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

**Meeting Report  
for  
TSG SA WG5  
meeting: 124**



**Taipei, Taiwan, 25/02/2019 to 01/03/2019**

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## 1 Opening of the meeting

Dr. Jinn P.Chu (Vice President of the National Taiwan University of Science and Technology) welcomed the delegates to the city of Taipei on behalf of Chunghwa Telecom.

## 2 Approval of the agenda

**S5-192000 Agenda**

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

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

## 3 IPR declaration

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. Delegates were reminded of the fair network use rules established by the PCG:

1. Users shall not use the network to engage in illegal activities. This includes activities such as copyright violation, hacking, espionage or any other activity that may be prohibited by local laws.

2. Users shall not engage in non-work related activities that are consume excessive bandwidth or cause significant degradation of the performance of the network.

**S5-192001 IPR and legal declaration**

*Type: other For: (not specified)  
 Source: WG Chairman*

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

## 4 Meetings and activities reports

### 4.1 Last SA5 meeting report

**S5-192002 Report from last SA5 meeting**

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

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

### 4.2 Last SA meeting report

**S5-192015 SA5 status report at last SA meeting**

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

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

**S5-192016 SA5 results at last SA meeting**

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

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

### 4.3 Inter-organizational reports

## 5 Cross-SWG issues

### 5.1 Administrative issues at SA5 level

**S5-192003 Leaders meeting agenda**

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

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

**S5-192004 Leaders meeting minutes**

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

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

**S5-192005 SA5 Working Procedures**

*Type: other For: (not specified)  
 Source: WG Vice Chair (Huawei)*

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

**S5-192006 SA5 Meeting Facility Requirements**

*Type: other For: (not specified)  
 Source: WG Vice Chair (Orange)*

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

**S5-192007 Process for management of draft TSs/TRs**

*Type: other For: (not specified)  
 Source: WG Chairman*

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

**S5-192008 CR Quality Check**

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

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

**S5-192009 Status of email approvals**

*Type: other For: (not specified)  
 Source: WG Vice Chair (Orange)*

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

### 5.2 Technical issues at SA5 level

### 5.3 Liaison statements at SA5 level

**S5-192046 Resubmitted LS from ITU-T to SA5 on Draft new Recommendation E.RQST – “KPI targets for mobile networks”**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: ITU-T SG12*

**Discussion:**

It was commented that this was a table of proposed KPIs. Huawei added that there were no 3GPP references to the LTE values proposed and that the GSM KPIs were not correct since they were referring to 3GPP internal TRs (800 series).

ZTE added that new KPIs could also be proposed by SA5.

Intel: no 5G KPIs here, not relevant for our current work in 5G. Take a look at the KPIs we have defined and validate their proposal.

It was finally decided to postpone it for the next meeting given that it would happen before their deadline.

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

**S5-192047 Resubmitted LS from ITU-T to SA5 - Update of Technical Report – “Transport network support of IMT-2020/5G”**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: ITU-T SG15*

**Discussion:**

Intel: we sent an LS to them asking about a solution and now we are studying a different solution They are still studying the former solution. SA5 needs to guide them.

Nokia: 28.531 says that we are not limiting the possible solutions. We can tell ITU-T about this specification. If we receive their results before the end of this year we can react and include it in Rel-16.

The Chair proposed to reply with the expected time plan of SA5.

Huawei: no need to send a LS to them, they are still studying.

The Chair proposed to reply and this was agreed.

**Decision:** The document was **replied to in S5-192304**.

**S5-192304 Reply to: Resubmitted LS from ITU-T to SA5 - Update of Technical Report – “Transport network support of IMT-2020/5G”**

*Type: LS out For: approval  
 to ITU-T SG15  
 Source: Ericsson*

**Decision:** The document was **revised to S5-192459**.

**S5-192459 Reply to: Resubmitted LS from ITU-T to SA5 - Update of Technical Report – “Transport network support of IMT-2020/5G”**

*Type: LS out For: approval  
 to ITU-T SG15, cc RAN, ITU-T SG13  
 Source: Ericsson*

(Replaces S5-192304)

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

Attachments to this outgoing LS: -

### 5.4 SA5 meeting calendar

**S5-192010 SA5 Meeting Calendar**

*Type: other For: (not specified)  
 Source: WG Chairman*

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

### 5.5 Review of the Work Plan

**S5-192011 3GPP SA5 Work Plan**

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

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

## 6 OAM&P

### 6.1 OAM&P Plenary

**S5-192012 Time Plan for OAM&P**

*Type: other For: (not specified)  
 Source: WG Vice Chair (Huawei)*

**Decision:** The document was **revised to S5-192306**.

**S5-192306 Time Plan for OAM&P**

*Type: other For: -  
 Source: WG Vice Chair (Huawei)*

(Replaces S5-192012)

