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

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

**e-meeting, Online, 14/04/2020 to 17/04/2020**

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## 1 Agenda and meeting objectives

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

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

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

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

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

**S3-200600 Agenda**

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

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

**S3-200793 Process for SA3#98bis-e meeting**

*Type: other For: Information  
 Source: Ericsson LM*

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

## 2 Main work areas

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

**S3-200628 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 **replied to in S3-200649**.

**S3-200644 [33.180] R16 Fix first-to-answer**

*Type: CR For: Agreement  
 33.180 v16.3.0 CR-0141 Cat: F (Rel-16)  
  
 Source: Motorola Solutions UK Ltd.*

**Abstract:**

Align the first-to-answer security setup procedure with the normal private call security setup procedures.

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

**S3-200645 [33.179] R13 token scope fix**

*Type: CR For: Agreement  
 33.179 v13.10.0 CR-0106 Cat: F (Rel-13)  
  
 Source: Motorola Solutions UK Ltd.*

**Abstract:**

Fix Rel-13 access token scope definitions to align with Rel-14+ access token scope definitions.

**Discussion:**

Converted into a draftCR. Content approved.

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

**S3-200646 [33.180] R16 Fix IdM client terminology**

*Type: CR For: Agreement  
 33.180 v16.3.0 CR-0142 Cat: F (Rel-16)  
  
 Source: Motorola Solutions UK Ltd.*

**Abstract:**

Clarify that IdM client implementations are outside the scope of 33.180.

**Discussion:**

Converted into a draftCR. Content approved.

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

**S3-200647 [33.180] R16 Fix XML references**

*Type: CR For: Agreement  
 33.180 v16.3.0 CR-0143 Cat: D (Rel-16)  
  
 Source: Motorola Solutions UK Ltd.*

**Abstract:**

Fix References

**Discussion:**

Converted into a draftCR. Content approved.

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

**S3-200648 [33.180] R16 TrK-ID and InK-ID indication**

*Type: CR For: Agreement  
 33.180 v16.3.0 CR-0144 Cat: F (Rel-16)  
  
 Source: Motorola Solutions UK Ltd.*

**Discussion:**

Converted into a draftCR. Content approved.

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

**S3-200649 SA3 Reply LS on how the IWF obtains key material for interworking group and private communications**

*Type: LS out For: Agreement  
 to CT1, SA6  
 Source: Motorola Solutions UK Ltd.*

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

**S3-200808 [33.179] R13 token scope fix**

*Type: draftCR For: Agreement  
 33.179 v13.10.0  
 Source: Motorola Solutions UK Ltd.*

**Abstract:**

Fix Rel-13 access token scope definitions to align with Rel-14+ access token scope definitions.

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

**S3-200809 [33.180] R16 Fix IdM client terminology**

*Type: draftCR For: Agreement  
 33.180 v16.3.0  
 Source: Motorola Solutions UK Ltd.*

**Abstract:**

Clarify that IdM client implementations are outside the scope of 33.180.

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

**S3-200810 [33.180] R16 Fix XML references**

*Type: draftCR For: Agreement  
 33.180 v16.3.0  
 Source: Motorola Solutions UK Ltd.*

**Abstract:**

Fix References

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

**S3-200811 [33.180] R16 TrK-ID and InK-ID indication**

*Type: draftCR For: Agreement  
 33.180 v16.3.0  
 Source: Motorola Solutions UK Ltd.*

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

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

**S3-200621 Response LS on Enhancing Location Information Reporting with Dual Connectivity**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-201249*

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

**S3-200626 LS on enhancing location information reporting with Dual Connectivity**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-2002422*

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

**S3-200641 eLCS NOTE Clarification**

*Type: other For: Approval  
 Source: Futurewei*

**Abstract:**

This pCR proposes clarification to NOTEs in the living CR for eLCS.

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

**S3-200698 Draft CR as a living baseline for 5GS LCS normative work**

*Type: draftCR For: Approval  
 33.501 v16.2.0  
 Source: CATT*

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

**S3-200702 Removing ENs in Draft CR as a living baseline for 5GS LCS normative work**

*Type: draftCR For: Approval  
 33.501 v16.2.0  
 Source: CATT*

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

**S3-200720 Add clarifications to the living CR**

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

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

**S3-200732 Draft LS on security of eLCS**

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

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

**S3-200750 Resolving ENs in Draft CR**

*Type: draftCR For: Agreement  
 33.501 v16.2.0  
 Source: Ericsson*

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

**S3-200751 [DRAFT] LS on security of eLCS**

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

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

**S3-200791 eLCS privacy discussion on way forward**

*Type: discussion For: Endorsement  
 Source: NTT DOCOMO*

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

**S3-200802 5G\_eLCS - meeting minutes conf-call on eLCS Privacy Protection**

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

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

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

**S3-200613 Authentication between network functions and the NRF in indirect communication**

*Type: draftCR For: Approval  
 33.501 v16.2.0  
 Source: Ericsson*

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

**S3-200614 Token-based authorization in Scenario D**

*Type: draftCR For: Approval  
 33.501 v16.2.0  
 Source: Ericsson*

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

**S3-200616 LS on Misalignment on HTTP connections for N32-c and on N32-f contexts termination**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-200781*

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

**S3-200617 LS on Misalignments on N32-f context Id**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-200782*

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

**S3-200660 Way forward on authentication and authorization in SBA**

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

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

**S3-200662 Validation of Access Token ownership requirement**

*Type: CR For: Approval  
 33.501 v16.2.0 CR-0786 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**.

**S3-200663 Discussion End-2-End Access Token ownership validation**

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

**Abstract:**

What is required for end-2-end access token authorization

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

**S3-200664 end-2-end client authentication during Indirect communication**

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

**Abstract:**

Discussion on the required proof for enabling end-2-end authentication during Indirect communication

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

**S3-200665 Clarification of Token-based authorization**

*Type: CR For: Approval  
 33.501 v16.2.0 CR-0787 Cat: F (Rel-16)  
  
 Source: Mavenir,Deutsche Telekom*

**Abstract:**

What is required to enable end-2-end hop-by-hop mutual authentuication

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

**S3-200666 Clarification of Indirect Communication Mutual Authentication**

*Type: CR For: Approval  
 33.501 v16.2.0 CR-0788 Cat: F (Rel-16)  
  
 Source: Mavenir,Deutsche Telekom*

**Abstract:**

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

**Discussion:**

agreement: NF to NRF auth could be based on direct mutual TLS or hop-by-hop TLS.

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

**S3-200686 Trust mode in the eSBA**

*Type: CR For: Approval  
 33.501 v16.2.0 CR-0791 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200687 eSBA: Discussion on the subscribe/notify issue**

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

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

**S3-200688 Authorization in the Subscribe-Notify interaction scenarios**

*Type: CR For: Approval  
 33.501 v16.2.0 CR-0792 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200689 Clarification on NF consumer instance ID verification**

*Type: CR For: Approval  
 33.501 v16.2.0 CR-0793 Cat: F (Rel-16)  
  
 Source: Huawei, Hisilicon*

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

**S3-200792 Token based authorization in model D - Scenario 1**

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

**Abstract:**

Token based authorization for Model D - Scenario 1

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

**S3-200794 Token based authorization in model D - Scenario 2**

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

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

**S3-200795 Authentication between Network Functions**

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

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

**S3-200796 Authentication between NRF and NF**

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

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

**S3-200797 Access token ownership in Direct communication scenarios**

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

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

**S3-200798 Access token ownership in Indirect communication scenarios**

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

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

**S3-200799 Token based authorization in model D**

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

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

**S3-200800 SBA Network Function certificate profile**

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

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

**S3-200801 Discussion paper on authentication for indirect communication**

*Type: discussion For: Endorsement  
 33.501 v..  
 Source: Nokia, Nokia Shanghai Bell*

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

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

**S3-200606 AKMA-Derivation of the KAF**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Apple*

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

**S3-200607 AKMA-KAF refreshment**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Apple*

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

**S3-200608 AKMA-Editorial on the 6.2**

*Type: pCR For: Agreement  
 33.535 v0.3.0  
 Source: Apple*

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

**S3-200609 AKMA-AAnF definition**

*Type: pCR For: Information  
 33.535 v0.3.0  
 Source: Apple*

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

**S3-200610 AKMA-AKMA capability indication between UE and AF**

*Type: pCR For: Information  
 33.535 v0.3.0  
 Source: Apple*

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

**S3-200640 AKMA Application Key Requirement**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Futurewei*

**Abstract:**

This pCR proposes to remove one of the AKMA AF requirements.

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

**S3-200661 TS 33.535 - Corrections**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: InterDigital, Inc.*

**Abstract:**

This contribution provides editorial corrections for TS 33.535-0.3.0.

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

**S3-200669 Update clause 4.1**

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

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

**S3-200670 Update the figure in clause 6.1**

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

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

**S3-200671 Update the procedure in clause 6.2**

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

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

**S3-200672 Store AUSF instance ID in UDM**

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

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

**S3-200673 Defining AKMA key identifier for AKMA Anchor Key on demand procedures**

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

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

**S3-200674 AKMA anchor Key push**

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

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

**S3-200675 AKMA anchor Key update notification**

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

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

**S3-200676 Processing of KAKMA failure from AUSF to AAnF**

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

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

**S3-200677 Expire time in UE**

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

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

**S3-200678 Derivation of KAF**

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

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

**S3-200679 KAF update**

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

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

**S3-200703 Discussion paper to support AKMA progress**

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

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

**S3-200704 AKMA key ID derivation**

*Type: pCR For: (not specified)  
 33.535 v0.3.0  
 Source: Samsung*

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

**S3-200705 Key update procedure**

*Type: pCR For: (not specified)  
 33.535 v0.3.0  
 Source: Samsung*

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

**S3-200706 KAF derivation and refresh**

*Type: pCR For: (not specified)  
 33.535 v0.3.0  
 Source: Samsung*

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

**S3-200707 Authorization of AF in AKMA**

*Type: pCR For: (not specified)  
 33.535 v0.3.0  
 Source: Samsung*

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

**S3-200709 Adding additional AF functionality in clause 4.2.2**

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

**Decision:** The document was **revised to S3-200826**.

**S3-200710 Adding UDM functionality in clause 4.2**

*Type: pCR For: (not specified)  
 33.535 v0.3.0  
 Source: CATT*

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

**S3-200711 Adding UE functionality in clause 4.2**

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

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

**S3-200712 The details of the AKMA service subscription information confirmation**

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

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

**S3-200713 Update Requirement on clause 4.3.1**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

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

**S3-200714 Lifetime of Kakma ID**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

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

**S3-200715 Kakma ID format**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200814**.

**S3-200716 Kakma and Kakma ID derivation**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

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

**S3-200717 Store Kakma ID in the UDM**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

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

**S3-200718 AUSF selection**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

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

**S3-200719 Add a new clause on AKMA key re-keying**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200815**.

**S3-200724 Deriving AKMA Application key for a specific AF via NEF**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

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

**S3-200725 Update to deriving AKMA Application key for a specific AF**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200816**.

