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

**Meeting Report  
for  
TSG SA WG3  
meeting: 98e**

**e-meeting, Online, 02/03/2020 to 06/03/2020**

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## 1 Agenda and meeting objectives

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

**S3-200050 Agenda**

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

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

**S3-200428 Process for SA3#98e electronic meeting**

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

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

## 2 Incoming LSes

**S3-200062 Reply LS on clarification on the requirement for steering of roaming**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-1912764*

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

**S3-200065 Reply LS to Transfer the study on service-based support for SMS in 5GC to CT WGs**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: SP-191362*

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

**S3-200066 Reply LS to LS on analytics support for energy saving**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: SP-191378*

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

**S3-200068 LS on security consideration of performance measurement function protocol**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-196940*

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

**S3-200070 LS on native 5G NAS security context activation**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-199003*

**Decision:** The document was **replied to in S3-200517**.

**S3-200071 LS on ARPF in UDICOM**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-195553*

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

**S3-200072 LS on uniqueness of PEI in certain FN-RG configurations**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: s3i200069*

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

**S3-200089 Reply LS to RAN2 on FBS detection**

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

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

**S3-200126 reply LS on security consideration of performance measurement function protocol**

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

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

**S3-200127 Discussion on AMF Reallocation via RAN re-routing**

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

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

**S3-200128 reply LS on AMF Reallocation via RAN re-routing**

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

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

**S3-200340 [DRAFT] LS on security consideration of performance measurement function protocol**

*Type: LS out For: Approval  
 to CT1, cc SA2  
 Source: Apple Computer Trading Co. Ltd*

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

**S3-200353 Discussion on a response LS on AMF Re-allocation**

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

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

**S3-200354 Response LS on AMF Reallocation via RAN re-routing**

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

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

**S3-200359 Reply LS on native 5G NAS security context activation**

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

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

**S3-200374 Reply LS on ARPF in UDICOM**

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

**Abstract:**

SA3 thanks CT4 for the LS on ARPF in UDICOM and would like to provide response.

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

**S3-200430 Mandatory User Plane Integrity for 5G**

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

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

## 3 Main work areas

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

**S3-200188 Adding a clause of "Threats related to key reuse" for the eNB**

*Type: CR For: Approval  
 33.926 v16.2.0 CR-0031 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo*

**Abstract:**

This CR proposes to add a new key reuse threat for the eNB.

**Decision:** The document was **revised to S3-200502**.

**S3-200191 Updating the clause of "Key Reuse" for the gNB**

*Type: CR For: Approval  
 33.926 v16.2.0 CR-0032 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo*

**Abstract:**

This CR proposes to update the key reuse threat for the gNB.

**Decision:** The document was **revised to S3-200503**.

**S3-200201 New test case on NAS integrity protection**

*Type: CR For: Approval  
 33.512 v16.1.0 CR-0005 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200473**.

**S3-200209 Clarification on confidential IEs replacement handling in original N32-f message**

*Type: CR For: Approval  
 33.517 v16.1.0 CR-0002 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200210 Clarification on the clause 4.3.6.4 according to TS 29.501**

*Type: CR For: Approval  
 33.117 v16.3.0 CR-0057 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200497**.

**S3-200217 Clarification on exposure of confidential IEs in N32-f message in TR 33.926**

*Type: CR For: Approval  
 33.926 v16.2.0 CR-0033 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200223 Clarification on PLMN ID verification**

*Type: CR For: Approval  
 33.117 v16.3.0 CR-0058 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200498**.

**S3-200335 Complete the test cases of key refresh at the eNB**

*Type: CR For: Approval  
 33.216 v16.2.0 CR-0013 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo*

**Abstract:**

This CR proposes to add a sub-test case in TS 33.216 clause 4.2.2.1.8 to cover the requirement in TS 36.331 clause 5.3.1.2.

**Decision:** The document was **revised to S3-200504**.

**S3-200336 Complete the test cases of key refresh at the gNB**

*Type: CR For: Approval  
 33.511 v16.2.0 CR-0011 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo*

**Abstract:**

This CR proposes to extend and add a sub-test case in TS 33.511 clause 4.2.2.1.13 to cover the requirement in TS 38.331 clause 5.3.1.2.

**Decision:** The document was **revised to S3-200505**.

**S3-200397 A new test case for key update at the gNB on dual connectivity**

*Type: CR For: Approval  
 33.511 v16.2.0 CR-0012 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, NTT DoCoMo,Telecom Italia*

**Abstract:**

This CR proposes to add a new clause for the test case of KSN update at the gNB on dual connectivity in TS 33.511 clause 4.2.2.1.

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

**S3-200398 New test cases for key update at the eNB on dual connectivity**

*Type: CR For: Approval  
 33.216 v16.2.0 CR-0014 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell,Telecom Italia*

**Abstract:**

This CR proposes to add a new clause for the test case of key update at the eNB on dual connectivity with 5GC and a new clause for the test case of key update at the eNB on dual connectivity with EPC in TS 33.216 clause 4.2.2.1.

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

**S3-200473 New test case on NAS integrity protection**

*Type: CR For: Approval  
 33.512 v16.1.0 CR-0005 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

(Replaces S3-200201)

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

**S3-200497 Clarification on the clause 4.3.6.4 according to TS 29.501**

*Type: CR For: Approval  
 33.117 v16.3.0 CR-0057 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

(Replaces S3-200210)

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

**S3-200498 Clarification on PLMN ID verification**

*Type: CR For: Approval  
 33.117 v16.3.0 CR-0058 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

(Replaces S3-200223)

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

**S3-200502 Adding a clause of "Threats related to key reuse" for the eNB**

*Type: CR For: Approval  
 33.926 v16.2.0 CR-0031 rev 1 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo*

(Replaces S3-200188)

**Abstract:**

This CR proposes to add a new key reuse threat for the eNB.

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

**S3-200503 Updating the clause of "Key Reuse" for the gNB**

*Type: CR For: Approval  
 33.926 v16.2.0 CR-0032 rev 1 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo*

(Replaces S3-200191)

**Abstract:**

This CR proposes to update the key reuse threat for the gNB.

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

**S3-200504 Complete the test cases of key refresh at the eNB**

*Type: CR For: Approval  
 33.216 v16.2.0 CR-0013 rev 1 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo*

(Replaces S3-200335)

**Abstract:**

This CR proposes to add a sub-test case in TS 33.216 clause 4.2.2.1.8 to cover the requirement in TS 36.331 clause 5.3.1.2.

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

**S3-200505 Complete the test cases of key refresh at the gNB**

*Type: CR For: Approval  
 33.511 v16.2.0 CR-0011 rev 1 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo*

(Replaces S3-200336)

**Abstract:**

This CR proposes to extend and add a sub-test case in TS 33.511 clause 4.2.2.1.13 to cover the requirement in TS 38.331 clause 5.3.1.2.

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

### 3.2 Mission Critical security (Rel-16)

**S3-200069 Reply LS on how the IWF obtains key material for interworking group and private communications**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S6-192194*

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

**S3-200080 [33.180] R16 - Formatting corrections**

*Type: CR For: Agreement  
 33.180 v16.2.0 CR-0135 Cat: D (Rel-16)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

Fix table title formatting

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

**S3-200081 [33.180] R16 - MC Gateway security**

*Type: CR For: Agreement  
 33.180 v16.2.0 CR-0136 Cat: B (Rel-16)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

Add security for interconnection when using an MC gateway server.

**Decision:** The document was **revised to S3-200514**.

**S3-200084 [33.180] R16 MC location authorization**

*Type: CR For: Agreement  
 33.180 v16.2.0 CR-0137 Cat: B (Rel-16)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

Add authorization for location services

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

**S3-200110 [33.180] R16 SeGy IWF corrections**

*Type: CR For: Agreement  
 33.180 v16.2.0 CR-0138 Cat: F (Rel-16)  
  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

The implementation of security within a SeGy for interworking is not clear.

**Decision:** The document was **revised to S3-200515**.

**S3-200275 Correction to definition about temporary group call related procedures**

*Type: CR For: Approval  
 33.180 v16.2.0 CR-0139 Cat: F (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-200276 Correction to definition about the case of 'Temporary group call – user regroup''**

*Type: CR For: Approval  
 33.180 v15.7.0 CR-0140 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

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

**S3-200514 [33.180] R16 - MC Gateway security**

*Type: CR For: Agreement  
 33.180 v16.2.0 CR-0136 rev 1 Cat: B (Rel-16)  
  
 Source: Motorola Solutions Danmark A/S*

(Replaces S3-200081)

**Abstract:**

Add security for interconnection when using an MC gateway server.

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

**S3-200515 [33.180] R16 SeGy IWF corrections**

*Type: CR For: Agreement  
 33.180 v16.2.0 CR-0138 rev 1 Cat: F (Rel-16)  
  
 Source: Motorola Solutions Danmark A/S*

(Replaces S3-200110)

**Abstract:**

The implementation of security within a SeGy for interworking is not clear.

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

**S3-200522 Work Item exception MCXsec**

*Type: WI exception request For: Approval  
 Source: Motorola Solutions*

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

### 3.3 Security aspects of single radio voice continuity from 5GS to UTRAN (Rel-16)

**S3-200373 Editoral Change on reference clauses**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0765 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

### 3.4 Enhancements for Security aspects of Common API Framework for 3GPP Northbound APIs (Rel-16)

### 3.5 Security of URLLC for 5GS (Rel-16)

**S3-200244 Clarification on UP security activation**

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

**Decision:** The document was **revised to S3-200472**.

**S3-200245 Removing EN**

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

**Decision:** The document was **revised to S3-200469**.

**S3-200246 Living of URLLC**

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

**Decision:** The document was **revised to S3-200471**.

**S3-200367 URLLC: Resolve EN about MN being preconfigured with SN capability to perform UP IP**

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

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

**S3-200368 URLLC: Error handling in MN when SN cannot comply with UP security policy**

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

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

**S3-200369 URLLC: Pairing of redundant PDU sessions in MN**

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

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

**S3-200469 Removing EN**

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

(Replaces S3-200245)

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

**S3-200471 Living of URLLC**

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

(Replaces S3-200246)

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

**S3-200472 Clarification on UP security activation**

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

(Replaces S3-200244)

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

**S3-200485 Security of 5G URLLC**

*Type: CR For: (not specified)  
 33.501 v16.1.0 CR-0783 Cat: B (Rel-16)  
  
 Source: Huawei Device Co., Ltd*

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

### 3.6 Security for 5GS Enhanced support of Vertical and LAN Services (Rel-16)

**S3-200052 LS on Sending CAG ID**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2001616*

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

**S3-200053 Reply LS on Sending CAG ID in NAS layer**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-1916349*

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

**S3-200058 Reply LS on NSI requirements**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S1-193596*

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

**S3-200059 Reply LS on NPN clarifications**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S1-193605*

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

**S3-200060 Reply LS on SUCI computation from an NSI**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-1912417*

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

**S3-200102 UP security in TSC**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0713 Cat: B (Rel-16)  
  
 Source: SAMSUNG*

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

**S3-200103 Wayforward for UP security in TSC**

*Type: discussion For: Discussion  
 33.501 v..  
 Source: SAMSUNG*

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

**S3-200104 Alignment of the term NPN**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0714 Cat: D (Rel-16)  
  
 Source: SAMSUNG*

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

**S3-200109 Referencing Annex I for non-public networks in untrusted non-3GPP access case**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0716 Cat: B (Rel-16)  
  
 Source: CableLabs, Nokia, Nokia Shanghai Bell, Charter Communications*

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

**S3-200160 Adding UP security policy for 5GLAN groups**

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

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

**S3-200172 UP security in TSC**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0729 Cat: B (Rel-16)  
  
 Source: SAMSUNG*

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

**S3-200173 Wayforward for UP security in TSC**

*Type: discussion For: Discussion  
 33.501 v..  
 Source: SAMSUNG*

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

**S3-200174 Alignment of the term NPN**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0730 Cat: D (Rel-16)  
  
 Source: SAMSUNG*

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

**S3-200213 Discussion on CAG access control authorization**

*Type: discussion For: Endorsement  
 33.819 v..  
 Source: Huawei, Hisilicon*

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

**S3-200233 Authentication in PNI-NPN**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0747 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200480**.

**S3-200370 Clarification to TSC UP security policy**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0763 Cat: B (Rel-16)  
  
 Source: Ericsson*

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

**S3-200371 5GLAN UP security policy**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0764 Cat: F (Rel-16)  
  
 Source: Ericsson*

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

**S3-200375 VLAN intro added**

*Type: CR For: Agreement  
 33.819 v16.0.0 CR-0001 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

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

**S3-200376 Resolution of ed note on serving network name**

*Type: CR For: Agreement  
 33.819 v16.0.0 CR-0002 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

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

**S3-200377 KI on interworking NPN and PLMN - security req**

*Type: CR For: Agreement  
 33.819 v16.0.0 CR-0003 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

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

**S3-200378 KI on service continuity - threats and reqs**

*Type: CR For: Agreement  
 33.819 v16.0.0 CR-0004 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

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

**S3-200379 Resolution of editors note on AAA**

*Type: CR For: Agreement  
 33.819 v16.0.0 CR-0005 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-200380 Threats and requirements on AAA**

*Type: CR For: Agreement  
 33.819 v16.0.0 CR-0006 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

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

**S3-200381 Resolution of editor's note in solution 1**

*Type: CR For: Agreement  
 33.819 v16.0.0 CR-0007 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

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

**S3-200382 Resolution of editor's note in solution 15**

*Type: CR For: Agreement  
 33.819 v16.0.0 CR-0008 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-200383 UP security policy enforcement in 5GLAN**

*Type: CR For: Agreement  
 33.819 v16.0.0 CR-0009 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

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

**S3-200384 UP security policy enforcement in 5GLAN**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0766 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

**Decision:** The document was **revised to S3-200455**.

**S3-200385 Referencing Annex for use of authentication methods**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0767 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

**Decision:** The document was **revised to S3-200456**.

**S3-200386 Clarifications on authentication methods selection and key derivation**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0768 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

**Decision:** The document was **revised to S3-200457**.

**S3-200387 Modification of CAG ID list**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0769 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

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

**S3-200388 Definition of SN Id for standalone non-public networks**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0770 Cat: C (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

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

**S3-200389 UP integrity enforcement for gPTP messages**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0771 Cat: C (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

**Decision:** The document was **revised to S3-200454**.

**S3-200453 WI Exception for Vertical LAN Security**

*Type: WI exception request For: (not specified)  
 Source: Nokia Germany*

**Abstract:**

This work item aims at specifying the security for system enhancements required for 5G system to support new vertical service requirements.

This exception sheet is to request an extension to June 2020 for enhancements to the 5G system to support Time Sen

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

**S3-200454 UP integrity enforcement for gPTP messages**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0771 rev 1 Cat: C (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

(Replaces S3-200389)

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

**S3-200455 UP security policy enforcement in 5GLAN**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0766 rev 1 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital, Huawei, HiSilicon*

(Replaces S3-200384)

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

**S3-200456 Referencing Annex for use of authentication methods**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0767 rev 1 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

(Replaces S3-200385)

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

**S3-200457 Clarifications on authentication methods selection and key derivation**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0768 rev 1 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

(Replaces S3-200386)

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

**S3-200480 Authentication in PNI-NPN**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0747 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon, Nokia, Nokia Shanghai Bell*

(Replaces S3-200233)

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

### 3.7 Security of the enhancement to the 5GC location services

**S3-200189 Draft CR as a living baseline for 5GS LCS normative work**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: CATT*

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

**S3-200190 Removing ENs in Draft CR as a living baseline for 5GS LCS normative work**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: CATT*

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

**S3-200269 Add clarifications to the living CR**

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

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

**S3-200339 LS on security of eLCS**

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

**Abstract:**

Sends LS to other groups so that they can get started with their work

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

**S3-200402 Resolving editor's note on namespace: pCR against living baseline for 5GS LCS normative work S3-194465**

*Type: other For: Agreement  
 Source: NTT DOCOMO INC.*

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

**S3-200491 Rel-16 Work Item Exception for Security of the enhancement to the 5GC Location Services**

*Type: WI exception request For: Approval  
 Source: CATT*

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

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

**S3-200061 Reply LS on token-based authorization for indirect communication with delegated discovery (Scenario D)**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-1912657*

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

**S3-200105 NF and NRF mutual Authentication during Indirect communication**

*Type: discussion For: Endorsement  
 33.501 v..  
 Source: Mavenir, Deutsche Telekom AG*

**Abstract:**

Mutual authentication between the NF and NRF is required for access token authorization

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

**S3-200106 Clarification of Indirect Communication Mutual Authentication**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0715 Cat: F (Rel-16)  
  
 Source: Mavenir, Deutsche Telekom AG, Nokia*

**Abstract:**

Removing ambiguity regarding mutual authentication between NFs within same PLMN during Indirect communication, e.g., with SCP as a proxy service node

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

**S3-200193 Authorization in the Subscribe-Notify interaction scenarios**

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

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

**S3-200194 Resource-based authorization**

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

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

**S3-200215 Clarification on NF consumer instance ID verification**

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

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

**S3-200282 Resource Level Authorization using Access Tokens**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0755 Cat: B (Rel-16)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S3-200487**.

**S3-200283 Trust model and purpose of token-based authorization in Scenario D**

*Type: discussion For: Information  
 Source: Ericsson*

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

**S3-200284 Trust model and token-based authorization for Scenario D**

*Type: discussion For: Endorsement  
 Source: Ericsson*

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

**S3-200285 Draft-CR as baseline for Token-based authorization for indirect communication with and without delegated discovery**

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

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

**S3-200286 Clarifications and corrections for token-based authorization in Scenario C**

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

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

**S3-200287 Token-based authorization for Scenario D**

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

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

**S3-200288 SCP vs SECOP**

*Type: discussion For: Endorsement  
 Source: Ericsson*

**Decision:** The document was **endorsed**.

**S3-200289 Identifiers in certificates and authorization tokens**

*Type: discussion For: Endorsement  
 Source: Ericsson*

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

**S3-200290 Authorization of Subscribe-Notify interactions**

*Type: discussion For: Endorsement  
 Source: Ericsson*

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

**S3-200291 3gpp-Sbi\_Target-apiRoot header and TLS on N32**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0756 Cat: F (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-200489**.

**S3-200403 eSBA - pCR to update Solution #21**

*Type: pCR For: Approval  
 33.855 v1.9.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

pCR to update Solution #21

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

**S3-200404 eSBA: pCR to update Conclusion on KI #22**

*Type: pCR For: Approval  
 33.855 v1.9.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Update conclusion on KI #22

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

**S3-200405 Validation of Access Token ownership**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0774 Cat: F (Rel-16)  
  
 Source: Mavenir, Deutsche Telekom AG*

**Abstract:**

If Token-based authorization is used, validation of the Access Token ownership shall be required.

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

**S3-200406 Token Based Authorization – Validation of client ownership of the access token**

*Type: discussion For: Endorsement  
 33.501 v..  
 Source: Mavenir, Deutsche Telekom AG*

**Abstract:**

During Token-based authorization, the validation of the ownership is required.

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

**S3-200407 Clarification on Token Based Authorization**

*Type: discussion For: Endorsement  
 33.501 v..  
 Source: Mavenir*

**Abstract:**

clarification to the validation of the access token during token-based authorization in the case of Direct and Indirect communication

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

**S3-200408 eSBA: Token-based authorization in indirect communication scenario with delegated discovery (Model D)**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Token-based authorization in indirect communication scenario with delegated discovery (Model D)

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

**S3-200410 eSBA: Mutual Authentication between NFs**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0775 Cat: F (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Mutual authentication between NFs

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

**S3-200411 Clarification on Token Based Authorization**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0776 Cat: F (Rel-16)  
  
 Source: Mavenir,Deutsche Telekom*

**Abstract:**

clarification to the validation of the access token during token-based authorization in the case of Direct and Indirect communication

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

**S3-200412 eSBA: NF consumer authentication by the producer in direct communication scenarios**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0777 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

NF consumer authentication by the producer in direct communication scenarios

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

**S3-200414 eSBA: Network Function TLS certificate profile**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: Nokia, Nokia Shanghai Bell, CommScope*

**Abstract:**

SBA Network Function certificate profile

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

**S3-200421 eSBA: Network Function TLS certificate profile**

*Type: draftCR For: Approval  
 33.310 v16.2.0  
 Source: Nokia, Nokia Shanghai Bell, CommScope*

**Abstract:**

Network Function TLS certificate profile

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

**S3-200425 Comments on S3-200289 Identifiers in certificates and authorization tokens**

*Type: discussion For: Discussion  
 33.501 v..  
 Source: Huawei, Hisilicon*

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

**S3-200426 Comments on S3-200290 Authorization of Subscribe-Notify interactions**

*Type: discussion For: Discussion  
 33.501 v..  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200427**.

**S3-200427 Comments on S3-200290 Authorization of Subscribe-Notify interactions**

*Type: discussion For: Discussion  
 33.501 v..  
 Source: Huawei, Hisilicon*

(Replaces S3-200426)

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

**S3-200441 Rel-16 Work Item Exception for 5G\_eSBA**

*Type: WI exception request For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Security aspects of the Rel-16 5G SBA includes several key issues including authentication in indirect communication, token-based authorization in indirect communication scenarios, authorization for NF Set, authorization at the resource level and authoriz

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

**S3-200487 Resource Level Authorization using Access Tokens**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0755 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell, Huawei*

(Replaces S3-200282)

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

**S3-200489 3gpp-Sbi\_Target-apiRoot header and TLS on N32**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0756 rev 1 Cat: F (Rel-16)  
  
 Source: Ericsson, Nokia, Nokia Shanghai Bell*

(Replaces S3-200291)

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

### 3.9 Authentication and key management for applications based on 3GPP credential in 5G (Rel-16)

**S3-200101 AKMA key derivation**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: SAMSUNG*

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

**S3-200129 Adding UDM to AKMA reference model**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-200511**.

**S3-200130 AKMA anchor key identifier update**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: ZTE Corporation*

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

**S3-200131 resolve EN in clause 6.1**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: ZTE Corporation*

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

**S3-200132 resolve EN in clause 6.2**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: ZTE Corporation*

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

**S3-200133 AKMA anchor Key push**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: ZTE Corporation*

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

**S3-200134 network initials AKMA anchor key update**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: ZTE Corporation*

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

**S3-200135 UE initials AKMA anchor key update**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: ZTE Corporation*

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

**S3-200136 Update 6.2**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-200512**.

**S3-200171 AKMA key derivation**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: SAMSUNG*

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

**S3-200181 Add description of the KAKMA Key ID allocation**

*Type: draftCR For: Approval  
 33.535 v0.2.0  
 Source: CATT*

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

**S3-200182 Add the functionalities of the AUSF into clause 4.2**

*Type: draftCR For: Approval  
 33.535 v0.2.0  
 Source: CATT*

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

**S3-200216 AKMA: Key ID generation**

*Type: pCR For: Approval  
 33.535 v0.0.2  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200499**.

**S3-200248 Update clause 4.1**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200249 Editoral change on clause 4.3**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200250 Adding AF under Network element clause**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200460**.

