214 | * 01/06/2021 14:48:23 | * approved |
| * S3-212215 | * 02/06/2021 12:57:13 | * approved |
| * S3-212216 | * 01/06/2021 14:03:32 | * approved |
| * S3-212217 | * 01/06/2021 10:08:50 | * approved |
| * S3-212218 | * 01/06/2021 10:10:22 | * approved |
| * S3-212219 | * 01/06/2021 10:11:22 | * approved |
| * S3-212220 | * 01/06/2021 13:44:37 | * approved |
| * S3-212221 | * 01/06/2021 14:12:52 | * approved |
| * S3-212222 | * 31/05/2021 10:27:38 | * approved |
| * S3-212223 | * 01/06/2021 10:42:57 | * approved |
| * S3-212224 | * 01/06/2021 10:51:34 | * approved |
| * S3-212225 | * 01/06/2021 10:45:38 | * approved |
| * S3-212226 | * 01/06/2021 10:46:00 | * approved |
| * S3-212227 | * 01/06/2021 10:46:07 | * approved |
| * S3-212228 | * 01/06/2021 14:49:21 | * approved |
| * S3-212229 | * 01/06/2021 14:49:27 | * approved |
| * S3-212230 | * 01/06/2021 14:49:49 | * approved |
| * S3-212231 | * 01/06/2021 11:32:55 | * approved |
| * S3-212232 | * 01/06/2021 13:22:52 | * approved |
| * S3-212233 | * 02/06/2021 12:58:32 | * approved |
| * S3-212234 | * 01/06/2021 10:48:42 | * approved |
| * S3-212235 | * 01/06/2021 10:49:19 | * approved |
| * S3-212236 | * 01/06/2021 10:50:24 | * approved |
| * S3-212237 | * 01/06/2021 14:47:51 | * approved |
| * S3-212238 | * 01/06/2021 14:13:55 | * approved |
| * S3-212239 | * 01/06/2021 13:23:27 | * approved |
| * S3-212240 | * 03/06/2021 12:01:49 | * approved |
| * S3-212241 | * 01/06/2021 13:42:19 | * approved |
| * S3-212242 | * 01/06/2021 14:48:47 | * approved |
| * S3-212243 | * 01/06/2021 10:51:59 | * approved |
| * S3-212244 | * 31/05/2021 10:27:04 | * approved |
| * S3-212245 | * 31/05/2021 10:27:17 | * approved |
| * S3-212246 | * 31/05/2021 10:27:22 | * approved |
| * S3-212247 | * 02/06/2021 12:56:37 | * approved |
| * S3-212248 | * 01/06/2021 13:42:44 | * approved |
| * S3-212249 | * 02/06/2021 12:36:36 | * available |
| * S3-212250 | * 01/06/2021 13:23:51 | * approved |
| * S3-212253 | * 01/06/2021 10:48:13 | * approved |
| * S3-212254 | * 01/06/2021 10:48:13 | * approved |
| * S3-212255 | * 01/06/2021 13:22:38 | * approved |
| * S3-212256 | * 01/06/2021 13:45:56 | * approved |
| * S3-212257 | * 02/06/2021 09:57:32 | * available |
| * S3-212257 | * 02/06/2021 09:57:43 | * merged |
| * S3-212257 | * 02/06/2021 10:27:25 | * noted |
| * S3-212258 | * 31/05/2021 14:37:25 | * approved |
| * S3-212259 | * 01/06/2021 15:35:11 | * approved |
| * S3-212262 | * 03/06/2021 13:12:08 | * agreed |
| * S3-212263 | * 03/06/2021 12:00:52 | * approved |
| * S3-212264 | * 02/06/2021 12:06:07 | * approved |
| * S3-212265 | * 31/05/2021 15:26:25 | * agreed |
| * S3-212266 | * 31/05/2021 15:26:50 | * agreed |
| * S3-212267 | * 01/06/2021 10:22:24 | * approved |
| * S3-212268 | * 01/06/2021 10:31:46 | * approved |
| * S3-212269 | * 02/06/2021 12:09:46 | * approved |
| * S3-212270 | * 31/05/2021 14:53:41 | * approved |
| * S3-212271 | * 03/06/2021 12:02:16 | * approved |
| * S3-212272 | * 31/05/2021 11:45:32 | * approved |
| * S3-212273 | * 01/06/2021 10:22:32 | * approved |
| * S3-212274 | * 01/06/2021 10:23:38 | * approved |
| * S3-212275 | * 01/06/2021 10:23:51 | * approved |
| * S3-212276 | * 01/06/2021 10:24:15 | * approved |
| * S3-212277 | * 01/06/2021 10:24:52 | * approved |
| * S3-212278 | * 01/06/2021 10:24:57 | * approved |
| * S3-212279 | * 01/06/2021 16:41:10 | * approved |
| * S3-212280 | * 31/05/2021 15:19:30 | * agreed |
| * S3-212281 | * 31/05/2021 15:20:55 | * agreed |
| * S3-212282 | * 31/05/2021 15:03:16 | * agreed |
| * S3-212283 | * 01/06/2021 08:29:17 | * approved |
| * S3-212284 | * 31/05/2021 15:03:20 | * agreed |
| * S3-212285 | * 31/05/2021 15:12:08 | * agreed |
| * S3-212286 | * 31/05/2021 15:12:13 | * agreed |
| * S3-212287 | * 31/05/2021 15:02:26 | * agreed |
| * S3-212288 | * 31/05/2021 15:02:42 | * agreed |
| * S3-212289 | * 31/05/2021 15:54:42 | * agreed |
| * S3-212290 | * 31/05/2021 15:54:44 | * agreed |
| * S3-212291 | * 31/05/2021 14:48:39 | * approved |
| * S3-212292 | * 01/06/2021 15:39:06 | * approved |
| * S3-212293 | * 02/06/2021 11:00:19 | * approved |
| * S3-212294 | * 03/06/2021 08:03:03 | * approved |
| * S3-212295 | * 02/06/2021 10:49:33 | * approved |
| * S3-212296 | * 01/06/2021 10:23:11 | * approved |
| * S3-212297 | * 03/06/2021 13:16:12 | * approved |
| * S3-212298 | * 01/06/2021 16:34:46 | * approved |
| * S3-212299 | * 01/06/2021 16:34:53 | * approved |
| * S3-212300 | * 01/06/2021 16:35:54 | * approved |
| * S3-212301 | * 31/05/2021 15:30:46 | * approved |
| * S3-212302 | * 31/05/2021 15:31:01 | * approved |
| * S3-212302 | * 03/06/2021 08:05:56 | * revised |
| * S3-212303 | * 01/06/2021 16:39:23 | * approved |
| * S3-212304 | * 31/05/2021 15:28:26 | * agreed |
| * S3-212305 | * 02/06/2021 09:19:07 | * approved |
| * S3-212306 | * 31/05/2021 14:35:54 | * approved |
| * S3-212307 | * 02/06/2021 11:01:25 | * approved |
| * S3-212308 | * 31/05/2021 14:56:10 | * approved |
| * S3-212309 | * 31/05/2021 15:12:35 | * agreed |
| * S3-212310 | * 31/05/2021 15:12:38 | * agreed |
| * S3-212311 | * 31/05/2021 15:12:48 | * agreed |
| * S3-212312 | * 31/05/2021 15:21:54 | * agreed |
| * S3-212313 | * 02/06/2021 11:12:21 | * agreed |
| * S3-212314 | * 02/06/2021 12:10:54 | * agreed |
| * S3-212315 | * 03/06/2021 12:00:35 | * approved |
| * S3-212316 | * 31/05/2021 15:26:14 | * approved |
| * S3-212317 | * 31/05/2021 15:26:39 | * approved |
| * S3-212318 | * 31/05/2021 15:25:16 | * agreed |
| * S3-212319 | * 02/06/2021 11:14:59 | * agreed |
| * S3-212320 | * 02/06/2021 11:13:52 | * agreed |
| * S3-212321 | * 02/06/2021 11:01:34 | * agreed |
| * S3-212322 | * 02/06/2021 11:02:14 | * approved |
| * S3-212323 | * 03/06/2021 13:03:55 | * approved |
| * S3-212324 | * 01/06/2021 08:33:33 | * withdrawn |
| * S3-212325 | * 03/06/2021 12:02:40 | * approved |
| * S3-212326 | * 01/06/2021 08:33:40 | * approved |
| * S3-212327 | * 01/06/2021 10:24:27 | * approved |
| * S3-212328 | * 02/06/2021 11:14:42 | * agreed |
| * S3-212329 | * 31/05/2021 11:48:59 | * approved |
| * S3-212330 | * 31/05/2021 15:49:45 | * agreed |
| * S3-212331 | * 31/05/2021 15:49:53 | * agreed |
| * S3-212332 | * 02/06/2021 10:47:26 | * approved |
| * S3-212333 | * 02/06/2021 12:05:31 | * approved |
| * S3-212334 | * 02/06/2021 11:07:22 | * approved |
| * S3-212335 | * 02/06/2021 11:07:23 | * approved |
| * S3-212336 | * 31/05/2021 11:37:54 | * approved |
| * S3-212336 | * 02/06/2021 12:45:03 | * revised |
| * S3-212337 | * 31/05/2021 15:59:23 | * agreed |
| * S3-212338 | * 31/05/2021 15:59:24 | * agreed |
| * S3-212339 | * 02/06/2021 12:38:48 | * agreed |
| * S3-212340 | * 01/06/2021 08:27:16 | * available |
| * S3-212342 | * 31/05/2021 15:46:53 | * agreed |
| * S3-212343 | * 31/05/2021 14:50:23 | * approved |
| * S3-212344 | * 31/05/2021 14:11:43 | * approved |
| * S3-212345 | * 03/06/2021 12:01:07 | * approved |
| * S3-212346 | * 31/05/2021 15:50:08 | * agreed |
| * S3-212347 | * 01/06/2021 10:32:29 | * approved |
| * S3-212348 | * 31/05/2021 15:23:28 | * agreed |
| * S3-212349 | * 31/05/2021 16:01:30 | * approved |
| * S3-212350 | * 01/06/2021 10:32:52 | * approved |
| * S3-212351 | * 03/06/2021 13:04:34 | * approved |
| * S3-212352 | * 31/05/2021 15:45:36 | * agreed |
| * S3-212353 | * 02/06/2021 11:14:07 | * agreed |
| * S3-212354 | * 31/05/2021 15:44:05 | * agreed |
| * S3-212355 | * 01/06/2021 10:39:32 | * approved |
| * S3-212356 | * 01/06/2021 08:28:10 | * approved |
| * S3-212357 | * 01/06/2021 08:28:12 | * approved |
| * S3-212358 | * 01/06/2021 08:29:01 | * approved |
| * S3-212359 | * 02/06/2021 11:13:24 | * agreed |
| * S3-212360 | * 04/06/2021 07:37:30 | * approved |
| * S3-212361 | * 02/06/2021 09:21:13 | * agreed |
| * S3-212362 | * 02/06/2021 09:22:02 | * agreed |
| * S3-212363 | * 02/06/2021 09:39:10 | * agreed |
| * S3-212364 | * 02/06/2021 09:39:25 | * agreed |
| * S3-212365 | * 31/05/2021 15:10:12 | * approved |
| * S3-212366 | * 31/05/2021 15:09:08 | * approved |
| * S3-212367 | * 31/05/2021 15:08:14 | * agreed |
| * S3-212368 | * 31/05/2021 15:08:11 | * agreed |
| * S3-212369 | * 31/05/2021 15:07:58 | * agreed |
| * S3-212370 | * 02/06/2021 09:41:03 | * agreed |
| * S3-212371 | * 31/05/2021 15:43:18 | * agreed |
| * S3-212372 | * 01/06/2021 16:37:47 | * approved |
| * S3-212373 | * 02/06/2021 09:40:42 | * agreed |
| * S3-212374 | * 01/06/2021 15:35:25 | * approved |
| * S3-212375 | * 04/06/2021 10:12:08 | * approved |
| * S3-212376 | * 04/06/2021 10:12:09 | * approved |
| * S3-212377 | * 04/06/2021 10:12:10 | * approved |
| * S3-212378 | * 02/06/2021 12:59:57 | * approved |
| * S3-212379 | * 04/06/2021 10:12:13 | * agreed |
| * S3-212380 | * 04/06/2021 10:12:14 | * agreed |