**S3-200726 AUSF function in AKMA**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200817**.

**S3-200739 AKMA AF key request via NEF**

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

**Decision:** The document was **revised to S3-200803**.

**S3-200740 AKMA Architecture considerations**

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

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

**S3-200741 pCR to TS 33.535: Update of the AKMA procedures**

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

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

**S3-200769 pCR : Requirements on AKMA Key Identifier**

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

(Replaces S3-200365)

**Decision:** The document was **revised to S3-200812**.

**S3-200770 pCR : AKMA Temporary UE Identifier**

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

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

**S3-200771 Correction of FC values**

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

**Decision:** The document was **revised to S3-200830**.

**S3-200772 CR to TS 33.220-FC value allocations for AKMA**

*Type: CR For: Approval  
 33.220 v16.0.0 CR-0200 Cat: F (Rel-16)  
  
 Source: China Mobile*

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

**S3-200773 Removing obsolete Editor’s Notes in TS 33.535**

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

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

**S3-200774 Derivation of KAF**

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

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

**S3-200775 Meeting minutes of AKMA conference call on 31st March**

*Type: other For: Information  
 33.535 v..  
 Source: China Mobile*

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

**S3-200803 AKMA AF key request via NEF**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Ericsson, Huawei*

(Replaces S3-200739)

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

**S3-200812 pCR : Requirements on AKMA Key Identifier**

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

(Replaces S3-200769)

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

**S3-200813 Kakma ID format**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

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

**S3-200814 Kakma ID format**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

(Replaces S3-200715)

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

**S3-200815 Add a new clause on AKMA key re-keying**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon,Apple*

(Replaces S3-200719)

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

**S3-200816 Update to deriving AKMA Application key for a specific AF**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

(Replaces S3-200725)

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

**S3-200817 AUSF function in AKMA**

*Type: pCR For: Approval  
 33.535 v0.3.0  
 Source: Huawei, Hisilicon*

(Replaces S3-200726)

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

**S3-200826 Adding additional AF functionality in clause 4.2.2**

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

(Replaces S3-200709)

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

**S3-200830 Correction of FC values**

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

(Replaces S3-200771)

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

**S3-200831 draft TS 33.535 v0.4.0**

*Type: draft TS For: Approval  
 33.535 v0.4.0  
 Source: China Mobile*

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

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

**S3-200615 LS on 5G-GUTI reallocation after paging of a UE in 5GMM-IDLE mode with suspend indication**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C1-200967*

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

**S3-200625 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 **noted**.

**S3-200667 Procedure to transfer UE capability for UEs without AS Security**

*Type: discussion For: (not specified)  
 Source: Intel Corporation (UK) Ltd*

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

**S3-200668 Security of RRC UE capability transfer procedure in 5G for CIoT optimisation**

*Type: draftCR For: (not specified)  
 33.501 v16.2.0  
 Source: Intel Corporation (UK) Ltd*

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

**S3-200701 Reply LS on 5G-GUTI reallocation after paging of a UE in 5GMM-IDLE mode with suspend indication**

*Type: LS out For: (not specified)  
 to CT1  
 Source: Samsung*

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

**S3-200722 Security handling for UP data protection for UP CIoT 5GS Opmitization**

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

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

**S3-200723 Discussion on protection of UE radio capability**

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

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

**S3-200733 way forward on Calculation of shortResumeMAC-I**

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

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

**S3-200734 Address EN for Calculation of ShortResumeMAC-I for UP 5GS CIoT Optimisation**

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

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

**S3-200735 Draft LS to RAN2 and RAN3 inputs for ShortResumeMAC-I Calculation for UP 5GS CIoT Optimisation**

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

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

**S3-200736 Draft Reply LS on 5G-S-TMSI Truncation Procedure**

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

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

**S3-200744 [Draft CR] Input to MESSAGE when calculating ShortResumeMAC-I in RRC Connection Suspend and Resume**

*Type: draftCR For: Agreement  
 33.501 v16.2.0  
 Source: Ericsson*

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

**S3-200747 Way forward for UE caps protection and NB-IoT Ues**

*Type: discussion For: Endorsement  
 Source: Ericsson*

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

**S3-200748 UE caps protection using AS security in EPS Rel-16**

*Type: CR For: Agreement  
 33.401 v16.2.0 CR-0693 Cat: C (Rel-16)  
  
 Source: Ericsson*

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

**S3-200749 UE caps protection using AS security in 5GS Rel-16**

*Type: CR For: Agreement  
 33.501 v16.2.0 CR-0796 Cat: C (Rel-16)  
  
 Source: Ericsson*

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

**S3-200764 Protection of UE radio capability transfer for UEs without AS security**

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

(Replaces S3-200357)

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

**S3-200765 Way forward for UE radio capability protection without AS security**

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

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

**S3-200778 DraftCR – Living document for supporting 5G CIoT security**

*Type: draftCR For: Approval  
 33.501 v16.2.0  
 Source: Ericsson*

**Abstract:**

Baseline capturing previously agreed text

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

**S3-200837 CIoT UE caps confcall rapporteur notes**

*Type: discussion For: Information  
 Source: Ericsson*

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

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

**S3-200619 Clarification on encryption requirements for AGF interfaces (N1, N2, N3) [WWC]**

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

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

**S3-200627 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**.

**S3-200652 AGF in 5GC trust domain**

*Type: draftCR For: Approval  
 33.501 v16.2.0  
 Source: Juniper Networks, Ericsson*

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

**S3-200752 ERP for TNAP mobility**

*Type: CR For: Approval  
 33.501 v16.2.0 CR-0797 Cat: B (Rel-16)  
  
 Source: Lenovo, Motorola Mobility*

**Abstract:**

Introduction of ERP for TNAP mobility

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

**S3-200779 N5CW: editorial correction**

*Type: draftCR For: Approval  
 33.501 v16.2.0  
 Source: THALES, ORANGE*

**Abstract:**

N5CW: editorial correction

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

**S3-200783 UE pre-configuration for non-3GPP access networks**

*Type: draftCR For: Approval  
 33.501 v16.2.0  
 Source: THALES, ORANGE*

**Abstract:**

UE pre-configuration for non-3GPP access networks

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

**S3-200818 Living CR for 5WWC**

*Type: draftCR For: (not specified)  
 33.501 v16.2.0  
 Source: Huawei, Hisilicon*

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

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

**S3-200622 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 **replied to in S3-200821**.

**S3-200657 eNS Living CR Re-submission**

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

**Abstract:**

Re-submission of eNS living CR

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

**S3-200658 Slice Specific Authentication and Authrorization clauses**

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

**Abstract:**

Text for subclauses for eNS

**Decision:** The document was **revised to S3-200807**.

**S3-200659 draft\_Reply LS to SA2 on AUSF role**

*Type: LS out For: Approval  
 to SA2  
 Source: Nokia, Nokia Shanghai Bell*

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

**S3-200776 Addessing EN on transmitting NSSAI to AAA**

*Type: draftCR For: Approval  
 33.501 v16.2.0  
 Source: China Mobile*

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

**S3-200777 LS on transformation of S-NSSAI during NSSAA**

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

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

**S3-200780 [DRAFT] Reply LS on AUSF role in slice specific authentication**

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

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

**S3-200781 DraftCR – Replacing AUSF with AAA-IWF for NSSAA procedures**

*Type: draftCR For: Approval  
 33.501 v16.2.0  
 Source: Ericsson, Hewlett-Packard Enterprise, China Mobile, CATT*

**Abstract:**

This contribution targets the living CR document.

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

**S3-200782 Discussion paper on the role of AUSF during NSSAA**

*Type: discussion For: Endorsement  
 33.501 v..  
 Source: Ericsson, Hewlett-Packard Enterprise, China Mobile, CATT*

**Discussion:**

agreement: new NF for NSSAA.

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

**S3-200784 AUSF role in slice-specific authentication**

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

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

**S3-200785 draft LS to SA2 on AUSF roles**

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

**Decision:** The document was **revised to S3-200821**.

**S3-200786 draft CR on AUSF roles**

*Type: draftCR For: Agreement  
 33.501 v16.2.0  
 Source: Huawei, HiSilicon*

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

**S3-200787 draft CR on sending NSSAI to AAA**

*Type: draftCR For: Agreement  
 33.501 v16.2.0  
 Source: Huawei, HiSilicon*

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

**S3-200788 draft CR on miscellaneous items**

*Type: draftCR For: Agreement  
 33.501 v16.2.0  
 Source: Huawei, HiSilicon*

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

**S3-200807 Living CR for Slice Specific Authentication and Authrorization clauses**

*Type: draftCR For: Approval  
 33.501 v16.2.0  
 Source: Nokia, Nokia Shanghai Bell, Huawei, HiSilicon, Ericsson, Hewlett-Packard Enterprise, China Mobile, CATT, Interdigital*

(Replaces S3-200658)

**Abstract:**

Text for subclauses for eNS

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

**S3-200821 LS to SA2 on AUSF roles**

*Type: LS out For: Approval  
 to SA2, CT1, CT3, CT4  
 Source: Huawei, HiSilicon, Nokia, Ericsson*

(Replaces S3-200785)

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

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

**S3-200680 Adding a definition for IAB-UE**

*Type: CR For: Agreement  
 33.501 v16.2.0 CR-0789 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

**Discussion:**

Converted into a draft CR.

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

**S3-200681 Update the Annex M.2.4**

*Type: CR For: Agreement  
 33.501 v16.2.0 CR-0790 Cat: F (Rel-16)  
  
 Source: ZTE Corporation*

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

**S3-200694 F1 interface security set-up procedure**

*Type: CR For: Agreement  
 33.501 v16.2.0 CR-0794 Cat: B (Rel-16)  
  
 Source: Samsung, Thales, Nokia, Nokia Shanghai Bell, ZTE*

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

**S3-200721 editorial change to IAB architecture**

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

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

**S3-200731 Add requirement for OAM to IAB ENDC**

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

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

**S3-200762 F1 security setup with certificate based IKEv2 authentication**

*Type: CR For: Agreement  
 33.501 v16.2.0 CR-0798 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated, Ericsson, Intel*

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

**S3-200763 F1 security setup with PSK based IKEv2 authentication**

*Type: CR For: Agreement  
 33.501 v16.2.0 CR-0799 Cat: B (Rel-16)  
  
 Source: Qualcomm Incorporated, Ericsson, Intel*

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

**S3-200829 Adding a definition for IAB-UE**

*Type: draftCR For: Agreement  
 33.501 v16.2.0  
 Source: ZTE Corporation*

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

### 2.9 Security aspects of SEAL (Rel-16)

**S3-200650 SEAL Key Management procedure**

*Type: pCR For: Agreement  
 33.434 v0.2.0  
 Source: Motorola Solutions UK Ltd.*

**Abstract:**

key management procedure for a SEAL

**Decision:** The document was **revised to S3-200835**.

**S3-200651 SEAL Key Management Request and Response messages**

*Type: pCR For: Agreement  
 33.434 v0.2.0  
 Source: Motorola Solutions UK Ltd.*

**Abstract:**

Key management messages for SEAL key management service.

**Decision:** The document was **revised to S3-200836**.

**S3-200827 Draft 33.434 v0.3.0**

*Type: draft TS For: (not specified)  
 33.434 v0.3.0  
 Source: Samsung*

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

**S3-200835 SEAL Key Management procedure**

*Type: pCR For: Agreement  
 33.434 v0.2.0  
 Source: Motorola Solutions UK Ltd.*

(Replaces S3-200650)

**Abstract:**

key management procedure for a SEAL

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

**S3-200836 SEAL Key Management Request and Response messages**

*Type: pCR For: Agreement  
 33.434 v0.2.0  
 Source: Motorola Solutions UK Ltd.*

(Replaces S3-200651)

**Abstract:**

Key management messages for SEAL key management service.

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

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

**S3-200601 eV2XARC-Security policy for unicast message in PC5**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Apple*

**Decision:** The document was **revised to S3-200824**.

**S3-200602 eV2XARC-Security policy provisioning**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Apple*

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

**S3-200603 eV2XARC-Security establishment for user plane bearer**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Apple*

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

**S3-200604 eV2XARC-LCID clairification**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Apple*

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

**S3-200605 eV2XARC-Correction in 5.3.3.1.3.2 and 5.3.3.2.2**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Apple*

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

**S3-200612 TS 33.536 - Corrections**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: InterDigital, Inc., Nokia, Nokia Shanghai Bell, Ericsson*

**Abstract:**

This contribution provides editorial corrections for TS 33.536-1.0.0.