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

**S5-192013 OAM Executive Report**

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

**Decision:** The document was **revised to S5-192458**.

**S5-192458 OAM Executive Report**

*Type: report For: -  
 Source: WG Vice Chair (ORANGE)*

(Replaces S5-192013)

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

**S5-192014 OAM&P SWG action list**

*Type: other For: (not specified)  
 Source: WG Vice Chair (Huawei)*

**Decision:** The document was **revised to S5-192307**.

**S5-192307 OAM&P SWG action list**

*Type: other For: -  
 Source: WG Vice Chair (Huawei)*

(Replaces S5-192014)

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

**S5-192017 Minutes of OAM&P SWG opening session**

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

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

**S5-192049 Reply LS from SA2 to SA5 on Slice related Data Analytics**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-1901294*

**Decision:** The document was **replied to in S5-192308**.

**S5-192050 Ls from SA2 ccSA5 on providing information on SLA fulfilment to NG-RAN**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-1901382*

**Decision:** The document was **replied to in S5-192309**.

**S5-192309 Reply to: Ls from SA2 ccSA5 on providing information on SLA fulfilment to NG-RAN**

*Type: LS out For: approval  
 to SA2,RAN2, cc RAN3  
 Source: Nokia*

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

**S5-192051 Ls from SA4 cc SA5 on Collection of Slice Related Data Analytics from UEs**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S4-190195*

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

**S5-192310 LS on Status of QoE work in SA5**

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

**Discussion:**

The content was approved, but the final version was to be created after the email approval of the drafts.

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

**S5-192075 SA5 presentation to ZTA congress - Integration of 3GPP and ONAP**

*Type: discussion For: Discussion  
 Source: AT&T, Orange,Deutsche Telekom*

**Decision:** The document was **revised to S5-192311**.

**S5-192311 SA5 presentation to ZTA congress - Integration of 3GPP and ONAP**

*Type: discussion For: Discussion  
 Source: AT&T, Orange,Deutsche Telekom*

(Replaces S5-192075)

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

**S5-192237 LS on Reply LS on Slice related Data Analytics**

*Type: LS out For: Approval  
 to SA2  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-192308**.

**S5-192308 LS on Reply LS on Slice related Data Analytics**

*Type: LS out For: Approval  
 to SA2  
 Source: Ericsson España S.A.*

(Replaces S5-192237)

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

**S5-192267 Overview of the 5G specification structure**

*Type: discussion For: Discussion  
 Source: Huawei Tech.(UK) Co., Ltd*

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

**S5-192341 LSReply to 3GPP SA5 on network slicing**

*Type: discussion For: discussion  
 Source: ETSI ISG NFV*

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

### 6.2 New OAM&P Work Item proposals

**S5-192018 Minutes of New Work Item proposals - OAM&P**

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

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

### 6.3 OAM&P Maintenance and Rel-16 small Enhancements

**S5-192019 Minutes of OAM&P Maintenance and Rel-16 small Enhancements**

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

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

**S5-192092 Rel-15 CR TS 28.541 Add NRM Info Model definitions for beam managed object class**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0051 Cat: C (Rel-15)  
  
 Source: Pivotal Commware, ZTE, Intel, P.I. Works, China Mobile*

**Decision:** The document was **revised to S5-192312**.

**S5-192312 Rel-15 CR TS 28.541 Add NRM Info Model definitions for beam managed object class**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0051 rev 1 Cat: C (Rel-15)  
  
 Source: Pivotal Commware, ZTE, Intel, P.I. Works, China Mobile*

(Replaces S5-192092)

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

**S5-192435 Rel-15 CR TS 28.541 Add NRM Info Model definitions for beam managed object class**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0051 rev 2 Cat: C (Rel-15)  
  
 Source: Pivotal Commware, ZTE, Intel, P.I. Works, China Mobile*

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

**S5-192118 Add en-gNB to List of NE types and List of interfaces**

*Type: CR For: Approval  
 32.422 v15.1.0 CR-0300 Cat: F (Rel-15)  
  
 Source: Nokia, NTT DOCOMO*

**Abstract:**

en-gNB needs to be considered for Trace/UE measurement control and configuration in case of EN-DC.