| * S3-212381 | * 04/06/2021 10:12:14 | * agreed |
| * S3-212382 | * 04/06/2021 10:12:19 | * agreed |
| * S3-212383 | * 04/06/2021 10:12:20 | * agreed |
| * S3-212384 | * 04/06/2021 10:12:20 | * agreed |
| * S3-212385 | * 03/06/2021 13:11:44 | * approved |
| * S3-212386 | * 03/06/2021 13:11:45 | * approved |
| * S3-212387 | * 03/06/2021 13:04:06 | * approved |
| * S3-212388 | * 02/06/2021 12:55:47 | * approved |
| * S3-212389 | * 02/06/2021 12:56:01 | * approved |
| * S3-212390 | * 01/06/2021 11:12:55 | * agreed |
| * S3-212391 | * 02/06/2021 12:29:41 | * approved |
| * S3-212392 | * 14/06/2021 15:01:58 | * approved |
| * S3-212393 | * 02/06/2021 12:52:14 | * withdrawn |
| * S3-212394 | * 03/06/2021 08:06:45 | * approved |
| * S3-212395 | * 03/06/2021 08:06:36 | * agreed |
| * S3-212397 | * 07/06/2021 11:50:00 | * withdrawn |

## Annex B: List of change requests

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Spec | CR | Rev | Rel | Cat | WI | Decision |
| * S3-211554 | * Clarification on external file system mount restrictions R16 | * ZTE Corporation | * 33.117 | * 0069 | * - | * Rel-16 | * F | * SCAS\_5G | * agreed |
| * S3-211555 | * Clarification on external file system mount restrictions R17 | * ZTE Corporation | * 33.117 | * 0070 | * - | * Rel-17 | * A | * SCAS\_5G | * not pursued |
| * S3-211935 | * Alignment of requirements with specification updates | * Nokia, Nokia Shanghai Bell | * 33.117 | * 0071 | * - | * Rel-16 | * F | * SCAS\_5G | * revised |
| * S3-212395 | * Alignment of requirements with specification updates | * Nokia, Nokia Shanghai Bell | * 33.117 | * 0071 | * 1 | * Rel-16 | * F | * SCAS\_5G | * not pursued |
| * S3-212383 | * CR to include new test cases and fix editorial in33.117 | * Huawei, HiSilicon | * 33.117 | * 0072 | * - | * Rel-17 | * B | * eSCAS\_5G | * agreed |
| * S3-211474 | * [33.180] R14 UID encoding | * Motorola Solutions Danmark A/S | * 33.180 | * 0163 | * - | * Rel-14 | * F | * MCSec | * agreed |
| * S3-211475 | * [33.180] R15 UID encoding (mirror) | * Motorola Solutions Danmark A/S | * 33.180 | * 0164 | * - | * Rel-15 | * A | * MCSec | * agreed |
| * S3-211476 | * [33.180] R16 UID encoding (mirror) | * Motorola Solutions Danmark A/S | * 33.180 | * 0165 | * - | * Rel-16 | * A | * MCSec | * agreed |
| * S3-211478 | * [33.180] R17 UID encoding (mirror) | * Motorola Solutions Danmark A/S | * 33.180 | * 0166 | * - | * Rel-17 | * A | * MCSec | * agreed |
| * S3-211479 | * [33.180] R17 Group subscription | * Motorola Solutions Danmark A/S | * 33.180 | * 0167 | * - | * Rel-17 | * F | * MCXSec2 | * not pursued |
| * S3-211480 | * [33.180] R17 Limited Service | * Motorola Solutions Danmark A/S | * 33.180 | * 0168 | * - | * Rel-17 | * B | * MCXSec2 | * not pursued |
| * S3-211481 | * [33.180] R17 Preconfigured group clarification | * Motorola Solutions Danmark A/S | * 33.180 | * 0169 | * - | * Rel-17 | * F | * MCXSec2 | * not pursued |
| * S3-211625 | * Security solution for temporary group – broadcast group call procedure | * Huawei, HiSilicon | * 33.180 | * 0170 | * - | * Rel-17 | * B | * MCXSec2 | * not pursued |
| * S3-212053 | * Security for user regroup | * CATT | * 33.180 | * 0171 | * - | * Rel-17 | * B | * MCXSec2 | * not pursued |
| * S3-212091 | * CR on signalling Algorithm Selection | * Samsung | * 33.180 | * 0172 | * - | * Rel-17 | * F | * MCXSec2 | * agreed |
| * S3-211855 | * recommendation of SHA256 in SIP digest | * Huawei, Hisilicon | * 33.203 | * 0257 | * - | * Rel-17 | * B | * eCryptPr | * not pursued |
| * S3-212065 | * Security updates for algorithms and protocols in 33.203 | * Ericsson | * 33.203 | * 0258 | * - | * Rel-17 | * B | * eCryptPr | * not pursued |
| * S3-212064 | * Security updates for algorithms and protocols in 33.210 | * Ericsson | * 33.210 | * 0071 | * - | * Rel-17 | * B | * eCryptPr | * not pursued |
| * S3-211648 | * Address ENs in TS 33.216 | * Huawei, HiSilicon | * 33.216 | * 0022 | * - | * Rel-16 | * F | * TEI16 | * agreed |
| * S3-211646 | * FC Value Change because of KTIPSec and KTNAP Derivation in R16 | * Huawei, HiSilicon | * 33.220 | * 0208 | * - | * Rel-16 | * F | * 5WWC | * agreed |
| * S3-211647 | * FC Value Change because of KTIPSec and KTNAP Derivation in R17 | * Huawei, HiSilicon | * 33.220 | * 0209 | * - | * Rel-17 | * A | * 5WWC | * revised |
| * S3-212311 | * FC Value Change because of KTIPSec and KTNAP Derivation in R17 | * Huawei, HiSilicon, Samsung | * 33.220 | * 0209 | * 1 | * Rel-17 | * A | * 5WWC | * agreed |
| * S3-211911 | * Extending the Ua security protocol namespace to include AKMA Ua\* protocols | * Ericsson | * 33.220 | * 0210 | * - | * Rel-17 | * B | * DUMMY | * not pursued |
| * S3-212061 | * Security updates for algorithms and protocols in 33.220 | * Ericsson | * 33.220 | * 0211 | * - | * Rel-17 | * B | * eCryptPr | * agreed |
| * S3-212092 | * Correction to FC values in range for future use in 3GPP specifications | * Samsung | * 33.220 | * 0212 | * - | * Rel-17 | * F | * TEI17 | * merged |
| * S3-212062 | * Security updates for algorithms and protocols in 33.222 | * Ericsson | * 33.222 | * 0054 | * - | * Rel-17 | * B | * eCryptPr | * agreed |
| * S3-212063 | * Security updates for algorithms and protocols in 33.223 | * Ericsson | * 33.223 | * 0030 | * - | * Rel-17 | * B | * eCryptPr | * agreed |
| * S3-211762 | * Correction to NF Certificate profile: Format of the apiRoot | * Ericsson | * 33.310 | * 0118 | * - | * Rel-16 | * F | * 5G\_eSBA | * agreed |
| * S3-212066 | * Security updates for algorithms and protocols in 33.310 | * Ericsson | * 33.310 | * 0119 | * - | * Rel-17 | * B | * eCryptPr | * not pursued |
| * S3-211472 | * CR to TS 33.401 - addition of UPIP to LTE | * VODAFONE Group Plc | * 33.401 | * 0698 | * - | * Rel-16 | * B | * UPIP\_SEC\_LTE | * not pursued |
| * S3-211459 | * CR to 33.501 R16 - Clarification on the number of PLMN IDuse by SEPP over N32 | * VODAFONE Group Plc | * 33.501 | * 1080 | * - | * Rel-16 | * F | * 5G\_eSBA | * revised |
| * S3-212287 | * CR to 33.501 R16 - Clarification on the number of PLMN IDuse by SEPP over N32 | * VODAFONE Group Plc, Nokia, Nokia Shanghai Bell, Mavenir | * 33.501 | * 1080 | * 1 | * Rel-16 | * F | * 5G\_eSBA | * agreed |
| * S3-211460 | * CR to 33.501 R17 - Clarification on the number of PLMN IDuse by SEPP over N32 | * VODAFONE Group Plc | * 33.501 | * 1081 | * - | * Rel-17 | * A | * 5G\_eSBA | * revised |
| * S3-212288 | * CR to 33.501 R17 - Clarification on the number of PLMN IDuse by SEPP over N32 | * VODAFONE Group Plc, Nokia, Nokia Shanghai Bell, Mavenir | * 33.501 | * 1081 | * 1 | * Rel-17 | * A | * 5G\_eSBA | * agreed |
| * S3-211512 | * CR to Delete NSSAA Editor Notes (Rel-16) | * Nokia, Nokia Shangahai-Bell | * 33.501 | * 1082 | * - | * Rel-16 | * F | * eNS | * merged |
| * S3-211513 | * CR to Delete NSSAA Editor Notes (Rel-17) | * Nokia, Nokia Shanghai-Bell | * 33.501 | * 1083 | * - | * Rel-17 | * F | * eNS | * merged |
| * S3-211553 | * Add Routing indicator in Authentication response | * ZTE Corporation | * 33.501 | * 1084 | * - | * Rel-17 | * F | * AKMA | * not pursued |
| * S3-211602 | * Serving network ID in NSSAA | * Huawei, HiSilicon | * 33.501 | * 1085 | * - | * Rel-16 | * F | * eNS | * not pursued |
| * S3-211603 | * validity peirod of NSSAA result | * Huawei, HiSilicon | * 33.501 | * 1086 | * - | * Rel-16 | * F | * eNS | * not pursued |
| * S3-211624 | * Slice privacy protection in NSSAA related procedures | * Huawei, HiSilicon | * 33.501 | * 1087 | * - | * Rel-16 | * F | * eNS | * revised |
| * S3-212280 | * Slice privacy protection in NSSAA related procedures | * Huawei, HiSilicon, Nokia, Nokia Shangahai-Bell | * 33.501 | * 1087 | * 1 | * Rel-16 | * F | * eNS | * agreed |
| * S3-211626 | * Correction to Authorization for indirect communication with delegated discovery procedure | * Huawei, HiSilicon | * 33.501 | * 1088 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-211644 | * Assign FC Value for KTIPSec and KTNAP Derivation in R16 | * Huawei, HiSilicon | * 33.501 | * 1089 | * - | * Rel-16 | * F | * 5WWC | * revised |
| * S3-212309 | * Assign FC Value for KTIPSec and KTNAP Derivation in R16 | * Huawei, HiSilicon | * 33.501 | * 1089 | * 1 | * Rel-16 | * F | * 5WWC | * agreed |
| * S3-211645 | * Assign FC Value for KTIPSec and KTNAP Derivation in R17 | * Huawei, HiSilicon | * 33.501 | * 1090 | * - | * Rel-17 | * A | * 5WWC | * revised |
| * S3-212310 | * Assign FC Value for KTIPSec and KTNAP Derivation in R17 | * Huawei, HiSilicon | * 33.501 | * 1090 | * 1 | * Rel-17 | * A | * 5WWC | * agreed |
| * S3-211662 | * Change the procedure of network slice re-authentication and revocation by AAA-S | * Huawei, HiSilicon | * 33.501 | * 1091 | * - | * Rel-17 | * F | * eNS | * revised |