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

**S3-200620 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 **replied to in S3-200820**.

**S3-200623 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 **noted**.

**S3-200624 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 **noted**.

**S3-200642 Emergency Services in eV2X**

*Type: other For: Approval  
 Source: Futurewei*

**Abstract:**

This pCR proposes some clarification on emergency services support.

**Decision:** The document was **revised to S3-200806**.

**S3-200653 TS 33.536 - Clean up**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: LG Electronics Inc.*

**Abstract:**

This pCR clean-up the latest version of TS 33.536 in general

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

**S3-200654 TS 33.536 - Common Security over NR PC5**

*Type: pCR For: Approval  
 33.536 v0.3.0  
 Source: LG Electronics Inc.*

**Abstract:**

This pCR proposes requirements and procedures that can be commonly applied to all kinds of modes over NR PC5

**Decision:** The document was **revised to S3-200823**.

**S3-200655 TS 33.536 - Security Policy for NR PC5**

*Type: pCR For: Approval  
 33.536 v0.3.0  
 Source: LG Electronics Inc.*

**Abstract:**

This pCR proposes a procedure to select the security policy at the receiving UE.

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

**S3-200656 TS 33.536 - Group ID conversion on NR PC5**

*Type: pCR For: Approval  
 33.536 v0.3.0  
 Source: LG Electronics Inc.*

**Abstract:**

This pCR proposes text to cover the privacy of destination ID for the groupcast.

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

**S3-200682 Adding some abbreviations to V2X TS**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: ZTE Corporation*

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

**S3-200683 Update the clause 5.3.3.1.2.3**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-200825**.

**S3-200684 Update clause 5.3.3.2.2**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S3-200828**.

**S3-200685 Clean up of V2X TS**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: ZTE Corporation*

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

**S3-200690 eV2X: Resolving EN on policy definition**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Huawei, Hisilicon*

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

**S3-200691 eV2X: Resolving EN on security policy handling**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Huawei, Hisilicon*

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

**S3-200692 eV2X: Resolving EN on the choice of security notification message**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Huawei, Hisilicon*

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

**S3-200693 eV2X: Clarification on the security policy provisioning**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Huawei, Hisilicon*

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

**S3-200708 LS reply to RAN WG2 LS on NR V2X Security issues**

*Type: LS out For: Approval  
 to RAN2  
 Source: CATT*

**Decision:** The document was **revised to S3-200820**.

**S3-200727 Discussion on the functionality of Key ID in PDCP header for NR PC5 unicast communication**

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

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

**S3-200728 V2X signalling security mandatory activation for unicast**

*Type: pCR For: Approval  
 33.536 v0.3.0  
 Source: Huawei, Hisilicon*

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

**S3-200729 Draft LS on the security context index field in PDCP header for NR PC5 unicast**

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

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

**S3-200730 Clarification for V2X layer passing security configurations to AS layer**

*Type: pCR For: Approval  
 33.536 v0.3.0  
 Source: Huawei, Hisilicon*

**Decision:** The document was **revised to S3-200819**.

**S3-200742 Discussion paper on eV2X groupcast privacy**

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

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

**S3-200743 Adding privacy procedures for V2X group cast communication**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Huawei, HiSilicon, Lenovo, Motorola Mobility*

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

**S3-200753 Resolving the Editors’ Note on policy name in V2X TS**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Qualcomm Incorporated*

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

**S3-200754 Proposal to finalise UP security policy in V2X**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Qualcomm Incorporated*

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

**S3-200755 Proposal to resolve the Editor’s note of the size of COUNT**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Qualcomm Incorporated*

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

**S3-200756 Privacy of K\_NRP ID**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Qualcomm Incorporated*

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

**S3-200757 Resolving the editor’s note on the protection of messages**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Qualcomm Incorporated*

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

**S3-200758 Using the old security context for processing received re-transmissions**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Qualcomm Incorporated*

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

**S3-200759 Proposal for the Editor’s note on groupcast privacy**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Qualcomm Incorporated*

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

**S3-200789 Destination L2 privacy**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Ericsson*

**Abstract:**

a new solution against V2X UE tracking based on PC5 destination L2 identifier

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

**S3-200790 Discussion paper on security policy**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Apple*

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

**S3-200805 Emergency Services in eV2X**

*Type: other For: Approval  
 Source: Futurewei*

(Replaces S3-200642)

**Abstract:**

This pCR proposes some clarification on emergency services support.

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

**S3-200806 Emergency Services in eV2X**

*Type: other For: Approval  
 Source: Futurewei, InterDigital, Inc.*

(Replaces S3-200642)

**Abstract:**

This pCR proposes some clarification on emergency services support.

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

**S3-200819 Clarification for V2X layer passing security configurations to AS layer**

*Type: pCR For: Approval  
 33.536 v0.3.0  
 Source: Huawei, Hisilicon*

(Replaces S3-200730)

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

**S3-200820 LS reply to RAN WG2 LS on NR V2X Security issues**

*Type: LS out For: Approval  
 to RAN2  
 Source: CATT*

(Replaces S3-200708)

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

**S3-200822 draft\_TS 33.536 v1.1.0**

*Type: draft TS For: Approval  
 33.536 v1.1.0  
 Source: LG Electronics Inc.*

**Abstract:**

draft TS 33.536 v1.1.0 implements the contributions approved during SA3#98bis-e meeting.

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

**S3-200823 TS 33.536 - Common Security over NR PC5**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: LG Electronics Inc.*

(Replaces S3-200654)

**Abstract:**

This pCR proposes requirements and procedures that can be commonly applied to all kinds of modes over NR PC5

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

**S3-200824 eV2XARC-Security policy for unicast message in PC5**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: Apple*

(Replaces S3-200601)

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

**S3-200825 Update the clause 5.3.3.1.2.3**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: ZTE Corporation*

(Replaces S3-200683)

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

**S3-200828 Update clause 5.3.3.2.2**

*Type: pCR For: Approval  
 33.536 v1.0.0  
 Source: ZTE Corporation*

(Replaces S3-200684)

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

**S3-200834 LS on Specifying the PC5-S messages that can be processed without protection**

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

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

### 2.11 Study on User Plane Integrity Protection (Rel-16)

**S3-200611 UPIP-Update for solution#10**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: Apple*

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

**S3-200618 Mandatory User Plane Integrity for 5G**

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

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

**S3-200629 pCR to TR 33.853 move of network options from introduction to section 4**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: VODAFONE Group Plc*

**Abstract:**

moves the network options from the introduction to the network options section.

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

**S3-200630 pCR to TR33.853 (UPIP) - Addition of conclusions to section 7.2**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: VODAFONE Group Plc*

**Abstract:**

This adds a conclusion for LTE core based options

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

**S3-200631 pCR to TR 33.853 (UPIP): addition of new solution - used NR PDCP for LTE**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: VODAFONE Group Plc*

**Abstract:**

this adds a new solution for the LTE core options.

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

**S3-200632 draft WID - Normative changes for UPIP**

*Type: WID new For: Approval  
 Source: VODAFONE Group Plc*

**Abstract:**

This WID covers changes to SA3 specification to implement updates to UPIP

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

**S3-200633 CR to 33.501 - Update to User Plane Integrity Protection**

*Type: CR For: Approval  
 33.501 v16.2.0 CR-0785 Cat: C (Rel-16)  
  
 Source: VODAFONE Group Plc*

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

**S3-200634 LS to RAN3 and CT1 on Updated User Plane Integrity Protection advice**

*Type: LS out For: Approval  
 to RAN3, CT1, cc RAN, SA, SA2  
 Source: VODAFONE Group Plc*

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

**S3-200635 Cover sheet for TR 33.853 for Information**

*Type: TS or TR cover For: Approval  
 33.853 v0.7.0  
 Source: VODAFONE Group Plc*

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

**S3-200636 minutes of UPIP confcall #1 on 2 April 2020**

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

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

**S3-200637 minutes of confcall 2 on UPIP held 3 April 2020**

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

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

**S3-200638 Discussion docuemnt on the approval of TR33.853**

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

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

**S3-200639 pCR to 33.853 (UPIP) - Correction to Key Issue 5**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: VODAFONE Group Plc*

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

**S3-200643 UPIP Way Forward Discussion**

*Type: discussion For: Endorsement  
 Source: Futurewei*

**Abstract:**

This is discussion paper on way forward for UPIP in R16.

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

**S3-200695 Proposed solution for UP IP issues in GSMA LS**

*Type: discussion For: (not specified)  
 33.501 v..  
 Source: Samsung, Nokia, Nokia Shanghai Bell*

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

**S3-200696 UP integrity protection for UP Signalling messages**

*Type: CR For: (not specified)  
 33.501 v16.2.0 CR-0795 Cat: B (Rel-16)  
  
 Source: Samsung*

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

**S3-200697 Integrity protection of DNS messages**

*Type: CR For: (not specified)  
 33.401 v16.2.0 CR-0692 Cat: B (Rel-16)  
  
 Source: Samsung*

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

**S3-200699 Reduced overhead for UP IP for 5G RAN\_conclusion**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: Philips International B.V.*

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

**S3-200700 Conclusion to Key Issue #5**

*Type: pCR For: (not specified)  
 33.853 v0.7.0  
 Source: Samsung*

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

**S3-200737 Discussion on endorsement for UP IP**

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

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

**S3-200738 Draft LS on UP IP**

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

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

**S3-200745 UPIP: pCR for new solution of UP IP in EPS**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-200832**.

**S3-200746 UPIP: pCR for new solution for option 5**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: Ericsson*

**Decision:** The document was **revised to S3-200833**.

**S3-200760 Interworking between EPS and 5GS when UP IP is supported in EPS**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: Qualcomm Incorporated*

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

**S3-200761 Using existing algorithm IEs to indicate support UP IP with an eNB**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: Qualcomm Incorporated*

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

**S3-200766 On the GSMA LS on UP IP**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated, vivo, Nokia, Nokia Shanghai Bell*

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

**S3-200767 Proposed solution for UP IP issues in GSMA LS**

*Type: discussion For: Approval  
 Source: Qualcomm Incorporated, vivo*

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

**S3-200768 Proposed conclusion for Key Issue #6 in TR 33.853**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: Qualcomm Incorporated*

(Replaces S3-194338)

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

**S3-200804 Draft TR 33.853 v0.8.0**

*Type: draft TR For: Approval  
 33.853 v0.8.0  
 Source: VODAFONE Group Plc*

**Abstract:**

Draft TR as a result of SA3 98bis-e

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

**S3-200832 UPIP: pCR for new solution of UP IP in EPS**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: Ericsson*

(Replaces S3-200745)

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

**S3-200833 UPIP: pCR for new solution for option 5**

*Type: pCR For: Approval  
 33.853 v0.7.0  
 Source: Ericsson*

(Replaces S3-200746)