Add en-gNB to List of NE types and List of interfaces.

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

**S5-192119 Add en-gNB to E-UTRAN Trace Record Content**

*Type: CR For: Approval  
 32.423 v15.0.0 CR-0096 Cat: F (Rel-15)  
  
 Source: Nokia, NTT DOCOMO*

**Abstract:**

en-gNB needs to be considered for E-UTRAN trace recording in case of EN-DC.

Add en-gNB to E-UTRAN Trace Record Content.

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

**S5-192124 Rel-15 CR 28.541 Align the term mFIdList and constituentNSSIIdList**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0052 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192330**.

**S5-192330 Rel-15 CR 28.541 Align the term mFIdList and constituentNSSIIdList**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0052 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei,Ericsson*

(Replaces S5-192124)

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

**S5-192125 Rel-15 CR 28.541 Correct the definition of nSSIId**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0053 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192313**.

**S5-192313 Rel-15 CR 28.541 Correct the definition of nSSIId**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0053 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-192125)

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

**S5-192126 Rel-15 CR 28.541 Add missing attribute constraints for class definition of NSSFFunction**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0054 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192314**.

**S5-192314 Rel-15 CR 28.541 Add missing attribute constraints for class definition of NSSFFunction**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0054 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-192126)

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

**S5-192127 Rel-15 CR 28.541 Correct attribute constraints for RRMpolicy related attributes in NRCellCU**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0055 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192316**.

**S5-192316 Rel-15 CR 28.541 Correct attribute constraints for RRMpolicy related attributes in NRCellCU**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0055 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-192127)

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

**S5-192141 Rel-15 CR 28.550 Add the missing RESTFul API definitions**

*Type: CR For: Approval  
 28.550 v15.0.0 CR-0003 Cat: F (Rel-15)  
  
 Source: Intel Finland Oy*

**Decision:** The document was **revised to S5-192317**.

**S5-192317 Rel-15 CR 28.550 Add the missing RESTFul API definitions**

*Type: CR For: Approval  
 28.550 v15.0.0 CR-0003 rev 1 Cat: F (Rel-15)  
  
 Source: Intel Finland Oy*

(Replaces S5-192141)

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

**S5-192151 Rel-15 CR 28.550 Correction on MDAS**

*Type: CR For: Approval  
 28.550 v15.0.0 CR-0007 Cat: F (Rel-15)  
  
 Source: Intel Finland Oy*

**Decision:** The document was **revised to S5-192350**.

**S5-192350 Rel-15 CR 28.550 Correction on MDAS**

*Type: CR For: Approval  
 28.550 v15.0.0 CR-0007 rev 1 Cat: F (Rel-15)  
  
 Source: Intel Finland Oy*

(Replaces S5-192151)

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

**S5-192152 Rel-15 CR 28.531 Correct management service term**

*Type: CR For: Approval  
 28.531 v15.1.0 CR-0016 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192318**.

**S5-192318 Rel-15 CR 28.531 Correct management service term**

*Type: CR For: Approval  
 28.531 v15.1.0 CR-0016 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-192152)

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

**S5-192153 Rel-16 CR 28.531 Correct management service term**

*Type: CR For: Approval  
 28.531 v16.0.0 CR-0017 Cat: A (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192319**.

**S5-192319 Rel-16 CR 28.531 Correct management service term**

*Type: CR For: Approval  
 28.531 v16.0.0 CR-0017 rev 1 Cat: A (Rel-16)  
  
 Source: Huawei*

(Replaces S5-192153)

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

**S5-192180 Add missing NR cell and freq relation**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0056 Cat: F (Rel-15)  
  
 Source: Ericsson Inc.*

**Decision:** The document was **revised to S5-192320**.

**S5-192320 Add missing NR cell and freq relation**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0056 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson Inc.*

(Replaces S5-192180)

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

**S5-192181 Correct cardinality of EP to target**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0057 Cat: F (Rel-15)  
  
 Source: Ericsson Inc.*

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

**S5-192182 Correct Import table**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0058 Cat: F (Rel-15)  
  
 Source: Ericsson Inc.*

**Decision:** The document was **revised to S5-192321**.

**S5-192321 Correct Import table**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0058 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson Inc.*

(Replaces S5-192182)

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

**S5-192183 Remove ExternalNRCellCU.pLMNIdList**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0059 Cat: F (Rel-15)  
  
 Source: Ericsson Inc.*

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

**S5-192184 Use bS (not bs) to prefix all BS attributes**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0060 Cat: F (Rel-15)  
  
 Source: Ericsson Inc.*

**Discussion:**

MCC had check S5-191357 to see if their changes overlap or they can be sent together. This was verified so the CR was agreed.