| * S3-212312 | * Change the procedure of network slice re-authentication and revocation by AAA-S | * Huawei, HiSilicon, Ericsson | * 33.501 | * 1091 | * 1 | * Rel-17 | * F | * TEI17,eNS | * agreed |
| * S3-211684 | * Clarify on ngKSI used in NAS SMC in Kausf storage | * Huawei, HiSilicon | * 33.501 | * 1092 | * - | * Rel-16 | * F | * TEI16 | * not pursued |
| * S3-211685 | * Addressing impersonate attack from AAA-S | * Huawei, HiSilicon | * 33.501 | * 1093 | * - | * Rel-16 | * F | * eNS | * agreed |
| * S3-211686 | * Mirror- Addressing impersonate attack from AAA-S | * Huawei, HiSilicon | * 33.501 | * 1094 | * - | * Rel-17 | * A | * eNS | * agreed |
| * S3-211689 | * EAP ID Request in NSSAA Procedure | * Ericsson | * 33.501 | * 1095 | * - | * Rel-16 | * F | * TEI16 | * not pursued |
| * S3-211700 | * EAP ID Request in NSSAA Procedure (Rel-17) | * Ericsson | * 33.501 | * 1096 | * - | * Rel-17 | * A | * TEI16 | * not pursued |
| * S3-211720 | * UE procedures at TAU reject in idle mode mobility from 5GS to EPS over N26 | * MediaTek Inc. / Marko | * 33.501 | * 1097 | * - | * Rel-16 | * F | * TEI16 | * not pursued |
| * S3-211722 | * UE procedures at TAU reject in idle mode mobility from 5GS to EPS over N26 | * MediaTek Inc. / Marko | * 33.501 | * 1098 | * - | * Rel-17 | * A | * TEI16 | * not pursued |
| * S3-211753 | * Clarification on the NRF services authorization | * Ericsson, Nokia, Nokia Shanghai Bell | * 33.501 | * 1099 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * not pursued |
| * S3-211754 | * Clarification on the NRF services authorization | * Ericsson, Nokia, Nokia Shanghai Bell | * 33.501 | * 1100 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * not pursued |
| * S3-211755 | * Clarification on the NRF services authorization | * Ericsson, Nokia, Nokia Shanghai Bell | * 33.501 | * 1101 | * - | * Rel-17 | * A | * 5GS\_Ph1-SEC | * not pursued |
| * S3-211756 | * Clarification on the OAuth 2.0 client registration | * Ericsson, Nokia, Nokia Shanghai Bell | * 33.501 | * 1102 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * not pursued |
| * S3-211757 | * Clarification on the OAuth 2.0 client registration | * Ericsson, Nokia, Nokia Shanghai Bell | * 33.501 | * 1103 | * - | * Rel-16 | * A | * 5GS\_Ph1-SEC | * not pursued |
| * S3-211758 | * Clarification on the OAuth 2.0 client registration | * Ericsson, Nokia, Nokia Shanghai Bell | * 33.501 | * 1104 | * - | * Rel-17 | * A | * 5GS\_Ph1-SEC | * not pursued |
| * S3-211759 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson | * 33.501 | * 1105 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * revised |
| * S3-212367 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson, Nokia, Nokia Shanghai Bell, Mavenir | * 33.501 | * 1105 | * 1 | * Rel-15 | * F | * 5GS\_Ph1-SEC | * agreed |
| * S3-211760 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson | * 33.501 | * 1106 | * - | * Rel-16 | * A | * 5GS\_Ph1-SEC | * revised |
| * S3-212368 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson, Nokia, Nokia Shanghai Bell, Mavenir | * 33.501 | * 1106 | * 1 | * Rel-16 | * A | * 5GS\_Ph1-SEC | * agreed |
| * S3-211761 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson | * 33.501 | * 1107 | * - | * Rel-17 | * A | * 5GS\_Ph1-SEC | * revised |
| * S3-212369 | * Clarify the usage of TLS and PRINS between SEPPs | * Ericsson, Nokia, Nokia Shanghai Bell, Mavenir | * 33.501 | * 1107 | * 1 | * Rel-17 | * A | * 5GS\_Ph1-SEC | * agreed |
| * S3-211763 | * Correction to JOSE profile Reference | * Ericsson | * 33.501 | * 1108 | * - | * Rel-16 | * F | * 5G\_eSBA | * agreed |
| * S3-211764 | * Correction to JOSE profile Reference | * Ericsson | * 33.501 | * 1109 | * - | * Rel-17 | * A | * 5G\_eSBA | * agreed |
| * S3-211795 | * Downlink NAS COUNT handling after creating NAS container in EPS to 5GS Handover | * Qualcomm Incorporated, Huawei, HiSilicon, CATT, ZTE | * 33.501 | * 1110 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * agreed |
| * S3-211796 | * Downlink NAS COUNT handling after creating NAS container in EPS to 5GS Handover | * Qualcomm Incorporated, Huawei, HiSilicon, CATT, ZTE | * 33.501 | * 1111 | * - | * Rel-16 | * A | * 5GS\_Ph1-SEC | * agreed |
| * S3-211797 | * Downlink NAS COUNT handling after creating NAS container in EPS to 5GS Handover | * Qualcomm Incorporated, Huawei, HiSilicon, CATT, ZTE | * 33.501 | * 1112 | * - | * Rel-17 | * A | * 5GS\_Ph1-SEC | * agreed |
| * S3-211818 | * Clarifying the support for authentication methods in an SNPN | * Qualcomm Incorporated | * 33.501 | * 1113 | * - | * Rel-16 | * F | * Vertical\_LAN\_SEC | * agreed |
| * S3-211819 | * Clarifying the support for authentication methods in an SNPN | * Qualcomm Incorporated | * 33.501 | * 1114 | * - | * Rel-17 | * A | * Vertical\_LAN\_SEC | * agreed |
| * S3-211820 | * UP integrity protection in options 4,5 and 7 | * Ericsson | * 33.501 | * 1115 | * - | * Rel-17 | * F | * eUPIP\_SEC | * not pursued |
| * S3-211821 | * Correction of Annex A.13 | * Ericsson | * 33.501 | * 1116 | * - | * Rel-16 | * F | * TEI16 | * withdrawn |
| * S3-211822 | * Correction of Annex A.13 | * Ericsson | * 33.501 | * 1117 | * - | * Rel-17 | * A | * TEI16 | * not pursued |
| * S3-211873 | * Clarifications to 5G CIoT K\_NG-RAN derivation | * Huawei, Hisilicon | * 33.501 | * 1118 | * - | * Rel-16 | * F | * TEI16 | * not pursued |
| * S3-211874 | * Claifications on mapped security | * Huawei, Hisilicon | * 33.501 | * 1119 | * - | * Rel-16 | * F | * TEI16 | * revised |
| * S3-212337 | * Claifications on mapped security | * Huawei, Hisilicon | * 33.501 | * 1119 | * 1 | * Rel-16 | * F | * TEI16 | * agreed |
| * S3-211881 | * Clarification to SoR transparent container | * Huawei, Hisilicon | * 33.501 | * 1120 | * - | * Rel-17 | * F | * TEI17 | * revised |
| * S3-212339 | * Clarification to SoR transparent container | * Huawei, Hisilicon | * 33.501 | * 1120 | * 1 | * Rel-17 | * F | * TEI17 | * agreed |
| * S3-211885 | * UP Security policy requirement on the IMS data network | * Huawei, Hisilicon | * 33.501 | * 1121 | * - | * Rel-17 | * F | * TEI17 | * not pursued |
| * S3-211886 | * Editor's note of the security of 5GLAN services removal in R16 | * Huawei, Hisilicon | * 33.501 | * 1122 | * - | * Rel-16 | * F | * Vertical\_LAN\_SEC | * agreed |
| * S3-211887 | * Editor's note of the security of 5GLAN services removal in R17 | * Huawei, Hisilicon | * 33.501 | * 1123 | * - | * Rel-17 | * A | * Vertical\_LAN\_SEC | * agreed |
| * S3-211888 | * Clarification on the Oauth client registration | * Huawei, Hisilicon | * 33.501 | * 1124 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * not pursued |
| * S3-211889 | * Clarification on the Oauth client registration and authorization | * Huawei, Hisilicon | * 33.501 | * 1125 | * - | * Rel-16 | * A | * 5GS\_Ph1-SEC | * not pursued |
| * S3-211891 | * Clarification on the static authorization | * Huawei, Hisilicon | * 33.501 | * 1126 | * - | * Rel-17 | * F | * TEI17 | * not pursued |
| * S3-211980 | * N32-c and N32-f clarification R16 | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1127 | * - | * Rel-16 | * F | * 5G\_eSBA | * revised |
| * S3-212282 | * N32-c and N32-f clarification R16 | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1127 | * 1 | * Rel-16 | * F | * 5G\_eSBA | * agreed |
| * S3-211981 | * N32-c and N32-f clarification R17 | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1128 | * - | * Rel-17 | * A | * 5G\_eSBA | * revised |
| * S3-212284 | * N32-c and N32-f clarification R17 | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1128 | * 1 | * Rel-17 | * A | * 5G\_eSBA | * agreed |
| * S3-211982 | * Deployment models R16 | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1129 | * - | * Rel-16 | * F | * 5G\_eSBA | * revised |
| * S3-212285 | * Deployment models R16 | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1129 | * 1 | * Rel-16 | * F | * 5G\_eSBA | * agreed |
| * S3-211983 | * Deployment models R17 | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1130 | * - | * Rel-17 | * A | * 5G\_eSBA | * revised |
| * S3-212286 | * Deployment models R17 | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1130 | * 1 | * Rel-17 | * A | * 5G\_eSBA | * agreed |
| * S3-211985 | * Prevention of attacks on slice core by CCA modifications - Rel-16 | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1131 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-211986 | * Prevention of attacks on slice core by CCA modifications - Rel-17 | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1132 | * - | * Rel-17 | * A | * 5G\_eSBA | * not pursued |