**S3-200251 Adding NEF under the Network element clause**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200461**.

**S3-200252 Delete EN of clause 4.4**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200253 Delete EN of clause 5.2**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200254 life time of Key identifier**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200255 The time when the key identifier is generated**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200256 KAKMA Derivation**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200257 AAnF checks the authorization information of AF**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200463**.

**S3-200258 Add details on deleting Kakma**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200259 Kaf update procedure**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200260 Editoral Change on reference clauses**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200293 Clarification of implicit lifetime**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-200447**.

**S3-200294 AUSF selection for AKMA**

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

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

**S3-200295 CR to TS 33.501: AUSF Selection for AKMA**

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

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

**S3-200296 pCR to TS 33.535: Update of the AKMA procedures**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Ericsson*

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

**S3-200297 pCR to TS 33.535: UE authentication result notification**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Ericsson*

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

**S3-200298 CR to TS 33.501: UE authentication result notification**

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

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

**S3-200299 pCR to TS 33.535: Optimization in AKMA key generation**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Ericsson*

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

**S3-200300 CR to TS 33.501: AKMA key generation optimization**

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

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

**S3-200301 pCR to TS 33.535: Application function key refresh**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Ericsson*

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

**S3-200316 Informative Annex: Deployment scenarios for end-to-end security**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: KPN N.V.*

**Abstract:**

This contribution proposes informative text describing a method for obtaining secure communication between UE and AKMA AF based on 3GPP keys generated for the AKMA service.

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

**S3-200363 pCR : Deriving AKMA key after UE is registered to 5GS**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-200486**.

**S3-200364 pCR : Initiation of AKMA**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Qualcomm Incorporated*

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

**S3-200365 pCR : Requirements on AKMA Key Identifier**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Qualcomm Incorporated*

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

**S3-200366 pCR : Requirements for Ua\***

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Qualcomm Incorporated*

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

**S3-200391 Derivation of KAF**

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

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

**S3-200392 Derivation of KAKMA and related key identifier**

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

**Decision:** The document was **revised to S3-200513**.

**S3-200429 Meeting minutes of AKMA conference call for SA3#98e**

*Type: report For: Information  
 Source: China Mobile*

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

**S3-200438 draft TS 33.535**

*Type: draft TS For: Approval  
 33.535 v0.2.0  
 Source: China Mobile*

**Decision:** The document was **revised to S3-200523**.

**S3-200523 draft TS 33.535**

*Type: draft TS For: Approval  
 33.535 v0.2.0  
 Source: China Mobile*

(Replaces S3-200438)

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

**S3-200447 Clarification of implicit lifetime**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Ericsson*

(Replaces S3-200293)

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

**S3-200460 Adding AF under Network element clause**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

(Replaces S3-200250)

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

**S3-200461 Adding NEF under the Network element clause**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

(Replaces S3-200251)

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

**S3-200463 AAnF checks the authorization information of AF**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Huawei, Hisilicon*

(Replaces S3-200257)

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

**S3-200470 Exception sheet o fAuthentication and key management for applications based on 3GPP credential in 5G**

*Type: WI exception request For: Approval  
 Source: China Mobile*

**Decision:** The document was **revised to S3-200524**.

**S3-200524 Exception sheet of Authentication and key management for applications based on 3GPP credential in 5G**

*Type: WI exception request For: Approval  
 Source: China Mobile*

(Replaces S3-200470)

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

**S3-200486 pCR : Deriving AKMA key after UE is registered to 5GS**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: Qualcomm Incorporated, Huawei, Hisilicon*

(Replaces S3-200363)

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

**S3-200499 AKMA: Key ID generation**

*Type: pCR For: Approval  
 33.535 v0.0.2  
 Source: Huawei, Hisilicon*

(Replaces S3-200216)

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

**S3-200511 Adding UDM to AKMA reference model**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: ZTE Corporation*

(Replaces S3-200129)

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

**S3-200512 Update 6.2**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: ZTE Corporation*

(Replaces S3-200136)

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

**S3-200513 Derivation of KAKMA**

*Type: pCR For: Approval  
 33.535 v0.2.0  
 Source: China Mobile, Nokia, Nokia Shanghai Bell, ZTE, Huawei, Hisilicon, Samsung*

(Replaces S3-200392)

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

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

**S3-200064 Reply LS on 5G-S-TMSI Truncation Procedure**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2001248*

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

**S3-200176 Security of RRC UE capability transfer procedure in 5G for CIoT optimisation**

*Type: draftCR For: (not specified)  
 33.501 v16.1.0  
 Source: Intel Corporation (UK) Ltd*

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

**S3-200177 Procedure to transfer UE capability for UEs without AS Security**

*Type: discussion For: Agreement  
 Source: Intel Corporation (UK) Ltd*

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

**S3-200180 Security of RRC UE capability transfer procedure in EPS**

*Type: CR For: (not specified)  
 33.401 v15.10.0 CR-0688 Cat: F (Rel-15)  
  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S3-200516**.

**S3-200226 Address the ENs on Security procedures for Small Data Transfer in Control Plane CIoT 5GS Optimisation**

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

**Decision:** The document was **revised to S3-200474**.

**S3-200227 Address EN for Calculation of ShortResumeMAC-I for UP CIoT Optimisation**

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

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

**S3-200228 Address the ENs on Security handling in User Plane CIoT 5GS Optimisation**

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

**Decision:** The document was **revised to S3-200475**.

**S3-200229 Security handling for UP data protection for UP CIoT 5GS Opmitization**

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

**Decision:** The document was **revised to S3-200476**.

**S3-200265 Discussion paper on UE radio capability protection for UEs without AS security**

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

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

**S3-200266 Protection of UE radio capability transfer for CIoT UEs that only support CP optimization**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: Huawei, HiSilicon,China Mobile*

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

**S3-200302 [Draft CR] Resume identity I-RNTI in RRC Connection Suspend and Resum**

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

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

**S3-200303 [Draft CR] ShortResumeMAC-I in RRC Connection Suspend and Resume**

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

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

**S3-200304 [Draft CR] Input to MESSAGE when calculating ShortResumeMAC-I in RRC Connection Suspend and Resume**

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

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

**S3-200305 Further evaluation to Solution #25: Security solution for preventing Botnet Attacks from Improper CIOT Device Use**

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

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

**S3-200306 [Draft CR] Clean up of editor notes from living CR for 5G CIoT**

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

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

**S3-200307 [Draft CR] Updates to Control Plane CIoT 5GS Optimization**

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

**Decision:** The document was **revised to S3-200519**.

**S3-200519 [Draft CR] Updates to Control Plane CIoT 5GS Optimization**

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

(Replaces S3-200307)

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

**S3-200308 GUTI allocation for MT-EDT cases**

*Type: discussion For: Endorsement  
 Source: Ericsson*

**Abstract:**

Clarifies that requirements for GUTI reallocation.

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

**S3-200309 [DRAFT] LS on GUTI allocation for MT-EDT cases**

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

**Abstract:**

Sends LS to other groups with clarificaiton of requirements for GUTI reallocation.

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

**S3-200310 Way forward for UE caps protection and NB-IoT UEs**

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

**Abstract:**

Proposes a way forward for resilience against tempering of UE caps and NB-IoT UEs

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

**S3-200311 [Draft CR] RRCReestablishment procedure in 5G CIoT**

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

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

**S3-200312 [Draft CR] EDT in User Plane CIoT 5GS Optimization**

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

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

**S3-200313 CIOT: draft CR Living document**

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

**Abstract:**

All agreed text, resubmitted as baseline

**Decision:** The document was **revised to S3-200518**.

**S3-200518 CIOT: draft CR Living document**

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

(Replaces S3-200313)

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

**S3-200356 Changes made to solution 30 in TR 33.861**

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

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

**S3-200357 Protection of UE radio capability transfer for UEs without AS security**

*Type: other For: Approval  
 33.501 v..  
 Source: Qualcomm Incorporated*

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

**S3-200432 CIoT - meeting minutes of conf call on UE caps and suspend/resume**

*Type: report For: Information  
 Source: Nanjing Ericsson Panda Com Ltd*

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

**S3-200474 Address the ENs on Security procedures for Small Data Transfer in Control Plane CIoT 5GS Optimisation**

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

(Replaces S3-200226)

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

**S3-200475 Address the ENs on Security handling in User Plane CIoT 5GS Optimisation**

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

(Replaces S3-200228)

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

**S3-200476 Security handling for UP data protection for UP CIoT 5GS Opmitization**

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

(Replaces S3-200229)

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

**S3-200484 Rel-16 Work Item Exception for CIoT security**

*Type: WI exception request For: Approval  
 Source: Ericsson*

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

**S3-200516 Security of RRC UE capability transfer procedure in EPS**

*Type: CR For: (not specified)  
 33.401 v15.10.0 CR-0688 rev 1 Cat: F (Rel-15)  
  
 Source: Intel Corporation (UK) Ltd*

(Replaces S3-200180)

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

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

**S3-200063 LS on Further clarifications on GLI/GCI and Line ID/ HFC\_Identifier**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-1912767*

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

**S3-200083 AGF-side SEG option**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0712 Cat: C (Rel-16)  
  
 Source: Juniper Networks*

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

**S3-200247 Living of 5WWC**

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

**Decision:** The document was **revised to S3-200467**.

**S3-200322 Correction for FN-RG authentication: transport of authentication indication from W-AGF to AMF**

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

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

**S3-200323 Corrections for N5CW**

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

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

**S3-200324 Corrections for 7B.d**

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

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

**S3-200325 Trust indication using UPU**

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

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

**S3-200326 Corrections for trusted access**

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

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

**S3-200327 TNAP mobility using ERP**

*Type: discussion For: Endorsement  
 Source: Ericsson*

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

**S3-200328 Corrections for Annex X**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: Ericsson, Cablelabs, Charter Communications, Huawei, Nokia, Nokia Shanghai Bell, Lenovo, Motorola Mobility*

**Decision:** The document was **revised to S3-200448**.

**S3-200329 3GPP-based access authentication for untrusted non-3GPP access**

*Type: discussion For: Endorsement  
 Source: Ericsson*

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

**S3-200330 pCR:3GPP-based access authentication for untrusted non-3GPP access**

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

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

**S3-200413 ERP for TNAP mobility**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: Motorola Mobility, Lenovo*

**Abstract:**

Introduction of ERP for TNAP mobility

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

**S3-200416 5WWC: Update to Subscriber privacy for wireline access**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: Nokia, Nokia Shanghai Bell, CableLabs*

**Abstract:**

Update to Subscriber privacy for wireline access

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

**S3-200423 AGF in 5GC trust domain**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: Juniper Networks, Ericsson*

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

**S3-200448 Corrections for Annex X**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: Ericsson, Cablelabs, Charter Communications, Huawei, Nokia, Nokia Shanghai Bell, Lenovo, Motorola Mobility*

(Replaces S3-200328)

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

**S3-200467 Living document of 5WWC**

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

(Replaces S3-200247)

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

**S3-200483 exception sheet for 5WWC**

*Type: WI exception request For: (not specified)  
 Source: Huawei, Hisilicon*

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

**S3-200520 CR on 5G security for 5WWC**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0784 Cat: B (Rel-16)  
  
 Source: Huawei*

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

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

**S3-200051 LS to 3GPP SA3 to consider appropriate authorization and authentication when providing network slice access**

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

**Decision:** The document was **replied to in S3-200442**.

**S3-200067 Reply LS on AUSF role in slice specific authentication**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-1910668*

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

**S3-200115 draft reply LS to SA2 LS on AUSF role in slice specific authentication**

*Type: other For: Agreement  
 Source: Nokia Germany*

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

**S3-200116 Discussion paper on AUSF role for Network Slice specific authentication**

*Type: discussion For: Endorsement  
 Source: Nokia Germany*

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

**S3-200117 Enhanced Network Slicing living CR from SA3#97**

*Type: other For: (not specified)  
 Source: Nokia Germany*

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

**S3-200118 draft CR for clause x.x.3 Slice specific authentication of living CR**

*Type: other For: Approval  
 Source: Nokia Germany*

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

**S3-200119 draft CR for clause x.x.4 of Enhanced Network Slicing Living CR**

*Type: other For: (not specified)  
 Source: Nokia Germany*

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

**S3-200120 draft CR for clause x.x.5 AAA triggered revocation of eNS living CR**

*Type: other For: Approval  
 Source: Nokia Germany*

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

**S3-200121 draft CR for clause 14 AUSF services of eNS living CR**

*Type: other For: (not specified)  
 Source: Nokia Germany*

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

**S3-200122 Discussion on GSMA LS 5GSTF20\_001 on appropriate authentication for Network slice**

*Type: other For: Agreement  
 Source: Nokia Germany*

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

**S3-200123 draft reply to GSMA LS 5GSTF20\_001 on NS authentication**

*Type: other For: Agreement  
 Source: Nokia Germany*

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

**S3-200149 Discussion on AUSF role**

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

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

**S3-200150 Draft LS reply to SA2 on AUSF**

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

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

**S3-200151 Draft LS reply to GSMA on slice access**

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

**Decision:** The document was **revised to S3-200442**.

**S3-200156 Security procedures for network slices**

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

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

**S3-200157 Addressing ENs in security procedures for network slices**

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

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

**S3-200158 Addessing EN on transmitting NSSAI to AAA**

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

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

**S3-200159 CR to slice management on NSaaS**

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

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

**S3-200393 LS on transformation of S-NSSAI during NSSAA**

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

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

**S3-200400 draftCR on addessing EN on transmitting NSSAI to AAA**

*Type: other For: (not specified)  
 Source: China Mobile*

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

**S3-200442 LS reply to GSMA on slice access**

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

(Replaces S3-200151)

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

**S3-200488 Rel-16 Network Slice security Exception sheet**

*Type: WI exception request For: Approval  
 Source: Nokia, Nokia Shangahi Bell*

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

**S3-200500 Enhanced Network Slicing Living CR**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: Nokia, Nokia Shangahi Bell,*

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

### 3.13 Security for NR Integrated Access and Backhaul (Rel-16)

**S3-200091 [Draft CR]Solution for IAB Architecture (Baseline version)**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: Samsung*

**Abstract:**

Re-submission of S3-194596, agreed in the last meeting. Baseline for the IAB normative work (TS 33.501).

**Decision:** The document was **revised to S3-200443**.

**S3-200093 [Draft CR] F1 interface set-up procedure**

*Type: draftCR For: (not specified)  
 33.501 v16.1.0  
 Source: Samsung, Thales, Nokia, Nokia Shanghai Bell*

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

**S3-200096 [Draft CR] Cleanup of IAB draft CR**

*Type: draftCR For: (not specified)  
 33.501 v16.1.0  
 Source: Samsung*

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

**S3-200270 Add requirement and feature to the DraftCR**

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

**Decision:** The document was **revised to S3-200458**.

**S3-200360 F1 interface set-up procedure**

*Type: other For: Approval  
 33.501 v..  
 Source: Qualcomm Incorporated, Ericsson*

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

**S3-200443 [Draft CR]Solution for IAB Architecture (Baseline version)**

*Type: draftCR For: Approval  
 33.501 v16.1.0  
 Source: Samsung*

(Replaces S3-200091)

**Abstract:**

Re-submission of S3-194596, agreed in the last meeting. Baseline for the IAB normative work (TS 33.501).

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

**S3-200444 Solution for IAB Architecture - 5GC**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0782 Cat: B (Rel-16)  
  
 Source: Samsung, Ericsson, Qualcomm Incorporated, Nokia, Nokia Shanghai Bell, Thales, Intel, Huawei, HiSilicon, AT&T*

**Abstract:**

Creation of CR from Living Doc (based on S3-200443)

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

**S3-200445 Solution for IAB Architecture - ENDC**

*Type: CR For: (not specified)  
 33.401 v16.1.0 CR-0691 Cat: B (Rel-16)  
  
 Source: Samsung, Ericsson, Qualcomm Incorporated, Nokia, Nokia Shanghai Bell, Thales, Intel, Huawei, HiSilicon, AT&T*

**Abstract:**

Creation of CR from Living Doc (S3-194599)

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

**S3-200446 Rel-16 Work Item Exception for Security for NR IAB**

*Type: WI exception request For: (not specified)  
 Source: Samsung*

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

**S3-200458 Add requirement and feature to the DraftCR**

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

(Replaces S3-200270)

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

### 3.14 Security aspects of SEAL (Rel-16)

**S3-200082 [33.434] SEAL key management procedure**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: Motorola Solutions Danmark A/S*

**Abstract:**

key management procedure for a SEAL UE to acquire key material

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

**S3-200090 VAL Client authentication**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200092 Security requirement update in clause 5.1**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200094 Security for SEAL interfaces**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200095 Annex X: OpenID Connect**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200097 Terminology alignment**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200098 Group key management in SEAL**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200099 Key generation and distribution in SEAL**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200163 VAL Client authentication**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

**Decision:** The document was **revised to S3-200451**.

**S3-200164 Security requirement update in clause 5.1**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200165 Security procedure for SEAL interfaces**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200166 Annex X: OpenID Connect**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

**Decision:** The document was **revised to S3-200452**.

**S3-200167 Terminology alignment**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200168 Group key management in SEAL**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200169 Key generation and distribution in SEAL**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

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

**S3-200234 Adding SEAL security requirements**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200492**.

**S3-200235 Adding security requirements of interfaces for SEAL**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200493**.

**S3-200236 Adding authorization procedures of SEAL system**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200494**.

**S3-200237 Adding SEAl security procedures for interconnection**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200495**.

**S3-200449 Draft TR 33.434 v0.2.0**

*Type: draft TS For: (not specified)  
 33.434 v0.1.0  
 Source: Samsung*

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

**S3-200450 Rel-16 Work Item Exception for SEAL security aspects**

*Type: WI exception request For: (not specified)  
 Source: Samsung*

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

**S3-200451 VAL Client authentication**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

(Replaces S3-200163)

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

**S3-200452 Annex X: OpenID Connect**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: SAMSUNG*

(Replaces S3-200166)

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

**S3-200492 Adding SEAL security requirements**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: Huawei, Hisilicon*

(Replaces S3-200234)

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

**S3-200493 Adding security requirements of interfaces for SEAL**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: Huawei, Hisilicon, Samsung*

(Replaces S3-200235)

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

**S3-200494 Adding authorization procedures of SEAL system**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: Huawei, Hisilicon*

(Replaces S3-200236)

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

**S3-200495 Adding SEAl security procedures for interconnection**

*Type: pCR For: Approval  
 33.434 v0.1.0  
 Source: Huawei, Hisilicon*

(Replaces S3-200237)

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

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

**S3-200054 Reply LS on PC5S and PC5 RRC unicast message protection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-1916461*

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

**S3-200055 Reply LS on LS on PC5S and PC5 RRC unicast message protection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-1912002*

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

**S3-200056 Reply LS on PC5 unicast and groupcast security protection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2000971*

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

**S3-200057 LS on NR V2X Security issue and PDCP SN size**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to RAN2, cc -  
 Source: R2-1916467*

**Decision:** The document was **replied to in S3-200478**.

**S3-200073 TS 33.536 - Security procedure for unicast messages over PC5**

*Type: pCR For: Approval  
 33.536 v0.0.1  
 Source: InterDigital Communications*

**Abstract:**

This contribution describes the security procedure for unicast messages over PC5 for normative work, as concluded in TR 33.836, i.e., the initiating UE uses the entire session identifier, Kd session ID, to identify the security context for a given peer UE

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

**S3-200074 TS 33.536 - Privacy protection procedure for unicast messages over PC5**

*Type: pCR For: Approval  
 33.536 v0.0.1  
 Source: InterDigital Communications*

**Abstract:**

This contribution describes the procedure for privacy protection of unicast messages over PC5 for normative work, as concluded in TR 33.836, i.e., changing the layer 2 identities of both peer UEs and the Key ID at the same time.

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

**S3-200075 TS 33.536 - Privacy protection requirements for unicast messages over PC5**

*Type: pCR For: Approval  
 33.536 v0.0.1  
 Source: InterDigital Communications*

**Abstract:**

This contribution provides the requirements for privacy protection of unicast messages over PC5 for normative work. It ports the approved requirements from TR 33.836.

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

**S3-200076 TS 33.536 - Security requirements for unicast messages over PC5**

*Type: pCR For: Approval  
 33.536 v0.0.1  
 Source: InterDigital Communications*

**Abstract:**

This contribution provides the requirements for security protection of unicast messages over PC5 for normative work. It ports the approved requirements from TR 33.836.

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

**S3-200077 Security requirements for unicast mode**

*Type: pCR For: Agreement  
 33.536 v0.2.0  
 Source: Oy LM Ericsson AB*

**Abstract:**

This contribution proposes to add the security requirements for unicast mode.

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

**S3-200085 TS 33.536 - Common Security Requirement over NR PC5**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: LG Electronics Inc.*

**Abstract:**

This contribution provides the requirements that can applied for all communication modes over NR PC5. It brings the approved requirements from TR 33.836.

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

**S3-200086 TS 33.536 - Common Security Procedure over NR PC5**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: LG Electronics Inc.*

**Abstract:**

This contribution provides the procedure that can applied for all communication modes over NR PC5.

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

**S3-200087 TS 33.536 - Text for general clauses**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: LG Electronics Inc.*

**Abstract:**

This contribution provides introductory text for general clauses in TS 33.536

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

**S3-200088 TS 33.536 - Clean-up for broadcast and groupcast**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: LG Electronics Inc.*

**Abstract:**

This contribution suggests renaming of some clauses along the text lines for clarification

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

**S3-200100 Security policy handling for NR PC5**

*Type: pCR For: Approval  
 33.536 v0.0.0  
 Source: SAMSUNG*

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

**S3-200107 V2X UE source IP address randomization**

*Type: discussion For: Discussion  
 Source: Futurewei Technologies*

**Abstract:**

This contribution discusses the source UE IP address randomization .

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

**S3-200108 eV2X UE source IP address randomization**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Futurewei Technologies*

**Abstract:**

This pCR proposes to enhance the requirement on UE source IP address randomization.

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

**S3-200124 Discussion on V2X LS R2-1916467**

*Type: other For: Agreement  
 Source: Nokia Germany*

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

**S3-200125 draft reply LS to RAN2 on V2X PDCP SN size and security**

*Type: other For: Agreement  
 Source: Nokia Germany*

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

**S3-200161 Discussion paper on eV2X groupcast privacy**

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

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

**S3-200162 Adding privacy procedures for V2X Groupcast communications**

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

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

**S3-200170 Security policy handling for NR PC5**

*Type: pCR For: Approval  
 33.536 v0.0.0  
 Source: SAMSUNG*

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

**S3-200187 LS reply to RAN WG2 LS on NR V2X Security issue and PDCP SN size**

*Type: LS out For: Approval  
 to RAN2  
 Source: CATT*

**Decision:** The document was **revised to S3-200478**.

**S3-200211 eV2X: PC5 UP security policy activation**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200468**.

**S3-200212 eV2X: PC5 key hierarchy**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200218 eV2X: requirements for algorithm**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200219 eV2X: Discussion on LC ID used for PDCP protection**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Huawei, Hisilicon*

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

**S3-200238 adding V2X groupcast privacy requirement**

*Type: pCR For: Approval  
 33.536 v0.0.0  
 Source: Huawei, Hisilicon*

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

**S3-200239 Adding V2X unicast security requirements**

*Type: pCR For: Approval  
 33.536 v0.0.0  
 Source: Huawei, Hisilicon*

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

**S3-200240 Adding V2X common requirements**

*Type: pCR For: Approval  
 33.536 v0.0.0  
 Source: Huawei, Hisilicon*

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

**S3-200241 Adding abbreviations to the V2X TS**

*Type: pCR For: Approval  
 33.536 v0.0.0  
 Source: Huawei, Hisilicon*

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

**S3-200321 Security requirement for unicast message in PC5**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Apple Computer Trading Co. Ltd*

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

**S3-200342 Adding the requirements for the for the security of the NR PC5 unicast link**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG*

**Decision:** The document was **revised to S3-200496**.

**S3-200343 Proposed solution for the security policy of unicast connections**

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

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

**S3-200344 Proposed skeleton for the security of unicast link procedures**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG*

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

**S3-200345 Proposed text for general and overview clauses of NR PC5 unicast security**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG*

**Decision:** The document was **revised to S3-200501**.

**S3-200346 Proposed text for keying clause of NR PC5 unicast security**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG*

**Decision:** The document was **revised to S3-200506**.

**S3-200347 Proposed text for security establishment clause of NR PC5 unicast security**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-200507**.