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

**S5-192185 Correct PLMN Id definition**

*Type: CR For: Approval  
 28.658 v15.3.0 CR-0049 Cat: F (Rel-15)  
  
 Source: Ericsson Inc.*

**Decision:** The document was **revised to S5-192322**.

**S5-192322 Correct PLMN Id definition**

*Type: CR For: Approval  
 28.658 v16.0.0 CR-0049 rev 1 Cat: F (Rel-16)  
  
 Source: Ericsson Inc.*

(Replaces S5-192185)

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

**S5-192187 Correction of State attributes descriptions**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0061 Cat: F (Rel-15)  
  
 Source: Ericsson Japan K.K. (ARIB)*

**Decision:** The document was **revised to S5-192323**.

**S5-192323 Correction of State attributes descriptions**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0061 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson Japan K.K. (ARIB)*

(Replaces S5-192187)

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

**S5-192190 Update State management SS to support JSON**

*Type: CR For: Agreement  
 28.626 v15.0.0 CR-0007 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192324**.

**S5-192324 Update State management SS to support JSON**

*Type: CR For: Agreement  
 28.626 v15.0.0 CR-0007 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192190)

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

**S5-192191 Update Generic NRM Solution Set to support JSON**

*Type: CR For: Agreement  
 28.623 v15.1.0 CR-0020 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192325**.

**S5-192325 Update Generic NRM Solution Set to support JSON**

*Type: CR For: Agreement  
 28.623 v15.1.0 CR-0020 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192191)

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

**S5-192192 Update 5G JSON Solution Set to align with generic NRM**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0062 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-192193 Update YANG Solution Set to align with Stage 2 definition**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0063 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192326**.

**S5-192326 Update YANG Solution Set to align with Stage 2 definition**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0063 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192193)

**Discussion:**

Nokia wanted to capture the information of the not agreed editor's note in the meeting report:

"The stage 3 here is based on stage 2 defined in TS 28.541 V15.0.1, and some, not all, agreed changes to TS 28.541 V15.0.1".

It was discussed the fact that changes in stage 2 need an alignment in stage 3 (with another CR). It was argued whether this to-do CR should be created and email approved or whether should be done in the next meeting by creating an action item.

Huawei commented that stage 2 and 3 CRs could go together. MCC commented that draft CRs could be created and then converted to CRs to be sent together.

**ACTION: Create a stage 3 CR dependent on this CR.  
 (action on: SA WG5 all / due by: 2019-05-19)**

**ACTION: Discuss how to handle the stage 2 and 3 misalignment with a process: responsible people, solution with draftCRs,etc…  
 (action on: SA5 leadership / due by: 2019-05-19)**

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

**S5-192194 Update Information Service to fix Network Slice modelling issue**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0064 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192327**.

**S5-192327 Update Information Service to fix Network Slice modelling issue**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0064 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192194)

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

**S5-192195 Update Solution Set to fix Network Slice modelling issue**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0065 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192328**.

**S5-192328 Update Solution Set to fix Network Slice modeling issue**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0065 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192195)

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

**S5-192222 Add availability in service profile of network slice resource model**

*Type: CR For: (not specified)  
 28.541 v15.1.0 CR-0066 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192329**.

**S5-192329 Add availability in service profile of network slice resource model**

*Type: CR For: -  
 28.541 v15.1.0 CR-0066 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192222)

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

**S5-192223 Rel-15 CR 28.541 Add mFIdList attribute definition**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0067 Cat: F (Rel-15)  
  
 Source: Ericsson Hungary Ltd*

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

**S5-192224 Discussion paper around sST attribute**

*Type: discussion For: Approval  
 28.541 v..  
 Source: Ericsson Hungary Ltd*

**Decision:** The document was **revised to S5-192331**.

**S5-192331 Discussion paper around sST attribute**

*Type: discussion For: Endorsement  
 28.541 v..  
 Source: Ericsson Hungary Ltd*

(Replaces S5-192224)

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

**S5-192225 Rel-15 CR 28.541 Add sST attribute to ServiceProfile**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0068 Cat: B (Rel-15)  
  
 Source: Ericsson Hungary Ltd*

**Discussion:**

Huawei asked to be minuted:

"The group is asked to consider adding "sST" as one attribute of SliceProfile datatype defined in TS 28.541 to keep consistency with the CR agreed in S5-192434".