| * S3-211988 | * Removal of ENs for draft-ietf-emu-rfc5448bis - Rel-15 | * Ericsson | * 33.501 | * 1133 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * revised |
| * S3-212330 | * Removal of ENs for draft-ietf-emu-rfc5448bis - Rel-15 | * Ericsson | * 33.501 | * 1133 | * 1 | * Rel-15 | * F | * 5GS\_Ph1-SEC | * agreed |
| * S3-211990 | * Removal of ENs for draft-ietf-emu-rfc5448bis -Rel-16 | * Ericsson | * 33.501 | * 1134 | * - | * Rel-16 | * A | * 5GS\_Ph1-SEC | * revised |
| * S3-212331 | * Removal of ENs for draft-ietf-emu-rfc5448bis -Rel-16 | * Ericsson | * 33.501 | * 1134 | * 1 | * Rel-16 | * A | * 5GS\_Ph1-SEC | * agreed |
| * S3-211991 | * Removal of ENs for draft-ietf-emu-rfc5448bis- Rel-17 | * Ericsson | * 33.501 | * 1135 | * - | * Rel-17 | * A | * 5GS\_Ph1-SEC | * revised |
| * S3-212346 | * Removal of ENs for draft-ietf-emu-rfc5448bis- Rel-17 | * Ericsson | * 33.501 | * 1135 | * 1 | * Rel-17 | * A | * 5GS\_Ph1-SEC | * agreed |
| * S3-212067 | * Security updates for algorithms and protocols in 33.501 | * Ericsson | * 33.501 | * 1136 | * - | * Rel-17 | * B | * eCryptPr | * not pursued |
| * S3-212103 | * Rel16-Handling of Kausf upon successful primary authentication | * Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel | * 33.501 | * 1137 | * - | * Rel-16 | * F | * TEI16 | * revised |
| * S3-212289 | * Rel16-Handling of Kausf upon successful primary authentication | * Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel, Ericsson | * 33.501 | * 1137 | * 1 | * Rel-16 | * F | * TEI16 | * agreed |
| * S3-212104 | * Rel17-Handling of Kausf upon successful primary authentication | * Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel | * 33.501 | * 1138 | * - | * Rel-17 | * A | * TEI16 | * revised |
| * S3-212290 | * Rel17-Handling of Kausf upon successful primary authentication | * Samsung, NEC, Nokia, Nokia Shanghai Bell, Intel, Ericsson | * 33.501 | * 1138 | * 1 | * Rel-17 | * A | * TEI16 | * agreed |
| * S3-212119 | * Correction of Annex A.13 | * Ericsson | * 33.501 | * 1139 | * - | * Rel-16 | * F | * TEI16 | * not pursued |
| * S3-212265 | * PTP aspects | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1140 | * - | * Rel-17 | * B | * DUMMY | * agreed |
| * S3-212266 | * NEF-AF aspects | * Nokia, Nokia Shanghai Bell | * 33.501 | * 1141 | * - | * Rel-17 | * B | * DUMMY | * agreed |
| * S3-212281 | * Slice privacy protection in NSSAA related procedures (Rel-17) | * Huawei, HiSilicon, Nokia, Nokia Shangahai-Bell | * 33.501 | * 1142 | * - | * Rel-17 | * A | * eNS | * agreed |
| * S3-212338 | * Claifications on mapped security | * Huawei, Hisilicon | * 33.501 | * 1143 | * - | * Rel-17 | * A | * TEI16 | * agreed |
| * S3-212340 | * Clarifications to 5G CIoT K\_NG-RAN derivation | * Huawei, Hisilicon | * 33.501 | * 1144 | * - | * Rel-17 | * A | * TEI16 | * not pursued |
| * S3-211556 | * Editorial correction in clause 4.2.2.1.5 R16 | * ZTE Corporation | * 33.511 | * 0021 | * - | * Rel-16 | * F | * SCAS\_5G | * agreed |
| * S3-211557 | * Editorial correction in clause 4.2.2.1.5 R17 | * ZTE Corporation | * 33.511 | * 0022 | * - | * Rel-17 | * A | * SCAS\_5G | * not pursued |
| * S3-211681 | * Update testcases in gNB SCAS | * Huawei, HiSilicon | * 33.511 | * 0023 | * - | * Rel-16 | * F | * SCAS\_5G | * revised |
| * S3-212314 | * Update testcases in gNB SCAS | * Huawei, HiSilicon | * 33.511 | * 0023 | * 1 | * Rel-16 | * F | * SCAS\_5G | * agreed |
| * S3-212379 | * CR to include R-16 feature of gNB to 33.511 | * Huawei, HiSilicon | * 33.511 | * 0024 | * - | * Rel-17 | * B | * eSCAS\_5G | * agreed |
| * S3-212380 | * CR to include R-16 feature of AMF to 33.512 | * Huawei, HiSilicon | * 33.512 | * 0010 | * - | * Rel-17 | * B | * eSCAS\_5G | * agreed |
| * S3-212381 | * CR to include R-16 feature of UDM to 33.514 | * Huawei, HiSilicon | * 33.514 | * 0005 | * - | * Rel-17 | * B | * eSCAS\_5G | * agreed |
| * S3-211883 | * Resolving EN on the error handling | * Huawei, Hisilicon | * 33.517 | * 0008 | * - | * Rel-16 | * F | * SCAS\_5G | * agreed |
| * S3-212382 | * CR to include R-16 feature of SEPP to 33.517 | * Huawei, HiSilicon | * 33.517 | * 0009 | * - | * Rel-17 | * B | * eSCAS\_5G | * agreed |
| * S3-211785 | * Profiling the GBA TLS protocols for use with AKMA | * Qualcomm Incorporated | * 33.535 | * 0066 | * 1 | * Rel-17 | * B | * DUMMY | * revised |
| * S3-212353 | * Profiling the GBA TLS protocols for use with AKMA | * Qualcomm Incorporated | * 33.535 | * 0066 | * 2 | * Rel-17 | * B | * DUMMY | * agreed |
| * S3-211546 | * Clarification on how AF select AAnF | * ZTE Corporation | * 33.535 | * 0068 | * - | * Rel-17 | * F | * AKMA | * merged |
| * S3-211547 | * Clarification on how AUSF select AAnF | * ZTE Corporation | * 33.535 | * 0069 | * - | * Rel-17 | * F | * AKMA | * merged |
| * S3-211548 | * Clarification on how the AUSF get RID | * ZTE Corporation | * 33.535 | * 0070 | * - | * Rel-17 | * F | * AKMA | * not pursued |
| * S3-211550 | * Resolution of EN on other parameter in clause 6.3 | * ZTE Corporation | * 33.535 | * 0071 | * - | * Rel-17 | * F | * AKMA | * not pursued |
| * S3-211551 | * UDM notifies AAnF AKMA context removal | * ZTE Corporation | * 33.535 | * 0072 | * - | * Rel-17 | * B | * AKMA | * revised |
| * S3-212319 | * UDM notifies AAnF AKMA context removal | * ZTE Corporation | * 33.535 | * 0072 | * 1 | * Rel-17 | * B | * AKMA | * agreed |
| * S3-211552 | * Update clause 6.1 refer to Kausf stored in AUSF | * ZTE Corporation | * 33.535 | * 0073 | * - | * Rel-17 | * F | * AKMA | * not pursued |
| * S3-211575 | * Handle the failure cause by UE | * ZTE Corporation | * 33.535 | * 0074 | * - | * Rel-17 | * F | * AKMA | * not pursued |
| * S3-211585 | * Add an abbreviation to AKMA | * ZTE Corporation | * 33.535 | * 0075 | * - | * Rel-17 | * F | * AKMA | * revised |
| * S3-212320 | * Add an abbreviation to AKMA | * ZTE Corporation | * 33.535 | * 0075 | * 1 | * Rel-17 | * F | * AKMA | * agreed |
| * S3-211671 | * Clarification on AAnF Selection | * Huawei, HiSilicon | * 33.535 | * 0076 | * - | * Rel-17 | * F | * AKMA | * revised |
| * S3-212313 | * Clarification on AAnF Selection | * Huawei, HiSilicon | * 33.535 | * 0076 | * 1 | * Rel-17 | * F | * AKMA | * agreed |
| * S3-211672 | * Editoral change in clause 6.1 | * Huawei, HiSilicon | * 33.535 | * 0077 | * - | * Rel-17 | * F | * AKMA | * agreed |
| * S3-211817 | * Sending UE identifier to the AKMA AF | * Qualcomm Incorporated | * 33.535 | * 0078 | * - | * Rel-17 | * F | * AKMA | * not pursued |
| * S3-211908 | * AKMA Anchor Function selection clause | * Ericsson | * 33.535 | * 0079 | * - | * Rel-17 | * F | * AKMA | * revised |
| * S3-212359 | * AKMA Anchor Function selection clause | * Ericsson | * 33.535 | * 0079 | * 1 | * Rel-17 | * F | * AKMA | * agreed |
| * S3-211910 | * IETF OSCORE as AKMA Ua\* protocol | * Ericsson, DT | * 33.535 | * 0080 | * - | * Rel-17 | * B | * DUMMY | * not pursued |
| * S3-211913 | * AKMA UE aspects | * Ericsson | * 33.535 | * 0081 | * - | * Rel-17 | * F | * AKMA | * revised |
| * S3-212328 | * AKMA UE aspects | * Ericsson | * 33.535 | * 0081 | * 1 | * Rel-17 | * F | * AKMA | * agreed |
| * S3-212074 | * Refresh of Kaf and Kakma | * Samsung | * 33.535 | * 0082 | * - | * Rel-17 | * B | * AKMA | * not pursued |
| * S3-212076 | * Network provides authorization to AF for Kaf key refresh | * Samsung | * 33.535 | * 0083 | * - | * Rel-17 | * B | * AKMA | * not pursued |
| * S3-211882 | * Clarification on a figure and the key activation | * Huawei, Hisilicon | * 33.536 | * 0025 | * - | * Rel-16 | * F | * eV2XARC | * revised |
| * S3-212341 | * Clarification on a figure and the key activation | * Huawei, Hisilicon | * 33.536 | * 0025 | * 1 | * Rel-16 | * F | * eV2XARC | * revised |
| * S3-212348 | * Clarification on a figure and the key activation | * Huawei, Hisilicon, Interdigtal | * 33.536 | * 0025 | * 2 | * Rel-16 | * F | * eV2XARC | * agreed |
| * S3-211842 | * Adding asset, description and threats to TR 33.926 for NWDAF SCAS | * China Mobile | * 33.926 | * 0041 | * - | * Rel-17 | * B | * SCAS\_5G\_NWDAF | * revised |
| * S3-212321 | * Adding asset, description and threats to TR 33.926 for NWDAF SCAS | * China Mobile | * 33.926 | * 0041 | * 1 | * Rel-17 | * B | * SCAS\_5G\_NWDAF | * agreed |
| * S3-211942 | * Assets and Threats specific to SCP | * Nokia, Nokia Shanghai Bell | * 33.926 | * 0042 | * - | * Rel-17 | * B | * SCAS\_5G\_SECOP | * withdrawn |
| * S3-211951 | * Assets and Threats specific to SCP | * Nokia, Nokia Shanghai Bell | * 33.926 | * 0043 | * - | * Rel-17 | * B | * SCAS\_5G\_SECOP | * not pursued |
| * S3-212262 | * IMS SCAS: Adding the assets and threats | * Huawei, HiSilicon | * 33.926 | * 0044 | * - | * Rel-17 | * B | * SCAS\_IMS | * agreed |