**S3-200348 Proposed text for security protection clause of NR PC5 unicast security**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG*

**Decision:** The document was **revised to S3-200508**.

**S3-200349 Annex for key derivation functions in the V2X TS**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG*

**Decision:** The document was **revised to S3-200509**.

**S3-200350 Allocation of FC values for TS 33.356**

*Type: CR For: Agreement  
 33.220 v16.0.0 CR-0199 Cat: C (Rel-16)  
  
 Source: Qualcomm Incorporated, LG*

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

**S3-200351 Proposed requirements for the privacy of NR PC5 unicast connections**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG*

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

**S3-200352 Proposed procedures for the privacy of NR PC5 unicast connections**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG*

**Decision:** The document was **revised to S3-200510**.

**S3-200418 Identifier conversion in groupcast communication**

*Type: CR For: Approval  
 33.185 v15.0.0 CR-0002 Cat: B (Rel-16)  
  
 Source: Motorola Mobility, Lenovo*

**Abstract:**

Addition of the UE behaviour when configured with the parameters for L2 group ID update.

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

**S3-200424 Identifier conversion in groupcast communication**

*Type: pCR For: (not specified)  
 33.536 v0.2.0  
 Source: Motorola Mobility Germany GmbH*

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

**S3-200433 LS to SA3 on NR V2X Security issues**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-2001980*

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

**S3-200440 draft\_TS 33.536 v0.3.0**

*Type: draft TS For: (not specified)  
 33.536 v0.3.0  
 Source: LG Electronics Inc.*

**Abstract:**

draft\_TS 33.536 v0.3.0 implements the contributions approved during SA3 #98e meeting.

**Decision:** The document was **revised to S3-200528**.

**S3-200528 draft\_TS 33.536 v0.3.0**

*Type: draft TS For: -  
 33.536 v0.3.0  
 Source: LG Electronics Inc.*

(Replaces S3-200440)

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

**S3-200468 eV2X: PC5 UP security policy activation**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Huawei, Hisilicon*

(Replaces S3-200211)

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

**S3-200478 LS reply to RAN WG2 LS on NR V2X Security issue and PDCP SN size**

*Type: LS out For: Approval  
 to RAN2  
 Source: CATT*

(Replaces S3-200187)

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

**S3-200496 Adding the requirements for the for the security of the NR PC5 unicast link**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG, Interdigital, Huawei, Apple*

(Replaces S3-200342)

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

**S3-200501 Proposed text for general and overview clauses of NR PC5 unicast security**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG, Interdigital, Huawei*

(Replaces S3-200345)

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

**S3-200506 Proposed text for keying clause of NR PC5 unicast security**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG*

(Replaces S3-200346)

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

**S3-200507 Proposed text for security establishment clause of NR PC5 unicast security**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, Interdigital, Apple, Huawei, LG, Samsung*

(Replaces S3-200347)

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

**S3-200508 Proposed text for security protection clause of NR PC5 unicast security**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG*

(Replaces S3-200348)

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

**S3-200509 Annex for key derivation functions in the V2X TS**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG*

(Replaces S3-200349)

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

**S3-200510 Proposed procedures for the privacy of NR PC5 unicast connections**

*Type: pCR For: Approval  
 33.536 v0.2.0  
 Source: Qualcomm Incorporated, LG, Interdigital*

(Replaces S3-200352)

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

**S3-200521 Cover sheet for TS 33.536**

*Type: TS or TR cover For: Approval  
 33.536 v..  
 Source: LG*

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

### 3.16 User Plane Gateway Function for Inter-PLMN Security (Rel-16)

**S3-200277 Security requirements for UP Gateway Function**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0754 Cat: B (Rel-16)  
  
 Source: Huawei, HiSilicon*

**Decision:** The document was **revised to S3-200481**.

**S3-200278 Reply LS to S2-2001727 on UP gateway function on the N9 interface**

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

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

**S3-200292 draft reply-LS on UP gateway function on the N9 interface**

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

**Decision:** The document was **revised to S3-200482**.

**S3-200399 Protection of N9 interface**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0689 rev 2 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Juniper Networks*

(Replaces S3-194444)

**Abstract:**

Protection of inter-PLMN N9 interface

**Decision:** The document was **revised to S3-200530**.

**S3-200530 Protection of N9 interface**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0689 rev 3 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Juniper Networks*

(Replaces S3-200399)

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

**S3-200401 Security requirements for Inter-PLMN User Plane Security (IPUPS) function**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0773 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Juniper Networks*

**Abstract:**

Security requirements for Inter-PLMN User Plane Security (IPUPS) function

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

**S3-200434 Reply LS to LS S3-194452 on UP gateway function on the N9 interface**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2001727*

**Decision:** The document was **replied to in S3-200482**.

**S3-200481 Security requirements for UP Gateway Function**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0754 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei, Hisilicon, Nokia, Nokia Shanghai Bell, Juniper Networks*

(Replaces S3-200277)

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

**S3-200482 reply-LS on UP gateway function on the N9 interface**

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

(Replaces S3-200292)

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

### 3.17 Provision of Access to Restricted Local Operator Services by Unauthenticated UEs Security Aspects (Rel-16)

### 3.18 3GPP profiles for cryptographic algorithms and security protocols (Rel-16)

**S3-200317 IKEv2 profile update 33.310**

*Type: CR For: Agreement  
 33.310 v16.2.0 CR-0104 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-200462**.

**S3-200318 Using EAP-TLS with TLS 1.3**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0757 Cat: B (Rel-16)  
  
 Source: Ericsson*

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

**S3-200319 ESP profile update**

*Type: CR For: Agreement  
 33.210 v16.2.0 CR-0064 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-200464**.

**S3-200331 Certificate and CRL profile update**

*Type: CR For: Agreement  
 33.310 v16.2.0 CR-0105 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-200465**.

**S3-200332 TLS Recommended Cipher Suites**

*Type: CR For: Agreement  
 33.210 v16.2.0 CR-0065 Cat: B (Rel-16)  
  
 Source: Ericsson*

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

**S3-200333 Required TLS extenstions and algorithms**

*Type: CR For: Agreement  
 33.210 v16.2.0 CR-0066 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S3-200466**.

**S3-200334 IKEv2 profile update 33.210**

*Type: CR For: Agreement  
 33.210 v16.2.0 CR-0067 Cat: B (Rel-16)  
  
 Source: Ericsson*

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

**S3-200419 CryptPr: Update to clause 6.1.1 - Common rules to all certificates**

*Type: CR For: Agreement  
 33.310 v16.2.0 CR-0106 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, CommScope*

**Abstract:**

Update to clause 6.1.1 - Common rules to all certificates

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

**S3-200420 CryptPr: Update to CRL Profile in clause 6.1a**

*Type: CR For: Agreement  
 33.310 v16.2.0 CR-0107 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, CommScope*

**Abstract:**

Update to CRL Profile in clause 6.1a

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

**S3-200462 IKEv2 profile update 33.310**

*Type: CR For: Agreement  
 33.310 v16.2.0 CR-0104 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson*

(Replaces S3-200317)

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

**S3-200464 ESP profile update**

*Type: CR For: Agreement  
 33.210 v16.2.0 CR-0064 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson*

(Replaces S3-200319)

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

**S3-200465 Certificate and CRL profile update**

*Type: CR For: Agreement  
 33.310 v16.2.0 CR-0105 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson*

(Replaces S3-200331)

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

**S3-200466 Required TLS extensions and algorithms**

*Type: CR For: Agreement  
 33.210 v16.2.0 CR-0066 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson*

(Replaces S3-200333)

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

### 3.19 Other areas (Rel-16)

**S3-200111 Discussion paper on SA2 LS S2-2001730 on AMF reallocation via RAN r-routing**

*Type: discussion For: Endorsement  
 Source: Nokia Germany*

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

**S3-200112 draft reply LS to SA2 LS S2-2001730 on AMF reallocation**

*Type: other For: Agreement  
 Source: Nokia Germany*

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

**S3-200113 draft reply LS to CT1 LS S3-200070 on activating 5G native NAS context**

*Type: other For: Agreement  
 Source: Nokia Germany*

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

**S3-200114 draft reply LS to CT1 on PMF protocol security**

*Type: other For: Agreement  
 Source: Nokia Germany*

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

**S3-200137 Corrections in clause 6.1.2-R16**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0717 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-200138 Corrections in clause 6.1.2-R15**

*Type: CR For: Agreement  
 33.501 v15.7.0 CR-0718 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

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

**S3-200139 Clarification for distribution of subscriber identities and security data in clause 6.3.1.2-R16**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0719 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-200140 Clarification for distribution of subscriber identities and security data in clause 6.3.1.2-R15**

*Type: CR For: Agreement  
 33.501 v15.7.0 CR-0720 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

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

**S3-200141 remove the EN in clause 6.8.1.2.4-R16**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0721 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-200142 remove the EN in clause 6.8.1.2.4-R15**

*Type: CR For: Agreement  
 33.501 v15.7.0 CR-0722 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

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

**S3-200143 Security handling in registration with AMF re-allocation via direct NAS reroute-R16**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0723 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-200144 Security handling in registration with AMF re-allocation via direct NAS reroute-R15**

*Type: CR For: Agreement  
 33.501 v15.7.0 CR-0724 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

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

**S3-200145 remove the EN in clause 13.2.3.6-R16**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0725 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-200146 remove the EN in clause 13.2.3.6-R15**

*Type: CR For: Agreement  
 33.501 v15.7.0 CR-0726 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

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

**S3-200147 Remove the EN in clause 13.5-R16**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0727 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-200148 Remove the EN in clause 13.5-R15**

*Type: CR For: Agreement  
 33.501 v15.7.0 CR-0728 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

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

**S3-200175 Reply LS to LS on native 5G NAS security context activation**

*Type: LS out For: Agreement  
 to CT1  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S3-200517**.

**S3-200183 Modification on the RRC connection resume procedure**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0731 Cat: F (Rel-16)  
  
 Source: CATT*

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

**S3-200184 Discussion for AS rekeying failure on Xn-Handover**

*Type: discussion For: Decision  
 33.501 v..  
 Source: CATT*

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

**S3-200185 Clarification on AS rekeying failure**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0732 Cat: F (Rel-16)  
  
 Source: CATT*

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

**S3-200186 Clarification on the Xn-Handover procedure**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0733 Cat: F (Rel-16)  
  
 Source: CATT*

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

**S3-200195 Discussion on authentication result removal**

*Type: discussion For: Endorsement  
 33.501 v..  
 Source: Huawei, Hisilicon*

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

**S3-200196 JSON object modification - R15**

*Type: CR For: Approval  
 33.501 v15.7.0 CR-0734 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

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

**S3-200197 JSON object modification - R16**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0735 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200198 SUCI computation clarification - R15**

*Type: CR For: Approval  
 33.501 v15.7.0 CR-0736 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

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

**S3-200199 SUCI computation clarification - R16**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0737 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200200 compatibility issue in resume request protection**

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

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

**S3-200202 Solving registration failure in registration procedure with AMF reallocation**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0738 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

*CMCC,ChinaTelecom*

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

**S3-200203 Clarification on AMF reallocation via direct NAS reroute**

*Type: CR For: Approval  
 33.501 v15.7.0 CR-0739 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

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

**S3-200204 Clarification on AMF reallocation via direct NAS reroute**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0740 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200205 Discussion on horizontal Kamf derivation in direct NAS reroute**

*Type: discussion For: Endorsement  
 33.501 v..  
 Source: Huawei, Hisilicon*

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

**S3-200206 Discussion on AMF reallocation**

*Type: discussion For: Endorsement  
 33.501 v..  
 Source: Huawei, Hisilicon*

*CMCC,ChinaTelecom*

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

**S3-200207 Discussion on slice separation**

*Type: discussion For: Endorsement  
 33.501 v..  
 Source: Huawei, Hisilicon*

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

**S3-200208 LS reply to SA2 on AMF reallocation**

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

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

**S3-200220 Clarification on native 5G NAS security context activation after an inter-system change from S1 mode to N1 mode in idle mode in Rel15**

*Type: CR For: Approval  
 33.501 v15.7.0 CR-0741 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

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

**S3-200221 Mirror for clarification on native 5G NAS security context activation after an inter-system change from S1 mode to N1 mode in idle mode in Rel16**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0742 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200222 [DRAFT] Reply LS on native 5G NAS security context activation**

*Type: LS out For: Approval  
 to CT1  
 Source: Huawei, Hisilicon*

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

**S3-200224 Clarification on IPX certificate acquirement in SEPP**

*Type: CR For: Approval  
 33.501 v15.7.0 CR-0743 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

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

**S3-200225 Mirror for clarification on IPX certificate acquirement in SEPP**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0744 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200230 UE handling on CHO key derivation for NR**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0745 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200477**.

**S3-200231 UE handling on CHO key derivation for LTE**

*Type: CR For: Approval  
 33.401 v16.1.0 CR-0689 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200479**.

**S3-200232 Include Resume Request Message to Calculation of ShortResumeMAC-I for INACTIVE**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0746 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200242 Update testcases of eNB SCAS**

*Type: CR For: Approval  
 33.216 v15.2.0 CR-0011 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

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

**S3-200243 Mirror - Update testcases of eNB SCAS**

*Type: CR For: Approval  
 33.216 v16.2.0 CR-0012 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200263 CR on requirements for algorithm selection and handover from EPS to 5GS over N26**

*Type: CR For: Approval  
 33.501 v15.7.0 CR-0748 Cat: F (Rel-15)  
  
 Source: Huawei, Hisilicon*

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

**S3-200264 CR on requirements for algorithm selection and handover from EPS to 5GS over N26**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0749 Cat: A (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200271 Correction to security capability negotiation between SEPPs**

*Type: CR For: Approval  
 33.501 v15.7.0 CR-0750 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon,China Mobile*

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

**S3-200272 Correction to security capability negotiation between SEPPs**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0751 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon,China Mobile*

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

**S3-200273 Correction to initial EAP Authentication with an external AAA server**

*Type: CR For: Approval  
 33.501 v15.7.0 CR-0752 Cat: F (Rel-15)  
  
 Source: Huawei, HiSilicon*

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

**S3-200274 Correction to initial EAP Authentication with an external AAA server**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0753 Cat: A (Rel-16)  
  
 Source: Huawei, HiSilicon*

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

**S3-200320 Recovery from NASC verification failure**

*Type: CR For: (not specified)  
 33.501 v16.1.0 CR-0758 Cat: F (Rel-16)  
  
 Source: MediaTek Inc.*

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

**S3-200337 Key derivation for CHO(LTE R16)**

*Type: CR For: Approval  
 33.401 v16.1.0 CR-0690 Cat: C (Rel-16)  
  
 Source: Apple Computer Trading Co. Ltd*

**Decision:** The document was **revised to S3-200437**.

**S3-200338 Key derivation for CHO(NR R16)**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0759 Cat: C (Rel-16)  
  
 Source: Apple Computer Trading Co. Ltd*

**Decision:** The document was **revised to S3-200436**.

**S3-200358 Clarification on native security context activation in handover from EPS to 5GS**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0760 Cat: F (Rel-16)  
  
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S3-200490**.

**S3-200361 Clarification on the use of SUPI as the Identity in EAP-AKA’ key derivation**

*Type: CR For: Agreement  
 33.501 v15.7.0 CR-0761 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

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

**S3-200362 Clarification on the use of SUPI as the Identity in EAP-AKA’ key derivation**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0762 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

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

**S3-200372 AMF reallocation and slicing**

*Type: discussion For: Endorsement  
 Source: Ericsson*

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

**S3-200390 Reference correction in key hierarchy**

*Type: CR For: Agreement  
 33.501 v16.1.0 CR-0772 Cat: D (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell, Interdigital*

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

**S3-200415 SUCI computation: test data Rel-15**

*Type: CR For: Approval  
 33.501 v15.7.0 CR-0778 Cat: F (Rel-15)  
  
 Source: THALES*

**Abstract:**

SUCI computation: test data for network specific identifier-based SUPI - Rel-15

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

**S3-200417 SUCI computation: test data Rel-16**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0779 Cat: A (Rel-16)  
  
 Source: THALES*

**Abstract:**

SUCI computation: test data for network specific identifier-based SUPI - Rel-16

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

**S3-200422 LS on AMF Reallocation via RAN re-routing**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2001730*

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

**S3-200431 CR to TS 33.501 to clarify support for User Plane Integrity Protection in NR**

*Type: CR For: Endorsement  
 33.501 v16.1.0 CR-0780 Cat: C (Rel-16)  
  
 Source: VODAFONE Group Plc*

**Abstract:**

This CR clarifies that support for User Plane Integrity Protection in the UE and the gNB is mandatory for all supported data rates.

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

**S3-200435 Clarification on native security context activation in handover from EPS to 5GS**

*Type: CR For: Approval  
 33.501 v15.7.0 CR-0781 Cat: F (Rel-15)  
  
 Source: Qualcomm Incorporated*

**Abstract:**

It is clarified that in order to activate the native security context, AMF shall perform NAS SMC and added a note saying when to activate it is up to AMF

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

**S3-200436 Key derivation for CHO(NR R16)**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0759 rev 1 Cat: C (Rel-16)  
  
 Source: Apple Computer Trading Co. Ltd*

(Replaces S3-200338)

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

**S3-200437 Key derivation for CHO(LTE R16)**

*Type: CR For: Approval  
 33.401 v16.1.0 CR-0690 rev 1 Cat: C (Rel-16)  
  
 Source: Apple Computer Trading Co. Ltd*

(Replaces S3-200337)

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

**S3-200477 UE handling on CHO key derivation for NR**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0745 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

(Replaces S3-200230)

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

**S3-200479 UE handling on CHO key derivation for LTE**

*Type: CR For: Approval  
 33.401 v16.1.0 CR-0689 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

(Replaces S3-200231)

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

**S3-200490 Clarification on native security context activation in handover from EPS to 5GS**

*Type: CR For: Approval  
 33.501 v16.1.0 CR-0760 rev 1 Cat: A (Rel-16)  
  
 Source: Qualcomm Incorporated*

(Replaces S3-200358)

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

**S3-200517 Reply LS to LS on native 5G NAS security context activation**

*Type: LS out For: Agreement  
 to CT1  
 Source: Intel Corporation (UK) Ltd*

(Replaces S3-200175)

**Decision:** The document was **revised to S3-200529**.

**S3-200529 Reply LS to LS on native 5G NAS security context activation**

*Type: LS out For: Agreement  
 to CT1  
 Source: Intel Corporation (UK) Ltd*

(Replaces S3-200517)

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

## 4 New work and study item proposals

**S3-200078 Discussion on the Support of Multi-CU-UP connectivity in Rel-17**

*Type: discussion For: Discussion  
 Source: China Telecom Corporation Ltd.*

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

**S3-200079 Study on the security of Multi-CU-UP connectivity**

*Type: SID new For: Approval  
 Source: China Telecom,CATT,Xiaomi,vivo*

**Decision:** The document was **revised to S3-200341**.

**S3-200152 Discussion paper for Rel17 SID on UAS**

*Type: discussion For: Discussion  
 Source: Huawei, HiSilicon, China Unicom, CATT*

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

**S3-200153 Study on security aspects of UAS Remote Identification and Application**

*Type: SID new For: Approval  
 Source: Huawei, HiSilicon, China Unicom, CATT*

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

**S3-200154 Discussion paper for Rel17 SID on network slicing security**

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

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

**S3-200155 New SID on security aspects of network slicing - RAN and Phase 2**

*Type: SID new For: Approval  
 Source: Huawei, HiSilicon*

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

**S3-200178 New SID on the security of the system enablers for devices having multiple Universal Subscriber Identity Modules (USIM)**

*Type: SID new For: (not specified)  
 Source: Intel Corporation (UK) Ltd*

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

**S3-200179 Discussion on new SID Security Study on system enablers for devices having multiple USIMS**

*Type: discussion For: (not specified)  
 Source: Intel Corporation (UK) Ltd*

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

**S3-200192 Study on Security Aspects of Enhancement for Proximity Based Services in 5GS**

*Type: SID new For: Approval  
 Source: CATT*

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

**S3-200214 New SID: Study on Security Aspects of Enhancement of Support for Edge Computing in 5GC**

*Type: SID new For: Approval  
 Source: Huawei, Hisilicon, China Unicom, CAICT, China Telecom, ZTE*

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

**S3-200261 Discussion for 5G SCAS Enhancement**

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

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

**S3-200262 New WID for 5G SCAS Enhancement**

*Type: WID new For: Approval  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200459**.

**S3-200267 Discussion on security of 5G multicast-broadcast services**

*Type: discussion For: Endorsement  
 Source: Huawei, Hisilicon*

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

**S3-200268 New SID: Study on Security Aspects of Enhancements for 5G Multicast-Broadcast Services**

*Type: SID new For: Approval  
 Source: Huawei, Hisilicon*

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

**S3-200279 New SID: Study on Security Aspects of Enhancement of Support for Edge Applications in 5GC**

*Type: SID new For: (not specified)  
 Source: China Unicom, CAICT, China Telecom, Huawei, Hisilicon, ZTE*

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

**S3-200280 New WID on Security Assurance Specification for Non-3GPP InterWorking Function (N3IWF)**

*Type: WID new For: (not specified)  
 Source: China Unicom, CAICT, China Mobile, CATT, ZTE*

**Decision:** The document was **revised to S3-200527**.

**S3-200527 New WID on Security Assurance Specification for Non-3GPP InterWorking Function (N3IWF)**

*Type: WID new For: -  
 Source: China Unicom, CAICT, China Mobile, CATT, ZTE*

(Replaces S3-200280)

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

**S3-200281 New WID on Study of certificate management for Service Based Architecture (SBA)**

*Type: SID new For: Approval  
 Source: Ericsson*

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

**S3-200314 New SID on Slice isolation**

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

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

**S3-200315 VERTICAL: New SID: Study on enhanced security support for Non-Public Networks**

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

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

**S3-200341 Study on the security of Multi-CU-UP connectivity**

*Type: SID new For: Approval  
 Source: China Telecom,China Unicom, CATT, Xiaomi, vivo*

(Replaces S3-200079)

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

**S3-200355 New WID on study of security aspects of Unmanned Aerial Systems**

*Type: SID new For: Agreement  
 Source: Qualcomm Incorporated*

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

**S3-200394 Work Item on Security Assurance Specification for 5G NWDAF**

*Type: WID new For: Approval  
 Source: China Mobile, China Unicom, CAICT, ZTE*

**Decision:** The document was **revised to S3-200525**.

**S3-200525 Work Item on Security Assurance Specification for 5G NWDAF**

*Type: WID new For: Approval  
 Source: China Mobile, China Unicom, CAICT, ZTE*

(Replaces S3-200394)

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

**S3-200395 New SID on security aspects of UAS Connectivity, Identification, and Tracking**

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

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

**S3-200396 Discussion on new SID for security of UAS Connectivity, Identification, and Tracking**

*Type: discussion For: Discussion  
 Source: China Mobile*

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

**S3-200409 New WID on Security Assurance Specification for Service Communication Proxy (SECOP)**

*Type: WID new For: Approval  
 Source: Nokia, Nokia Shanghai Bell, Deutsch Telecom, T-Mobile USA, China Mobile, China Unicom*

**Abstract:**

This WID proposes to develop the Security Assurance Specification (SCAS) for the Service Communication Proxy (SECOP) network product class.