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

## Annex A: Contribution documents and status

### A1: List of TDocs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| * S3-200600 | * Agenda | * WG Chair | * approved |  |  |
| * S3-200601 | * eV2XARC-Security policy for unicast message in PC5 | * Apple | * revised |  | * S3-200824 |
| * S3-200602 | * eV2XARC-Security policy provisioning | * Apple | * noted |  |  |
| * S3-200603 | * eV2XARC-Security establishment for user plane bearer | * Apple | * noted |  |  |
| * S3-200604 | * eV2XARC-LCID clairification | * Apple | * noted |  |  |
| * S3-200605 | * eV2XARC-Correction in 5.3.3.1.3.2 and 5.3.3.2.2 | * Apple | * approved |  |  |
| * S3-200606 | * AKMA-Derivation of the KAF | * Apple | * noted |  |  |
| * S3-200607 | * AKMA-KAF refreshment | * Apple | * merged |  | * S3-200815 |
| * S3-200608 | * AKMA-Editorial on the 6.2 | * Apple | * noted |  |  |
| * S3-200609 | * AKMA-AAnF definition | * Apple | * noted |  |  |
| * S3-200610 | * AKMA-AKMA capability indication between UE and AF | * Apple | * noted |  |  |
| * S3-200611 | * UPIP-Update for solution#10 | * Apple | * approved |  |  |
| * S3-200612 | * TS 33.536 - Corrections | * InterDigital, Inc., Nokia, Nokia Shanghai Bell, Ericsson | * approved |  |  |
| * S3-200613 | * Authentication between network functions and the NRF in indirect communication | * Ericsson | * noted |  |  |
| * S3-200614 | * Token-based authorization in Scenario D | * Ericsson | * noted |  |  |
| * S3-200615 | * LS on 5G-GUTI reallocation after paging of a UE in 5GMM-IDLE mode with suspend indication | * C1-200967 | * postponed |  |  |
| * S3-200616 | * LS on Misalignment on HTTP connections for N32-c and on N32-f contexts termination | * C4-200781 | * withdrawn |  |  |
| * S3-200617 | * LS on Misalignments on N32-f context Id | * C4-200782 | * withdrawn |  |  |
| * S3-200618 | * Mandatory User Plane Integrity for 5G | * GSMA | * noted |  |  |
| * S3-200619 | * Clarification on encryption requirements for AGF interfaces (N1, N2, N3) [WWC] | * BBF | * postponed |  |  |
| * S3-200620 | * LS to SA3 on NR V2X Security issues | * R2-2001980 | * replied to |  |  |
| * S3-200621 | * Response LS on Enhancing Location Information Reporting with Dual Connectivity | * R3-201249 | * noted |  |  |
| * S3-200622 | * Reply LS on AUSF role in slice specific authentication | * S2-1910668 | * replied to |  |  |
| * S3-200623 | * Reply LS on LS on PC5S and PC5 RRC unicast message protection | * S2-1912002 | * noted |  |  |
| * S3-200624 | * Reply LS on PC5 unicast and groupcast security protection | * S2-2000971 | * noted |  |  |
| * S3-200625 | * Reply LS on 5G-S-TMSI Truncation Procedure | * S2-2001248 | * noted |  |  |
| * S3-200626 | * LS on enhancing location information reporting with Dual Connectivity | * S2-2002422 | * noted |  |  |
| * S3-200627 | * LS on uniqueness of PEI in certain FN-RG configurations | * S3i200069 | * postponed |  |  |
| * S3-200628 | * Reply LS on how the IWF obtains key material for interworking group and private communications | * S6-192194 | * replied to |  |  |
| * S3-200629 | * pCR to TR 33.853 move of network options from introduction to section 4 | * VODAFONE Group Plc | * noted |  |  |
| * S3-200630 | * pCR to TR33.853 (UPIP) - Addition of conclusions to section 7.2 | * VODAFONE Group Plc | * withdrawn |  |  |
| * S3-200631 | * pCR to TR 33.853 (UPIP): addition of new solution - used NR PDCP for LTE | * VODAFONE Group Plc | * noted |  |  |
| * S3-200632 | * draft WID - Normative changes for UPIP | * VODAFONE Group Plc | * noted |  |  |
| * S3-200633 | * CR to 33.501 - Update to User Plane Integrity Protection | * VODAFONE Group Plc | * not pursued |  |  |
| * S3-200634 | * LS to RAN3 and CT1 on Updated User Plane Integrity Protection advice | * VODAFONE Group Plc | * noted |  |  |
| * S3-200635 | * Cover sheet for TR 33.853 for Information | * VODAFONE Group Plc | * noted |  |  |
| * S3-200636 | * minutes of UPIP confcall #1 on 2 April 2020 | * VODAFONE Group Plc | * noted |  |  |
| * S3-200637 | * minutes of confcall 2 on UPIP held 3 April 2020 | * VODAFONE Group Plc | * noted |  |  |
| * S3-200638 | * Discussion docuemnt on the approval of TR33.853 | * VODAFONE Group Plc | * withdrawn |  |  |
| * S3-200639 | * pCR to 33.853 (UPIP) - Correction to Key Issue 5 | * VODAFONE Group Plc | * noted |  |  |
| * S3-200640 | * AKMA Application Key Requirement | * Futurewei | * approved |  |  |
| * S3-200641 | * eLCS NOTE Clarification | * Futurewei | * noted |  |  |
| * S3-200642 | * Emergency Services in eV2X | * Futurewei | * revised |  | * S3-200806 |
| * S3-200643 | * UPIP Way Forward Discussion | * Futurewei | * noted |  |  |
| * S3-200644 | * [33.180] R16 Fix first-to-answer | * Motorola Solutions UK Ltd. | * not pursued |  |  |
| * S3-200645 | * [33.179] R13 token scope fix | * Motorola Solutions UK Ltd. | * not pursued |  |  |
| * S3-200646 | * [33.180] R16 Fix IdM client terminology | * Motorola Solutions UK Ltd. | * not pursued |  |  |
| * S3-200647 | * [33.180] R16 Fix XML references | * Motorola Solutions UK Ltd. | * not pursued |  |  |
| * S3-200648 | * [33.180] R16 TrK-ID and InK-ID indication | * Motorola Solutions UK Ltd. | * not pursued |  |  |
| * S3-200649 | * SA3 Reply LS on how the IWF obtains key material for interworking group and private communications | * Motorola Solutions UK Ltd. | * approved |  |  |
| * S3-200650 | * SEAL Key Management procedure | * Motorola Solutions UK Ltd. | * revised |  | * S3-200835 |
| * S3-200651 | * SEAL Key Management Request and Response messages | * Motorola Solutions UK Ltd. | * revised |  | * S3-200836 |
| * S3-200652 | * AGF in 5GC trust domain | * Juniper Networks, Ericsson | * approved |  |  |
| * S3-200653 | * TS 33.536 - Clean up | * LG Electronics Inc. | * approved |  |  |
| * S3-200654 | * TS 33.536 - Common Security over NR PC5 | * LG Electronics Inc. | * revised |  | * S3-200823 |
| * S3-200655 | * TS 33.536 - Security Policy for NR PC5 | * LG Electronics Inc. | * noted |  |  |
| * S3-200656 | * TS 33.536 - Group ID conversion on NR PC5 | * LG Electronics Inc. | * noted |  |  |
| * S3-200657 | * eNS Living CR Re-submission | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200658 | * Slice Specific Authentication and Authrorization clauses | * Nokia, Nokia Shanghai Bell | * revised |  | * S3-200807 |
| * S3-200659 | * draft\_Reply LS to SA2 on AUSF role | * Nokia, Nokia Shanghai Bell | * merged |  | * S3-200821 |
| * S3-200660 | * Way forward on authentication and authorization in SBA | * CableLabs | * noted |  |  |
| * S3-200661 | * TS 33.535 - Corrections | * InterDigital, Inc. | * approved |  |  |
| * S3-200662 | * Validation of Access Token ownership requirement | * Mavenir,Deutsche Telekom | * not pursued |  |  |
| * S3-200663 | * Discussion End-2-End Access Token ownership validation | * Mavenir,Deutsche Telekom | * noted |  |  |
| * S3-200664 | * end-2-end client authentication during Indirect communication | * Mavenir,Deutsche Telekom | * noted |  |  |
| * S3-200665 | * Clarification of Token-based authorization | * Mavenir,Deutsche Telekom | * not pursued |  |  |
| * S3-200666 | * Clarification of Indirect Communication Mutual Authentication | * Mavenir,Deutsche Telekom | * not pursued |  |  |
| * S3-200667 | * Procedure to transfer UE capability for UEs without AS Security | * Intel Corporation (UK) Ltd | * noted |  |  |
| * S3-200668 | * Security of RRC UE capability transfer procedure in 5G for CIoT optimisation | * Intel Corporation (UK) Ltd | * noted |  |  |
| * S3-200669 | * Update clause 4.1 | * ZTE Corporation | * approved |  |  |
| * S3-200670 | * Update the figure in clause 6.1 | * ZTE Corporation | * noted |  |  |
| * S3-200671 | * Update the procedure in clause 6.2 | * ZTE Corporation | * noted |  |  |
| * S3-200672 | * Store AUSF instance ID in UDM | * ZTE Corporation | * noted |  |  |
| * S3-200673 | * Defining AKMA key identifier for AKMA Anchor Key on demand procedures | * ZTE Corporation | * noted |  |  |
| * S3-200674 | * AKMA anchor Key push | * ZTE Corporation | * noted |  |  |
| * S3-200675 | * AKMA anchor Key update notification | * ZTE Corporation | * noted |  |  |
| * S3-200676 | * Processing of KAKMA failure from AUSF to AAnF | * ZTE Corporation | * noted |  |  |
| * S3-200677 | * Expire time in UE | * ZTE Corporation | * noted |  |  |
| * S3-200678 | * Derivation of KAF | * ZTE Corporation | * noted |  |  |
| * S3-200679 | * KAF update | * ZTE Corporation | * noted |  |  |
| * S3-200680 | * Adding a definition for IAB-UE | * ZTE Corporation | * not pursued |  |  |
| * S3-200681 | * Update the Annex M.2.4 | * ZTE Corporation | * not pursued |  |  |
| * S3-200682 | * Adding some abbreviations to V2X TS | * ZTE Corporation | * approved |  |  |
| * S3-200683 | * Update the clause 5.3.3.1.2.3 | * ZTE Corporation | * revised |  | * S3-200825 |
| * S3-200684 | * Update clause 5.3.3.2.2 | * ZTE Corporation | * revised |  | * S3-200828 |
| * S3-200685 | * Clean up of V2X TS | * ZTE Corporation | * approved |  |  |
| * S3-200686 | * Trust mode in the eSBA | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-200687 | * eSBA: Discussion on the subscribe/notify issue | * Huawei, Hisilicon | * noted |  |  |
| * S3-200688 | * Authorization in the Subscribe-Notify interaction scenarios | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-200689 | * Clarification on NF consumer instance ID verification | * Huawei, Hisilicon | * not pursued |  |  |
| * S3-200690 | * eV2X: Resolving EN on policy definition | * Huawei, Hisilicon | * approved |  |  |
| * S3-200691 | * eV2X: Resolving EN on security policy handling | * Huawei, Hisilicon | * noted |  |  |
| * S3-200692 | * eV2X: Resolving EN on the choice of security notification message | * Huawei, Hisilicon | * noted |  |  |
| * S3-200693 | * eV2X: Clarification on the security policy provisioning | * Huawei, Hisilicon | * noted |  |  |
| * S3-200694 | * F1 interface security set-up procedure | * Samsung, Thales, Nokia, Nokia Shanghai Bell, ZTE | * not pursued |  |  |
| * S3-200695 | * Proposed solution for UP IP issues in GSMA LS | * Samsung, Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200696 | * UP integrity protection for UP Signalling messages | * Samsung | * not pursued |  |  |
| * S3-200697 | * Integrity protection of DNS messages | * Samsung | * not pursued |  |  |
| * S3-200698 | * Draft CR as a living baseline for 5GS LCS normative work | * CATT | * approved |  |  |
| * S3-200699 | * Reduced overhead for UP IP for 5G RAN\_conclusion | * Philips International B.V. | * noted |  |  |
| * S3-200700 | * Conclusion to Key Issue #5 | * Samsung | * noted |  |  |
| * S3-200701 | * Reply LS on 5G-GUTI reallocation after paging of a UE in 5GMM-IDLE mode with suspend indication | * Samsung | * noted |  |  |
| * S3-200702 | * Removing ENs in Draft CR as a living baseline for 5GS LCS normative work | * CATT | * noted |  |  |
| * S3-200703 | * Discussion paper to support AKMA progress | * Samsung | * noted |  |  |
| * S3-200704 | * AKMA key ID derivation | * Samsung | * noted |  |  |
| * S3-200705 | * Key update procedure | * Samsung | * noted |  |  |
| * S3-200706 | * KAF derivation and refresh | * Samsung | * noted |  |  |
| * S3-200707 | * Authorization of AF in AKMA | * Samsung | * noted |  |  |
| * S3-200708 | * LS reply to RAN WG2 LS on NR V2X Security issues | * CATT | * revised |  | * S3-200820 |
| * S3-200709 | * Adding additional AF functionality in clause 4.2.2 | * CATT | * revised |  | * S3-200826 |
| * S3-200710 | * Adding UDM functionality in clause 4.2 | * CATT | * noted |  |  |
| * S3-200711 | * Adding UE functionality in clause 4.2 | * CATT | * noted |  |  |
| * S3-200712 | * The details of the AKMA service subscription information confirmation | * CATT | * noted |  |  |
| * S3-200713 | * Update Requirement on clause 4.3.1 | * Huawei, Hisilicon | * noted |  |  |
| * S3-200714 | * Lifetime of Kakma ID | * Huawei, Hisilicon | * approved |  |  |
| * S3-200715 | * Kakma ID format | * Huawei, Hisilicon | * revised |  | * S3-200814 |
| * S3-200716 | * Kakma and Kakma ID derivation | * Huawei, Hisilicon | * noted |  |  |
| * S3-200717 | * Store Kakma ID in the UDM | * Huawei, Hisilicon | * noted |  |  |
| * S3-200718 | * AUSF selection | * Huawei, Hisilicon | * noted |  |  |
| * S3-200719 | * Add a new clause on AKMA key re-keying | * Huawei, Hisilicon | * revised |  | * S3-200815 |
| * S3-200720 | * Add clarifications to the living CR | * Huawei, Hisilicon | * noted |  |  |
| * S3-200721 | * editorial change to IAB architecture | * Huawei, Hisilicon | * approved |  |  |