| * S3-212384 | * CR to add threat related to R-16 features of network products to 33.926 | * Huawei, HiSilicon | * 33.926 | * 0045 | * - | * Rel-17 | * B | * eSCAS\_5G | * agreed |
| * S3-211473 | * CR to TS 43.020 - R16 - Removal of support for GEA2 | * VODAFONE Group Plc | * 43.020 | * 0058 | * - | * Rel-16 | * F | * TEI16 | * revised |
| * S3-212361 | * CR to TS 43.020 - R16 - Removal of support for GEA2 | * VODAFONE Group Plc | * 43.020 | * 0058 | * 1 | * Rel-16 | * A | * TEI11 | * agreed |
| * S3-211491 | * CR to TS 43.020 - R11 - Removal of GEA1 and GEA2 due to security concerns | * VODAFONE Group Plc | * 43.020 | * 0059 | * - | * Rel-11 | * F | * TEI11 | * revised |
| * S3-212362 | * CR to TS 43.020 - R11 - Removal of GEA1 and GEA2 due to security concerns | * VODAFONE Group Plc | * 43.020 | * 0059 | * 1 | * Rel-11 | * F | * TEI11 | * agreed |
| * S3-211492 | * CR to TS 43.020 - R12 - Depreciation of GEA2 due to security concerns | * VODAFONE Group Plc | * 43.020 | * 0060 | * - | * Rel-12 | * F | * TEI12 | * revised |
| * S3-212363 | * CR to TS 43.020 - R12 - Depreciation of GEA2 due to security concerns | * VODAFONE Group Plc | * 43.020 | * 0060 | * 1 | * Rel-12 | * F | * TEI11 | * agreed |
| * S3-211493 | * CR to TS 43.020 - R13 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * 43.020 | * 0061 | * - | * Rel-13 | * A | * TEI12 | * revised |
| * S3-212364 | * CR to TS 43.020 - R13 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * 43.020 | * 0061 | * 1 | * Rel-13 | * A | * TEI11 | * agreed |
| * S3-211494 | * CR to TS 43.020 - R14 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * 43.020 | * 0062 | * - | * Rel-14 | * A | * TEI12 | * revised |
| * S3-212370 | * CR to TS 43.020 - R14 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * 43.020 | * 0062 | * 1 | * Rel-14 | * A | * TEI11 | * agreed |
| * S3-211495 | * CR to TS 43.020 - R15 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * 43.020 | * 0063 | * - | * Rel-15 | * A | * TEI12 | * revised |
| * S3-212373 | * CR to TS 43.020 - R15 - Removal of GEA1 and GEA2 due to security concerns - mirror | * VODAFONE Group Plc | * 43.020 | * 0063 | * 1 | * Rel-15 | * A | * TEI11 | * agreed |

## Annex C: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Original | Title | From | Decision | Reply TDoc |
| * S3-211362 |  | * LS on using MOBIKE in Integrated Access and Backhaul system | * R3-211297 | * replied to | * S3-212164 |
| * S3-211363 |  | * Reply LS on IP address to GPSI translation | * S2-2009339 | * withdrawn | * (none) |
| * S3-211364 |  | * Reply to LS on Resynchronisations | * ETSI SAGE | * postponed | * ???? |
| * S3-211365 |  | * Reply LS on IP address to GPSI translation | * S2-2101307 | * withdrawn | * (none) |
| * S3-211366 |  | * 5G capabilities exposure for factories of the future - revised | * 5G Alliance for Connected Industries and Automation (5G-ACIA) | * noted | * (none) |
| * S3-211367 |  | * Misalignment on usage of OAuth within 3GPP 29.510 | * GSMA | * postponed | * (none) |
| * S3-211368 |  | * AMF transparency for SOR | * C1-207736 | * noted | * (none) |
| * S3-211369 |  | * Reply LS on AMF transparency for SOR | * C4- 211701 | * noted | * (none) |
| * S3-211370 |  | * LS on extraterritorial use of MCC for satellite access | * C1-210439 | * noted | * (none) |
| * S3-211371 |  | * Reply LS on extraterritorial use of MCC for satellite access | * S1-210358 | * noted | * (none) |
| * S3-211372 |  | * LS on broadcasting from other PLMN in case of Disaster Condition | * C1-211189 | * replied to | * S3-212258 |
| * S3-211373 |  | * Reply LS on the re-keying procedure and security indication for NR SL | * C1-211228 | * noted | * (none) |
| * S3-211374 |  | * Reply LS on User Plane Integrity Protection for eUTRA connected to EPC | * C1-211461 | * noted | * (none) |
| * S3-211375 |  | * Reply LS on storage of KAUSF | * C1-211518 | * replied to | * S3-212291 |
| * S3-211376 |  | * LS on Secondary AUTH for 5GS interworking with EPS | * C3-210377 | * replied to | * S3-212366 |
| * S3-211377 |  | * LS on Changes to SoR Delivery Mechanism | * C4-205696 | * noted | * (none) |
| * S3-211378 |  | * LS on the Security consideration to support L2TP with CUPS | * C4-210171 | * replied to | * S3-212365 |
| * S3-211379 |  | * LS on the support of L2TP with CUPS | * C4-211624 | * noted | * (none) |
| * S3-211380 |  | * LS on Header Enrichment for HTTPS in PFCP | * C4-211662 | * replied to | * S3-212344 |
| * S3-211381 |  | * Reply LS on port allocation for the W1 interface | * C4-211700 | * noted | * (none) |
| * S3-211382 |  | * User location identification from Carrier Aggregation secondary cell activation messages | * GSMA | * replied to | * S3-212305 |
| * S3-211383 |  | * Prevention of attacks on sliced core network | * GSMA | * postponed | * (none) |
| * S3-211384 |  | * Attack preventing NAS procedures to succeed | * GSMA | * noted | * (none) |
| * S3-211385 |  | * Support of UAVs authentication/authorization in 3GPP systems and interfacing with USS/UTM | * GSMA | * postponed | * (none) |
| * S3-211386 |  | * 3GPP SA1 clarifications on problematic UAV | * GSMA | * noted | * (none) |
| * S3-211387 |  | * LS on UE location aspects in NTN | * R2-2102055 | * replied to | * S3-212306 |
| * S3-211388 |  | * Reply LS on broadcasting gNB ID length in system information block | * R2-2102449 | * noted | * (none) |
| * S3-211389 |  | * Remove the user message size limitation for DTLS over SCTP | * R3-211274 | * noted | * (none) |
| * S3-211390 |  | * LS on support of PWS over SNPN | * S1-210368 | * postponed | * (none) |
| * S3-211391 |  | * Reply LS on IP address to GPSI translation | * S2-2009339 | * replied to | * S3-212355 |
| * S3-211392 |  | * Reply LS on IP address to GPSI translation | * S2-2101307 | * replied to | * S3-212355 |
| * S3-211393 |  | * Reply LS on NSSAA at inter-PLMN mobility | * S2-2101052 | * noted | * (none) |
| * S3-211394 |  | * LS on UE capabilities indication in UPU | * S2-2101072 | * postponed | * (none) |
| * S3-211395 |  | * LS on updating the Credentials Holder controlled lists for SNPN selection | * S2-2101077 | * replied to | * S3-212208 |
| * S3-211396 |  | * Reply LS on AKMA Anchor Function selection | * S2-2101304 | * noted | * (none) |
| * S3-211397 |  | * Reply LS on Secondary AUTH for 5GS interworking with EPS | * S2-2101305 | * replied to | * S3-212366 |
| * S3-211398 |  | * Reply LS on User Plane Integrity Protection for eUTRA connected to EPC | * S2-2101306 | * noted | * (none) |
| * S3-211399 |  | * LS on PAP/CHAP and other point-to-point protocols usage in 5GS | * S2-2101309 | * noted | * (none) |
| * S3-211400 |  | * LS Response on Network Slice PA Charging per maximum utilized bandwidth | * S2-21001347 | * withdrawn | * (none) |
| * S3-211401 |  | * LS on Layer-3 UE-to-Network Relay authentication and authorization | * S2-2101623 | * postponed | * (none) |
| * S3-211402 |  | * LS on System support for Multi-USIM devices | * S2-2102039 | * noted | * (none) |
| * S3-211403 |  | * Reply LS on 5MBS progress and issues to address | * S2-2102077 | * withdrawn | * (none) |
| * S3-211404 |  | * LS on Plugtest issues | * S6-210203 | * noted | * (none) |
| * S3-211405 |  | * LS on EDGEAPP | * S6-210630 | * noted | * (none) |
| * S3-211406 |  | * Reply LS on clarification regarding EEC ID | * S6-210707 | * noted | * (none) |
| * S3-211407 |  | * 256-bit algorithms based on SNOW 3G or SNOW V | * ETSI SAGE | * postponed | * S3-211497 |
| * S3-211408 |  | * Choice of cryptographic algorithm in 256-bit Milenage | * ETSI SAGE | * replied to | * S3-212329 |
| * S3-211409 |  | * LS re Penetration Testing of SCAS | * GSMA | * postponed | * (none) |
| * S3-211410 |  | * LS on progress of ongoing work item ITU-T TR-USSD | * ITU-T SG11 | * noted | * (none) |
| * S3-211411 |  | * Reply LS on UE location aspects in NTN | * S3i210282 | * noted | * (none) |
| * S3-211413 |  | * LS on the latest results on the Vehicular Multimedia deliverables from ITU FG-VM | * ITU-T Focus Group on Vehicular Multimedia (FG-VM) | * noted | * (none) |
| * S3-211414 |  | * Reply LS on support of PWS over SNPN | * S2-2102963 | * noted | * (none) |
| * S3-211415 |  | * Reply LS on Prevention of attacks on sliced core network | * S2-2103213 | * noted | * (none) |
| * S3-211416 |  | * Reply LS on the support of L2TP with CUPS | * S2-2103232 | * noted | * (none) |
| * S3-211417 |  | * Reply LS on RAT type for network monitoring | * S2-2103237 | * replied to | * S3-212158 |
| * S3-211418 |  | * LS on security aspects for the method of collection of data from the UE | * S2-213263 | * postponed | * (none) |