**Decision:** The document was **revised to S3-200526**.

**S3-200526 New WID on Security Assurance Specification for Service Communication Proxy (SECOP)**

*Type: WID new For: Approval  
 Source: Nokia, Nokia Shanghai Bell, Deutsch Telecom, T-Mobile USA, China Mobile, China Unicom*

(Replaces S3-200409)

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

**S3-200439 WI exception request for eV2X**

*Type: WI exception request For: (not specified)  
 Source: LG Electronics Inc.*

**Abstract:**

This work item exception requests to extend the deadline of the SA3 eV2X work till June 2020

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

**S3-200459 New WID for 5G SCAS Enhancement**

*Type: WID new For: Approval  
 Source: Huawei, Hisilicon*

(Replaces S3-200262)

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

## Annex A: Contribution documents and status

### A1: List of TDocs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| * S3-200050 | * Agenda | * WG Chair | * approved |  |  |
| * S3-200051 | * LS to 3GPP SA3 to consider appropriate authorization and authentication when providing network slice access | * GSMA | * replied to |  |  |
| * S3-200052 | * LS on Sending CAG ID | * S2-2001616 | * postponed |  |  |
| * S3-200053 | * Reply LS on Sending CAG ID in NAS layer | * R2-1916349 | * postponed |  |  |
| * S3-200054 | * Reply LS on PC5S and PC5 RRC unicast message protection | * R2-1916461 | * noted |  |  |
| * S3-200055 | * Reply LS on LS on PC5S and PC5 RRC unicast message protection | * S2-1912002 | * postponed |  |  |
| * S3-200056 | * Reply LS on PC5 unicast and groupcast security protection | * S2-2000971 | * postponed |  |  |
| * S3-200057 | * LS on NR V2X Security issue and PDCP SN size | * R2-1916467 | * replied to |  |  |
| * S3-200058 | * Reply LS on NSI requirements | * S1-193596 | * noted |  |  |
| * S3-200059 | * Reply LS on NPN clarifications | * S1-193605 | * postponed |  |  |
| * S3-200060 | * Reply LS on SUCI computation from an NSI | * S2-1912417 | * noted |  |  |
| * S3-200061 | * Reply LS on token-based authorization for indirect communication with delegated discovery (Scenario D) | * S2-1912657 | * noted |  |  |
| * S3-200062 | * Reply LS on clarification on the requirement for steering of roaming | * S2-1912764 | * noted |  |  |
| * S3-200063 | * LS on Further clarifications on GLI/GCI and Line ID/ HFC\_Identifier | * S2-1912767 | * noted |  |  |
| * S3-200064 | * Reply LS on 5G-S-TMSI Truncation Procedure | * S2-2001248 | * postponed |  |  |
| * S3-200065 | * Reply LS to Transfer the study on service-based support for SMS in 5GC to CT WGs | * SP-191362 | * postponed |  |  |
| * S3-200066 | * Reply LS to LS on analytics support for energy saving | * SP-191378 | * noted |  |  |
| * S3-200067 | * Reply LS on AUSF role in slice specific authentication | * S2-1910668 | * postponed |  |  |
| * S3-200068 | * LS on security consideration of performance measurement function protocol | * C1-196940 | * postponed |  |  |
| * S3-200069 | * Reply LS on how the IWF obtains key material for interworking group and private communications | * S6-192194 | * postponed |  |  |
| * S3-200070 | * LS on native 5G NAS security context activation | * C1-199003 | * replied to |  |  |
| * S3-200071 | * LS on ARPF in UDICOM | * C4-195553 | * postponed |  |  |
| * S3-200072 | * LS on uniqueness of PEI in certain FN-RG configurations | * s3i200069 | * postponed |  |  |
| * S3-200073 | * TS 33.536 - Security procedure for unicast messages over PC5 | * InterDigital Communications | * merged |  | * S3-200507 |
| * S3-200074 | * TS 33.536 - Privacy protection procedure for unicast messages over PC5 | * InterDigital Communications | * merged |  | * S3-200510 |
| * S3-200075 | * TS 33.536 - Privacy protection requirements for unicast messages over PC5 | * InterDigital Communications | * merged |  | * S3-200496 |
| * S3-200076 | * TS 33.536 - Security requirements for unicast messages over PC5 | * InterDigital Communications | * merged |  | * S3-200496 |
| * S3-200077 | * Security requirements for unicast mode | * Oy LM Ericsson AB | * merged |  | * S3-200496 |
| * S3-200078 | * Discussion on the Support of Multi-CU-UP connectivity in Rel-17 | * China Telecom Corporation Ltd. | * noted |  |  |
| * S3-200079 | * Study on the security of Multi-CU-UP connectivity | * China Telecom,CATT,Xiaomi,vivo | * revised |  | * S3-200341 |
| * S3-200080 | * [33.180] R16 - Formatting corrections | * Motorola Solutions Danmark A/S | * agreed |  |  |
| * S3-200081 | * [33.180] R16 - MC Gateway security | * Motorola Solutions Danmark A/S | * revised |  | * S3-200514 |
| * S3-200082 | * [33.434] SEAL key management procedure | * Motorola Solutions Danmark A/S | * noted |  |  |
| * S3-200083 | * AGF-side SEG option | * Juniper Networks | * agreed |  |  |
| * S3-200084 | * [33.180] R16 MC location authorization | * Motorola Solutions Danmark A/S | * agreed |  |  |
| * S3-200085 | * TS 33.536 - Common Security Requirement over NR PC5 | * LG Electronics Inc. | * noted |  |  |
| * S3-200086 | * TS 33.536 - Common Security Procedure over NR PC5 | * LG Electronics Inc. | * noted |  |  |
| * S3-200087 | * TS 33.536 - Text for general clauses | * LG Electronics Inc. | * approved |  |  |
| * S3-200088 | * TS 33.536 - Clean-up for broadcast and groupcast | * LG Electronics Inc. | * approved |  |  |
| * S3-200089 | * Reply LS to RAN2 on FBS detection | * Huawei, HiSilicon | * withdrawn |  |  |
| * S3-200090 | * VAL Client authentication | * SAMSUNG | * withdrawn |  |  |
| * S3-200091 | * [Draft CR]Solution for IAB Architecture (Baseline version) | * Samsung | * revised |  | * S3-200443 |
| * S3-200092 | * Security requirement update in clause 5.1 | * SAMSUNG | * withdrawn |  |  |
| * S3-200093 | * [Draft CR] F1 interface set-up procedure | * Samsung, Thales, Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200094 | * Security for SEAL interfaces | * SAMSUNG | * withdrawn |  |  |
| * S3-200095 | * Annex X: OpenID Connect | * SAMSUNG | * withdrawn |  |  |
| * S3-200096 | * [Draft CR] Cleanup of IAB draft CR | * Samsung | * approved |  |  |
| * S3-200097 | * Terminology alignment | * SAMSUNG | * withdrawn |  |  |
| * S3-200098 | * Group key management in SEAL | * SAMSUNG | * withdrawn |  |  |
| * S3-200099 | * Key generation and distribution in SEAL | * SAMSUNG | * withdrawn |  |  |
| * S3-200100 | * Security policy handling for NR PC5 | * SAMSUNG | * withdrawn |  |  |
| * S3-200101 | * AKMA key derivation | * SAMSUNG | * withdrawn |  |  |
| * S3-200102 | * UP security in TSC | * SAMSUNG | * withdrawn |  |  |
| * S3-200103 | * Wayforward for UP security in TSC | * SAMSUNG | * withdrawn |  |  |
| * S3-200104 | * Alignment of the term NPN | * SAMSUNG | * withdrawn |  |  |
| * S3-200105 | * NF and NRF mutual Authentication during Indirect communication | * Mavenir, Deutsche Telekom AG | * noted |  |  |
| * S3-200106 | * Clarification of Indirect Communication Mutual Authentication | * Mavenir, Deutsche Telekom AG, Nokia | * not pursued |  |  |
| * S3-200107 | * V2X UE source IP address randomization | * Futurewei Technologies | * noted |  |  |
| * S3-200108 | * eV2X UE source IP address randomization | * Futurewei Technologies | * approved |  |  |
| * S3-200109 | * Referencing Annex I for non-public networks in untrusted non-3GPP access case | * CableLabs, Nokia, Nokia Shanghai Bell, Charter Communications | * not pursued |  |  |
| * S3-200110 | * [33.180] R16 SeGy IWF corrections | * Motorola Solutions Danmark A/S | * revised |  | * S3-200515 |
| * S3-200111 | * Discussion paper on SA2 LS S2-2001730 on AMF reallocation via RAN r-routing | * Nokia Germany | * noted |  |  |
| * S3-200112 | * draft reply LS to SA2 LS S2-2001730 on AMF reallocation | * Nokia Germany | * noted |  |  |
| * S3-200113 | * draft reply LS to CT1 LS S3-200070 on activating 5G native NAS context | * Nokia Germany | * noted |  |  |
| * S3-200114 | * draft reply LS to CT1 on PMF protocol security | * Nokia Germany | * noted |  |  |
| * S3-200115 | * draft reply LS to SA2 LS on AUSF role in slice specific authentication | * Nokia Germany | * noted |  |  |
| * S3-200116 | * Discussion paper on AUSF role for Network Slice specific authentication | * Nokia Germany | * noted |  |  |
| * S3-200117 | * Enhanced Network Slicing living CR from SA3#97 | * Nokia Germany | * noted |  |  |
| * S3-200118 | * draft CR for clause x.x.3 Slice specific authentication of living CR | * Nokia Germany | * noted |  |  |
| * S3-200119 | * draft CR for clause x.x.4 of Enhanced Network Slicing Living CR | * Nokia Germany | * noted |  |  |
| * S3-200120 | * draft CR for clause x.x.5 AAA triggered revocation of eNS living CR | * Nokia Germany | * noted |  |  |
| * S3-200121 | * draft CR for clause 14 AUSF services of eNS living CR | * Nokia Germany | * noted |  |  |
| * S3-200122 | * Discussion on GSMA LS 5GSTF20\_001 on appropriate authentication for Network slice | * Nokia Germany | * noted |  |  |
| * S3-200123 | * draft reply to GSMA LS 5GSTF20\_001 on NS authentication | * Nokia Germany | * merged |  | * S3-200442 |
| * S3-200124 | * Discussion on V2X LS R2-1916467 | * Nokia Germany | * noted |  |  |
| * S3-200125 | * draft reply LS to RAN2 on V2X PDCP SN size and security | * Nokia Germany | * noted |  |  |
| * S3-200126 | * reply LS on security consideration of performance measurement function protocol | * ZTE Corporation | * noted |  |  |
| * S3-200127 | * Discussion on AMF Reallocation via RAN re-routing | * ZTE Corporation | * noted |  |  |
| * S3-200128 | * reply LS on AMF Reallocation via RAN re-routing | * ZTE Corporation | * noted |  |  |
| * S3-200129 | * Adding UDM to AKMA reference model | * ZTE Corporation | * revised |  | * S3-200511 |
| * S3-200130 | * AKMA anchor key identifier update | * ZTE Corporation | * noted |  |  |
| * S3-200131 | * resolve EN in clause 6.1 | * ZTE Corporation | * merged |  | * S3-200513 |
| * S3-200132 | * resolve EN in clause 6.2 | * ZTE Corporation | * noted |  |  |
| * S3-200133 | * AKMA anchor Key push | * ZTE Corporation | * noted |  |  |
| * S3-200134 | * network initials AKMA anchor key update | * ZTE Corporation | * noted |  |  |
| * S3-200135 | * UE initials AKMA anchor key update | * ZTE Corporation | * noted |  |  |
| * S3-200136 | * Update 6.2 | * ZTE Corporation | * revised |  | * S3-200512 |
| * S3-200137 | * Corrections in clause 6.1.2-R16 | * ZTE Corporation | * withdrawn |  |  |
| * S3-200138 | * Corrections in clause 6.1.2-R15 | * ZTE Corporation | * withdrawn |  |  |
| * S3-200139 | * Clarification for distribution of subscriber identities and security data in clause 6.3.1.2-R16 | * ZTE Corporation | * withdrawn |  |  |
| * S3-200140 | * Clarification for distribution of subscriber identities and security data in clause 6.3.1.2-R15 | * ZTE Corporation | * withdrawn |  |  |
| * S3-200141 | * remove the EN in clause 6.8.1.2.4-R16 | * ZTE Corporation | * withdrawn |  |  |
| * S3-200142 | * remove the EN in clause 6.8.1.2.4-R15 | * ZTE Corporation | * withdrawn |  |  |
| * S3-200143 | * Security handling in registration with AMF re-allocation via direct NAS reroute-R16 | * ZTE Corporation | * not pursued |  |  |
| * S3-200144 | * Security handling in registration with AMF re-allocation via direct NAS reroute-R15 | * ZTE Corporation | * withdrawn |  |  |
| * S3-200145 | * remove the EN in clause 13.2.3.6-R16 | * ZTE Corporation | * withdrawn |  |  |
| * S3-200146 | * remove the EN in clause 13.2.3.6-R15 | * ZTE Corporation | * withdrawn |  |  |
| * S3-200147 | * Remove the EN in clause 13.5-R16 | * ZTE Corporation | * withdrawn |  |  |
| * S3-200148 | * Remove the EN in clause 13.5-R15 | * ZTE Corporation | * withdrawn |  |  |
| * S3-200149 | * Discussion on AUSF role | * Huawei, HiSilicon | * noted |  |  |
| * S3-200150 | * Draft LS reply to SA2 on AUSF | * Huawei, HiSilicon | * noted |  |  |
| * S3-200151 | * Draft LS reply to GSMA on slice access | * Huawei, HiSilicon | * revised |  | * S3-200442 |
| * S3-200152 | * Discussion paper for Rel17 SID on UAS | * Huawei, HiSilicon, China Unicom, CATT | * noted |  |  |
| * S3-200153 | * Study on security aspects of UAS Remote Identification and Application | * Huawei, HiSilicon, China Unicom, CATT | * noted |  |  |
| * S3-200154 | * Discussion paper for Rel17 SID on network slicing security | * Huawei, HiSilicon | * noted |  |  |
| * S3-200155 | * New SID on security aspects of network slicing - RAN and Phase 2 | * Huawei, HiSilicon | * noted |  |  |
| * S3-200156 | * Security procedures for network slices | * Huawei, HiSilicon | * noted |  |  |
| * S3-200157 | * Addressing ENs in security procedures for network slices | * Huawei, HiSilicon | * noted |  |  |
| * S3-200158 | * Addessing EN on transmitting NSSAI to AAA | * Huawei, HiSilicon | * noted |  |  |
| * S3-200159 | * CR to slice management on NSaaS | * Huawei, HiSilicon | * noted |  |  |
| * S3-200160 | * Adding UP security policy for 5GLAN groups | * Huawei, HiSilicon | * merged |  | * S3-200455 |
| * S3-200161 | * Discussion paper on eV2X groupcast privacy | * Huawei, HiSilicon | * noted |  |  |
| * S3-200162 | * Adding privacy procedures for V2X Groupcast communications | * Huawei, HiSilicon | * noted |  |  |
| * S3-200163 | * VAL Client authentication | * SAMSUNG | * revised |  | * S3-200451 |
| * S3-200164 | * Security requirement update in clause 5.1 | * SAMSUNG | * approved |  |  |
| * S3-200165 | * Security procedure for SEAL interfaces | * SAMSUNG | * merged |  | * S3-200493 |
| * S3-200166 | * Annex X: OpenID Connect | * SAMSUNG | * revised |  | * S3-200452 |
| * S3-200167 | * Terminology alignment | * SAMSUNG | * approved |  |  |
| * S3-200168 | * Group key management in SEAL | * SAMSUNG | * noted |  |  |
| * S3-200169 | * Key generation and distribution in SEAL | * SAMSUNG | * noted |  |  |
| * S3-200170 | * Security policy handling for NR PC5 | * SAMSUNG | * merged |  | * S3-200507 |
| * S3-200171 | * AKMA key derivation | * SAMSUNG | * noted |  |  |
| * S3-200172 | * UP security in TSC | * SAMSUNG | * not pursued |  |  |
| * S3-200173 | * Wayforward for UP security in TSC | * SAMSUNG | * noted |  |  |
| * S3-200174 | * Alignment of the term NPN | * SAMSUNG | * not pursued |  |  |
| * S3-200175 | * Reply LS to LS on native 5G NAS security context activation | * Intel Corporation (UK) Ltd | * revised |  | * S3-200517 |
| * S3-200176 | * Security of RRC UE capability transfer procedure in 5G for CIoT optimisation | * Intel Corporation (UK) Ltd | * noted |  |  |
| * S3-200177 | * Procedure to transfer UE capability for UEs without AS Security | * Intel Corporation (UK) Ltd | * noted |  |  |
| * S3-200178 | * New SID on the security of the system enablers for devices having multiple Universal Subscriber Identity Modules (USIM) | * Intel Corporation (UK) Ltd | * noted |  |  |
| * S3-200179 | * Discussion on new SID Security Study on system enablers for devices having multiple USIMS | * Intel Corporation (UK) Ltd | * noted |  |  |
| * S3-200180 | * Security of RRC UE capability transfer procedure in EPS | * Intel Corporation (UK) Ltd | * revised |  | * S3-200516 |
| * S3-200181 | * Add description of the KAKMA Key ID allocation | * CATT | * noted |  |  |
| * S3-200182 | * Add the functionalities of the AUSF into clause 4.2 | * CATT | * noted |  |  |
| * S3-200183 | * Modification on the RRC connection resume procedure | * CATT | * not pursued |  |  |
| * S3-200184 | * Discussion for AS rekeying failure on Xn-Handover | * CATT | * withdrawn |  |  |
| * S3-200185 | * Clarification on AS rekeying failure | * CATT | * withdrawn |  |  |
| * S3-200186 | * Clarification on the Xn-Handover procedure | * CATT | * withdrawn |  |  |
| * S3-200187 | * LS reply to RAN WG2 LS on NR V2X Security issue and PDCP SN size | * CATT | * revised |  | * S3-200478 |
| * S3-200188 | * Adding a clause of "Threats related to key reuse" for the eNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * revised |  | * S3-200502 |
| * S3-200189 | * Draft CR as a living baseline for 5GS LCS normative work | * CATT | * approved |  |  |
| * S3-200190 | * Removing ENs in Draft CR as a living baseline for 5GS LCS normative work | * CATT | * noted |  |  |
| * S3-200191 | * Updating the clause of "Key Reuse" for the gNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * revised |  | * S3-200503 |
| * S3-200192 | * Study on Security Aspects of Enhancement for Proximity Based Services in 5GS | * CATT | * noted |  |  |
| * S3-200193 | * Authorization in the Subscribe-Notify interaction scenarios | * Huawei, Hisilicon | * noted |  |  |
| * S3-200194 | * Resource-based authorization | * Huawei, Hisilicon | * noted |  |  |
| * S3-200195 | * Discussion on authentication result removal | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200196 | * JSON object modification - R15 | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200197 | * JSON object modification - R16 | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200198 | * SUCI computation clarification - R15 | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200199 | * SUCI computation clarification - R16 | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200200 | * compatibility issue in resume request protection | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200201 | * New test case on NAS integrity protection | * Huawei, Hisilicon | * revised |  | * S3-200473 |
| * S3-200202 | * Solving registration failure in registration procedure with AMF reallocation | * Huawei, Hisilicon * CMCC,ChinaTelecom | * not pursued |  |  |
| * S3-200203 | * Clarification on AMF reallocation via direct NAS reroute | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200204 | * Clarification on AMF reallocation via direct NAS reroute | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-200205 | * Discussion on horizontal Kamf derivation in direct NAS reroute | * Huawei, Hisilicon | * noted |  |  |
| * S3-200206 | * Discussion on AMF reallocation | * Huawei, Hisilicon * CMCC,ChinaTelecom | * noted |  |  |
| * S3-200207 | * Discussion on slice separation | * Huawei, Hisilicon | * noted |  |  |
| * S3-200208 | * LS reply to SA2 on AMF reallocation | * Huawei, Hisilicon | * noted |  |  |
| * S3-200209 | * Clarification on confidential IEs replacement handling in original N32-f message | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-200210 | * Clarification on the clause 4.3.6.4 according to TS 29.501 | * Huawei, Hisilicon | * revised |  | * S3-200497 |
| * S3-200211 | * eV2X: PC5 UP security policy activation | * Huawei, Hisilicon | * revised |  | * S3-200468 |
| * S3-200212 | * eV2X: PC5 key hierarchy | * Huawei, Hisilicon | * merged |  | * S3-200501 |
| * S3-200213 | * Discussion on CAG access control authorization | * Huawei, Hisilicon | * noted |  |  |
| * S3-200214 | * New SID: Study on Security Aspects of Enhancement of Support for Edge Computing in 5GC | * Huawei, Hisilicon, China Unicom, CAICT, China Telecom, ZTE | * noted |  |  |
| * S3-200215 | * Clarification on NF consumer instance ID verification | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-200216 | * AKMA: Key ID generation | * Huawei, Hisilicon | * revised |  | * S3-200499 |
| * S3-200217 | * Clarification on exposure of confidential IEs in N32-f message in TR 33.926 | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-200218 | * eV2X: requirements for algorithm | * Huawei, Hisilicon | * merged |  | * S3-200508 |
| * S3-200219 | * eV2X: Discussion on LC ID used for PDCP protection | * Huawei, Hisilicon | * noted |  |  |
| * S3-200220 | * Clarification on native 5G NAS security context activation after an inter-system change from S1 mode to N1 mode in idle mode in Rel15 | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-200221 | * Mirror for clarification on native 5G NAS security context activation after an inter-system change from S1 mode to N1 mode in idle mode in Rel16 | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-200222 | * [DRAFT] Reply LS on native 5G NAS security context activation | * Huawei, Hisilicon | * noted |  |  |
| * S3-200223 | * Clarification on PLMN ID verification | * Huawei, Hisilicon | * revised |  | * S3-200498 |
| * S3-200224 | * Clarification on IPX certificate acquirement in SEPP | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200225 | * Mirror for clarification on IPX certificate acquirement in SEPP | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200226 | * Address the ENs on Security procedures for Small Data Transfer in Control Plane CIoT 5GS Optimisation | * Huawei, Hisilicon | * revised |  | * S3-200474 |
| * S3-200227 | * Address EN for Calculation of ShortResumeMAC-I for UP CIoT Optimisation | * Huawei, Hisilicon | * noted |  |  |
| * S3-200228 | * Address the ENs on Security handling in User Plane CIoT 5GS Optimisation | * Huawei, Hisilicon | * revised |  | * S3-200475 |
| * S3-200229 | * Security handling for UP data protection for UP CIoT 5GS Opmitization | * Huawei, Hisilicon | * revised |  | * S3-200476 |
| * S3-200230 | * UE handling on CHO key derivation for NR | * Huawei, Hisilicon | * revised |  | * S3-200477 |
| * S3-200231 | * UE handling on CHO key derivation for LTE | * Huawei, Hisilicon | * revised |  | * S3-200479 |
| * S3-200232 | * Include Resume Request Message to Calculation of ShortResumeMAC-I for INACTIVE | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200233 | * Authentication in PNI-NPN | * Huawei, Hisilicon | * revised |  | * S3-200480 |
| * S3-200234 | * Adding SEAL security requirements | * Huawei, Hisilicon | * revised |  | * S3-200492 |
| * S3-200235 | * Adding security requirements of interfaces for SEAL | * Huawei, Hisilicon | * revised |  | * S3-200493 |
| * S3-200236 | * Adding authorization procedures of SEAL system | * Huawei, Hisilicon | * revised |  | * S3-200494 |
| * S3-200237 | * Adding SEAl security procedures for interconnection | * Huawei, Hisilicon | * revised |  | * S3-200495 |
| * S3-200238 | * adding V2X groupcast privacy requirement | * Huawei, Hisilicon | * noted |  |  |
| * S3-200239 | * Adding V2X unicast security requirements | * Huawei, Hisilicon | * merged |  | * S3-200496 |
| * S3-200240 | * Adding V2X common requirements | * Huawei, Hisilicon | * noted |  |  |
| * S3-200241 | * Adding abbreviations to the V2X TS | * Huawei, Hisilicon | * approved |  |  |
| * S3-200242 | * Update testcases of eNB SCAS | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200243 | * Mirror - Update testcases of eNB SCAS | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200244 | * Clarification on UP security activation | * Huawei, Hisilicon | * revised |  | * S3-200472 |
| * S3-200245 | * Removing EN | * Huawei, Hisilicon | * revised |  | * S3-200469 |
| * S3-200246 | * Living of URLLC | * Huawei, Hisilicon | * revised |  | * S3-200471 |
| * S3-200247 | * Living of 5WWC | * Huawei, Hisilicon | * revised |  | * S3-200467 |
| * S3-200248 | * Update clause 4.1 | * Huawei, Hisilicon | * noted |  |  |
| * S3-200249 | * Editoral change on clause 4.3 | * Huawei, Hisilicon | * approved |  |  |
| * S3-200250 | * Adding AF under Network element clause | * Huawei, Hisilicon | * revised |  | * S3-200460 |
| * S3-200251 | * Adding NEF under the Network element clause | * Huawei, Hisilicon | * revised |  | * S3-200461 |
| * S3-200252 | * Delete EN of clause 4.4 | * Huawei, Hisilicon | * noted |  |  |
| * S3-200253 | * Delete EN of clause 5.2 | * Huawei, Hisilicon | * merged |  | * S3-200447 |
| * S3-200254 | * life time of Key identifier | * Huawei, Hisilicon | * noted |  |  |
| * S3-200255 | * The time when the key identifier is generated | * Huawei, Hisilicon | * merged |  | * S3-200486 |
| * S3-200256 | * KAKMA Derivation | * Huawei, Hisilicon | * merged |  | * S3-200513 |
| * S3-200257 | * AAnF checks the authorization information of AF | * Huawei, Hisilicon | * revised |  | * S3-200463 |
| * S3-200258 | * Add details on deleting Kakma | * Huawei, Hisilicon | * noted |  |  |
| * S3-200259 | * Kaf update procedure | * Huawei, Hisilicon | * noted |  |  |
| * S3-200260 | * Editoral Change on reference clauses | * Huawei, Hisilicon | * withdrawn |  | * - |
| * S3-200261 | * Discussion for 5G SCAS Enhancement | * Huawei, Hisilicon | * noted |  |  |
| * S3-200262 | * New WID for 5G SCAS Enhancement | * Huawei, Hisilicon | * revised |  | * S3-200459 |
| * S3-200263 | * CR on requirements for algorithm selection and handover from EPS to 5GS over N26 | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200264 | * CR on requirements for algorithm selection and handover from EPS to 5GS over N26 | * Huawei, Hisilicon | * withdrawn |  |  |
| * S3-200265 | * Discussion paper on UE radio capability protection for UEs without AS security | * Huawei, HiSilicon,China Mobile | * noted |  |  |
| * S3-200266 | * Protection of UE radio capability transfer for CIoT UEs that only support CP optimization | * Huawei, HiSilicon,China Mobile | * noted |  |  |
| * S3-200267 | * Discussion on security of 5G multicast-broadcast services | * Huawei, Hisilicon | * noted |  |  |
| * S3-200268 | * New SID: Study on Security Aspects of Enhancements for 5G Multicast-Broadcast Services | * Huawei, Hisilicon | * noted |  |  |
| * S3-200269 | * Add clarifications to the living CR | * Huawei, Hisilicon | * noted |  |  |
| * S3-200270 | * Add requirement and feature to the DraftCR | * Huawei, Hisilicon | * revised |  | * S3-200458 |
| * S3-200271 | * Correction to security capability negotiation between SEPPs | * Huawei, HiSilicon,China Mobile | * withdrawn |  |  |
| * S3-200272 | * Correction to security capability negotiation between SEPPs | * Huawei, HiSilicon,China Mobile | * withdrawn |  |  |
| * S3-200273 | * Correction to initial EAP Authentication with an external AAA server | * Huawei, HiSilicon | * withdrawn |  |  |
| * S3-200274 | * Correction to initial EAP Authentication with an external AAA server | * Huawei, HiSilicon | * withdrawn |  |  |
| * S3-200275 | * Correction to definition about temporary group call related procedures | * Huawei, HiSilicon | * agreed |  |  |
| * S3-200276 | * Correction to definition about the case of 'Temporary group call – user regroup'' | * Huawei, HiSilicon | * withdrawn |  |  |
| * S3-200277 | * Security requirements for UP Gateway Function | * Huawei, HiSilicon | * revised |  | * S3-200481 |
| * S3-200278 | * Reply LS to S2-2001727 on UP gateway function on the N9 interface | * Huawei, HiSilicon | * noted |  |  |
| * S3-200279 | * New SID: Study on Security Aspects of Enhancement of Support for Edge Applications in 5GC | * China Unicom, CAICT, China Telecom, Huawei, Hisilicon, ZTE | * noted |  |  |
| * S3-200280 | * New WID on Security Assurance Specification for Non-3GPP InterWorking Function (N3IWF) | * China Unicom, CAICT, China Mobile, CATT, ZTE | * revised |  | * S3-200527 |
| * S3-200281 | * New WID on Study of certificate management for Service Based Architecture (SBA) | * Ericsson | * noted |  |  |
| * S3-200282 | * Resource Level Authorization using Access Tokens | * Ericsson, Nokia, Nokia Shanghai Bell | * revised |  | * S3-200487 |
| * S3-200283 | * Trust model and purpose of token-based authorization in Scenario D | * Ericsson | * noted |  |  |
| * S3-200284 | * Trust model and token-based authorization for Scenario D | * Ericsson | * noted |  |  |
| * S3-200285 | * Draft-CR as baseline for Token-based authorization for indirect communication with and without delegated discovery | * Ericsson | * approved |  |  |
| * S3-200286 | * Clarifications and corrections for token-based authorization in Scenario C | * Ericsson | * noted |  |  |
| * S3-200287 | * Token-based authorization for Scenario D | * Ericsson | * noted |  |  |
| * S3-200288 | * SCP vs SECOP | * Ericsson | * endorsed |  |  |
| * S3-200289 | * Identifiers in certificates and authorization tokens | * Ericsson | * noted |  |  |
| * S3-200290 | * Authorization of Subscribe-Notify interactions | * Ericsson | * noted |  |  |
| * S3-200291 | * 3gpp-Sbi\_Target-apiRoot header and TLS on N32 | * Ericsson | * revised |  | * S3-200489 |
| * S3-200292 | * draft reply-LS on UP gateway function on the N9 interface | * Ericsson | * revised |  | * S3-200482 |
| * S3-200293 | * Clarification of implicit lifetime | * Ericsson | * revised |  | * S3-200447 |
| * S3-200294 | * AUSF selection for AKMA | * Ericsson | * noted |  |  |
| * S3-200295 | * CR to TS 33.501: AUSF Selection for AKMA | * Ericsson | * noted |  |  |