**Decision:** The document was **revised to S5-192434**.

**S5-192434 Rel-15 CR 28.541 Add sST attribute to ServiceProfile**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0068 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson Hungary Ltd*

(Replaces S5-192225)

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

**S5-192226 Rel-15 CR 28.541 Update to sST attribute stage 3**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0069 Cat: F (Rel-15)  
  
 Source: Ericsson Hungary Ltd*

**Decision:** The document was **revised to S5-192418**.

**S5-192418 Rel-15 CR 28.541 Update to sST attribute stage 3**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0069 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson Hungary Ltd*

(Replaces S5-192226)

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

**S5-192228 Correct the DN to URI mapping rules**

*Type: CR For: Approval  
 32.158 v15.1.0 CR-0002 Cat: F (Rel-15)  
  
 Source: Nokia Germany*

**Decision:** The document was **revised to S5-192338**.

**S5-192338 Correct the DN to URI mapping rules**

*Type: CR For: Approval  
 32.158 v15.1.0 CR-0002 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia Germany*

(Replaces S5-192228)

**Decision:** The document was **revised to S5-192460**.

**S5-192460 Correct the DN to URI mapping rules**

*Type: CR For: Approval  
 32.158 v15.1.0 CR-0002 rev 2 Cat: F (Rel-15)  
  
 Source: Nokia Germany*

(Replaces S5-192338)

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

**S5-192230 Rel-15 CR 28.628 Correction of AAS IP Throughput load rate definition**

*Type: CR For: Agreement  
 28.628 v15.0.0 CR-0017 Cat: F (Rel-15)  
  
 Source: P.I. WORKS*

**Abstract:**

Correct IP throughput load rate definition as 5.4.1 Attribute properties to include UL throughput and DL throughput instead of double DL throughput in the formula.

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

**S5-192241 Rel-16 28.541 Name datatypes SliceProfile and ServiceProfile**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0070 Cat: F (Rel-16)  
  
 Source: Ericsson España S.A.*

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

**S5-192242 CR Rel-16 28.541 Add datatype definition for TAC**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0071 Cat: F (Rel-16)  
  
 Source: Ericsson España S.A.*

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

**S5-192243 CR Rel-16 28.541 Add datatype definition for S-NSSAI**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0072 Cat: F (Rel-16)  
  
 Source: Ericsson España S.A.*

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

**S5-192244 CR Rel-15 28.541 Add datatype definition for CoverageAreaTA**

*Type: CR For: (not specified)  
 28.541 v15.1.0 CR-0073 Cat: F (Rel-15)  
  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-192332**.

**S5-192332 CR Rel-15 28.541 Add datatype definition for CoverageAreaTA**

*Type: CR For: -  
 28.541 v15.1.0 CR-0073 rev 1 Cat: F (Rel-16)  
  
 Source: Ericsson España S.A.*

(Replaces S5-192244)

**Decision:** The document was **revised to S5-192436**.

**S5-192436 CR Rel-16 28.541 Add datatype definition for CoverageAreaTA**

*Type: CR For: -  
 28.541 v15.1.0 CR-0073 rev 2 Cat: F (Rel-16)  
  
 Source: Ericsson España S.A.*

(Replaces S5-192332)

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

**S5-192245 CR Rel-15 28.541 Name datatypes SliceProfile and ServiceProfile**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0074 Cat: F (Rel-15)  
  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-192333**.

**S5-192333 CR Rel-16 28.541 Name datatypes SliceProfile and ServiceProfile**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0074 rev 1 Cat: F (Rel-16)  
  
 Source: Ericsson España S.A.*

(Replaces S5-192245)

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

**S5-192246 CR Rel-15 28.541 Add datatype definition for S-NSSAI**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0075 Cat: F (Rel-15)  
  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-192334**.

**S5-192334 CR Rel-16 28.541 Add datatype definition for S-NSSAI**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0075 rev 1 Cat: F (Rel-16)  
  
 Source: Ericsson España S.A.*

(Replaces S5-192246)

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

**S5-192247 CR Rel-15 28.541 Add datatype definition for TAC**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0076 Cat: F (Rel-15)  
  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-192335**.