| * S3-211419 |  | * Reply to LS on UE location aspects in NTN | * S2-2103550 | * noted | * (none) |
| * S3-211420 |  | * Reply LS to SA2 on UE Data Collection | * S4-210644 | * noted | * (none) |
| * S3-211421 |  | * LS on Media-Related Services and Requirements | * S4-210680 | * withdrawn | * (none) |
| * S3-211422 |  | * LS on Transaction Information - Dispersion Analytics | * S2-2103268 | * replied to | * S3-212159 |
| * S3-211423 |  | * 3GPP Edge Computing coordination | * S6-210978 | * noted | * (none) |
| * S3-211424 |  | * Reply LS on IP address to GPSI translation | * S6-211082 | * replied to | * S3-212355 |
| * S3-211425 |  | * Reply LS on User Plane Integrity Protection for eUTRA connected to EPC | * R2-2104349 | * noted | * (none) |
| * S3-211426 |  | * LS to SA3 on Small data transmissions | * R2-2104401 | * postponed | * ???? |
| * S3-211427 |  | * Reply LS to SA3 on FBS detection | * R2-2104626 | * noted | * (none) |
| * S3-211428 |  | * Reply LS on support of PWS over SNPN | * R2-2104640 | * noted | * (none) |
| * S3-211430 |  | * Reply LS on the support of L2TP with CUPS | * C3-212569 | * noted | * (none) |
| * S3-211431 |  | * LS on NAS-based busy indication | * R2-2104354 | * noted | * (none) |
| * S3-211432 |  | * LS on R17 Layer-2 SL Relay of UE ID exposure in paging mechanism | * R2-2104654 | * replied to | * S3-212204 |
| * S3-211439 |  | * Reply LS on updating the Credentials Holder controlled lists for SNPN selection | * C1-212419 | * noted | * (none) |
| * S3-211440 |  | * LS on integrity protection between the UE and the HPLMN of additional fields in SOR transparent container carrying SOR acknowledgement | * C1-212523 | * noted | * (none) |
| * S3-211441 |  | * Reply LS on UE capabilities indication in UPU | * C1-212599 | * postponed | * (none) |
| * S3-211446 |  | * LS to 3GPP SA3 N32 and multiple PLMN IDs | * GSMA | * replied to | * S3-212392 |

### C2: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| * S3-212123 | * S on user consent revocation to SA2 | * SA2 | * - |  |
| * S3-212124 | * LS on Clarification of AMF Reallocation and network slice selection | * SA2 | * - |  |
| * S3-212158 | * Reply LS on RAT type for network monitoring | * SA WG2; SA WG6 | * - | * S3-211417 |
| * S3-212159 | * Reply LS on Transaction Information - Dispersion Analytics | * SA WG2 | * - | * S3-211422 |
| * S3-212164 | * Reply LS on MOBIKE usage in IAB | * RAN3 | * - | * S3-211362 |
| * S3-212196 | * LS on Supporting UP Integrity Protection Policy Handling for Interworking from 5GS to EPS | * SA2 | * - |  |
| * S3-212204 | * Reply LS on R17 Layer-2 SL Relay | * RAN2 | * SA2, CT1 | * S3‑211432 |
| * S3-212208 | * Reply LS on updating the Credentials Holder controlled lists for SNPN selection | * SA2 | * CT1 | * S3‑211395,S3‑211439 |
| * S3-212258 | * Reply LS to LS on broadcasting from other PLMN in case of Disaster Condition | * CT1 | * RAN2 | * S3-211372 |
| * S3-212268 | * LS on Security risk evaluation of using long term key for another key derivation than AKA | * ETSI SAGE | * - |  |
| * S3-212272 | * Reply-LS on integrity protection between the UE and the HPLMN of additional fields in SOR transparent container carrying SOR acknowledgement | * CT1 | * - | * S3-211440/C1-212523 |
| * S3-212291 | * Reply LS on Storage of KAUSF | * CT1 | * CT4 | * S3-211375 |
| * S3-212305 | * Reply LS on User location identification from Carrier Aggregation secondary cell activation messages | * GSMA FSAG | * RAN2 | * S3-211382 |
| * S3-212306 | * Reply LS on UE location aspects in NTN | * RAN2, SA2, SA3-LI, RAN3 | * CT1 | * S3-211387 |
| * S3-212329 | * Response LS on 256-bit Milenage | * ETSI SAGE | * - | * S3-211408 |
| * S3-212343 | * LS on TAU reject issue during MME handover | * CT4 | * - |  |
| * S3-212344 | * Reply LS on Header Enrichment for HTTPS in PFCP | * CT4 | * - | * S3-211380 |
| * S3-212349 | * 5GFBS-LS to RAN2 on Solution#17 | * RAN2 | * - |  |
| * S3-212355 | * Reply LS on IP address to GPSI translation | * SA2, SA6 | * SA1 | * S3-211391,S3-211392,S3-211424 |
| * S3-212365 | * Reply-LS on the Security consideration to support L2TP with CUPS | * CT4 | * SA2, CT3 | * S3-211378 |
| * S3-212366 | * Reply-LS on Secondary AUTH for 5GS interworking with EPS | * CT3, SA2 | * CT1 | * S3-211376,S3-211397 |
| * S3-212378 | * Reply LS on changes to SoR | * CT1, CT4 | * - |  |
| * S3-212392 | * Response LS to GSMA on 3GPP SA3 N32 and multiple PLMN IDs | * GSMA | * CT4 | * S3-211446 |

## Annex D: List of agreed/approved new and revised Work Items

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | Source | new/revised |
| * S3-212390 | * Standardising Automated TLS Certificate Management in SBA | * BT plc | * SID new |
| * S3-212304 | * New WID on Security enhancements for 5G multicast-broadcast services (5MBS) | * Huawei, Hisilicon,China Broadcasting Network | * WID new |
| * S3-212318 | * WID on IIoT | * Nokia, Nokia Shanghai Bell | * WID new |
| * S3-212342 | * New WID on Security Aspects of Enhancement of Support for Edge Computing in 5GC | * Huawei, Hisilicon | * WID new |
| * S3-212352 | * New WID on TLS protocols profiles for AKMA | * Qualcomm Incorporated, Ericsson, CMCC, ZTE, Nokia | * WID new |
| * S3-212354 | * New WID on Security aspects of Uncrewed Aerial Systems | * Qualcomm Incorporated, Interdigital, Huawei, HiSilicon, Ericsson, Lenovo, Motorola Mobility, Nokia, Nokia Shanghai Bell | * WID new |
| * S3-212371 | * New WID on Security Aspects of eNPN | * Ericsson, Alibaba, China Mobile, InterDigital, ZTE | * WID new |

## Annex E: List of draft Technical Specifications and Reports

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Spec | vers | Doc title |
| * S3-211515 | * 33.881 | * 0.0.0 | * Skeleton for 5G NSWO TR |
| * S3-212126 | * 33.851 | * 0.6.0 | * TR\_33.851\_IIoT\_Sec |
| * S3-212151 | * 33.881 | * 0.1.0 | * New TR33.811 for 5G NSWO |
| * S3-212154 | * 33.847 | * 0.6.0 | * Draft TR 33.847 v0.6.0 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS |
| * S3-212155 | * 33.864 | * 0.5.0 | * Draft TR 33.864 v0.5.0 Study on the security of Access and Mobility Management Function (AMF) re-allocation |
| * S3-212168 | * 33.873 | * 0.4.0 | * draft TR Study on the security of the system enablers for devices having multiple Universal Subscriber Identity Modules |
| * S3-212178 | * 33.850 | * 0.6.0 | * TR 33.850 for MBS security |
| * S3-212186 | * 33.874 | * 0.2.0 | * Draft TR33.874 eNS2\_SEC |
| * S3-212205 | * 33.867 | * 0.5.0 | * Draft TR 33.867 |
| * S3-212214 | * 33.866 | * 0.5.0 | * draft TR 33.866 0.5.0 |
| * S3-212215 | * 33.862 | * 0.5.0 | * draft TR 33.862 0.5.0 |
| * S3-212219 | * 33.853 | * 1.6.0 | * new draft TR33.853 v1.6.0 |
| * S3-212220 | * 33.857 | * 0.6.0 | * draft TR 33.857 v0.6.0 |
| * S3-212233 | * 33.824 | * 0.9.0 | * Draft 33.824 v0.9.0 |
| * S3-212240 | * 33.839 | * 0.6.0 | * Draft TR 33.839 v0.6.0 |
| * S3-212247 | * 33.854 | * 0.6.0 | * Draft TR 33.854 |
| * S3-212279 | * 33.874 | * 0.2.0 | * draft TR 33.874 |
| * S3-212294 | * 33.522 | * 0.3.0 | * TS 33.522 SCAS SCP |
| * S3-212297 | * 33.875 | * 0.3.0 | * TR 33.875-030 |
| * S3-212315 | * 33.846 | * 0.12.0 | * Draft TR 33.846 v0.12.0 Study on authentication enhancements in the 5G System (5GS) |
| * S3-212323 | * 33.521 | * 0.4.0 | * TS 33.521 v0.4.0 |
| * S3-212325 | * 33.818 | * 0.12.0 | * TR 33.818 v0.12.0 |
| * S3-212345 | * 33.226 | * 0.5.0 | * Draft TS 33.226 |
| * S3-212351 | * 33.809 | * 0.15.0 | * draft TR 33.809 |
| * S3-212360 | * 33.845 | * 1.1.0 | * TR33.845 v1.1.0 |
| * S3-212391 | * 33.848 | * 0.8.0 | * TR 33.848 |

## Annex F: List of participants

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TITLE | Family Name | Given Name | Employer Organization | Organization Represented |
| Mr. | Ahmad | Saad | InterDigital, Inc. | InterDigital France R&D, SAS |
| Mr. | Ai | Ming | CATT | Datang Mobile Com. Equipment |
| Mr. | Aono | Hiroshi | NTT DOCOMO INC. | NTT DOCOMO INC. |
| Dr. | Arumugam | Sivabalan | Rakuten Mobile, Inc | Rakuten Mobile, Inc |
| Mr. | Ashton | Tim | National Technical Assistance | National Technical Assistance |
| Prof. | Babbage | Steve | VODAFONE Group Plc | VODAFONE Group Plc |
| Dr. | Baboescu | Florin | BROADCOM CORPORATION | BROADCOM CORPORATION |
| Dr. | Baskaran | Sheeba Backia Mary | Motorola Mobility Germany GmbH | Motorola Mobility Germany GmbH |
| Mr. | Bjerrum | Bo Holm | Nokia Corporation | Nokia Denmark |
| Mr. | Brusilovsky | Alec | InterDigital, Inc. | InterDigital, Inc. |
| Mr. | Cano Soveri | Mirko | ETSI | ETSI |
| Mr. | Canterbury | Mark | Tencastle Limited | National Technical Assistance |
| Ms. | Carducci | Candace | Johns Hopkins University APL | Johns Hopkins University APL |