| * S3-200296 | * pCR to TS 33.535: Update of the AKMA procedures | * Ericsson | * noted |  |  |
| * S3-200297 | * pCR to TS 33.535: UE authentication result notification | * Ericsson | * noted |  |  |
| * S3-200298 | * CR to TS 33.501: UE authentication result notification | * Ericsson | * noted |  |  |
| * S3-200299 | * pCR to TS 33.535: Optimization in AKMA key generation | * Ericsson | * noted |  |  |
| * S3-200300 | * CR to TS 33.501: AKMA key generation optimization | * Ericsson | * noted |  |  |
| * S3-200301 | * pCR to TS 33.535: Application function key refresh | * Ericsson | * noted |  |  |
| * S3-200302 | * [Draft CR] Resume identity I-RNTI in RRC Connection Suspend and Resum | * Ericsson | * merged |  | * S3-200475 |
| * S3-200303 | * [Draft CR] ShortResumeMAC-I in RRC Connection Suspend and Resume | * Ericsson | * merged |  | * S3-200475 |
| * S3-200304 | * [Draft CR] Input to MESSAGE when calculating ShortResumeMAC-I in RRC Connection Suspend and Resume | * Ericsson | * noted |  |  |
| * S3-200305 | * Further evaluation to Solution #25: Security solution for preventing Botnet Attacks from Improper CIOT Device Use | * Ericsson | * withdrawn |  |  |
| * S3-200306 | * [Draft CR] Clean up of editor notes from living CR for 5G CIoT | * Ericsson | * merged |  | * S3-200475 |
| * S3-200307 | * [Draft CR] Updates to Control Plane CIoT 5GS Optimization | * Ericsson | * revised |  | * S3-200519 |
| * S3-200308 | * GUTI allocation for MT-EDT cases | * Ericsson | * noted |  |  |
| * S3-200309 | * [DRAFT] LS on GUTI allocation for MT-EDT cases | * Ericsson | * noted |  |  |
| * S3-200310 | * Way forward for UE caps protection and NB-IoT UEs | * Ericsson | * noted |  |  |
| * S3-200311 | * [Draft CR] RRCReestablishment procedure in 5G CIoT | * Ericsson | * approved |  |  |
| * S3-200312 | * [Draft CR] EDT in User Plane CIoT 5GS Optimization | * Ericsson | * merged |  | * S3-200476 |
| * S3-200313 | * CIOT: draft CR Living document | * Ericsson | * revised |  | * S3-200518 |
| * S3-200314 | * New SID on Slice isolation | * Ericsson | * noted |  |  |
| * S3-200315 | * VERTICAL: New SID: Study on enhanced security support for Non-Public Networks | * Ericsson | * noted |  |  |
| * S3-200316 | * Informative Annex: Deployment scenarios for end-to-end security | * KPN N.V. | * noted |  |  |
| * S3-200317 | * IKEv2 profile update 33.310 | * Ericsson | * revised |  | * S3-200462 |
| * S3-200318 | * Using EAP-TLS with TLS 1.3 | * Ericsson | * agreed |  |  |
| * S3-200319 | * ESP profile update | * Ericsson | * revised |  | * S3-200464 |
| * S3-200320 | * Recovery from NASC verification failure | * MediaTek Inc. | * not pursued |  |  |
| * S3-200321 | * Security requirement for unicast message in PC5 | * Apple Computer Trading Co. Ltd | * merged |  | * S3-200496 |
| * S3-200322 | * Correction for FN-RG authentication: transport of authentication indication from W-AGF to AMF | * Ericsson | * approved |  |  |
| * S3-200323 | * Corrections for N5CW | * Ericsson | * approved |  |  |
| * S3-200324 | * Corrections for 7B.d | * Ericsson | * approved |  |  |
| * S3-200325 | * Trust indication using UPU | * Ericsson | * noted |  |  |
| * S3-200326 | * Corrections for trusted access | * Ericsson | * approved |  |  |
| * S3-200327 | * TNAP mobility using ERP | * Ericsson | * noted |  |  |
| * S3-200328 | * Corrections for Annex X | * Ericsson, Cablelabs, Charter Communications, Huawei, Nokia, Nokia Shanghai Bell, Lenovo, Motorola Mobility | * revised |  | * S3-200448 |
| * S3-200329 | * 3GPP-based access authentication for untrusted non-3GPP access | * Ericsson | * noted |  |  |
| * S3-200330 | * pCR:3GPP-based access authentication for untrusted non-3GPP access | * Ericsson | * noted |  |  |
| * S3-200331 | * Certificate and CRL profile update | * Ericsson | * revised |  | * S3-200465 |
| * S3-200332 | * TLS Recommended Cipher Suites | * Ericsson | * agreed |  |  |
| * S3-200333 | * Required TLS extenstions and algorithms | * Ericsson | * revised |  | * S3-200466 |
| * S3-200334 | * IKEv2 profile update 33.210 | * Ericsson | * agreed |  |  |
| * S3-200335 | * Complete the test cases of key refresh at the eNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * revised |  | * S3-200504 |
| * S3-200336 | * Complete the test cases of key refresh at the gNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * revised |  | * S3-200505 |
| * S3-200337 | * Key derivation for CHO(LTE R16) | * Apple Computer Trading Co. Ltd | * revised |  | * S3-200437 |
| * S3-200338 | * Key derivation for CHO(NR R16) | * Apple Computer Trading Co. Ltd | * revised |  | * S3-200436 |
| * S3-200339 | * LS on security of eLCS | * Ericsson | * noted |  |  |
| * S3-200340 | * [DRAFT] LS on security consideration of performance measurement function protocol | * Apple Computer Trading Co. Ltd | * noted |  |  |
| * S3-200341 | * Study on the security of Multi-CU-UP connectivity | * China Telecom,China Unicom, CATT, Xiaomi, vivo | * noted | * S3-200079 |  |
| * S3-200342 | * Adding the requirements for the for the security of the NR PC5 unicast link | * Qualcomm Incorporated, LG | * revised |  | * S3-200496 |
| * S3-200343 | * Proposed solution for the security policy of unicast connections | * Qualcomm Incorporated | * noted |  |  |
| * S3-200344 | * Proposed skeleton for the security of unicast link procedures | * Qualcomm Incorporated, LG | * noted |  |  |
| * S3-200345 | * Proposed text for general and overview clauses of NR PC5 unicast security | * Qualcomm Incorporated, LG | * revised |  | * S3-200501 |
| * S3-200346 | * Proposed text for keying clause of NR PC5 unicast security | * Qualcomm Incorporated, LG | * revised |  | * S3-200506 |
| * S3-200347 | * Proposed text for security establishment clause of NR PC5 unicast security | * Qualcomm Incorporated | * revised |  | * S3-200507 |
| * S3-200348 | * Proposed text for security protection clause of NR PC5 unicast security | * Qualcomm Incorporated, LG | * revised |  | * S3-200508 |
| * S3-200349 | * Annex for key derivation functions in the V2X TS | * Qualcomm Incorporated, LG | * revised |  | * S3-200509 |
| * S3-200350 | * Allocation of FC values for TS 33.356 | * Qualcomm Incorporated, LG | * not pursued |  |  |
| * S3-200351 | * Proposed requirements for the privacy of NR PC5 unicast connections | * Qualcomm Incorporated, LG | * merged |  | * S3-200496 |
| * S3-200352 | * Proposed procedures for the privacy of NR PC5 unicast connections | * Qualcomm Incorporated, LG | * revised |  | * S3-200510 |
| * S3-200353 | * Discussion on a response LS on AMF Re-allocation | * Qualcomm Incorporated | * noted |  |  |
| * S3-200354 | * Response LS on AMF Reallocation via RAN re-routing | * Qualcomm Incorporated | * noted |  |  |
| * S3-200355 | * New WID on study of security aspects of Unmanned Aerial Systems | * Qualcomm Incorporated | * noted |  |  |
| * S3-200356 | * Changes made to solution 30 in TR 33.861 | * Qualcomm Incorporated | * withdrawn |  |  |
| * S3-200357 | * Protection of UE radio capability transfer for UEs without AS security | * Qualcomm Incorporated | * noted |  |  |
| * S3-200358 | * Clarification on native security context activation in handover from EPS to 5GS | * Qualcomm Incorporated | * revised |  | * S3-200490 |
| * S3-200359 | * Reply LS on native 5G NAS security context activation | * Qualcomm Incorporated | * noted |  |  |
| * S3-200360 | * F1 interface set-up procedure | * Qualcomm Incorporated, Ericsson | * noted |  |  |
| * S3-200361 | * Clarification on the use of SUPI as the Identity in EAP-AKA’ key derivation | * Qualcomm Incorporated | * withdrawn |  |  |
| * S3-200362 | * Clarification on the use of SUPI as the Identity in EAP-AKA’ key derivation | * Qualcomm Incorporated | * withdrawn |  |  |
| * S3-200363 | * pCR : Deriving AKMA key after UE is registered to 5GS | * Qualcomm Incorporated | * revised |  | * S3-200486 |
| * S3-200364 | * pCR : Initiation of AKMA | * Qualcomm Incorporated | * approved |  |  |
| * S3-200365 | * pCR : Requirements on AKMA Key Identifier | * Qualcomm Incorporated | * noted |  |  |
| * S3-200366 | * pCR : Requirements for Ua\* | * Qualcomm Incorporated | * approved |  |  |
| * S3-200367 | * URLLC: Resolve EN about MN being preconfigured with SN capability to perform UP IP | * Ericsson | * merged |  | * S3-200469 |
| * S3-200368 | * URLLC: Error handling in MN when SN cannot comply with UP security policy | * Ericsson | * noted |  |  |
| * S3-200369 | * URLLC: Pairing of redundant PDU sessions in MN | * Ericsson | * noted |  |  |
| * S3-200370 | * Clarification to TSC UP security policy | * Ericsson | * not pursued |  |  |
| * S3-200371 | * 5GLAN UP security policy | * Ericsson | * not pursued |  |  |
| * S3-200372 | * AMF reallocation and slicing | * Ericsson | * noted |  |  |
| * S3-200373 | * Editoral Change on reference clauses | * Huawei, Hisilicon | * agreed | * - |  |
| * S3-200374 | * Reply LS on ARPF in UDICOM | * Ericsson | * noted |  |  |
| * S3-200375 | * VLAN intro added | * Nokia, Nokia Shanghai Bell, Interdigital | * withdrawn |  |  |
| * S3-200376 | * Resolution of ed note on serving network name | * Nokia, Nokia Shanghai Bell, Interdigital | * withdrawn |  |  |
| * S3-200377 | * KI on interworking NPN and PLMN - security req | * Nokia, Nokia Shanghai Bell, Interdigital | * withdrawn |  |  |
| * S3-200378 | * KI on service continuity - threats and reqs | * Nokia, Nokia Shanghai Bell, Interdigital | * withdrawn |  |  |
| * S3-200379 | * Resolution of editors note on AAA | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-200380 | * Threats and requirements on AAA | * Nokia, Nokia Shanghai Bell, Interdigital | * withdrawn |  |  |
| * S3-200381 | * Resolution of editor's note in solution 1 | * Nokia, Nokia Shanghai Bell, Interdigital | * withdrawn |  |  |
| * S3-200382 | * Resolution of editor's note in solution 15 | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-200383 | * UP security policy enforcement in 5GLAN | * Nokia, Nokia Shanghai Bell, Interdigital | * withdrawn |  |  |
| * S3-200384 | * UP security policy enforcement in 5GLAN | * Nokia, Nokia Shanghai Bell, Interdigital | * revised |  | * S3-200455 |
| * S3-200385 | * Referencing Annex for use of authentication methods | * Nokia, Nokia Shanghai Bell, Interdigital | * revised |  | * S3-200456 |
| * S3-200386 | * Clarifications on authentication methods selection and key derivation | * Nokia, Nokia Shanghai Bell, Interdigital | * revised |  | * S3-200457 |
| * S3-200387 | * Modification of CAG ID list | * Nokia, Nokia Shanghai Bell, Interdigital | * agreed |  |  |
| * S3-200388 | * Definition of SN Id for standalone non-public networks | * Nokia, Nokia Shanghai Bell, Interdigital | * agreed |  |  |
| * S3-200389 | * UP integrity enforcement for gPTP messages | * Nokia, Nokia Shanghai Bell, Interdigital | * revised |  | * S3-200454 |
| * S3-200390 | * Reference correction in key hierarchy | * Nokia, Nokia Shanghai Bell, Interdigital | * withdrawn |  |  |
| * S3-200391 | * Derivation of KAF | * China Mobile, Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200392 | * Derivation of KAKMA and related key identifier | * China Mobile, Nokia, Nokia Shanghai Bell | * revised |  | * S3-200513 |
| * S3-200393 | * LS on transformation of S-NSSAI during NSSAA | * China Mobile | * noted |  |  |
| * S3-200394 | * Work Item on Security Assurance Specification for 5G NWDAF | * China Mobile, China Unicom, CAICT, ZTE | * revised |  | * S3-200525 |
| * S3-200395 | * New SID on security aspects of UAS Connectivity, Identification, and Tracking | * China Mobile | * noted |  |  |
| * S3-200396 | * Discussion on new SID for security of UAS Connectivity, Identification, and Tracking | * China Mobile | * noted |  |  |
| * S3-200397 | * A new test case for key update at the gNB on dual connectivity | * Nokia, Nokia Shanghai Bell, NTT DoCoMo,Telecom Italia | * agreed |  |  |
| * S3-200398 | * New test cases for key update at the eNB on dual connectivity | * Nokia, Nokia Shanghai Bell,Telecom Italia | * not pursued |  |  |
| * S3-200399 | * Protection of N9 interface | * Nokia, Nokia Shanghai Bell, Juniper Networks | * revised | * S3-194444 | * S3-200530 |
| * S3-200400 | * draftCR on addessing EN on transmitting NSSAI to AAA | * China Mobile | * noted |  |  |
| * S3-200401 | * Security requirements for Inter-PLMN User Plane Security (IPUPS) function | * Nokia, Nokia Shanghai Bell, Juniper Networks | * merged |  | * S3-200481 |
| * S3-200402 | * Resolving editor's note on namespace: pCR against living baseline for 5GS LCS normative work S3-194465 | * NTT DOCOMO INC. | * noted |  |  |
| * S3-200403 | * eSBA - pCR to update Solution #21 | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-200404 | * eSBA: pCR to update Conclusion on KI #22 | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-200405 | * Validation of Access Token ownership | * Mavenir, Deutsche Telekom AG | * not pursued |  |  |
| * S3-200406 | * Token Based Authorization – Validation of client ownership of the access token | * Mavenir, Deutsche Telekom AG | * noted |  |  |
| * S3-200407 | * Clarification on Token Based Authorization | * Mavenir | * withdrawn |  |  |
| * S3-200408 | * eSBA: Token-based authorization in indirect communication scenario with delegated discovery (Model D) | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200409 | * New WID on Security Assurance Specification for Service Communication Proxy (SECOP) | * Nokia, Nokia Shanghai Bell, Deutsch Telecom, T-Mobile USA, China Mobile, China Unicom | * revised |  | * S3-200526 |
| * S3-200410 | * eSBA: Mutual Authentication between NFs | * Nokia, Nokia Shanghai Bell | * not pursued |  |  |
| * S3-200411 | * Clarification on Token Based Authorization | * Mavenir,Deutsche Telekom | * not pursued |  |  |
| * S3-200412 | * eSBA: NF consumer authentication by the producer in direct communication scenarios | * Nokia, Nokia Shanghai Bell | * not pursued |  |  |
| * S3-200413 | * ERP for TNAP mobility | * Motorola Mobility, Lenovo | * noted |  |  |
| * S3-200414 | * eSBA: Network Function TLS certificate profile | * Nokia, Nokia Shanghai Bell, CommScope | * withdrawn |  |  |
| * S3-200415 | * SUCI computation: test data Rel-15 | * THALES | * withdrawn |  |  |
| * S3-200416 | * 5WWC: Update to Subscriber privacy for wireline access | * Nokia, Nokia Shanghai Bell, CableLabs | * approved |  |  |
| * S3-200417 | * SUCI computation: test data Rel-16 | * THALES | * withdrawn |  |  |
| * S3-200418 | * Identifier conversion in groupcast communication | * Motorola Mobility, Lenovo | * withdrawn |  |  |
| * S3-200419 | * CryptPr: Update to clause 6.1.1 - Common rules to all certificates | * Nokia, Nokia Shanghai Bell, CommScope | * not pursued |  |  |
| * S3-200420 | * CryptPr: Update to CRL Profile in clause 6.1a | * Nokia, Nokia Shanghai Bell, CommScope | * not pursued |  |  |
| * S3-200421 | * eSBA: Network Function TLS certificate profile | * Nokia, Nokia Shanghai Bell, CommScope | * noted |  |  |
| * S3-200422 | * LS on AMF Reallocation via RAN re-routing | * S2-2001730 | * postponed |  |  |
| * S3-200423 | * AGF in 5GC trust domain | * Juniper Networks, Ericsson | * withdrawn |  |  |
| * S3-200424 | * Identifier conversion in groupcast communication | * Motorola Mobility Germany GmbH | * noted |  |  |
| * S3-200425 | * Comments on S3-200289 Identifiers in certificates and authorization tokens | * Huawei, Hisilicon | * noted |  |  |
| * S3-200426 | * Comments on S3-200290 Authorization of Subscribe-Notify interactions | * Huawei, Hisilicon | * revised |  | * S3-200427 |
| * S3-200427 | * Comments on S3-200290 Authorization of Subscribe-Notify interactions | * Huawei, Hisilicon | * noted | * S3-200426 |  |
| * S3-200428 | * Process for SA3#98e electronic meeting | * WG chair | * noted |  |  |
| * S3-200429 | * Meeting minutes of AKMA conference call for SA3#98e | * China Mobile | * noted |  |  |
| * S3-200430 | * Mandatory User Plane Integrity for 5G | * GSMA | * postponed |  |  |
| * S3-200431 | * CR to TS 33.501 to clarify support for User Plane Integrity Protection in NR | * VODAFONE Group Plc | * withdrawn |  |  |
| * S3-200432 | * CIoT - meeting minutes of conf call on UE caps and suspend/resume | * Nanjing Ericsson Panda Com Ltd | * noted |  |  |
| * S3-200433 | * LS to SA3 on NR V2X Security issues | * R2-2001980 | * postponed |  |  |
| * S3-200434 | * Reply LS to LS S3-194452 on UP gateway function on the N9 interface | * S2-2001727 | * replied to |  |  |
| * S3-200435 | * Clarification on native security context activation in handover from EPS to 5GS | * Qualcomm Incorporated | * agreed |  |  |
| * S3-200436 | * Key derivation for CHO(NR R16) | * Apple Computer Trading Co. Ltd | * agreed | * S3-200338 |  |
| * S3-200437 | * Key derivation for CHO(LTE R16) | * Apple Computer Trading Co. Ltd | * agreed | * S3-200337 |  |
| * S3-200438 | * draft TS 33.535 | * China Mobile | * revised |  | * S3-200523 |
| * S3-200439 | * WI exception request for eV2X | * LG Electronics Inc. | * agreed |  |  |
| * S3-200440 | * draft\_TS 33.536 v0.3.0 | * LG Electronics Inc. | * revised |  | * S3-200528 |
| * S3-200441 | * Rel-16 Work Item Exception for 5G\_eSBA | * Nokia, Nokia Shanghai Bell | * agreed |  |  |
| * S3-200442 | * LS reply to GSMA on slice access | * Huawei, HiSilicon | * approved | * S3-200151 |  |
| * S3-200443 | * [Draft CR]Solution for IAB Architecture (Baseline version) | * Samsung | * approved | * S3-200091 |  |
| * S3-200444 | * Solution for IAB Architecture - 5GC | * Samsung, Ericsson, Qualcomm Incorporated, Nokia, Nokia Shanghai Bell, Thales, Intel, Huawei, HiSilicon, AT&T | * agreed |  |  |
| * S3-200445 | * Solution for IAB Architecture - ENDC | * Samsung, Ericsson, Qualcomm Incorporated, Nokia, Nokia Shanghai Bell, Thales, Intel, Huawei, HiSilicon, AT&T | * agreed |  |  |
| * S3-200446 | * Rel-16 Work Item Exception for Security for NR IAB | * Samsung | * agreed |  |  |
| * S3-200447 | * Clarification of implicit lifetime | * Ericsson | * approved | * S3-200293 |  |
| * S3-200448 | * Corrections for Annex X | * Ericsson, Cablelabs, Charter Communications, Huawei, Nokia, Nokia Shanghai Bell, Lenovo, Motorola Mobility | * approved | * S3-200328 |  |
| * S3-200449 | * Draft TR 33.434 v0.2.0 | * Samsung | * approved |  |  |
| * S3-200450 | * Rel-16 Work Item Exception for SEAL security aspects | * Samsung | * agreed |  |  |
| * S3-200451 | * VAL Client authentication | * SAMSUNG | * approved | * S3-200163 |  |
| * S3-200452 | * Annex X: OpenID Connect | * SAMSUNG | * approved | * S3-200166 |  |
| * S3-200453 | * WI Exception for Vertical LAN Security | * Nokia Germany | * withdrawn |  |  |
| * S3-200454 | * UP integrity enforcement for gPTP messages | * Nokia, Nokia Shanghai Bell, Interdigital | * agreed | * S3-200389 |  |
| * S3-200455 | * UP security policy enforcement in 5GLAN | * Nokia, Nokia Shanghai Bell, Interdigital, Huawei, HiSilicon | * agreed | * S3-200384 |  |
| * S3-200456 | * Referencing Annex for use of authentication methods | * Nokia, Nokia Shanghai Bell, Interdigital | * agreed | * S3-200385 |  |
| * S3-200457 | * Clarifications on authentication methods selection and key derivation | * Nokia, Nokia Shanghai Bell, Interdigital | * agreed | * S3-200386 |  |
| * S3-200458 | * Add requirement and feature to the DraftCR | * Huawei, Hisilicon | * approved | * S3-200270 |  |
| * S3-200459 | * New WID for 5G SCAS Enhancement | * Huawei, Hisilicon | * agreed | * S3-200262 |  |
| * S3-200460 | * Adding AF under Network element clause | * Huawei, Hisilicon | * approved | * S3-200250 |  |
| * S3-200461 | * Adding NEF under the Network element clause | * Huawei, Hisilicon | * approved | * S3-200251 |  |
| * S3-200462 | * IKEv2 profile update 33.310 | * Ericsson | * agreed | * S3-200317 |  |
| * S3-200463 | * AAnF checks the authorization information of AF | * Huawei, Hisilicon | * approved | * S3-200257 |  |
| * S3-200464 | * ESP profile update | * Ericsson | * agreed | * S3-200319 |  |
| * S3-200465 | * Certificate and CRL profile update | * Ericsson | * agreed | * S3-200331 |  |
| * S3-200466 | * Required TLS extensions and algorithms | * Ericsson | * agreed | * S3-200333 |  |
| * S3-200467 | * Living document of 5WWC | * Huawei, Hisilicon | * approved | * S3-200247 |  |
| * S3-200468 | * eV2X: PC5 UP security policy activation | * Huawei, Hisilicon | * approved | * S3-200211 |  |
| * S3-200469 | * Removing EN | * Huawei, Hisilicon | * approved | * S3-200245 |  |
| * S3-200470 | * Exception sheet o fAuthentication and key management for applications based on 3GPP credential in 5G | * China Mobile | * revised |  | * S3-200524 |
| * S3-200471 | * Living of URLLC | * Huawei, Hisilicon | * approved | * S3-200246 |  |
| * S3-200472 | * Clarification on UP security activation | * Huawei, Hisilicon | * agreed | * S3-200244 |  |
| * S3-200473 | * New test case on NAS integrity protection | * Huawei, Hisilicon | * agreed | * S3-200201 |  |
| * S3-200474 | * Address the ENs on Security procedures for Small Data Transfer in Control Plane CIoT 5GS Optimisation | * Huawei, Hisilicon | * approved | * S3-200226 |  |
| * S3-200475 | * Address the ENs on Security handling in User Plane CIoT 5GS Optimisation | * Huawei, Hisilicon, Ericsson | * approved | * S3-200228 |  |
| * S3-200476 | * Security handling for UP data protection for UP CIoT 5GS Opmitization | * Huawei, Hisilicon, Ericsson | * approved | * S3-200229 |  |
| * S3-200477 | * UE handling on CHO key derivation for NR | * Huawei, Hisilicon | * agreed | * S3-200230 |  |
| * S3-200478 | * LS reply to RAN WG2 LS on NR V2X Security issue and PDCP SN size | * CATT | * approved | * S3-200187 |  |
| * S3-200479 | * UE handling on CHO key derivation for LTE | * Huawei, Hisilicon | * agreed | * S3-200231 |  |
| * S3-200480 | * Authentication in PNI-NPN | * Huawei, Hisilicon, Nokia, Nokia Shanghai Bell | * agreed | * S3-200233 |  |
| * S3-200481 | * Security requirements for UP Gateway Function | * Huawei, Hisilicon, Nokia, Nokia Shanghai Bell, Juniper Networks | * agreed | * S3-200277 |  |
| * S3-200482 | * reply-LS on UP gateway function on the N9 interface | * Ericsson | * approved | * S3-200292 |  |
| * S3-200483 | * exception sheet for 5WWC | * Huawei, Hisilicon | * agreed |  |  |
| * S3-200484 | * Rel-16 Work Item Exception for CIoT security | * Ericsson | * agreed |  |  |
| * S3-200485 | * Security of 5G URLLC | * Huawei Device Co., Ltd | * agreed |  |  |
| * S3-200486 | * pCR : Deriving AKMA key after UE is registered to 5GS | * Qualcomm Incorporated, Huawei, Hisilicon | * approved | * S3-200363 |  |
| * S3-200487 | * Resource Level Authorization using Access Tokens | * Ericsson, Nokia, Nokia Shanghai Bell, Huawei | * agreed | * S3-200282 |  |
| * S3-200488 | * Rel-16 Network Slice security Exception sheet | * Nokia, Nokia Shangahi Bell | * agreed |  |  |
| * S3-200489 | * 3gpp-Sbi\_Target-apiRoot header and TLS on N32 | * Ericsson, Nokia, Nokia Shanghai Bell | * agreed | * S3-200291 |  |
| * S3-200490 | * Clarification on native security context activation in handover from EPS to 5GS | * Qualcomm Incorporated | * agreed | * S3-200358 |  |
| * S3-200491 | * Rel-16 Work Item Exception for Security of the enhancement to the 5GC Location Services | * CATT | * agreed |  |  |
| * S3-200492 | * Adding SEAL security requirements | * Huawei, Hisilicon | * approved | * S3-200234 |  |
| * S3-200493 | * Adding security requirements of interfaces for SEAL | * Huawei, Hisilicon, Samsung | * approved | * S3-200235 |  |
| * S3-200494 | * Adding authorization procedures of SEAL system | * Huawei, Hisilicon | * approved | * S3-200236 |  |
| * S3-200495 | * Adding SEAl security procedures for interconnection | * Huawei, Hisilicon | * approved | * S3-200237 |  |
| * S3-200496 | * Adding the requirements for the for the security of the NR PC5 unicast link | * Qualcomm Incorporated, LG, Interdigital, Huawei, Apple | * approved | * S3-200342 |  |
| * S3-200497 | * Clarification on the clause 4.3.6.4 according to TS 29.501 | * Huawei, Hisilicon | * agreed | * S3-200210 |  |
| * S3-200498 | * Clarification on PLMN ID verification | * Huawei, Hisilicon | * agreed | * S3-200223 |  |
| * S3-200499 | * AKMA: Key ID generation | * Huawei, Hisilicon | * approved | * S3-200216 |  |
| * S3-200500 | * Enhanced Network Slicing Living CR | * Nokia, Nokia Shangahi Bell, | * approved |  |  |
| * S3-200501 | * Proposed text for general and overview clauses of NR PC5 unicast security | * Qualcomm Incorporated, LG, Interdigital, Huawei | * approved | * S3-200345 |  |
| * S3-200502 | * Adding a clause of "Threats related to key reuse" for the eNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * agreed | * S3-200188 |  |
| * S3-200503 | * Updating the clause of "Key Reuse" for the gNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * agreed | * S3-200191 |  |
| * S3-200504 | * Complete the test cases of key refresh at the eNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * agreed | * S3-200335 |  |
| * S3-200505 | * Complete the test cases of key refresh at the gNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * agreed | * S3-200336 |  |
| * S3-200506 | * Proposed text for keying clause of NR PC5 unicast security | * Qualcomm Incorporated, LG | * approved | * S3-200346 |  |
| * S3-200507 | * Proposed text for security establishment clause of NR PC5 unicast security | * Qualcomm Incorporated, Interdigital, Apple, Huawei, LG, Samsung | * approved | * S3-200347 |  |
| * S3-200508 | * Proposed text for security protection clause of NR PC5 unicast security | * Qualcomm Incorporated, LG | * approved | * S3-200348 |  |
| * S3-200509 | * Annex for key derivation functions in the V2X TS | * Qualcomm Incorporated, LG | * approved | * S3-200349 |  |
| * S3-200510 | * Proposed procedures for the privacy of NR PC5 unicast connections | * Qualcomm Incorporated, LG, Interdigital | * approved | * S3-200352 |  |
| * S3-200511 | * Adding UDM to AKMA reference model | * ZTE Corporation | * approved | * S3-200129 |  |
| * S3-200512 | * Update 6.2 | * ZTE Corporation | * approved | * S3-200136 |  |
| * S3-200513 | * Derivation of KAKMA | * China Mobile, Nokia, Nokia Shanghai Bell, ZTE, Huawei, Hisilicon, Samsung | * approved | * S3-200392 |  |
| * S3-200514 | * [33.180] R16 - MC Gateway security | * Motorola Solutions Danmark A/S | * agreed | * S3-200081 |  |
| * S3-200515 | * [33.180] R16 SeGy IWF corrections | * Motorola Solutions Danmark A/S | * agreed | * S3-200110 |  |
| * S3-200516 | * Security of RRC UE capability transfer procedure in EPS | * Intel Corporation (UK) Ltd | * agreed | * S3-200180 |  |
| * S3-200517 | * Reply LS to LS on native 5G NAS security context activation | * Intel Corporation (UK) Ltd | * revised | * S3-200175 | * S3-200529 |
| * S3-200518 | * CIOT: draft CR Living document | * Ericsson | * approved | * S3-200313 | * - |
| * S3-200519 | * [Draft CR] Updates to Control Plane CIoT 5GS Optimization | * Ericsson | * approved | * S3-200307 | * - |
| * S3-200520 | * CR on 5G security for 5WWC | * Huawei | * agreed | * - | * - |
| * S3-200521 | * Cover sheet for TS 33.536 | * LG | * approved | * - | * - |
| * S3-200522 | * Work Item exception MCXsec | * Motorola Solutions | * agreed | * - | * - |
| * S3-200523 | * draft TS 33.535 | * China Mobile | * approved | * S3-200438 | * - |
| * S3-200524 | * Exception sheet of Authentication and key management for applications based on 3GPP credential in 5G | * China Mobile | * agreed | * S3-200470 | * - |
| * S3-200525 | * Work Item on Security Assurance Specification for 5G NWDAF | * China Mobile, China Unicom, CAICT, ZTE | * agreed | * S3-200394 | * - |
| * S3-200526 | * New WID on Security Assurance Specification for Service Communication Proxy (SECOP) | * Nokia, Nokia Shanghai Bell, Deutsch Telecom, T-Mobile USA, China Mobile, China Unicom | * agreed | * S3-200409 | * - |
| * S3-200527 | * New WID on Security Assurance Specification for Non-3GPP InterWorking Function (N3IWF) | * China Unicom, CAICT, China Mobile, CATT, ZTE | * agreed | * S3-200280 | * - |
| * S3-200528 | * draft\_TS 33.536 v0.3.0 | * LG Electronics Inc. | * approved | * S3-200440 | * - |
| * S3-200529 | * Reply LS to LS on native 5G NAS security context activation | * Intel Corporation (UK) Ltd | * approved | * S3-200517 | * - |
| * S3-200530 | * Protection of N9 interface | * Nokia, Nokia Shanghai Bell, Juniper Networks | * agreed | * S3-200399 | * - |