| * S3-200722 | * Security handling for UP data protection for UP CIoT 5GS Opmitization | * Huawei, Hisilicon | * noted |  |  |
| * S3-200723 | * Discussion on protection of UE radio capability | * Huawei, Hisilicon | * noted |  |  |
| * S3-200724 | * Deriving AKMA Application key for a specific AF via NEF | * Huawei, Hisilicon | * merged |  | * S3-200815 |
| * S3-200725 | * Update to deriving AKMA Application key for a specific AF | * Huawei, Hisilicon | * revised |  | * S3-200816 |
| * S3-200726 | * AUSF function in AKMA | * Huawei, Hisilicon | * revised |  | * S3-200817 |
| * S3-200727 | * Discussion on the functionality of Key ID in PDCP header for NR PC5 unicast communication | * Huawei, Hisilicon | * noted |  |  |
| * S3-200728 | * V2X signalling security mandatory activation for unicast | * Huawei, Hisilicon | * noted |  |  |
| * S3-200729 | * Draft LS on the security context index field in PDCP header for NR PC5 unicast | * Huawei, Hisilicon | * noted |  |  |
| * S3-200730 | * Clarification for V2X layer passing security configurations to AS layer | * Huawei, Hisilicon | * revised |  | * S3-200819 |
| * S3-200731 | * Add requirement for OAM to IAB ENDC | * Huawei, Hisilicon | * approved |  |  |
| * S3-200732 | * Draft LS on security of eLCS | * Huawei, Hisilicon | * noted |  |  |
| * S3-200733 | * way forward on Calculation of shortResumeMAC-I | * Huawei, Hisilicon | * noted |  |  |
| * S3-200734 | * Address EN for Calculation of ShortResumeMAC-I for UP 5GS CIoT Optimisation | * Huawei, Hisilicon | * noted |  |  |
| * S3-200735 | * Draft LS to RAN2 and RAN3 inputs for ShortResumeMAC-I Calculation for UP 5GS CIoT Optimisation | * Huawei, Hisilicon | * noted |  |  |
| * S3-200736 | * Draft Reply LS on 5G-S-TMSI Truncation Procedure | * Huawei, Hisilicon | * noted |  |  |
| * S3-200737 | * Discussion on endorsement for UP IP | * Huawei, Hisilicon | * noted |  |  |
| * S3-200738 | * Draft LS on UP IP | * Huawei, Hisilicon | * noted |  |  |
| * S3-200739 | * AKMA AF key request via NEF | * Ericsson | * revised |  | * S3-200803 |
| * S3-200740 | * AKMA Architecture considerations | * Ericsson | * noted |  |  |
| * S3-200741 | * pCR to TS 33.535: Update of the AKMA procedures | * Ericsson | * noted |  |  |
| * S3-200742 | * Discussion paper on eV2X groupcast privacy | * Huawei, HiSilicon | * noted |  |  |
| * S3-200743 | * Adding privacy procedures for V2X group cast communication | * Huawei, HiSilicon, Lenovo, Motorola Mobility | * noted |  |  |
| * S3-200744 | * [Draft CR] Input to MESSAGE when calculating ShortResumeMAC-I in RRC Connection Suspend and Resume | * Ericsson | * noted |  |  |
| * S3-200745 | * UPIP: pCR for new solution of UP IP in EPS | * Ericsson | * revised |  | * S3-200832 |
| * S3-200746 | * UPIP: pCR for new solution for option 5 | * Ericsson | * revised |  | * S3-200833 |
| * S3-200747 | * Way forward for UE caps protection and NB-IoT Ues | * Ericsson | * noted |  |  |
| * S3-200748 | * UE caps protection using AS security in EPS Rel-16 | * Ericsson | * not pursued |  |  |
| * S3-200749 | * UE caps protection using AS security in 5GS Rel-16 | * Ericsson | * not pursued |  |  |
| * S3-200750 | * Resolving ENs in Draft CR | * Ericsson | * noted |  |  |
| * S3-200751 | * [DRAFT] LS on security of eLCS | * Ericsson | * noted |  |  |
| * S3-200752 | * ERP for TNAP mobility | * Lenovo, Motorola Mobility | * not pursued |  |  |
| * S3-200753 | * Resolving the Editors’ Note on policy name in V2X TS | * Qualcomm Incorporated | * noted |  |  |
| * S3-200754 | * Proposal to finalise UP security policy in V2X | * Qualcomm Incorporated | * noted |  |  |
| * S3-200755 | * Proposal to resolve the Editor’s note of the size of COUNT | * Qualcomm Incorporated | * noted |  |  |
| * S3-200756 | * Privacy of K\_NRP ID | * Qualcomm Incorporated | * noted |  |  |
| * S3-200757 | * Resolving the editor’s note on the protection of messages | * Qualcomm Incorporated | * noted |  |  |
| * S3-200758 | * Using the old security context for processing received re-transmissions | * Qualcomm Incorporated | * noted |  |  |
| * S3-200759 | * Proposal for the Editor’s note on groupcast privacy | * Qualcomm Incorporated | * noted |  |  |
| * S3-200760 | * Interworking between EPS and 5GS when UP IP is supported in EPS | * Qualcomm Incorporated | * approved |  |  |
| * S3-200761 | * Using existing algorithm IEs to indicate support UP IP with an eNB | * Qualcomm Incorporated | * approved |  |  |
| * S3-200762 | * F1 security setup with certificate based IKEv2 authentication | * Qualcomm Incorporated, Ericsson, Intel | * not pursued |  |  |
| * S3-200763 | * F1 security setup with PSK based IKEv2 authentication | * Qualcomm Incorporated, Ericsson, Intel | * not pursued |  |  |
| * S3-200764 | * Protection of UE radio capability transfer for UEs without AS security | * Qualcomm Incorporated | * noted | * S3-200357 |  |
| * S3-200765 | * Way forward for UE radio capability protection without AS security | * Qualcomm Incorporated | * noted |  |  |
| * S3-200766 | * On the GSMA LS on UP IP | * Qualcomm Incorporated, vivo, Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200767 | * Proposed solution for UP IP issues in GSMA LS | * Qualcomm Incorporated, vivo | * noted |  |  |
| * S3-200768 | * Proposed conclusion for Key Issue #6 in TR 33.853 | * Qualcomm Incorporated | * approved | * S3-194338 |  |
| * S3-200769 | * pCR : Requirements on AKMA Key Identifier | * Qualcomm Incorporated | * revised | * S3-200365 | * S3-200812 |
| * S3-200770 | * pCR : AKMA Temporary UE Identifier | * Qualcomm Incorporated | * noted |  |  |
| * S3-200771 | * Correction of FC values | * China Mobile | * revised |  | * S3-200830 |
| * S3-200772 | * CR to TS 33.220-FC value allocations for AKMA | * China Mobile | * not pursued |  |  |
| * S3-200773 | * Removing obsolete Editor’s Notes in TS 33.535 | * China Mobile | * approved |  |  |
| * S3-200774 | * Derivation of KAF | * China Mobile | * noted |  |  |
| * S3-200775 | * Meeting minutes of AKMA conference call on 31st March | * China Mobile | * noted |  |  |
| * S3-200776 | * Addessing EN on transmitting NSSAI to AAA | * China Mobile | * noted |  |  |
| * S3-200777 | * LS on transformation of S-NSSAI during NSSAA | * China Mobile | * noted |  |  |
| * S3-200778 | * DraftCR – Living document for supporting 5G CIoT security | * Ericsson | * noted |  |  |
| * S3-200779 | * N5CW: editorial correction | * THALES, ORANGE | * noted |  |  |
| * S3-200780 | * [DRAFT] Reply LS on AUSF role in slice specific authentication | * Ericsson | * merged |  | * S3-200821 |
| * S3-200781 | * DraftCR – Replacing AUSF with AAA-IWF for NSSAA procedures | * Ericsson, Hewlett-Packard Enterprise, China Mobile, CATT | * merged |  | * S3-200807 |
| * S3-200782 | * Discussion paper on the role of AUSF during NSSAA | * Ericsson, Hewlett-Packard Enterprise, China Mobile, CATT | * noted |  |  |
| * S3-200783 | * UE pre-configuration for non-3GPP access networks | * THALES, ORANGE | * approved |  |  |
| * S3-200784 | * AUSF role in slice-specific authentication | * Huawei, HiSilicon | * noted |  |  |
| * S3-200785 | * draft LS to SA2 on AUSF roles | * Huawei, HiSilicon | * revised |  | * S3-200821 |
| * S3-200786 | * draft CR on AUSF roles | * Huawei, HiSilicon | * merged |  | * S3-200807 |
| * S3-200787 | * draft CR on sending NSSAI to AAA | * Huawei, HiSilicon | * noted |  |  |
| * S3-200788 | * draft CR on miscellaneous items | * Huawei, HiSilicon | * merged |  | * S3-200807 |
| * S3-200789 | * Destination L2 privacy | * Ericsson | * noted |  |  |
| * S3-200790 | * Discussion paper on security policy | * Apple | * withdrawn |  |  |
| * S3-200791 | * eLCS privacy discussion on way forward | * NTT DOCOMO | * noted |  |  |
| * S3-200792 | * Token based authorization in model D - Scenario 1 | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200793 | * Process for SA3#98bis-e meeting | * Ericsson LM | * noted |  |  |
| * S3-200794 | * Token based authorization in model D - Scenario 2 | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200795 | * Authentication between Network Functions | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200796 | * Authentication between NRF and NF | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200797 | * Access token ownership in Direct communication scenarios | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200798 | * Access token ownership in Indirect communication scenarios | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200799 | * Token based authorization in model D | * Nokia, Nokia Shanghai Bell | * withdrawn |  |  |
| * S3-200800 | * SBA Network Function certificate profile | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200801 | * Discussion paper on authentication for indirect communication | * Nokia, Nokia Shanghai Bell | * noted |  |  |
| * S3-200802 | * 5G\_eLCS - meeting minutes conf-call on eLCS Privacy Protection | * Nanjing Ericsson Panda Com Ltd | * noted |  |  |
| * S3-200803 | * AKMA AF key request via NEF | * Ericsson, Huawei | * approved | * S3-200739 |  |
| * S3-200804 | * Draft TR 33.853 v0.8.0 | * VODAFONE Group Plc | * reserved |  |  |
| * S3-200805 | * Emergency Services in eV2X | * Futurewei | * withdrawn | * S3-200642 |  |
| * S3-200806 | * Emergency Services in eV2X | * Futurewei, InterDigital, Inc. | * approved | * S3-200642 |  |
| * S3-200807 | * Living CR for Slice Specific Authentication and Authrorization clauses | * Nokia, Nokia Shanghai Bell, Huawei, HiSilicon, Ericsson, Hewlett-Packard Enterprise, China Mobile, CATT, Interdigital | * approved | * S3-200658 |  |
| * S3-200808 | * [33.179] R13 token scope fix | * Motorola Solutions UK Ltd. | * approved | * - |  |
| * S3-200809 | * [33.180] R16 Fix IdM client terminology | * Motorola Solutions UK Ltd. | * approved | * - |  |
| * S3-200810 | * [33.180] R16 Fix XML references | * Motorola Solutions UK Ltd. | * approved | * - |  |
| * S3-200811 | * [33.180] R16 TrK-ID and InK-ID indication | * Motorola Solutions UK Ltd. | * approved | * - |  |
| * S3-200812 | * pCR : Requirements on AKMA Key Identifier | * Qualcomm Incorporated | * approved | * S3-200769 |  |
| * S3-200813 | * Kakma ID format | * Huawei, Hisilicon | * withdrawn | * - |  |
| * S3-200814 | * Kakma ID format | * Huawei, Hisilicon | * approved | * S3-200715 |  |
| * S3-200815 | * Add a new clause on AKMA key re-keying | * Huawei, Hisilicon,Apple | * approved | * S3-200719 |  |
| * S3-200816 | * Update to deriving AKMA Application key for a specific AF | * Huawei, Hisilicon | * approved | * S3-200725 |  |
| * S3-200817 | * AUSF function in AKMA | * Huawei, Hisilicon | * approved | * S3-200726 |  |
| * S3-200818 | * Living CR for 5WWC | * Huawei, Hisilicon | * approved |  |  |
| * S3-200819 | * Clarification for V2X layer passing security configurations to AS layer | * Huawei, Hisilicon | * approved | * S3-200730 |  |
| * S3-200820 | * LS reply to RAN WG2 LS on NR V2X Security issues | * CATT | * approved | * S3-200708 |  |
| * S3-200821 | * LS to SA2 on AUSF roles | * Huawei, HiSilicon, Nokia, Ericsson | * approved | * S3-200785 |  |
| * S3-200822 | * draft\_TS 33.536 v1.1.0 | * LG Electronics Inc. | * approved |  |  |
| * S3-200823 | * TS 33.536 - Common Security over NR PC5 | * LG Electronics Inc. | * approved | * S3-200654 |  |
| * S3-200824 | * eV2XARC-Security policy for unicast message in PC5 | * Apple | * approved | * S3-200601 |  |
| * S3-200825 | * Update the clause 5.3.3.1.2.3 | * ZTE Corporation | * approved | * S3-200683 |  |
| * S3-200826 | * Adding additional AF functionality in clause 4.2.2 | * CATT | * approved | * S3-200709 |  |
| * S3-200827 | * Draft 33.434 v0.3.0 | * Samsung | * approved |  |  |
| * S3-200828 | * Update clause 5.3.3.2.2 | * ZTE Corporation | * approved | * S3-200684 |  |
| * S3-200829 | * Adding a definition for IAB-UE | * ZTE Corporation | * approved | * - |  |
| * S3-200830 | * Correction of FC values | * China Mobile | * approved | * S3-200771 |  |
| * S3-200831 | * draft TS 33.535 v0.4.0 | * China Mobile | * approved |  |  |
| * S3-200832 | * UPIP: pCR for new solution of UP IP in EPS | * Ericsson | * approved | * S3-200745 |  |
| * S3-200833 | * UPIP: pCR for new solution for option 5 | * Ericsson | * approved | * S3-200746 |  |
| * S3-200834 | * LS on Specifying the PC5-S messages that can be processed without protection | * Qualcomm Incorpotated | * approved |  |  |
| * S3-200835 | * SEAL Key Management procedure | * Motorola Solutions UK Ltd. | * approved | * S3-200650 |  |
| * S3-200836 | * SEAL Key Management Request and Response messages | * Motorola Solutions UK Ltd. | * approved | * S3-200651 |  |
| * S3-200837 | * CIoT UE caps confcall rapporteur notes | * Ericsson | * noted |  |  |