| Mr. | Carpenter | Steven | FCC | FCC |
| Mr. | Castagno | Mauro | TELECOM ITALIA S.p.A. | TELECOM ITALIA S.p.A. |
| Mr. | Champel | Mary-Luc | Beijing Xiaomi Mobile Software | Beijing Xiaomi Electronics |
| Mrs. | Chaponniere | Lena | Qualcomm CDMA Technologies | Qualcomm Wireless GmbH |
| Mr. | Chater-Lea | David | Motorola Solutions UK Ltd. | Motorola Solutions UK Ltd. |
| Mr. | Chen | Jiajun | ZTE Corporation | ZTE Wistron Telecom AB |
| Mr. | Chen | Jingran | Beijing OPPO Com. corp., ltd | OnePlus |
| Mr. | Chen | Jun | HiSilicon Technologies Co. Ltd | HuaWei Technologies Co., Ltd |
| Mr. | Choi | Hongjin | Samsung R&D Institute UK | Samsung Electronics Benelux BV |
| Mr. | Chou | Joey | Intel Corporation (UK) Ltd | Intel Technology India Pvt Ltd |
| Mr. | Choyi | Vinod Kumar | Verizon UK Ltd | Verizon Denmark |
| Mr. | Chuberre | Nicolas | THALES | THALES |
| Mr. | Chun | SungDuck | LG Electronics France | LG Electronics France |
| Mr. | Cichonski | Jeffrey | NIST | NIST |
| Ms. | Comak | Pinar | Ericsson LM | Ericsson-LG Co., LTD |
| Mr. | Cong | Shi | Guangdong OPPO Mobile Telecom. | Dongguan OPPO Precision Elec. |
| Dr. | Corbett | Cherita | Johns Hopkins University APL | Johns Hopkins University APL |
| Mrs. | Costa | Luciana | TELECOM ITALIA S.p.A. | TELECOM ITALIA S.p.A. |
| Mr. | Davydov | Stepan | JSRPC Kryptonite | JSRPC Kryptonite |
| Mr. | Dees | Walter | Philips International B.V. | Philips International B.V. |
| Ms. | Deng | Juan | HuaWei Technologies Co., Ltd | HUAWEI TECHNOLOGIES Co. Ltd. |
| Dr. | Dhanda | Mungal Singh | Qualcomm Technologies Int | Qualcomm Austria RFFE GmbH |
| Miss | Diao | Xueying | ZTE Corporation | Sanechips |
| Mr. | Doerr | Johannes | BMWi | BMWi |
| Dr. | Dolan | Michael | FirstNet | FirstNet |
| Mr. | Dolly | Martin | AT&T | AT&T |
| Mr. | Dong | Fei | ZTE Corporation | ZXNE |
| Mr. | Dressler | Christian | ZITiS | ZITiS |
| Mr. | Druta | Dan | AT&T GNS Belgium SPRL | AT&T GNS Belgium SPRL |
| Mr. | Drynkin | Anton | JSRPC Kryptonite | JSRPC Kryptonite |
| Mr. | Du | Zhongda | Guangdong OPPO Mobile Telecom. | Guangdong OPPO Mobile Telecom. |
| Mr. | Dupuis | Jean Michel | Rogers Communications Canada | Rogers Communications Canada |
| Dr. | Ekdahl | Patrik | Ericsson LM | Ericsson LM |
| Mr. | Ennesser | Francois | Huawei Technologies France | Huawei Technologies France |
| Dr. | Escott | Adrian | Qualcomm CDMA Technologies | Qualcomm CDMA Technologies |
| Mr. | Evans | Tim P. | VODAFONE Group Plc | VODAFONE Group Plc |
| Mr. | Everett | Jared | Johns Hopkins University APL | Johns Hopkins University APL |
| Mr. | Faccin | Stefano | QUALCOMM JAPAN LLC. | Qualcomm Finland RFFE Oy |
| Dr. | Falk | Rainer | Siemens AG | Siemens AG |
| Mr. | Feder | Peretz | Spirent Communications | Spirent Communications |
| Mr. | Feng | Cheng | Datang Mobile Com. Equipment | Datang Mobile Com. Equipment |
| Mr. | Ferdi | Samir | InterDigital, Inc. | InterDigital, Europe, Ltd. |
| Mr. | Flander | Andreas | BDBOS | BDBOS |
| Mr. | Gabay | David | MITRE Corporation | MITRE Corporation |
| Ing. | Gallo | Luigi | TELECOM ITALIA S.p.A. | TELECOM ITALIA S.p.A. |
| Mr. | Gamishev | Todor | Orange | Orange |
| Dr. | Gao | Feng | China Unicom | China Unicom |
| Mr. | Gautam | Deepanshu | Samsung R&D Institute UK | Samsung Electronics GmbH |
| Mr. | Gautam | Sheel Priya | Department of Telecom | Department of Telecom |
| Mr. | Goldberg | Martin | U.S. Department of Defense | U.S. Department of Defense |
| Mr. | Goldberg | Martin | U.S. National Security Agency | U.S. National Security Agency |
| Mr. | Goldfarb | Eithan | Verint | Verint |
| Mr. | Grewal | Rajpreet Singh | NTIA | NTIA |
| Ms. | Guo | Ivy | Apple Computer Trading Co. Ltd | Apple (UK) Limited |
| Mr. | Guo | Longhua | HUAWEI TECH. GmbH | HUAWEI Technologies Japan K.K. |
| Dr. | Guo | Yinghao | Huawei Technologies France | HUAWEI TECHNOLOGIES Co. Ltd. |
| Mr. | Gupta | Nishant | Samsung Electronics Co., Ltd | Samsung R&D Institute India |
| Mr. | Gupta | Varini | Samsung R&D Institute India | Samsung Research America |
| Mr. | Gustafsson | Sune | Ericsson LM | Ericsson LM |
| Mr. | Hanhisalo | Markus | Ericsson LM | Ericsson LM |
| Mrs. | he | ming | China Telecom Corporation Ltd. | China Telecom Corporation Ltd. |
| Mr. | Hegedus | Gabor | SSNS | SSNS |
| Mr. | Hjelm | Bjorn | Verizon UK Ltd | Verizon Sweden |
| Mr. | Hoffpauir | Dusty | Charter Communications, Inc | Charter Communications, Inc |
| Miss | Hou | Yunjing | CATT | GOHIGH DATA NETWORKS TECH. |
| Ms. | Hu | Haijing | Apple Switzerland AG | Apple Poland Sp. z.o.o. |
| Mr. | Hu | Li | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Device Co., Ltd |
| Miss | Huang | Xiaoting | China Mobile Com. Corporation | China Mobile E-Commerce Co. |
| Mr. | Ianev | Iskren | NEC Europe Ltd | NEC Europe Ltd |
| Ms. | Ijaz | Aneeqa | InterDigital, Inc. | InterDigital, Inc. |
| Miss | Jerichow | Anja | Nokia Germany | Nokia Germany |
| Mr. | Jiang | Yi | China Mobile Com. Corporation | China Mobile E-Commerce Co. |
| Mr. | jiao | qingwen | CBN | CBN |
| Dr. | Jost | Christine | Ericsson LM | Ericsson Hungary Ltd |
| Dr. | Karakoc | Ferhat | Ericsson LM | Ericsson GmbH, Eurolab |
| Miss | ke | xiaowan | vivo Mobile Communication Co., | vivo Mobile Communication (H) |
| Miss | Kedalagudde | Meghashree D | Intel Deutschland GmbH | Intel Sweden AB |
| Dr. | Keesmaat | Iko | TNO | KPN N.V. |
| Mr. | Kenyon | Bradley | Hewlett-Packard Enterprise | Hewlett-Packard Enterprise |
| Mr. | Kim | Dongjoo | LG Electronics Inc. | LG Electronics Inc. |
| Dr. | Kim | Hongil | Qualcomm Incorporated | Qualcomm Korea |
| Dr. | Kim | Hyunsook | LG Electronics Inc. | LG Electronics Deutschland |
| Dr. | Kim | Joonwoong | SK Telecom | SK Telecom |
| Dr. | Kim | Laeyoung | LG Electronics France | LG Electronics Finland |
| Mr. | Kim | Warren | Johns Hopkins University APL | Johns Hopkins University APL |
| Mr. | Kolekar | Abhijeet | Intel Corporation (UK) Ltd | Intel K.K. |
| Ms. | Koser | Elizabeth | U.S. Department of Defense | U.S. Department of Defense |
| Mr. | Kuchibhotla | Ravi | Motorola Mobility UK Ltd. | Motorola Mobility UK Ltd. |
| Mr. | Kumar | Lalith | Samsung R&D Institute India | Samsung Electronics Czech |
| Dr. | Kunz | Andreas | Motorola Mobility Germany GmbH | Lenovo (Beijing) Ltd |
| Mr. | Lair | Yannick | Nokia France | Nokia Italy |
| Mr. | Laitinen | Mika | Airbus | Airbus |
| 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 Iberia SA |
| Dr. | Lee | Moon-il | InterDigital Communications | InterDigital Communications |
| Mr. | Lee | Seungik | ETRI | ETRI |
| Dr. | Lee | Soo Bum | Qualcomm Incorporated | QUALCOMM JAPAN LLC. |
| Mr. | Lee | Xiaoyang | CISA ECD | CISA ECD |
| Mr. | Lehtovirta | Vesa | Ericsson LM | L.M. Ericsson Limited |
| Dr. | Lei | Ao | HUAWEI TECHNOLOGIES Co. Ltd. | HUAWEI TECH. GmbH |
| Mr. | Lei | Yu | Beijing Xiaomi Mobile Software | Xiaomi Communications |
| Dr. | Lei | Zander (Zhongding) | HuaWei Technologies Co., Ltd | Huawei Tech.(UK) Co.. Ltd |
| Mr. | Leung | Nikolai | Qualcomm CDMA Technologies | Qualcomm Technologies Int |
| Mr. | Li | Fei | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies R&D UK |
| Mr. | Li | He | HUAWEI TECHNOLOGIES Co. Ltd. | HiSilicon Technologies Co. Ltd |
| Mr. | Li | Michael | Ericsson LM | Ericsson France S.A.S |
| Ms. | Liang | Huarui | Apple GmbH | Apple France |
| Dr. | Liao | Ellen C. | Intel | Intel Korea, Ltd. |
| Mr. | Libunao | Gerardo | Verizon UK Ltd | Verizon UK Ltd |
| Dr. | Lim | Taehyung | Samsung R&D Institute UK | Samsung Electronics Polska |
| 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 | China Telecom Corporation Ltd. | China Telecomunication Corp. |
| Mr. | LIU | Jianning(Carry) | Beijing Xiaomi Mobile Software | Beijing Xiaomi Software Tech |
| Mr. | Liu | Yuze | ZTE Corporation | CALTTA |
| Mr. | Lopes | Luis | Qualcomm Technologies Int | Qualcomm communications-France |
| Mr. | Loushine | Mike | AT&T GNS Belgium SPRL | AT&T GNS Belgium SPRL |
| Mr. | Loushine | Mike | AT&T | AT&T |
| Mr. | Love | Robert | Motorola Mobility Germany GmbH | Motorola Mobility Germany GmbH |
| Mr. | Lu | Jinghao | CBN | CBN |
| Ms. | Lu | Ting | ZTE Corporation | ZONSON |
| Ms. | Lu | Wei | Xiaomi Technology | Xiaomi Technology |
| Mr. | Luetzenkirchen | Thomas | Intel Deutschland GmbH | Intel Deutschland GmbH |
| Mr. | Luft | Achim | IPCom GmbH & Co.KG | IPCom GmbH & Co.KG |
| Mr. | Lyu | Huazhang | vivo Mobile Communication Co., | vivo Communication Technology |
| Mr. | M Dhanasekaran | Ranganathan | Nokia Corporation | Nokia UK |
| Mr. | MA | ZIJIANG | ZTE Corporation | Nubia Technology Co.,Ltd |