### A2: Tdoc decision timing

|  |  |  |
| --- | --- | --- |
| Document | Date/time UTC | Decision |
| * C3-195000 | * 01/01/2020 10:26:05 | * approved |
| * C3-195000 | * 01/01/2020 10:26:15 | * noted |
| * C3-195000 | * 01/01/2020 10:26:22 | * approved |
| * C3-195000 | * 21/02/2020 14:30:18 | * agreed |
| * C3-195000 | * 21/02/2020 14:30:38 | * noted |
| * C3-195000 | * 22/02/2020 08:50:03 | * agreed |
| * C3-195000 | * 22/02/2020 08:50:06 | * noted |
| * C3-195000 | * 22/02/2020 08:54:01 | * postponed |
| * C3-195000 | * 22/02/2020 08:54:09 | * noted |
| * C3-195183 | * 01/01/2020 10:32:41 | * postponed |
| * C3-195183 | * 01/01/2020 13:52:18 | * noted |
| * C3-195183 | * 01/01/2020 13:52:25 | * approved |
| * C3-195183 | * 01/01/2020 13:52:27 | * noted |
| * C3-195183 | * 01/01/2020 13:52:31 | * agreed |
| * C3-195183 | * 01/01/2020 13:52:36 | * postponed |
| * S3-200050 | * 06/03/2020 15:06:48 | * approved |
| * S3-200051 | * 09/03/2020 11:06:14 | * available |
| * S3-200052 | * 09/03/2020 09:26:00 | * postponed |
| * S3-200053 | * 09/03/2020 09:26:07 | * postponed |
| * S3-200054 | * 09/03/2020 11:41:42 | * noted |
| * S3-200055 | * 09/03/2020 11:42:27 | * postponed |
| * S3-200056 | * 09/03/2020 11:42:31 | * postponed |
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| * S3-200058 | * 09/03/2020 09:26:13 | * noted |
| * S3-200059 | * 09/03/2020 09:26:20 | * postponed |
| * S3-200060 | * 09/03/2020 09:26:25 | * noted |
| * S3-200061 | * 09/03/2020 09:30:12 | * noted |
| * S3-200062 | * 09/03/2020 08:51:43 | * noted |
| * S3-200063 | * 09/03/2020 11:04:09 | * noted |
| * S3-200064 | * 09/03/2020 09:43:31 | * postponed |
| * S3-200065 | * 09/03/2020 08:53:49 | * postponed |
| * S3-200066 | * 09/03/2020 08:53:54 | * noted |
| * S3-200067 | * 09/03/2020 11:06:48 | * postponed |
| * S3-200068 | * 09/03/2020 08:53:59 | * postponed |
| * S3-200069 | * 09/03/2020 09:14:30 | * postponed |
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| * S3-200072 | * 09/03/2020 08:54:11 | * postponed |
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| * S3-200076 | * 09/03/2020 11:44:29 | * available |
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| * S3-200078 | * 09/03/2020 12:03:17 | * noted |
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| * S3-200087 | * 09/03/2020 11:44:56 | * approved |
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| * S3-200093 | * 09/03/2020 11:36:51 | * noted |
| * S3-200096 | * 09/03/2020 11:36:58 | * approved |
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| * S3-200118 | * 09/03/2020 11:34:48 | * noted |
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| * S3-200207 | * 09/03/2020 11:59:35 | * noted |
| * S3-200208 | * 09/03/2020 11:59:38 | * noted |
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| * S3-200213 | * 09/03/2020 09:27:50 | * noted |
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| * S3-200217 | * 09/03/2020 08:56:02 | * available |
| * S3-200218 | * 09/03/2020 11:47:21 | * available |
| * S3-200219 | * 09/03/2020 11:47:26 | * noted |
| * S3-200220 | * 09/03/2020 11:59:44 | * available |
| * S3-200221 | * 09/03/2020 11:59:51 | * available |
| * S3-200222 | * 09/03/2020 11:59:57 | * noted |
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| * S3-200238 | * 09/03/2020 11:47:30 | * noted |
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| * S3-200269 | * 09/03/2020 09:29:45 | * noted |
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| * S3-200294 | * 09/03/2020 09:40:57 | * noted |
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| * S3-200297 | * 09/03/2020 09:41:12 | * noted |
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| * S3-200299 | * 09/03/2020 09:41:24 | * noted |
| * S3-200300 | * 09/03/2020 09:41:36 | * noted |
| * S3-200301 | * 09/03/2020 09:41:42 | * noted |
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| * S3-200310 | * 09/03/2020 09:45:42 | * noted |
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| * S3-200313 | * 09/03/2020 08:26:01 | * revised |
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| * S3-200315 | * 09/03/2020 12:09:41 | * noted |
| * S3-200316 | * 09/03/2020 09:41:49 | * noted |
| * S3-200318 | * 09/03/2020 11:56:17 | * agreed |
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| * S3-200445 | * 10/03/2020 14:15:54 | * agreed |
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| * S3-200466 | * 09/03/2020 11:56:45 | * agreed |
| * S3-200467 | * 11/03/2020 11:26:56 | * approved |
| * S3-200468 | * 09/03/2020 11:46:37 | * approved |
| * S3-200469 | * 09/03/2020 09:24:08 | * approved |
| * S3-200470 | * 10/03/2020 09:25:20 | * revised |
| * S3-200471 | * 09/03/2020 09:24:59 | * approved |
| * S3-200472 | * 09/03/2020 09:23:57 | * agreed |
| * S3-200473 | * 09/03/2020 08:55:30 | * agreed |
| * S3-200474 | * 09/03/2020 09:43:52 | * approved |
| * S3-200475 | * 09/03/2020 09:44:08 | * approved |
| * S3-200476 | * 09/03/2020 09:44:13 | * approved |
| * S3-200477 | * 09/03/2020 12:00:07 | * agreed |
| * S3-200478 | * 09/03/2020 11:42:11 | * approved |
| * S3-200479 | * 09/03/2020 12:00:11 | * agreed |
| * S3-200480 | * 09/03/2020 09:27:57 | * agreed |
| * S3-200481 | * 09/03/2020 11:50:33 | * agreed |
| * S3-200482 | * 09/03/2020 11:50:49 | * approved |
| * S3-200483 | * 10/03/2020 14:11:38 | * agreed |
| * S3-200484 | * 10/03/2020 14:11:30 | * agreed |
| * S3-200485 | * 11/03/2020 07:44:16 | * agreed |
| * S3-200486 | * 09/03/2020 09:37:33 | * approved |
| * S3-200487 | * 09/03/2020 09:31:00 | * agreed |
| * S3-200488 | * 10/03/2020 14:13:37 | * agreed |
| * S3-200489 | * 09/03/2020 09:32:04 | * agreed |
| * S3-200490 | * 09/03/2020 12:01:05 | * agreed |
| * S3-200491 | * 10/03/2020 14:30:50 | * agreed |
| * S3-200492 | * 09/03/2020 11:40:54 | * approved |
| * S3-200493 | * 09/03/2020 11:38:13 | * approved |
| * S3-200494 | * 09/03/2020 11:41:07 | * approved |
| * S3-200495 | * 09/03/2020 11:41:12 | * approved |
| * S3-200496 | * 09/03/2020 11:44:13 | * approved |
| * S3-200497 | * 09/03/2020 08:55:53 | * agreed |
| * S3-200498 | * 09/03/2020 08:56:10 | * agreed |
| * S3-200499 | * 09/03/2020 09:35:45 | * approved |
| * S3-200500 | * 10/03/2020 14:13:56 | * approved |
| * S3-200501 | * 09/03/2020 11:46:50 | * approved |
| * S3-200502 | * 09/03/2020 08:55:15 | * agreed |
| * S3-200503 | * 09/03/2020 08:55:19 | * agreed |
| * S3-200504 | * 09/03/2020 08:56:25 | * agreed |
| * S3-200505 | * 09/03/2020 08:56:29 | * agreed |
| * S3-200506 | * 09/03/2020 11:48:52 | * approved |
| * S3-200507 | * 09/03/2020 11:43:29 | * approved |
| * S3-200508 | * 09/03/2020 11:47:11 | * approved |
| * S3-200509 | * 09/03/2020 11:49:13 | * approved |
| * S3-200510 | * 09/03/2020 11:43:54 | * approved |
| * S3-200511 | * 09/03/2020 09:33:28 | * approved |
| * S3-200512 | * 09/03/2020 09:35:21 | * approved |
| * S3-200513 | * 09/03/2020 09:33:49 | * approved |
| * S3-200514 | * 09/03/2020 09:14:46 | * agreed |
| * S3-200515 | * 09/03/2020 09:15:01 | * agreed |
| * S3-200516 | * 09/03/2020 09:43:43 | * agreed |
| * S3-200517 | * 09/03/2020 11:58:13 | * approved |
| * S3-200517 | * 10/03/2020 14:26:53 | * revised |
| * S3-200518 | * 09/03/2020 09:46:05 | * approved |
| * S3-200519 | * 09/03/2020 09:45:27 | * approved |
| * S3-200520 | * 11/03/2020 11:26:50 | * agreed |
| * S3-200521 | * 12/03/2020 14:26:21 | * approved |
| * S3-200522 | * 10/03/2020 14:09:33 | * agreed |
| * S3-200523 | * 10/03/2020 09:01:44 | * approved |
| * S3-200524 | * 10/03/2020 15:26:53 | * agreed |
| * S3-200525 | * 10/03/2020 14:28:48 | * agreed |
| * S3-200526 | * 10/03/2020 14:29:11 | * agreed |
| * S3-200527 | * 11/03/2020 07:30:12 | * agreed |
| * S3-200528 | * 12/03/2020 14:26:14 | * approved |
| * S3-200529 | * 10/03/2020 15:06:54 | * approved |
| * S3-200530 | * 12/03/2020 09:23:18 | * agreed |