**S5-192335 CR Rel-16 28.541 Add datatype definition for TAC**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0076 rev 1 Cat: F (Rel-16)  
  
 Source: Ericsson España S.A.*

(Replaces S5-192247)

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

**S5-192250 CR Rel-15 28.541 Add datatype definition for NfProfile**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0077 Cat: F (Rel-15)  
  
 Source: Ericsson España S.A.*

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

**S5-192251 CR Rel-15 28.541 Add datatype definition for PerfReq**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0078 Cat: F (Rel-15)  
  
 Source: Ericsson España S.A.*

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

**S5-192337 CR Rel-15 28.541 Add datatype definition for PerfReq**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0078 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson España S.A.*

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

**S5-192252 CR Rel-15 28.541 Name datatype RRMPolicyRatio2**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0079 Cat: F (Rel-15)  
  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-192336**.

**S5-192336 CR Rel-15 28.541 Name datatype RRMPolicyRatio2**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0079 rev 1 Cat: F (Rel-16)  
  
 Source: Ericsson España S.A.*

(Replaces S5-192252)

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

### 6.4 Rel-16 Operations, Administration, Maintenance and Provisioning (OAM&P)

#### 6.4.1 Management of QoE measurement collection

**S5-192020 Minutes of Management of QoE measurement collection**

*Type: report For: (not specified)  
 Source: Rapporteur (Ericsson)*

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

**S5-192188 pCR R16 28405-040 Remove duplicated references**

*Type: pCR For: (not specified)  
 28.405 v0.4.0  
 Source: Ericsson*

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

**S5-192189 pCR R16 28405-040 Activating and reporting in UTRAN**

*Type: pCR For: (not specified)  
 28.405 v0.4.0  
 Source: Ericsson*

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

**S5-192199 pCR R16 28405-040 Handover handling in UTRAN**

*Type: pCR For: (not specified)  
 28.405 v0.4.0  
 Source: Ericsson*

**Decision:** The document was **revised to S5-192340**.

**S5-192340 pCR R16 28405-040 Handover handling in UTRAN**

*Type: pCR For: -  
 28.405 v0.4.0  
 Source: Ericsson*

(Replaces S5-192199)

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

**S5-192200 pCR R16 28405-040 Align terminology**

*Type: pCR For: (not specified)  
 28.405 v0.4.0  
 Source: Ericsson*

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

**S5-192265 pCR R16 28404-060 Corrections according to edithelp**

*Type: pCR For: (not specified)  
 28.404 v0.6.0  
 Source: Ericsson and edithelp*

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

**S5-192339 Draft TS 28.405**

*Type: draft TS For: Approval  
 28.405 v0.5.0  
 Source: Ericsson*

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

**S5-192437 Draft TS 28.404**

*Type: draft TR For: Approval  
 28.804 v0.3.0  
 Source: Ericsson*

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

#### 6.4.2 Energy Efficiency of 5G

**S5-192021 Minutes of Energy effciency of 5G**

*Type: report For: (not specified)  
 Source: Rapporteur (ORANGE)*

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

**S5-192160 Discussion paper on PEE measurement data collection for NG-RAN split options**

*Type: discussion For: Discussion  
 Source: Huawei*

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

#### 6.4.3 OAM aspects of LTE and WLAN integration

**S5-192022 Minutes of Study on OAM aspects of LTE and WLAN integration**

*Type: report For: (not specified)  
 Source: Rapporteur (Intel)*

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

**S5-192149 Rel-16 CR 32.425 Add measurements related to WLAN connection status report**

*Type: CR For: Approval  
 32.425 v16.1.0 CR-0183 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

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

#### 6.4.4 Network policy management for mobile networks based on NFV scenarios

**S5-192023 Minutes of Network policy management for mobile networks based on NFV scenarios**

*Type: report For: (not specified)  
 Source: Rapporteur (China Mobile)*

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

#### 6.4.5 Methodology for 5G management specifications

**S5-192024 Minutes of Methodology for 5G management specifications**

*Type: report For: (not specified)  
 Source: Rapporteur (Ericsson)*

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

**S5-192162 Discussion paper on READ and WRITE controls on multiple MnS consumers**

*Type: discussion For: Approval  
 Source: Huawei*

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

**S5-192163 Resolution of the editor's note in W4.3.a.2**

*Type: pCR For: Approval  
 32.160 v1.1.0  
 Source: Huawei*

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

**S5-192186 YANG solution style guide**

*Type: discussion For: Agreement  
 32.153 v..  
 Source: Ericsson Inc.*

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

**S5-192227 Some thoughts on XML, JSON and YANG style guides**

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

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

**S5-192236 pCR 32.160 Stage 2 to stage 3 mapping**

*Type: pCR For: Agreement  
 32.160 v1.1.0  
 Source: Ericsson España S.A.*

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

**S5-192239 Presentation of Specification to TSG TS 32.160**

*Type: TS or TR cover For: Information  
 32.160 v1.1.0  
 Source: Ericsson España S.A.*