| Mr. | Manganahalli Jayaprakash | Sandesh | TNO | KPN N.V. |
| Mr. | Martin | Jesus | TELEFONICA S.A. | TELEFONICA S.A. |
| Mr. | McKee | Alan | NCSC | NCSC |
| Mr. | Miller | James | InterDigital Germany GmbH | InterDigital Germany GmbH |
| Mr. | Minokuchi | Atsushi | NTT DOCOMO INC. | NTT DOCOMO INC. |
| Mr. | Miyamoto | Yoshihiro | NEC Corporation | NEC Corporation |
| Mr. | Mouquet | Antoine | Orange | Orange Romania |
| Dr. | Muhanna | Ahmad | Mavenir | Mavenir |
| Mr. | Nair | Suresh | Nokia Germany | Nokia |
| Mr. | Nakarmi | Prajwol Kumar | Ericsson Limited | Nanjing Ericsson Panda Com Ltd |
| Mr. | Nayak | Ashok Kumar | Samsung R&D Institute India | Samsung R&D Institute UK |
| Mr. | Nerlikar | Rohit | Motorola Solutions UK Ltd. | Motorola Solutions UK Ltd. |
| Mr. | Niemi | Marko | MediaTek Inc. | MediaTek Inc. |
| Dr. | Ning | Yang | Guangdong OPPO Mobile Telecom. | Beijing OPPO Com. corp., ltd |
| Mr. | Norton | Mark | U.S. Department of Defense | U.S. Department of Defense |
| Mr. | O'Driscoll | James | NCSC | NCSC |
| Mr. | Oettl | Martin | Nokia Germany | Nokia Hungary |
| Mr. | Palanigounder | Anand | Qualcomm Technologies Int | Qualcomm India Pvt Ltd |
| Ms. | Pani | Diana | InterDigital, Inc. | InterDigital Belgium. LLC |
| Ms. | Parambath Sasi | NIvedya | Samsung R&D Institute India | Samsung Electronics France SA |
| Mr. | Park | Sang Min | LG Electronics France | LG Electronics UK |
| Mr. | Pattan | Basavaraj (Basu) | Samsung R&D Institute UK | Samsung Electronics Romania |
| Mr. | Pätzold | Thomas | Deutsche Telekom AG | Deutsche Telekom AG |
| Mrs. | Pauliac | Mireille | THALES | THALES |
| Mr. | Peinado | German | Nokia | Nokia Poland |
| Mr. | PENG | Jin | ZTE Corporation | ZTE Corporation |
| Mr. | Pica | Francesco | Qualcomm Incorporated | Qualcomm Tech. Netherlands B.V |
| Mr. | Pudney | Chris | VODAFONE Group Plc | Vodafone España SA |
| Mr. | Qi | Minpeng | China Mobile Com. Corporation | China Mobile Com. Corporation |
| Dr. | QI | Tao | ZTE Corporation | ZTE Photonics |
| Mr. | Qi | Yang | Qihoo 360 | Qihoo 360 |
| Miss | Qi | Yuan | CAICT | CAICT |
| Miss | Qiu | Zhihong | ZTE Corporation | Jetflow |
| Mr. | Rajadurai | Rajavelsamy | Samsung R&D Institute UK | Samsung Electronics Co., Ltd |
| Ms. | Rajendran | Rohini | Samsung R&D Institute India | BEIJING SAMSUNG TELECOM R&D |
| Mr. | Rathod | Niraj | BT plc | BT plc |
| Mr. | Rengasami | Selvam | OTD | OTD |
| Mrs. | Rong | Wu | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies (Korea) |
| Mr. | Rutkowski | Tony | CIS | CIS |
| Mr. | Sahlin | Bengt | Ericsson LM | Ericsson Telecomunicazioni SpA |
| Mr. | Sällberg | Krister | Ericsson LM | Oy LM Ericsson AB |
| Mr. | Samokhvalov | Roman | JSRPC Kryptonite | JSRPC Kryptonite |
| Ing. | Sánchez | Antonio | KEYSIGHT TECHNOLOGIES | KEYSIGHT TECHNOLOGIES |
| Mr. | Schumacher | Greg | T-Mobile USA | T-Mobile USA |
| Mr. | Shah | Sapan | Samsung R&D Institute India | Harman GmbH |
| Mr. | Shan | Changhong | Intel Corporation (UK) Ltd | Intel China Ltd. |
| Mr. | Shen | Jia | Guangdong OPPO Mobile Telecom. | Chengdu OPPO Mobile Com. corp. |
| Ms. | Shen | Jun | China Telecommunications | China Telecommunications |
| Ms. | Shen | Yang | Beijing Xiaomi Mobile Software | Beijing Xiaomi Mobile Software |
| Mrs. | Shi | xiaoli | HUAWEI TECHNOLOGIES Co. Ltd. | HUAWEI TECH. GmbH |
| Mr. | Smith | Brian | Bell Mobility | Bell Mobility |
| Dr. | Son | Jungje | Samsung R&D Institute UK | Samsung Electronics Nordic AB |
| Mrs. | song | hua | China Mobile Com. Corporation | China Mobile (Hangzhou) Inf. |
| Dr. | Speicher | Sebastian | Qualcomm Wireless GmbH | QUALCOMM Europe Inc. - Spain |
| Mr. | Starsinic | Michael | InterDigital, Inc. | Convida Wireless |
| Dr. | Staufer | Markus | Nokia Germany | Nokia Belgium |
| Mr. | Stojanovski | Saso | Intel Deutschland GmbH | Intel Finland Oy |
| Dr. | Sun | Tao | China Mobile M2M Company Ltd. | China Mobile M2M Company Ltd. |
| Mr. | Sun | Taoran Sun | Huawei Telecommunication India | Huawei Telecommunication India |
| Mr. | Syrett | Mark | Hewlett-Packard Enterprise | Hewlett-Packard Enterprise |
| Mr. | Tamura | Toshiyuki | NEC Europe Ltd | NEC Telecom MODUS Ltd. |
| Mr. | tang | rain | China Telecomunication Corp. | China Telecomunication Corp. |
| Mr. | Tangudu | Narendranath Durga | Samsung R&D Institute India | SAMSUNG R&D INSTITUTE JAPAN |
| Mr. | Tiwari | Kundan | NEC Corporation | NEC Corporation |
| Mr. | Torrecilla | Joaquin | Keysight Technologies UK Ltd | Keysight Technologies UK Ltd |
| Mr. | Tossou | Bruno | Orange | Orange UK |
| Ms. | Trakinat | Jean | T-Mobile USA Inc. | T-Mobile USA Inc. |
| Mr. | Trygar | Tobey | Perspecta Labs Inc. | Perspecta Labs Inc. |
| Dr. | Tsai | Yi-Hsueh | III | III |
| Mr. | Tsang kwong u | Steve | Orange | Orange Spain |
| Dr. | Tsiatsis | Vlasios | Ericsson LM | Ericsson España S.A. |
| Mrs. | Vahidi | Helena | Ericsson LM | Ericsson Japan K.K. |
| Mr. | van der Veen | Hans | NEC Europe Ltd | NEC Corporation |
| Mr. | Velev | Genadi | Motorola Mobility Germany GmbH | Motorola Mobility UK Ltd. |
| Mr. | Vujcic | Dragan | IDEMIA | IDEMIA |
| Dr. | Wan | Tao | CableLabs | CableLabs |
| Dr. | Wang | Dan | IPLOOK | IPLOOK |
| Dr. | Wang | Hucheng | CATT | Datang Linktester Technology |
| Mrs. | WANG | KE | China Mobile International Ltd | China Mobile International Ltd |
| Miss | Wang | Rui | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies Japan K.K. |
| Mr. | Wang | Wen | vivo Mobile Communication Co., | vivo Mobile Com. (Chongqing) |
| Mr. | Whorlow | Colin | NCSC | HOME OFFICE |
| Ms. | Wifvesson | Monica | Ericsson LM | Ericsson Limited |
| Dr. | Won | Sung Hwan | Nokia Korea | Nokia Korea |
| Mr. | Wong | Marcus | Futurewei | Futurewei Technologies |
| Mr. | Woodward | Tim | Motorola Solutions Danmark A/S | Motorola Solutions Danmark A/S |
| Ms. | WU | Jinhua | Beijing Xiaomi Mobile Software | Beijing Xiaomi Mobile Software |
| Mr. | Wu | Xiaobo | vivo Communication Technology | vivo Mobile Communication Co., |
| Miss | Wu | Yizhuang | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies Sweden AB |
| Miss | Xie | Zecheng | China Unicom | China Unicom |
| Mr. | Xie | Zhenhua | vivo Mobile Communication Co., | vivo Mobile Communication (S) |
| Miss | Xin | Jincan | China Telecommunications | China Telecommunications |
| Ms. | Xing | Zhen | ZTE Corporation | ZTE Corporation |
| Mrs. | Xu | Dan | Ericsson LM | Ericsson India Private Limited |
| Miss | Xu | Hui | CATT | CICT |
| Mr. | Xu | Ruiyue | Huawei Tech.(UK) Co.. Ltd | Huawei Tech.(UK) Co.. Ltd |
| Mr. | xu | sen | China Telecommunications | China Telecomunication Corp. |
| Mr. | Xu | Yang | Guangdong OPPO Mobile Telecom. | Chengdu OPPO Mobile Com. corp. |
| Miss | Yan | Ru | China Mobile Com. Corporation | China Mobile (Suzhou) Software |
| Dr. | Yang | Penglin | China Mobile Com. Corporation | CMDI |
| Mr. | Yang | Yunsong | Futurewei | Futurewei Technologies |
| Mr. | You | Shilin | ZTE Corporation | ZTE Corporation |
| Mr. | Youn | Myungjune | LG Electronics France | LG Electronics Polska |
| Dr. | Yu | Xiaobo | Alibaba (China) Group., Ltd. | Alibaba (China) Group., Ltd. |
| Dr. | Zhang | Bo | HUAWEI TECHNOLOGIES Co. Ltd. | HuaWei Technologies Co., Ltd |
| Miss | Zhang | Hua | China Telecommunications | China Telecommunications |
| Mr. | Zhang | Kai | Huawei Tech.(UK) Co.. Ltd | Huawei Technologies France |
| Miss | Zhang | Ling | CATT | CATT |
| Miss | Zhang | Man | ZTE Corporation | ShenZhen Zhongxing Shitong |
| Ms. | Zhang | Wanqiao | Alibaba (China) Group., Ltd. | Alibaba (China) Group., Ltd. |
| Mr. | Zhang | Yizhong | vivo Mobile Communication (S) | VIVO TECH GmbH |
| Miss | Zhao | Li | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies Sweden AB |
| Mr. | Zhao | Xuwen | HiSilicon Technologies Co. Ltd | Huawei Technologies Japan K.K. |
| Mr. | Zhao | Xuwen | HUAWEI Technologies Japan K.K. | HUAWEI Technologies Japan K.K. |
| Ms. | Zhao | Yang | HuaWei Technologies Co., Ltd | Huawei Telecommunication India |
| Mr. | Zhou | Wei | CATT | CATT |
| Mr. | Zhu | Chunhui | Spreadtrum Communications | Spreadtrum Communications |
| Mr. | Zisimopoulos | Haris | Qualcomm Technologies Int | QUALCOMM Europe Inc. - Italy |
| Ms. | Zou | Lan | Huawei Tech.(UK) Co.. Ltd | Huawei Technologies R&D UK |
| Dr. | Zugenmaier | Alf | NTT DOCOMO INC. | DOCOMO Communications Lab. |

## Annex G: List of future meetings

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Title | Start date | End date (OP) | Town | Country | Reference |
| SA3#104-e | 16-08-2021 | 27-08-2021 | Online | Electronic meeting |  |
| SA3#105-e | 08-11-2021 | 12-11-2021 | Online | Electronic meeting |  |