## Annex B: List of change requests

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Spec | CR | Rev | Rel | Cat | WI | Decision |
| * S3-200210 | * Clarification on the clause 4.3.6.4 according to TS 29.501 | * Huawei, Hisilicon | * 33.117 | * 0057 | * - | * Rel-16 | * F | * SCAS\_5G | * revised |
| * S3-200497 | * Clarification on the clause 4.3.6.4 according to TS 29.501 | * Huawei, Hisilicon | * 33.117 | * 0057 | * 1 | * Rel-16 | * F | * SCAS\_5G | * agreed |
| * S3-200223 | * Clarification on PLMN ID verification | * Huawei, Hisilicon | * 33.117 | * 0058 | * - | * Rel-16 | * F | * SCAS\_5G | * revised |
| * S3-200498 | * Clarification on PLMN ID verification | * Huawei, Hisilicon | * 33.117 | * 0058 | * 1 | * Rel-16 | * F | * SCAS\_5G | * agreed |
| * S3-200080 | * [33.180] R16 - Formatting corrections | * Motorola Solutions Danmark A/S | * 33.180 | * 0135 | * - | * Rel-16 | * D | * MCXSec | * agreed |
| * S3-200081 | * [33.180] R16 - MC Gateway security | * Motorola Solutions Danmark A/S | * 33.180 | * 0136 | * - | * Rel-16 | * B | * MCXSec | * revised |
| * S3-200514 | * [33.180] R16 - MC Gateway security | * Motorola Solutions Danmark A/S | * 33.180 | * 0136 | * 1 | * Rel-16 | * B | * MCXSec | * agreed |
| * S3-200084 | * [33.180] R16 MC location authorization | * Motorola Solutions Danmark A/S | * 33.180 | * 0137 | * - | * Rel-16 | * B | * MCXSec | * agreed |
| * S3-200110 | * [33.180] R16 SeGy IWF corrections | * Motorola Solutions Danmark A/S | * 33.180 | * 0138 | * - | * Rel-16 | * F | * MCXSec | * revised |
| * S3-200515 | * [33.180] R16 SeGy IWF corrections | * Motorola Solutions Danmark A/S | * 33.180 | * 0138 | * 1 | * Rel-16 | * F | * MCXSec | * agreed |
| * S3-200275 | * Correction to definition about temporary group call related procedures | * Huawei, HiSilicon | * 33.180 | * 0139 | * - | * Rel-16 | * F | * MCXSec | * agreed |
| * S3-200276 | * Correction to definition about the case of 'Temporary group call – user regroup'' | * Huawei, HiSilicon | * 33.180 | * 0140 | * - | * Rel-15 | * F | * eMCSec | * withdrawn |
| * S3-200418 | * Identifier conversion in groupcast communication | * Motorola Mobility, Lenovo | * 33.185 | * 0002 | * - | * Rel-16 | * B | * eV2XARC | * withdrawn |
| * S3-200319 | * ESP profile update | * Ericsson | * 33.210 | * 0064 | * - | * Rel-16 | * B | * CryptPr | * revised |
| * S3-200464 | * ESP profile update | * Ericsson | * 33.210 | * 0064 | * 1 | * Rel-16 | * B | * CryptPr | * agreed |
| * S3-200332 | * TLS Recommended Cipher Suites | * Ericsson | * 33.210 | * 0065 | * - | * Rel-16 | * B | * CryptPr | * agreed |
| * S3-200333 | * Required TLS extenstions and algorithms | * Ericsson | * 33.210 | * 0066 | * - | * Rel-16 | * B | * CryptPr | * revised |
| * S3-200466 | * Required TLS extensions and algorithms | * Ericsson | * 33.210 | * 0066 | * 1 | * Rel-16 | * B | * CryptPr | * agreed |
| * S3-200334 | * IKEv2 profile update 33.210 | * Ericsson | * 33.210 | * 0067 | * - | * Rel-16 | * B | * CryptPr | * agreed |
| * S3-200242 | * Update testcases of eNB SCAS | * Huawei, Hisilicon | * 33.216 | * 0011 | * - | * Rel-15 | * F | * SCAS\_eNB | * withdrawn |
| * S3-200243 | * Mirror - Update testcases of eNB SCAS | * Huawei, Hisilicon | * 33.216 | * 0012 | * - | * Rel-16 | * A | * SCAS\_eNB | * withdrawn |
| * S3-200335 | * Complete the test cases of key refresh at the eNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * 33.216 | * 0013 | * - | * Rel-16 | * B | * SCAS\_eNB, TEI16 | * revised |
| * S3-200504 | * Complete the test cases of key refresh at the eNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * 33.216 | * 0013 | * 1 | * Rel-16 | * B | * SCAS\_eNB, TEI16 | * agreed |
| * S3-200398 | * New test cases for key update at the eNB on dual connectivity | * Nokia, Nokia Shanghai Bell,Telecom Italia | * 33.216 | * 0014 | * - | * Rel-16 | * B | * SCAS\_eNB, TEI16 | * not pursued |
| * S3-200350 | * Allocation of FC values for TS 33.356 | * Qualcomm Incorporated, LG | * 33.220 | * 0199 | * - | * Rel-16 | * C | * eV2XARC | * not pursued |
| * S3-200317 | * IKEv2 profile update 33.310 | * Ericsson | * 33.310 | * 0104 | * - | * Rel-16 | * B | * CryptPr | * revised |
| * S3-200462 | * IKEv2 profile update 33.310 | * Ericsson | * 33.310 | * 0104 | * 1 | * Rel-16 | * B | * CryptPr | * agreed |
| * S3-200331 | * Certificate and CRL profile update | * Ericsson | * 33.310 | * 0105 | * - | * Rel-16 | * B | * CryptPr | * revised |
| * S3-200465 | * Certificate and CRL profile update | * Ericsson | * 33.310 | * 0105 | * 1 | * Rel-16 | * B | * CryptPr | * agreed |
| * S3-200419 | * CryptPr: Update to clause 6.1.1 - Common rules to all certificates | * Nokia, Nokia Shanghai Bell, CommScope | * 33.310 | * 0106 | * - | * Rel-16 | * B | * CryptPr | * not pursued |
| * S3-200420 | * CryptPr: Update to CRL Profile in clause 6.1a | * Nokia, Nokia Shanghai Bell, CommScope | * 33.310 | * 0107 | * - | * Rel-16 | * B | * CryptPr | * not pursued |
| * S3-200180 | * Security of RRC UE capability transfer procedure in EPS | * Intel Corporation (UK) Ltd | * 33.401 | * 0688 | * - | * Rel-15 | * F | * TEI15 | * revised |
| * S3-200516 | * Security of RRC UE capability transfer procedure in EPS | * Intel Corporation (UK) Ltd | * 33.401 | * 0688 | * 1 | * Rel-15 | * F | * TEI15 | * agreed |
| * S3-200231 | * UE handling on CHO key derivation for LTE | * Huawei, Hisilicon | * 33.401 | * 0689 | * - | * Rel-16 | * F | * TEI | * revised |
| * S3-200479 | * UE handling on CHO key derivation for LTE | * Huawei, Hisilicon | * 33.401 | * 0689 | * 1 | * Rel-16 | * F | * TEI16 | * agreed |
| * S3-200337 | * Key derivation for CHO(LTE R16) | * Apple Computer Trading Co. Ltd | * 33.401 | * 0690 | * - | * Rel-16 | * C | * TEI16 | * revised |
| * S3-200437 | * Key derivation for CHO(LTE R16) | * Apple Computer Trading Co. Ltd | * 33.401 | * 0690 | * 1 | * Rel-16 | * C | * TEI16 | * agreed |
| * S3-200445 | * Solution for IAB Architecture - ENDC | * Samsung, Ericsson, Qualcomm Incorporated, Nokia, Nokia Shanghai Bell, Thales, Intel, Huawei, HiSilicon, AT&T | * 33.401 | * 0691 | * - | * Rel-16 | * B | * IAB | * agreed |
| * S3-200399 | * Protection of N9 interface | * Nokia, Nokia Shanghai Bell, Juniper Networks | * 33.501 | * 0689 | * 2 | * Rel-16 | * B | * UPGF | * revised |
| * S3-200530 | * Protection of N9 interface | * Nokia, Nokia Shanghai Bell, Juniper Networks | * 33.501 | * 0689 | * 3 | * Rel-16 | * B | * UPGF | * agreed |
| * S3-200083 | * AGF-side SEG option | * Juniper Networks | * 33.501 | * 0712 | * - | * Rel-16 | * C | * 5WWC | * agreed |
| * S3-200102 | * UP security in TSC | * SAMSUNG | * 33.501 | * 0713 | * - | * Rel-16 | * B | * Vertical\_LAN\_SEC | * withdrawn |
| * S3-200104 | * Alignment of the term NPN | * SAMSUNG | * 33.501 | * 0714 | * - | * Rel-16 | * D | * Vertical\_LAN\_SEC | * withdrawn |
| * S3-200106 | * Clarification of Indirect Communication Mutual Authentication | * Mavenir, Deutsche Telekom AG, Nokia | * 33.501 | * 0715 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-200109 | * Referencing Annex I for non-public networks in untrusted non-3GPP access case | * CableLabs, Nokia, Nokia Shanghai Bell, Charter Communications | * 33.501 | * 0716 | * - | * Rel-16 | * B | * Vertical\_LAN\_SEC | * not pursued |
| * S3-200137 | * Corrections in clause 6.1.2-R16 | * ZTE Corporation | * 33.501 | * 0717 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200138 | * Corrections in clause 6.1.2-R15 | * ZTE Corporation | * 33.501 | * 0718 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200139 | * Clarification for distribution of subscriber identities and security data in clause 6.3.1.2-R16 | * ZTE Corporation | * 33.501 | * 0719 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200140 | * Clarification for distribution of subscriber identities and security data in clause 6.3.1.2-R15 | * ZTE Corporation | * 33.501 | * 0720 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200141 | * remove the EN in clause 6.8.1.2.4-R16 | * ZTE Corporation | * 33.501 | * 0721 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200142 | * remove the EN in clause 6.8.1.2.4-R15 | * ZTE Corporation | * 33.501 | * 0722 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200143 | * Security handling in registration with AMF re-allocation via direct NAS reroute-R16 | * ZTE Corporation | * 33.501 | * 0723 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * not pursued |
| * S3-200144 | * Security handling in registration with AMF re-allocation via direct NAS reroute-R15 | * ZTE Corporation | * 33.501 | * 0724 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200145 | * remove the EN in clause 13.2.3.6-R16 | * ZTE Corporation | * 33.501 | * 0725 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200146 | * remove the EN in clause 13.2.3.6-R15 | * ZTE Corporation | * 33.501 | * 0726 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200147 | * Remove the EN in clause 13.5-R16 | * ZTE Corporation | * 33.501 | * 0727 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200148 | * Remove the EN in clause 13.5-R15 | * ZTE Corporation | * 33.501 | * 0728 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200172 | * UP security in TSC | * SAMSUNG | * 33.501 | * 0729 | * - | * Rel-16 | * B | * Vertical\_LAN\_SEC | * not pursued |
| * S3-200174 | * Alignment of the term NPN | * SAMSUNG | * 33.501 | * 0730 | * - | * Rel-16 | * D | * Vertical\_LAN\_SEC | * not pursued |
| * S3-200183 | * Modification on the RRC connection resume procedure | * CATT | * 33.501 | * 0731 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * not pursued |
| * S3-200185 | * Clarification on AS rekeying failure | * CATT | * 33.501 | * 0732 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200186 | * Clarification on the Xn-Handover procedure | * CATT | * 33.501 | * 0733 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200196 | * JSON object modification - R15 | * Huawei, Hisilicon | * 33.501 | * 0734 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200197 | * JSON object modification - R16 | * Huawei, Hisilicon | * 33.501 | * 0735 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200198 | * SUCI computation clarification - R15 | * Huawei, Hisilicon | * 33.501 | * 0736 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200199 | * SUCI computation clarification - R16 | * Huawei, Hisilicon | * 33.501 | * 0737 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200202 | * Solving registration failure in registration procedure with AMF reallocation | * Huawei, Hisilicon * CMCC,ChinaTelecom | * 33.501 | * 0738 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * not pursued |
| * S3-200203 | * Clarification on AMF reallocation via direct NAS reroute | * Huawei, Hisilicon | * 33.501 | * 0739 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200204 | * Clarification on AMF reallocation via direct NAS reroute | * Huawei, Hisilicon | * 33.501 | * 0740 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * not pursued |
| * S3-200220 | * Clarification on native 5G NAS security context activation after an inter-system change from S1 mode to N1 mode in idle mode in Rel15 | * Huawei, Hisilicon | * 33.501 | * 0741 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * not pursued |
| * S3-200221 | * Mirror for clarification on native 5G NAS security context activation after an inter-system change from S1 mode to N1 mode in idle mode in Rel16 | * Huawei, Hisilicon | * 33.501 | * 0742 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * not pursued |
| * S3-200224 | * Clarification on IPX certificate acquirement in SEPP | * Huawei, Hisilicon | * 33.501 | * 0743 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200225 | * Mirror for clarification on IPX certificate acquirement in SEPP | * Huawei, Hisilicon | * 33.501 | * 0744 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200230 | * UE handling on CHO key derivation for NR | * Huawei, Hisilicon | * 33.501 | * 0745 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * revised |
| * S3-200477 | * UE handling on CHO key derivation for NR | * Huawei, Hisilicon | * 33.501 | * 0745 | * 1 | * Rel-16 | * F | * 5GS\_Ph1-SEC | * agreed |
| * S3-200232 | * Include Resume Request Message to Calculation of ShortResumeMAC-I for INACTIVE | * Huawei, Hisilicon | * 33.501 | * 0746 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200233 | * Authentication in PNI-NPN | * Huawei, Hisilicon | * 33.501 | * 0747 | * - | * Rel-16 | * F | * Vertical\_LAN\_SEC | * revised |
| * S3-200480 | * Authentication in PNI-NPN | * Huawei, Hisilicon, Nokia, Nokia Shanghai Bell | * 33.501 | * 0747 | * 1 | * Rel-16 | * F | * Vertical\_LAN\_SEC | * agreed |
| * S3-200263 | * CR on requirements for algorithm selection and handover from EPS to 5GS over N26 | * Huawei, Hisilicon | * 33.501 | * 0748 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200264 | * CR on requirements for algorithm selection and handover from EPS to 5GS over N26 | * Huawei, Hisilicon | * 33.501 | * 0749 | * - | * Rel-16 | * A | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200271 | * Correction to security capability negotiation between SEPPs | * Huawei, HiSilicon,China Mobile | * 33.501 | * 0750 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200272 | * Correction to security capability negotiation between SEPPs | * Huawei, HiSilicon,China Mobile | * 33.501 | * 0751 | * - | * Rel-16 | * A | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200273 | * Correction to initial EAP Authentication with an external AAA server | * Huawei, HiSilicon | * 33.501 | * 0752 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200274 | * Correction to initial EAP Authentication with an external AAA server | * Huawei, HiSilicon | * 33.501 | * 0753 | * - | * Rel-16 | * A | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200277 | * Security requirements for UP Gateway Function | * Huawei, HiSilicon | * 33.501 | * 0754 | * - | * Rel-16 | * B | * UPGF | * revised |
| * S3-200481 | * Security requirements for UP Gateway Function | * Huawei, Hisilicon, Nokia, Nokia Shanghai Bell, Juniper Networks | * 33.501 | * 0754 | * 1 | * Rel-16 | * B | * UPGF | * agreed |
| * S3-200282 | * Resource Level Authorization using Access Tokens | * Ericsson, Nokia, Nokia Shanghai Bell | * 33.501 | * 0755 | * - | * Rel-16 | * B | * 5G\_eSBA | * revised |
| * S3-200487 | * Resource Level Authorization using Access Tokens | * Ericsson, Nokia, Nokia Shanghai Bell, Huawei | * 33.501 | * 0755 | * 1 | * Rel-16 | * B | * 5G\_eSBA | * agreed |
| * S3-200291 | * 3gpp-Sbi\_Target-apiRoot header and TLS on N32 | * Ericsson | * 33.501 | * 0756 | * - | * Rel-16 | * F | * 5G\_eSBA | * revised |
| * S3-200489 | * 3gpp-Sbi\_Target-apiRoot header and TLS on N32 | * Ericsson, Nokia, Nokia Shanghai Bell | * 33.501 | * 0756 | * 1 | * Rel-16 | * F | * 5G\_eSBA | * agreed |
| * S3-200318 | * Using EAP-TLS with TLS 1.3 | * Ericsson | * 33.501 | * 0757 | * - | * Rel-16 | * B | * CryptPr | * agreed |
| * S3-200320 | * Recovery from NASC verification failure | * MediaTek Inc. | * 33.501 | * 0758 | * - | * Rel-16 | * F | * 5GS\_Ph1-SEC | * not pursued |
| * S3-200338 | * Key derivation for CHO(NR R16) | * Apple Computer Trading Co. Ltd | * 33.501 | * 0759 | * - | * Rel-16 | * C | * TEI16 | * revised |
| * S3-200436 | * Key derivation for CHO(NR R16) | * Apple Computer Trading Co. Ltd | * 33.501 | * 0759 | * 1 | * Rel-16 | * C | * TEI16 | * agreed |
| * S3-200358 | * Clarification on native security context activation in handover from EPS to 5GS | * Qualcomm Incorporated | * 33.501 | * 0760 | * - | * Rel-16 | * F | * TEI16, 5GS\_Ph1-SEC | * revised |
| * S3-200490 | * Clarification on native security context activation in handover from EPS to 5GS | * Qualcomm Incorporated | * 33.501 | * 0760 | * 1 | * Rel-16 | * A | * 5GS\_Ph1-SEC | * agreed |
| * S3-200361 | * Clarification on the use of SUPI as the Identity in EAP-AKA’ key derivation | * Qualcomm Incorporated | * 33.501 | * 0761 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200362 | * Clarification on the use of SUPI as the Identity in EAP-AKA’ key derivation | * Qualcomm Incorporated | * 33.501 | * 0762 | * - | * Rel-16 | * A | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200370 | * Clarification to TSC UP security policy | * Ericsson | * 33.501 | * 0763 | * - | * Rel-16 | * B | * Vertical\_LAN\_SEC | * not pursued |
| * S3-200371 | * 5GLAN UP security policy | * Ericsson | * 33.501 | * 0764 | * - | * Rel-16 | * F | * Vertical\_LAN\_SEC | * not pursued |
| * S3-200373 | * Editoral Change on reference clauses | * Huawei, Hisilicon | * 33.501 | * 0765 | * - | * Rel-16 | * F | * 5GS\_UTRAN\_SEC | * agreed |
| * S3-200384 | * UP security policy enforcement in 5GLAN | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.501 | * 0766 | * - | * Rel-16 | * B | * Vertical\_LAN\_SEC | * revised |
| * S3-200455 | * UP security policy enforcement in 5GLAN | * Nokia, Nokia Shanghai Bell, Interdigital, Huawei, HiSilicon | * 33.501 | * 0766 | * 1 | * Rel-16 | * B | * Vertical\_LAN\_SEC | * agreed |
| * S3-200385 | * Referencing Annex for use of authentication methods | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.501 | * 0767 | * - | * Rel-16 | * D | * Vertical\_LAN\_SEC | * revised |
| * S3-200456 | * Referencing Annex for use of authentication methods | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.501 | * 0767 | * 1 | * Rel-16 | * D | * Vertical\_LAN\_SEC | * agreed |
| * S3-200386 | * Clarifications on authentication methods selection and key derivation | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.501 | * 0768 | * - | * Rel-16 | * D | * Vertical\_LAN\_SEC | * revised |
| * S3-200457 | * Clarifications on authentication methods selection and key derivation | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.501 | * 0768 | * 1 | * Rel-16 | * D | * Vertical\_LAN\_SEC | * agreed |
| * S3-200387 | * Modification of CAG ID list | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.501 | * 0769 | * - | * Rel-16 | * D | * Vertical\_LAN\_SEC | * agreed |
| * S3-200388 | * Definition of SN Id for standalone non-public networks | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.501 | * 0770 | * - | * Rel-16 | * C | * Vertical\_LAN\_SEC | * agreed |
| * S3-200389 | * UP integrity enforcement for gPTP messages | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.501 | * 0771 | * - | * Rel-16 | * C | * Vertical\_LAN\_SEC | * revised |
| * S3-200454 | * UP integrity enforcement for gPTP messages | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.501 | * 0771 | * 1 | * Rel-16 | * C | * Vertical\_LAN\_SEC | * agreed |
| * S3-200390 | * Reference correction in key hierarchy | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.501 | * 0772 | * - | * Rel-16 | * D | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200401 | * Security requirements for Inter-PLMN User Plane Security (IPUPS) function | * Nokia, Nokia Shanghai Bell, Juniper Networks | * 33.501 | * 0773 | * - | * Rel-16 | * B | * UPGF | * merged |
| * S3-200405 | * Validation of Access Token ownership | * Mavenir, Deutsche Telekom AG | * 33.501 | * 0774 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-200410 | * eSBA: Mutual Authentication between NFs | * Nokia, Nokia Shanghai Bell | * 33.501 | * 0775 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-200411 | * Clarification on Token Based Authorization | * Mavenir,Deutsche Telekom | * 33.501 | * 0776 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-200412 | * eSBA: NF consumer authentication by the producer in direct communication scenarios | * Nokia, Nokia Shanghai Bell | * 33.501 | * 0777 | * - | * Rel-16 | * B | * 5G\_eSBA | * not pursued |
| * S3-200415 | * SUCI computation: test data Rel-15 | * THALES | * 33.501 | * 0778 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200417 | * SUCI computation: test data Rel-16 | * THALES | * 33.501 | * 0779 | * - | * Rel-16 | * A | * 5GS\_Ph1-SEC | * withdrawn |
| * S3-200431 | * CR to TS 33.501 to clarify support for User Plane Integrity Protection in NR | * VODAFONE Group Plc | * 33.501 | * 0780 | * - | * Rel-16 | * C | * 5GS\_Ph1-SEC, TEI16 | * withdrawn |
| * S3-200435 | * Clarification on native security context activation in handover from EPS to 5GS | * Qualcomm Incorporated | * 33.501 | * 0781 | * - | * Rel-15 | * F | * 5GS\_Ph1-SEC | * agreed |
| * S3-200444 | * Solution for IAB Architecture - 5GC | * Samsung, Ericsson, Qualcomm Incorporated, Nokia, Nokia Shanghai Bell, Thales, Intel, Huawei, HiSilicon, AT&T | * 33.501 | * 0782 | * - | * Rel-16 | * B | * IAB | * agreed |
| * S3-200485 | * Security of 5G URLLC | * Huawei Device Co., Ltd | * 33.501 | * 0783 | * - | * Rel-16 | * B | * 5G\_URLLC\_SEC | * agreed |
| * S3-200520 | * CR on 5G security for 5WWC | * Huawei | * 33.501 | * 0784 | * - | * Rel-16 | * B | * 5WWC | * agreed |
| * S3-200336 | * Complete the test cases of key refresh at the gNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * 33.511 | * 0011 | * - | * Rel-16 | * B | * SCAS\_5G | * revised |
| * S3-200505 | * Complete the test cases of key refresh at the gNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * 33.511 | * 0011 | * 1 | * Rel-16 | * B | * SCAS\_5G | * agreed |
| * S3-200397 | * A new test case for key update at the gNB on dual connectivity | * Nokia, Nokia Shanghai Bell, NTT DoCoMo,Telecom Italia | * 33.511 | * 0012 | * - | * Rel-16 | * B | * SCAS\_5G | * agreed |
| * S3-200201 | * New test case on NAS integrity protection | * Huawei, Hisilicon | * 33.512 | * 0005 | * - | * Rel-16 | * F | * SCAS\_5G | * revised |
| * S3-200473 | * New test case on NAS integrity protection | * Huawei, Hisilicon | * 33.512 | * 0005 | * 1 | * Rel-16 | * F | * SCAS\_5G | * agreed |
| * S3-200209 | * Clarification on confidential IEs replacement handling in original N32-f message | * Huawei, Hisilicon | * 33.517 | * 0002 | * - | * Rel-16 | * F | * SCAS\_5G | * not pursued |
| * S3-200375 | * VLAN intro added | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.819 | * 0001 | * - | * Rel-16 | * D | * FS\_Vertical\_LAN\_SEC | * withdrawn |
| * S3-200376 | * Resolution of ed note on serving network name | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.819 | * 0002 | * - | * Rel-16 | * D | * FS\_Vertical\_LAN\_SEC | * withdrawn |
| * S3-200377 | * KI on interworking NPN and PLMN - security req | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.819 | * 0003 | * - | * Rel-16 | * D | * FS\_Vertical\_LAN\_SEC | * withdrawn |
| * S3-200378 | * KI on service continuity - threats and reqs | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.819 | * 0004 | * - | * Rel-16 | * D | * FS\_Vertical\_LAN\_SEC | * withdrawn |
| * S3-200379 | * Resolution of editors note on AAA | * Nokia, Nokia Shanghai Bell | * 33.819 | * 0005 | * - | * Rel-16 | * D | * FS\_Vertical\_LAN\_SEC | * withdrawn |
| * S3-200380 | * Threats and requirements on AAA | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.819 | * 0006 | * - | * Rel-16 | * D | * FS\_Vertical\_LAN\_SEC | * withdrawn |
| * S3-200381 | * Resolution of editor's note in solution 1 | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.819 | * 0007 | * - | * Rel-16 | * D | * FS\_Vertical\_LAN\_SEC | * withdrawn |
| * S3-200382 | * Resolution of editor's note in solution 15 | * Nokia, Nokia Shanghai Bell | * 33.819 | * 0008 | * - | * Rel-16 | * D | * FS\_Vertical\_LAN\_SEC | * withdrawn |
| * S3-200383 | * UP security policy enforcement in 5GLAN | * Nokia, Nokia Shanghai Bell, Interdigital | * 33.819 | * 0009 | * - | * Rel-16 | * D | * FS\_Vertical\_LAN\_SEC | * withdrawn |
| * S3-200188 | * Adding a clause of "Threats related to key reuse" for the eNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * 33.926 | * 0031 | * - | * Rel-16 | * B | * SCAS\_eNB, TEI16 | * revised |
| * S3-200502 | * Adding a clause of "Threats related to key reuse" for the eNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * 33.926 | * 0031 | * 1 | * Rel-16 | * B | * SCAS\_eNB, TEI16 | * agreed |
| * S3-200191 | * Updating the clause of "Key Reuse" for the gNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * 33.926 | * 0032 | * - | * Rel-16 | * F | * SCAS\_5G | * revised |
| * S3-200503 | * Updating the clause of "Key Reuse" for the gNB | * Nokia, Nokia Shanghai Bell, Telecom Italia, NTT DoCoMo | * 33.926 | * 0032 | * 1 | * Rel-16 | * F | * SCAS\_5G | * agreed |
| * S3-200217 | * Clarification on exposure of confidential IEs in N32-f message in TR 33.926 | * Huawei, Hisilicon | * 33.926 | * 0033 | * - | * Rel-16 | * F | * SCAS\_5G | * not pursued |