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

**S5-192240 Discussion on Stage 2 to stage 3 mapping**

*Type: discussion For: Endorsement  
 Source: Ericsson España S.A.*

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

**S5-192258 pCR 32.160 Align template for datatype with 28.541**

*Type: pCR For: Approval  
 32.160 v1.1.0  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-192342**.

**S5-192342 pCR 32.160 Align template for datatype with 28.541**

*Type: pCR For: Approval  
 32.160 v1.1.0  
 Source: Ericsson España S.A.*

(Replaces S5-192258)

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

**S5-192384 Draft TS 32.160**

*Type: draft TS For: Approval  
 32.160 v1.2.0  
 Source: Ericsson*

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

#### 6.4.6 Intent driven management service for mobile networks

**S5-192025 Minutes of Intent driven management service for mobile networks**

*Type: report For: (not specified)  
 Source: Rapporteur (Huawei)*

**Decision:** The document was **revised to S5-192442**.

**S5-192442 Minutes of Intent driven management service for mobile networks**

*Type: report For: -  
 Source: Rapporteur (Huawei)*

(Replaces S5-192025)

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

**S5-192128 28.812 Update concept of IDMS**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192343**.

**S5-192343 28.812 Update concept of IDMS**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

(Replaces S5-192128)

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

**S5-192129 pCR 28.812 Add intent driven NF capacity expanding scenario**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192344**.

**S5-192344 pCR 28.812 Add intent driven NF capacity expanding scenario**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

(Replaces S5-192129)

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

**S5-192130 pCR 28.812 Add description of automation**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192345**.

**S5-192345 pCR 28.812 Add description of automation**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

(Replaces S5-192130)

**Decision:** The document was **revised to S5-192438**.

**S5-192438 pCR 28.812 Add description of automation**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

(Replaces S5-192345)

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

**S5-192131 pCR 28.812 Add conclusion**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192349**.

**S5-192349 pCR 28.812 Add conclusion**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

(Replaces S5-192131)

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

**S5-192132 pCR 28.812 Add abbreviations**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

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

**S5-192133 pCR 28.812 Add Intent driven 5GLAN service creation scenario**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192347**.

**S5-192347 pCR 28.812 Add Intent driven 5GLAN service creation scenario**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

(Replaces S5-192133)

**Decision:** The document was **revised to S5-192439**.

**S5-192439 pCR 28.812 Add Intent driven 5GLAN service creation scenario**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

(Replaces S5-192347)

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

**S5-192134 pCR 28.812 Add Intent translation description**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192348**.

**S5-192348 pCR 28.812 Add Intent translation description**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

(Replaces S5-192134)

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

**S5-192206 Abstraction versus layering**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Ericsson Inc.*

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

**S5-192231 Discussion paper on Scope and boundaries for Intent Based Management**

*Type: discussion For: Endorsement  
 28.812 v..  
 Source: Ericsson Japan K.K.*

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

**S5-192233 pCR 28.812 Clarification of the scope**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Ericsson Japan K.K.*

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

**S5-192234 pCR 28.812 Clarification of the dimensions**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Ericsson Japan K.K.*

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

**S5-192235 pCR 28.812 Use case for multi-tier intent management**

*Type: pCR For: Approval  
 28.812 v0.3.0  
 Source: Ericsson Japan K.K.*

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

**S5-192266 pCR 28812-030 edithelp**

*Type: pCR For: (not specified)  
 28.812 v0.3.0  
 Source: Huawei Tech.(UK) Co., Ltd*

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

**S5-192346 Draft TR 28.812**

*Type: draft TR For: Approval  
 28.812 v0.4.0  
 Source: Huawei*

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

#### 6.4.7 Enhancement of performance assurance for 5G networks including network slicing

**S5-192026 Minutes of Enhancement of performance assurance for 5G networks including network slicing**

*Type: report For: (not specified)  
 Source: Rapporteur (Intel)*

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

**S5-192084 Rel-16 CR TS 32.425 Add measurements related to Secondary Node Addition for E-UTRA-NR Dual Connectivity**

*Type: CR For: Agreement  
 32.425 v16.1.0 CR-0180 Cat: B (Rel-16)  
  