### 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 |
| * S3-200600 | * 23/04/2020 09:23:40 | * approved |
| * S3-200601 | * 27/04/2020 14:05:12 | * available |
| * S3-200602 | * 27/04/2020 14:05:28 | * noted |
| * S3-200603 | * 27/04/2020 14:05:31 | * noted |
| * S3-200604 | * 27/04/2020 14:05:49 | * noted |
| * S3-200605 | * 27/04/2020 14:05:54 | * approved |
| * S3-200606 | * 24/04/2020 14:57:28 | * noted |
| * S3-200607 | * 24/04/2020 15:02:29 | * available |
| * S3-200608 | * 24/04/2020 15:02:57 | * noted |
| * S3-200609 | * 24/04/2020 15:03:00 | * noted |
| * S3-200610 | * 24/04/2020 15:03:06 | * noted |
| * S3-200611 | * 27/04/2020 14:15:35 | * approved |
| * S3-200612 | * 15/04/2020 15:29:55 | * approved |
| * S3-200613 | * 23/04/2020 10:37:54 | * noted |
| * S3-200614 | * 23/04/2020 10:37:58 | * noted |
| * S3-200615 | * 27/04/2020 13:49:26 | * postponed |
| * S3-200616 | * 07/04/2020 08:08:37 | * withdrawn |
| * S3-200617 | * 07/04/2020 08:08:38 | * withdrawn |
| * S3-200618 | * 14/04/2020 08:48:19 | * postponed |
| * S3-200618 | * 14/04/2020 14:06:53 | * noted |
| * S3-200619 | * 14/04/2020 08:49:15 | * postponed |
| * S3-200620 | * 27/04/2020 14:06:41 | * available |
| * S3-200621 | * 14/04/2020 08:50:11 | * noted |
| * S3-200622 | * 27/04/2020 13:54:15 | * available |
| * S3-200623 | * 14/04/2020 08:48:51 | * noted |
| * S3-200624 | * 14/04/2020 08:48:38 | * noted |
| * S3-200625 | * 14/04/2020 14:43:03 | * noted |
| * S3-200626 | * 14/04/2020 08:49:58 | * noted |
| * S3-200627 | * 14/04/2020 08:49:04 | * postponed |
| * S3-200628 | * 14/04/2020 15:12:01 | * available |
| * S3-200629 | * 27/04/2020 14:15:52 | * noted |
| * S3-200631 | * 27/04/2020 14:16:19 | * noted |
| * S3-200632 | * 27/04/2020 14:16:22 | * noted |
| * S3-200633 | * 27/04/2020 14:16:32 | * available |
| * S3-200634 | * 27/04/2020 14:16:41 | * noted |
| * S3-200635 | * 27/04/2020 14:16:45 | * noted |
| * S3-200636 | * 27/04/2020 14:16:50 | * noted |
| * S3-200637 | * 27/04/2020 14:16:51 | * noted |
| * S3-200639 | * 27/04/2020 14:17:05 | * noted |
| * S3-200640 | * 24/04/2020 15:03:11 | * approved |
| * S3-200641 | * 23/04/2020 10:33:42 | * noted |
| * S3-200642 | * 27/04/2020 14:08:15 | * available |
| * S3-200643 | * 27/04/2020 14:17:10 | * noted |
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| * S3-200645 | * 14/04/2020 15:18:05 | * available |
| * S3-200646 | * 14/04/2020 15:19:59 | * available |
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| * S3-200648 | * 14/04/2020 15:22:45 | * available |
| * S3-200649 | * 14/04/2020 15:12:17 | * approved |
| * S3-200650 | * 15/04/2020 15:07:10 | * approved |
| * S3-200651 | * 27/04/2020 14:02:46 | * available |
| * S3-200652 | * 27/04/2020 13:51:47 | * approved |
| * S3-200653 | * 15/04/2020 15:30:36 | * approved |
| * S3-200654 | * 27/04/2020 14:09:12 | * available |
| * S3-200655 | * 27/04/2020 14:09:47 | * noted |
| * S3-200656 | * 27/04/2020 14:09:50 | * noted |
| * S3-200657 | * 27/04/2020 13:55:09 | * noted |
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| * S3-200659 | * 27/04/2020 14:21:17 | * available |
| * S3-200660 | * 23/04/2020 10:38:11 | * noted |
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| * S3-200663 | * 23/04/2020 10:38:24 | * noted |
| * S3-200664 | * 23/04/2020 10:38:30 | * noted |
| * S3-200665 | * 23/04/2020 10:38:32 | * available |
| * S3-200666 | * 24/04/2020 14:55:43 | * available |
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| * S3-200668 | * 27/04/2020 13:49:40 | * noted |
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| * S3-200670 | * 24/04/2020 15:03:26 | * noted |
| * S3-200671 | * 24/04/2020 15:03:30 | * noted |
| * S3-200672 | * 24/04/2020 15:03:36 | * noted |
| * S3-200673 | * 24/04/2020 15:03:39 | * noted |
| * S3-200674 | * 24/04/2020 15:03:43 | * noted |
| * S3-200675 | * 24/04/2020 15:03:49 | * noted |
| * S3-200676 | * 24/04/2020 15:03:52 | * noted |
| * S3-200677 | * 24/04/2020 15:03:53 | * noted |
| * S3-200678 | * 24/04/2020 15:03:59 | * noted |
| * S3-200679 | * 24/04/2020 15:04:00 | * noted |
| * S3-200680 | * 27/04/2020 13:59:27 | * available |
| * S3-200681 | * 27/04/2020 14:00:50 | * available |
| * S3-200682 | * 27/04/2020 14:09:58 | * approved |
| * S3-200683 | * 27/04/2020 14:10:24 | * available |
| * S3-200684 | * 27/04/2020 14:10:56 | * available |
| * S3-200685 | * 15/04/2020 15:28:31 | * noted |
| * S3-200685 | * 15/04/2020 15:28:32 | * approved |
| * S3-200686 | * 24/04/2020 14:56:07 | * available |
| * S3-200687 | * 24/04/2020 14:56:20 | * noted |
| * S3-200688 | * 16/04/2020 15:49:56 | * available |
| * S3-200689 | * 24/04/2020 14:56:33 | * available |
| * S3-200690 | * 16/04/2020 14:28:34 | * approved |
| * S3-200691 | * 27/04/2020 14:11:16 | * noted |
| * S3-200692 | * 27/04/2020 14:11:20 | * noted |
| * S3-200693 | * 27/04/2020 14:11:24 | * noted |
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| * S3-200699 | * 27/04/2020 14:17:36 | * noted |
| * S3-200700 | * 27/04/2020 14:17:42 | * noted |
| * S3-200701 | * 27/04/2020 13:49:45 | * noted |
| * S3-200702 | * 23/04/2020 10:33:56 | * noted |
| * S3-200703 | * 14/04/2020 16:02:57 | * noted |
| * S3-200704 | * 24/04/2020 15:04:16 | * noted |
| * S3-200705 | * 24/04/2020 15:04:21 | * noted |
| * S3-200706 | * 24/04/2020 15:04:22 | * noted |
| * S3-200707 | * 24/04/2020 15:04:25 | * noted |
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| * S3-200709 | * 24/04/2020 15:05:39 | * available |
| * S3-200710 | * 24/04/2020 15:06:07 | * noted |
| * S3-200711 | * 24/04/2020 15:06:08 | * noted |
| * S3-200712 | * 24/04/2020 15:06:08 | * noted |
| * S3-200713 | * 24/04/2020 15:06:23 | * noted |
| * S3-200714 | * 24/04/2020 15:06:28 | * approved |
| * S3-200715 | * 24/04/2020 15:07:04 | * available |
| * S3-200716 | * 24/04/2020 15:07:12 | * noted |
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| * S3-200718 | * 24/04/2020 15:07:14 | * noted |
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| * S3-200720 | * 23/04/2020 10:34:02 | * noted |
| * S3-200721 | * 27/04/2020 14:01:11 | * approved |
| * S3-200722 | * 27/04/2020 13:49:55 | * noted |
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| * S3-200726 | * 24/04/2020 15:10:43 | * available |
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| * S3-200728 | * 27/04/2020 14:12:19 | * noted |
| * S3-200729 | * 27/04/2020 14:12:24 | * noted |
| * S3-200730 | * 27/04/2020 14:12:52 | * available |
| * S3-200731 | * 27/04/2020 14:01:11 | * approved |
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| * S3-200733 | * 27/04/2020 13:50:00 | * noted |
| * S3-200734 | * 27/04/2020 13:50:06 | * noted |
| * S3-200735 | * 27/04/2020 13:50:06 | * noted |
| * S3-200736 | * 14/04/2020 14:42:39 | * noted |
| * S3-200737 | * 27/04/2020 14:17:43 | * noted |
| * S3-200738 | * 27/04/2020 14:17:44 | * noted |
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| * S3-200741 | * 24/04/2020 15:11:59 | * noted |
| * S3-200742 | * 27/04/2020 14:13:04 | * noted |
| * S3-200743 | * 27/04/2020 14:13:12 | * noted |
| * S3-200744 | * 27/04/2020 13:50:13 | * noted |
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| * S3-200746 | * 27/04/2020 14:19:48 | * available |
| * S3-200747 | * 27/04/2020 13:50:17 | * noted |
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| * S3-200749 | * 27/04/2020 13:50:30 | * available |
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| * S3-200759 | * 27/04/2020 14:14:52 | * noted |
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| * S3-200761 | * 27/04/2020 14:20:02 | * approved |
| * S3-200762 | * 27/04/2020 14:01:18 | * available |
| * S3-200763 | * 27/04/2020 14:01:31 | * available |
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| * S3-200766 | * 27/04/2020 14:20:07 | * noted |
| * S3-200767 | * 27/04/2020 14:20:11 | * noted |
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| * S3-200774 | * 24/04/2020 15:13:39 | * noted |
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| * S3-200776 | * 27/04/2020 14:21:28 | * noted |
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| * S3-200782 | * 15/04/2020 14:09:48 | * noted |
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| * S3-200793 | * 23/04/2020 09:23:46 | * noted |
| * S3-200794 | * 24/04/2020 14:56:47 | * noted |
| * S3-200795 | * 24/04/2020 14:56:54 | * noted |
| * S3-200796 | * 24/04/2020 14:56:57 | * noted |
| * S3-200797 | * 24/04/2020 14:57:02 | * noted |
| * S3-200798 | * 24/04/2020 14:57:08 | * noted |
| * S3-200799 | * 14/04/2020 07:55:53 | * withdrawn |
| * S3-200800 | * 24/04/2020 14:57:20 | * noted |
| * S3-200801 | * 24/04/2020 14:57:23 | * noted |
| * S3-200802 | * 27/04/2020 14:20:30 | * noted |
| * S3-200803 | * 24/04/2020 15:11:22 | * approved |
| * S3-200806 | * 27/04/2020 14:08:10 | * approved |
| * S3-200807 | * 27/04/2020 13:55:43 | * approved |
| * S3-200808 | * 23/04/2020 10:32:37 | * approved |
| * S3-200809 | * 23/04/2020 10:32:49 | * approved |
| * S3-200810 | * 23/04/2020 10:32:54 | * approved |
| * S3-200811 | * 23/04/2020 10:33:00 | * approved |
| * S3-200812 | * 24/04/2020 15:12:29 | * approved |
| * S3-200813 | * 27/04/2020 14:24:43 | * withdrawn |
| * S3-200814 | * 24/04/2020 15:06:56 | * approved |
| * S3-200815 | * 24/04/2020 15:07:24 | * approved |
| * S3-200816 | * 24/04/2020 15:10:03 | * approved |
| * S3-200817 | * 24/04/2020 15:10:37 | * approved |
| * S3-200818 | * 28/04/2020 07:07:09 | * approved |
| * S3-200819 | * 27/04/2020 14:12:43 | * approved |
| * S3-200820 | * 27/04/2020 14:07:20 | * approved |
| * S3-200821 | * 27/04/2020 13:54:30 | * approved |
| * S3-200822 | * 27/04/2020 14:15:08 | * approved |
| * S3-200823 | * 27/04/2020 14:09:06 | * approved |
| * S3-200824 | * 27/04/2020 14:05:02 | * approved |
| * S3-200825 | * 27/04/2020 14:10:19 | * approved |
| * S3-200826 | * 24/04/2020 15:05:55 | * approved |
| * S3-200827 | * 27/04/2020 14:29:24 | * approved |
| * S3-200828 | * 27/04/2020 14:10:51 | * approved |
| * S3-200829 | * 27/04/2020 14:00:30 | * approved |
| * S3-200830 | * 24/04/2020 15:13:07 | * approved |
| * S3-200831 | * 24/04/2020 15:00:19 | * approved |
| * S3-200832 | * 27/04/2020 14:19:13 | * approved |
| * S3-200833 | * 27/04/2020 14:19:41 | * approved |
| * S3-200834 | * 27/04/2020 14:15:21 | * approved |
| * S3-200835 | * 27/04/2020 14:02:07 | * approved |
| * S3-200836 | * 27/04/2020 14:02:50 | * approved |
| * S3-200837 | * 27/04/2020 13:51:30 | * noted |