## Annex C: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Original | Title | From | Decision | Reply TDoc |
| * S3-200051 |  | * LS to 3GPP SA3 to consider appropriate authorization and authentication when providing network slice access | * GSMA | * replied to | * S3-200442 |
| * S3-200052 |  | * LS on Sending CAG ID | * S2-2001616 | * postponed | * (none) |
| * S3-200053 |  | * Reply LS on Sending CAG ID in NAS layer | * R2-1916349 | * postponed | * (none) |
| * S3-200054 |  | * Reply LS on PC5S and PC5 RRC unicast message protection | * R2-1916461 | * noted | * (none) |
| * S3-200055 |  | * Reply LS on LS on PC5S and PC5 RRC unicast message protection | * S2-1912002 | * postponed | * (none) |
| * S3-200056 |  | * Reply LS on PC5 unicast and groupcast security protection | * S2-2000971 | * postponed | * (none) |
| * S3-200057 |  | * LS on NR V2X Security issue and PDCP SN size | * R2-1916467 | * replied to | * S3-200478 |
| * S3-200058 |  | * Reply LS on NSI requirements | * S1-193596 | * noted | * (none) |
| * S3-200059 |  | * Reply LS on NPN clarifications | * S1-193605 | * postponed | * (none) |
| * S3-200060 |  | * Reply LS on SUCI computation from an NSI | * S2-1912417 | * noted | * (none) |
| * S3-200061 |  | * Reply LS on token-based authorization for indirect communication with delegated discovery (Scenario D) | * S2-1912657 | * noted | * (none) |
| * S3-200062 |  | * Reply LS on clarification on the requirement for steering of roaming | * S2-1912764 | * noted | * (none) |
| * S3-200063 |  | * LS on Further clarifications on GLI/GCI and Line ID/ HFC\_Identifier | * S2-1912767 | * noted | * (none) |
| * S3-200064 |  | * Reply LS on 5G-S-TMSI Truncation Procedure | * S2-2001248 | * postponed | * (none) |
| * S3-200065 |  | * Reply LS to Transfer the study on service-based support for SMS in 5GC to CT WGs | * SP-191362 | * postponed | * (none) |
| * S3-200066 |  | * Reply LS to LS on analytics support for energy saving | * SP-191378 | * noted | * (none) |
| * S3-200067 |  | * Reply LS on AUSF role in slice specific authentication | * S2-1910668 | * postponed | * (none) |
| * S3-200068 |  | * LS on security consideration of performance measurement function protocol | * C1-196940 | * postponed | * (none) |
| * S3-200069 |  | * Reply LS on how the IWF obtains key material for interworking group and private communications | * S6-192194 | * postponed | * (none) |
| * S3-200070 |  | * LS on native 5G NAS security context activation | * C1-199003 | * replied to | * S3-200529 |
| * S3-200071 |  | * LS on ARPF in UDICOM | * C4-195553 | * postponed | * (none) |
| * S3-200072 |  | * LS on uniqueness of PEI in certain FN-RG configurations | * s3i200069 | * postponed | * (none) |
| * S3-200422 |  | * LS on AMF Reallocation via RAN re-routing | * S2-2001730 | * postponed | * (none) |
| * S3-200430 |  | * Mandatory User Plane Integrity for 5G | * GSMA | * postponed | * (none) |
| * S3-200433 |  | * LS to SA3 on NR V2X Security issues | * R2-2001980 | * postponed | * (none) |
| * S3-200434 |  | * Reply LS to LS S3-194452 on UP gateway function on the N9 interface | * S2-2001727 | * replied to | * S3-200482 |

### C2: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| * S3-200442 | * LS reply to GSMA on slice access | * GSMA | * - | * S3-200051 |
| * S3-200478 | * LS reply to RAN WG2 LS on NR V2X Security issue and PDCP SN size | * RAN2 | * - | * S3-200057 |
| * S3-200482 | * reply-LS on UP gateway function on the N9 interface | * SA2 | * CT4, SA | * S3-200434 |
| * S3-200529 | * Reply LS to LS on native 5G NAS security context activation | * CT1 | * - | * S3-200070 |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | Source | new/revised |
| * S3-200459 | * New WID for 5G SCAS Enhancement | * Huawei, Hisilicon | * WID new |
| * S3-200525 | * Work Item on Security Assurance Specification for 5G NWDAF | * China Mobile, China Unicom, CAICT, ZTE | * WID new |
| * S3-200526 | * New WID on Security Assurance Specification for Service Communication Proxy (SECOP) | * Nokia, Nokia Shanghai Bell, Deutsch Telecom, T-Mobile USA, China Mobile, China Unicom | * WID new |
| * S3-200527 | * New WID on Security Assurance Specification for Non-3GPP InterWorking Function (N3IWF) | * China Unicom, CAICT, China Mobile, CATT, ZTE | * WID new |

## Annex E: List of draft Technical Specifications and Reports

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Spec | vers | Doc title |
| * S3-200438 | * 33.535 | * 0.2.0 | * draft TS 33.535 |
| * S3-200440 | * 33.536 | * 0.3.0 | * draft\_TS 33.536 v0.3.0 |
| * S3-200449 | * 33.434 | * 0.1.0 | * Draft TR 33.434 v0.2.0 |
| * S3-200523 | * 33.535 | * 0.2.0 | * draft TS 33.535 |
| * S3-200528 | * 33.536 | * 0.3.0 | * draft\_TS 33.536 v0.3.0 |

## Annex F: List of participants

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TITLE | Family Name | Given Name | Role | Employer Organization | Organization Represented |
| Dr. | Baboescu | Florin | Delegate | BROADCOM CORPORATION | BROADCOM CORPORATION |
| Dr. | Ben Henda | Noamen | Chairman | Ericsson LM | Ericsson LM |
| Mr. | Brusilovsky | Alec | Delegate | InterDigital, Inc. | InterDigital Communications |
| Mr. | Bykampadi | Nagendra | Delegate | Nokia France | Nokia Solutions & Networks (I) |
| Mr. | Cano Soveri | Mirko | Secretary | ETSI | ETSI |
| Mr. | Canterbury | Mark | Delegate | Tencastle Limited | National Technical Assistance |
| Mr. | Castagno | Mauro | Delegate | TELECOM ITALIA S.p.A. | TELECOM ITALIA S.p.A. |
| Mr. | Chun | SungDuck | Delegate | LG Electronics France | LG Electronics France |
| Ms. | Comak | Pinar | Delegate | Ericsson LM | Ericsson Inc. |
| Dr. | Corbett | Cherita | Delegate | Johns Hopkins University APL | Johns Hopkins University APL |
| Ms. | Deng | Juan | Delegate | HuaWei Technologies Co., Ltd | HUAWEI Technologies Japan K.K. |
| Mr. | Dietze | Claus | Delegate | G+D MS | G+D MS |
| Mr. | Ennesser | Fran?ois | Delegate | Huawei Technologies France | Huawei Technologies France |
| Dr. | Escott | Adrian | Delegate | Qualcomm CDMA Technologies | Qualcomm CDMA Technologies |
| Mr. | Evans | Tim P. | Delegate | VODAFONE Group Plc | VODAFONE Group Plc |
| Mr. | Everett | Jared | Delegate | Johns Hopkins University APL | Johns Hopkins University APL |
| Dr. | Gao | Feng | Delegate | China Unicom | China Unicom |
| Mr. | Goldberg | Martin | Delegate | U.S. Department of Defense | U.S. Department of Defense |
| Dr. | Granboulan | Louis | Delegate | Airbus | Airbus |
| Ms. | Guo | Ivy | Delegate | Apple Computer Trading Co. Ltd | Apple Computer Trading Co. Ltd |
| Mr. | Guo | Longhua | Delegate | HUAWEI TECH. GmbH | Huawei Device Co., Ltd |
| Mr. | Hanhisalo | Markus | Delegate | Ericsson LM | Oy LM Ericsson AB |
| Mr. | Heldenbrand | Rob | Delegate | Hewlett-Packard Enterprise | Hewlett-Packard Enterprise |
| Mr. | Hjelm | Bjorn | Delegate | Verizon UK Ltd | Verizon UK Ltd |
| Miss | Jerichow | Anja | Delegate | Nokia Germany | Nokia Germany |
| Dr. | Jost | Christine | Delegate | Ericsson LM | Ericsson LM |
| Dr. | Karakoc | Ferhat | Delegate | Ericsson LM | Ericsson LM |
| Dr. | Keesmaat | Iko | Delegate | TNO | KPN N.V. |
| Mr. | Kim | Dongjoo | Delegate | LG Electronics Inc. | LG Electronics Inc. |
| Mr. | Kohalmi | Steve | Delegate | Juniper Networks | Juniper Networks |
| Mr. | Kolekar | Abhijeet | Delegate | Intel Corporation (UK) Ltd | Intel Corporation (UK) Ltd |
| Ms. | Koser | Elizabeth | Delegate | U.S. Department of Defense | U.S. Department of Defense |
| Dr. | Kunz | Andreas | Delegate | Motorola Mobility Germany GmbH | Motorola Mobility Germany GmbH |
| Mr. | Lee | Xiaoyang | Delegate | CISA ECD | CISA ECD |
| Mr. | Lehtovirta | Vesa | Delegate | Ericsson LM | Oy LM Ericsson AB |
| Dr. | LEI | AO | Delegate | HUAWEI TECHNOLOGIES Co. Ltd. | HuaWei Technologies Co., Ltd |
| Dr. | Lei | Zander (Zhongding) | Delegate | HuaWei Technologies Co., Ltd | Huawei Technologies Japan K.K. |
| Mr. | Li | He | Delegate | HUAWEI TECHNOLOGIES Co. Ltd. | HiSilicon Technologies Co. Ltd |
| Mr. | Liu | Yuze | Delegate | ZTE Corporation | ZTE Trunking Technology Corp. |
| Miss | Lu | Wei | Delegate | Nokia Korea | Nokia Shanghai Bell |
| Mr. | Mittal | Ajay Kumar | Delegate | TSDSI | TSDSI |
| Dr. | Muhanna | Ahmad | Delegate | Mavenir | Mavenir |
| Mr. | Nair | Suresh | Delegate | Nokia Germany | Nokia Germany |
| Mr. | Nakarmi | Prajwol Kumar | Delegate | Ericsson Limited | Nanjing Ericsson Panda Com Ltd |
| Mr. | Niemi | Marko | Delegate | MediaTek Inc. | MediaTek Inc. |
| Mr. | O'Driscoll | James | Delegate | NCSC | NCSC |
| Ms. | Parambath Sasi | NIvedya | Delegate | Samsung R&D Institute India | Samsung R&D Institute India |
| Mr. | Pätzold | Thomas | Delegate | Deutsche Telekom AG | Deutsche Telekom AG |
| Mrs. | Pauliac | Mireille | Delegate | THALES | THALES |
| Mr. | PENG | Jin | Delegate | ZTE Corporation | ZTE Corporation |
| Mr. | Pudney | Chris | Delegate | VODAFONE Group Plc | VODAFONE Group Plc |
| Mr. | Qi | Minpeng | Vice Chairman | China Mobile Com. Corporation | China Mobile Com. Corporation |
| Mr. | Rajadurai | Rajavelsamy | Vice Chairman | Samsung R&D Institute UK | Samsung Electronics Co., Ltd |
| Ms. | Rajendran | Rohini | Delegate | Samsung R&D Institute India | SAMSUNG R&D INSTITUTE JAPAN |
| Mrs. | Rong | Wu | Delegate | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies Sweden AB |
| Mr. | Rutkowski | Tony | Delegate | CIS | CIS |
| Mr. | Toor | Gurbakshish Singh | Delegate | TD Tech Ltd | Huawei Tech.(UK) Co., Ltd |
| Ms. | Trakinat | Jean | Delegate | T-Mobile USA Inc. | T-Mobile USA Inc. |
| Mr. | Trygar | Tobey | Delegate | Perspecta Labs Inc. | Perspecta Labs Inc. |
| Dr. | Tsai | Yi-Hsueh | Delegate | III | III |
| Dr. | Tsiatsis | Vlasios | Delegate | Ericsson LM | Nanjing Ericsson Panda Com Ltd |
| Mrs. | Vahidi | Helena | Delegate | Ericsson LM | Ericsson LM |
| Ms. | Villebrun | Emmanuelle | Delegate | Ministère Economie et Finances | Ministère Economie et Finances |
| Mr. | Vujcic | Dragan | Secretary | IDEMIA | IDEMIA |
| Mr. | Whorlow | Colin | Delegate | NCSC | HOME OFFICE |
| Ms. | Wifvesson | Monica | Delegate | Ericsson LM | Ericsson LM |
| Dr. | Wilson | Kelce | Delegate | Anemone Technology | Anemone Technology |
| Mr. | Wong | Marcus | Delegate | Futurewei Technologies | Futurewei Technologies |
| Dr. | Wong | Stan | Delegate | PCCW Global B.V. | PCCW Global B.V. |
| Mr. | Woodward | Tim | Delegate | Motorola Solutions Danmark A/S | Motorola Solutions Danmark A/S |
| Miss | Xu | Hui | Delegate | CATT | CATT |
| Mr. | xu | sen | Delegate | China Telecommunications | China Telecom Corporation Ltd. |
| Mr. | Xu | Yang | Delegate | Guangdong OPPO Mobile Telecom. | Guangdong OPPO Mobile Telecom. |
| Mr. | Yoo | Mike | Delegate | Johns Hopkins University APL | Johns Hopkins University APL |
| Dr. | Zhang | Bo | Delegate | HUAWEI TECHNOLOGIES Co. Ltd. | HUAWEI TECHNOLOGIES Co. Ltd. |
| Mr. | Zhang | Pengfei | Delegate | vivo Mobile Communication Co., | vivo Mobile Communication Co., |
| Mr. | Zhou | Wei | Delegate | CATT | CATT |
| Dr. | Zugenmaier | Alf | Delegate | NTT DOCOMO INC. | NTT DOCOMO INC. |

## Annex G: List of future meetings

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Title | Start date | End date (OP) | Town | Country | Reference |
| * SA3#99 | * 2020-05-11 | * 2020-05-15 | * Dubrovnik | * HR | * S3-99 |
| * SA3#100 | * 2020-07-13 | * 2020-07-17 | * TBD |  | * S3-100 |
| * SA3#78-LI | * 2020-07-14 | * 2020-07-17 | * Berlin | * DE | * S3-ah-36707 |
| * SA3#79-LI | * 2020-10-20 | * 2020-10-23 | * US | * US | * S3-ah-36851 |
| * SA3#101 | * 2020-11-02 | * 2020-11-06 | * TBD |  | * S3-101 |