## Annex B: List of change requests

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Spec | CR | Rev | Rel | Cat | WI | Decision |
| * S3-200645 | * [33.179] R13 token scope fix | * Motorola Solutions UK Ltd. | * 33.179 | * 0106 | * - | * Rel-13 | * F | * MCPTT | * not pursued |
| * S3-200644 | * [33.180] R16 Fix first-to-answer | * Motorola Solutions UK Ltd. | * 33.180 | * 0141 | * - | * Rel-16 | * F | * MCXSec | * not pursued |
| * S3-200646 | * [33.180] R16 Fix IdM client terminology | * Motorola Solutions UK Ltd. | * 33.180 | * 0142 | * - | * Rel-16 | * F | * MCXSec | * not pursued |
| * S3-200647 | * [33.180] R16 Fix XML references | * Motorola Solutions UK Ltd. | * 33.180 | * 0143 | * - | * Rel-16 | * D | * MCXSec | * not pursued |
| * S3-200648 | * [33.180] R16 TrK-ID and InK-ID indication | * Motorola Solutions UK Ltd. | * 33.180 | * 0144 | * - | * Rel-16 | * F | * MCXSec | * not pursued |
| * S3-200772 | * CR to TS 33.220-FC value allocations for AKMA | * China Mobile | * 33.220 | * 0200 | * - | * Rel-16 | * F | * AKMA | * not pursued |
| * S3-200697 | * Integrity protection of DNS messages | * Samsung | * 33.401 | * 0692 | * - | * Rel-16 | * B | * TEI16 | * not pursued |
| * S3-200748 | * UE caps protection using AS security in EPS Rel-16 | * Ericsson | * 33.401 | * 0693 | * - | * Rel-16 | * C | * 5G\_CIoT | * not pursued |
| * S3-200633 | * CR to 33.501 - Update to User Plane Integrity Protection | * VODAFONE Group Plc | * 33.501 | * 0785 | * - | * Rel-16 | * C | * FS\_UP\_IP\_Sec | * not pursued |
| * S3-200662 | * Validation of Access Token ownership requirement | * Mavenir,Deutsche Telekom | * 33.501 | * 0786 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-200665 | * Clarification of Token-based authorization | * Mavenir,Deutsche Telekom | * 33.501 | * 0787 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-200666 | * Clarification of Indirect Communication Mutual Authentication | * Mavenir,Deutsche Telekom | * 33.501 | * 0788 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-200680 | * Adding a definition for IAB-UE | * ZTE Corporation | * 33.501 | * 0789 | * - | * Rel-16 | * F | * NR\_IAB | * not pursued |
| * S3-200681 | * Update the Annex M.2.4 | * ZTE Corporation | * 33.501 | * 0790 | * - | * Rel-16 | * F | * NR\_IAB | * not pursued |
| * S3-200686 | * Trust mode in the eSBA | * Huawei, Hisilicon | * 33.501 | * 0791 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-200688 | * Authorization in the Subscribe-Notify interaction scenarios | * Huawei, Hisilicon | * 33.501 | * 0792 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-200689 | * Clarification on NF consumer instance ID verification | * Huawei, Hisilicon | * 33.501 | * 0793 | * - | * Rel-16 | * F | * 5G\_eSBA | * not pursued |
| * S3-200694 | * F1 interface security set-up procedure | * Samsung, Thales, Nokia, Nokia Shanghai Bell, ZTE | * 33.501 | * 0794 | * - | * Rel-16 | * B | * IAB | * not pursued |
| * S3-200696 | * UP integrity protection for UP Signalling messages | * Samsung | * 33.501 | * 0795 | * - | * Rel-16 | * B | * TEI16 | * not pursued |
| * S3-200749 | * UE caps protection using AS security in 5GS Rel-16 | * Ericsson | * 33.501 | * 0796 | * - | * Rel-16 | * C | * 5G\_CIoT | * not pursued |
| * S3-200752 | * ERP for TNAP mobility | * Lenovo, Motorola Mobility | * 33.501 | * 0797 | * - | * Rel-16 | * B | * 5WWC | * not pursued |
| * S3-200762 | * F1 security setup with certificate based IKEv2 authentication | * Qualcomm Incorporated, Ericsson, Intel | * 33.501 | * 0798 | * - | * Rel-16 | * B | * NR\_IAB | * not pursued |
| * S3-200763 | * F1 security setup with PSK based IKEv2 authentication | * Qualcomm Incorporated, Ericsson, Intel | * 33.501 | * 0799 | * - | * Rel-16 | * B | * NR\_IAB | * not pursued |

## Annex C: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Original | Title | From | Decision | Reply TDoc |
| * S3-200615 |  | * LS on 5G-GUTI reallocation after paging of a UE in 5GMM-IDLE mode with suspend indication | * C1-200967 | * postponed | * ???? |
| * S3-200616 |  | * LS on Misalignment on HTTP connections for N32-c and on N32-f contexts termination | * C4-200781 | * withdrawn | * (none) |
| * S3-200617 |  | * LS on Misalignments on N32-f context Id | * C4-200782 | * withdrawn | * (none) |
| * S3-200618 |  | * Mandatory User Plane Integrity for 5G | * GSMA | * noted | * (none) |
| * S3-200619 |  | * Clarification on encryption requirements for AGF interfaces (N1, N2, N3) [WWC] | * BBF | * postponed | * (none) |
| * S3-200620 |  | * LS to SA3 on NR V2X Security issues | * R2-2001980 | * replied to | * S3-200820 |
| * S3-200621 |  | * Response LS on Enhancing Location Information Reporting with Dual Connectivity | * R3-201249 | * noted | * (none) |
| * S3-200622 |  | * Reply LS on AUSF role in slice specific authentication | * S2-1910668 | * replied to | * S3-200821 |
| * S3-200623 |  | * Reply LS on LS on PC5S and PC5 RRC unicast message protection | * S2-1912002 | * noted | * (none) |
| * S3-200624 |  | * Reply LS on PC5 unicast and groupcast security protection | * S2-2000971 | * noted | * (none) |
| * S3-200625 |  | * Reply LS on 5G-S-TMSI Truncation Procedure | * S2-2001248 | * noted | * (none) |
| * S3-200626 |  | * LS on enhancing location information reporting with Dual Connectivity | * S2-2002422 | * noted | * (none) |
| * S3-200627 |  | * LS on uniqueness of PEI in certain FN-RG configurations | * S3i200069 | * postponed | * (none) |
| * S3-200628 |  | * Reply LS on how the IWF obtains key material for interworking group and private communications | * S6-192194 | * replied to | * S3-200649 |

### C2: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| * S3-200649 | * SA3 Reply LS on how the IWF obtains key material for interworking group and private communications | * CT1, SA6 | * - | * S3-200628 |
| * S3-200820 | * LS reply to RAN WG2 LS on NR V2X Security issues | * RAN2 | * - | * S3-200620 |
| * S3-200821 | * LS to SA2 on AUSF roles | * SA2, CT1, CT3, CT4 | * - | * S3-200622 |
| * S3-200834 | * LS on Specifying the PC5-S messages that can be processed without protection | * CT1 | * - |  |

## Annex D: List of draft Technical Specifications and Reports

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Spec | vers | Doc title |
| * S3-200804 | * 33.853 | * 0.8.0 | * Draft TR 33.853 v0.8.0 |
| * S3-200822 | * 33.536 | * 1.1.0 | * draft\_TS 33.536 v1.1.0 |
| * S3-200827 | * 33.434 | * 0.3.0 | * Draft 33.434 v0.3.0 |
| * S3-200831 | * 33.535 | * 0.4.0 | * draft TS 33.535 v0.4.0 |

## Annex E: List of participants

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| TITLE | Family Name | Given Name | Employer Organization | Employer Category Code | Organization Represented | Organization Represented Category Code |
| Dr. | Baboescu | Florin | BROADCOM CORPORATION | ETSI | BROADCOM CORPORATION | ETSI |
| Dr. | Ben Henda | Noamen | Ericsson LM | ETSI | Ericsson LM | ETSI |
| Mr. | Brusilovsky | Alec | InterDigital, Inc. | ETSI | InterDigital Communications | ATIS |
| Mr. | Bykampadi | Nagendra | Nokia France | ETSI | Nokia Solutions & Networks (I) | TSDSI |
| Mr. | Cano Soveri | Mirko | ETSI | ETSI | ETSI | ETSI |
| Mr. | Canterbury | Mark | Tencastle Limited | | National Technical Assistance | ETSI |
| Mr. | Castagno | Mauro | TELECOM ITALIA S.p.A. | ETSI | TELECOM ITALIA S.p.A. | ETSI |
| Mr. | Chun | SungDuck | LG Electronics France | ETSI | LG Electronics France | ETSI |
| Ms. | Comak | Pinar | Ericsson LM | ETSI | Ericsson Inc. | ATIS |
| Dr. | Corbett | Cherita | Johns Hopkins University APL | ATIS | Johns Hopkins University APL | ATIS |
| Ms. | Deng | Juan | HuaWei Technologies Co., Ltd | CCSA | HUAWEI Technologies Japan K.K. | ARIB |
| Mr. | Dietze | Claus | G+D MS | ETSI | G+D MS | ETSI |
| Mr. | Ennesser | Fran?ois | Huawei Technologies France | ETSI | Huawei Technologies France | ETSI |
| Dr. | Escott | Adrian | Qualcomm CDMA Technologies | ETSI | Qualcomm CDMA Technologies | ETSI |
| Mr. | Evans | Tim P. | VODAFONE Group Plc | ETSI | VODAFONE Group Plc | ETSI |
| Mr. | Everett | Jared | Johns Hopkins University APL | ATIS | Johns Hopkins University APL | ATIS |
| Dr. | Gao | Feng | China Unicom | CCSA | China Unicom | CCSA |
| Mr. | Goldberg | Martin | U.S. Department of Defense | ATIS | U.S. Department of Defense | ATIS |
| Dr. | Granboulan | Louis | Airbus | ETSI | Airbus | ETSI |
| Ms. | Guo | Ivy | Apple Computer Trading Co. Ltd | CCSA | Apple Computer Trading Co. Ltd | CCSA |
| Mr. | Guo | Longhua | HUAWEI TECH. GmbH | ETSI | Huawei Device Co., Ltd | CCSA |
| Mr. | Hanhisalo | Markus | Ericsson LM | ETSI | Oy LM Ericsson AB | ETSI |
| Mr. | Heldenbrand | Rob | Hewlett-Packard Enterprise | ETSI | Hewlett-Packard Enterprise | ETSI |
| Mr. | Hjelm | Bjorn | Verizon UK Ltd | ETSI | Verizon UK Ltd | ETSI |
| Miss | Jerichow | Anja | Nokia Germany | ETSI | Nokia Germany | ETSI |
| Dr. | Jost | Christine | Ericsson LM | ETSI | Ericsson LM | ETSI |
| Dr. | Karakoc | Ferhat | Ericsson LM | ETSI | Ericsson LM | ETSI |
| Dr. | Keesmaat | Iko | TNO | ETSI | KPN N.V. | ETSI |
| Mr. | Kim | Dongjoo | LG Electronics Inc. | TTA | LG Electronics Inc. | TTA |
| Mr. | Kohalmi | Steve | Juniper Networks | ETSI | Juniper Networks | ETSI |
| Mr. | Kolekar | Abhijeet | Intel Corporation (UK) Ltd | ETSI | Intel Corporation (UK) Ltd | ETSI |
| Ms. | Koser | Elizabeth | U.S. Department of Defense | ATIS | U.S. Department of Defense | ATIS |
| Dr. | Kunz | Andreas | Motorola Mobility Germany GmbH | ETSI | Motorola Mobility Germany GmbH | ETSI |
| Mr. | Lee | Xiaoyang | CISA ECD | ATIS | CISA ECD | ATIS |
| Mr. | Lehtovirta | Vesa | Ericsson LM | ETSI | Oy LM Ericsson AB | ETSI |
| Dr. | LEI | AO | HUAWEI TECHNOLOGIES Co. Ltd. | ETSI | HuaWei Technologies Co., Ltd | CCSA |
| Dr. | Lei | Zander (Zhongding) | HuaWei Technologies Co., Ltd | CCSA | Huawei Technologies Japan K.K. | TTC |
| Mr. | Li | He | HUAWEI TECHNOLOGIES Co. Ltd. | ETSI | HiSilicon Technologies Co. Ltd | CCSA |
| Mr. | Liu | Yuze | ZTE Corporation | CCSA | ZTE Trunking Technology Corp. | CCSA |
| Miss | Lu | Wei | Nokia Korea | TTA | Nokia Shanghai Bell | CCSA |
| Mr. | Mittal | Ajay Kumar | TSDSI | TSDSI | TSDSI | TSDSI |
| Dr. | Muhanna | Ahmad | Mavenir | ETSI | Mavenir | ETSI |
| Mr. | Nair | Suresh | Nokia Germany | ETSI | Nokia Germany | ETSI |
| Mr. | Nakarmi | Prajwol Kumar | Ericsson Limited | ETSI | Nanjing Ericsson Panda Com Ltd | CCSA |
| Mr. | Niemi | Marko | MediaTek Inc. | ETSI | MediaTek Inc. | ETSI |
| Mr. | O'Driscoll | James | NCSC | ETSI | NCSC | ETSI |
| Ms. | Parambath Sasi | NIvedya | Samsung R&D Institute India | TSDSI | Samsung R&D Institute India | TSDSI |
| Mr. | Pätzold | Thomas | Deutsche Telekom AG | ETSI | Deutsche Telekom AG | ETSI |
| Mrs. | Pauliac | Mireille | THALES | ETSI | THALES | ETSI |
| Mr. | PENG | Jin | ZTE Corporation | ETSI | ZTE Corporation | ETSI |
| Mr. | Pudney | Chris | VODAFONE Group Plc | ETSI | VODAFONE Group Plc | ETSI |
| Mr. | Qi | Minpeng | China Mobile Com. Corporation | CCSA | China Mobile Com. Corporation | CCSA |
| Mr. | Rajadurai | Rajavelsamy | Samsung R&D Institute UK | ETSI | Samsung Electronics Co., Ltd | TTA |
| Ms. | Rajendran | Rohini | Samsung R&D Institute India | TSDSI | SAMSUNG R&D INSTITUTE JAPAN | ARIB |
| Mrs. | Rong | Wu | HUAWEI TECHNOLOGIES Co. Ltd. | ETSI | Huawei Technologies Sweden AB | ETSI |
| Mr. | Rutkowski | Tony | CIS | ETSI | CIS | ETSI |
| Mr. | Toor | Gurbakshish Singh | TD Tech Ltd | CCSA | Huawei Tech.(UK) Co., Ltd | ETSI |
| Ms. | Trakinat | Jean | T-Mobile USA Inc. | ATIS | T-Mobile USA Inc. | ATIS |
| Mr. | Trygar | Tobey | Perspecta Labs Inc. | ATIS | Perspecta Labs Inc. | ATIS |
| Dr. | Tsai | Yi-Hsueh | III | ETSI | III | ETSI |
| Dr. | Tsiatsis | Vlasios | Ericsson LM | ETSI | Nanjing Ericsson Panda Com Ltd | CCSA |
| Mrs. | Vahidi | Helena | Ericsson LM | ETSI | Ericsson LM | ETSI |
| Ms. | Villebrun | Emmanuelle | Ministère Economie et Finances | ETSI | Ministère Economie et Finances | ETSI |
| Mr. | Vujcic | Dragan | IDEMIA | ETSI | IDEMIA | ETSI |
| Mr. | Whorlow | Colin | NCSC | ETSI | HOME OFFICE | ETSI |
| Ms. | Wifvesson | Monica | Ericsson LM | ETSI | Ericsson LM | ETSI |
| Dr. | Wilson | Kelce | Anemone Technology | ETSI | Anemone Technology | ETSI |
| Mr. | Wong | Marcus | Futurewei Technologies | ATIS | Futurewei Technologies | ATIS |
| Dr. | Wong | Stan | PCCW Global B.V. | ETSI | PCCW Global B.V. | ETSI |
| Mr. | Woodward | Tim | Motorola Solutions Danmark A/S | ETSI | Motorola Solutions Danmark A/S | ETSI |
| Miss | Xu | Hui | CATT | ETSI | CATT | ETSI |
| Mr. | xu | sen | China Telecommunications | ETSI | China Telecom Corporation Ltd. | CCSA |
| Mr. | Xu | Yang | Guangdong OPPO Mobile Telecom. | CCSA | Guangdong OPPO Mobile Telecom. | CCSA |
| Mr. | Yoo | Mike | Johns Hopkins University APL | ATIS | Johns Hopkins University APL | ATIS |
| Dr. | Zhang | Bo | HUAWEI TECHNOLOGIES Co. Ltd. | ETSI | HUAWEI TECHNOLOGIES Co. Ltd. | ETSI |
| Mr. | Zhang | Pengfei | vivo Mobile Communication Co., | CCSA | vivo Mobile Communication Co., | CCSA |
| Mr. | Zhou | Wei | CATT | CCSA | CATT | CCSA |
| Dr. | Zugenmaier | Alf | NTT DOCOMO INC. | TTC | NTT DOCOMO INC. | TTC |

## Annex F: List of future meetings

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Title | Start date | End date (OP) | Town | Country | Reference |
| * SA3#99 | * 2020-05-11 | * 2020-05-15 | * Online |  | * S3-99e |
| * 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 |