 Source: ZTE, China Mobile*

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

**S5-192376 Rel-16 CR TS 32.425 Add measurements related to Secondary Node Addition for E-UTRA-NR Dual Connectivity**

*Type: CR For: Agreement  
 32.425 v16.1.0 CR-0180 rev 1 Cat: B (Rel-16)  
  
 Source: ZTE, China Mobile*

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

**S5-192085 Rel-16 CR TS 32.425 Add measurements related to Secondary Node Release for E-UTRA-NR Dual Connectivity**

*Type: CR For: Agreement  
 32.425 v16.1.0 CR-0181 Cat: B (Rel-16)  
  
 Source: ZTE, China Mobile*

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

**S5-192086 Rel-16 CR TS 32.425 Add measurements related to Secondary Node Change for E-UTRA-NR Dual Connectivity**

*Type: CR For: Agreement  
 32.425 v16.1.0 CR-0182 Cat: B (Rel-16)  
  
 Source: ZTE, China Mobile*

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

**S5-192087 Rel-16 CR TS 28.552 Add measurements related to Secondary Node Addition for MR-DC Dual Connectivity**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0057 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, China Mobile*

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

**S5-192088 Rel-16 CR TS 28.552 Add measurements related to Secondary Node Change for MR-DC Dual Connectivity**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0058 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, China Mobile*

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

**S5-192089 Rel-16 CR TS 28.552 Add measurements related to Secondary Node Release for MR-DC Dual Connectivity**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0059 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, China Mobile*

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

**S5-192090 Rel-16 CR TS 28.552 Add measurements of RRC connection re-establishment**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0060 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, China Mobile*

**Decision:** The document was **revised to S5-192377**.

**S5-192377 Rel-16 CR TS 28.552 Add measurements of RRC connection re-establishment**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0060 rev 1 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, China Mobile*

(Replaces S5-192090)

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

**S5-192091 Rel-16 CR TS 28.552 Add measurements of RRC connection resume**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0061 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, China Mobile*

**Decision:** The document was **revised to S5-192378**.

**S5-192378 Rel-16 CR TS 28.552 Add measurements of RRC connection resume**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0061 rev 1 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, China Mobile*

(Replaces S5-192091)

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

**S5-192093 R16 CR TS28.552 Add RSRP measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0062 Cat: B (Rel-16)  
  
 Source: ZTE, Intel, China Mobile*

**Decision:** The document was **revised to S5-192379**.

**S5-192379 R16 CR TS28.552 Add RSRP measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0062 rev 1 Cat: B (Rel-16)  
  
 Source: ZTE, Intel, China Mobile*

(Replaces S5-192093)

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

**S5-192094 R16 CR TS 28.552 Add UE Rx-Tx time difference related measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0063 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, China Mobile*

**Decision:** The document was **revised to S5-192380**.

**S5-192380 R16 CR TS 28.552 Add UE Rx-Tx time difference related measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0063 rev 1 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, China Mobile*

(Replaces S5-192094)

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

**S5-192095 R16 CR TS 28.552 Add PDCP throughput measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0064 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, China Mobile*

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

**S5-192123 Add use case and definitions of QoS flow measurement over N3**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0065 Cat: B (Rel-16)  
  
 Source: ETRI*

**Abstract:**

Granular QoS flow level UP traffic measurement on N3.

**Decision:** The document was **revised to S5-192381**.

**S5-192381 Add use case and definitions of QoS level measurement over N3**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0065 rev 1 Cat: B (Rel-16)  
  
 Source: ETRI*

(Replaces S5-192123)

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

**S5-192140 Add use case and definitions of packet loss rate measurement over N3**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0066 Cat: B (Rel-16)  
  
 Source: ETRI*

**Abstract:**

Packet loss can happen between gBN and UPF and their measurement thus is described. .

**Decision:** The document was **revised to S5-192382**.

**S5-192382 Add use case and definitions of packet loss measurement over N3**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0066 rev 1 Cat: B (Rel-16)  
  
 Source: ETRI*

(Replaces S5-192140)

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

**S5-192142 Rel-16 CR 28.550 Add operations for establishing and terminating streaming connection**

*Type: CR For: Approval  
 28.550 v15.0.0 CR-0004 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

**Decision:** The document was **revised to S5-192371**.

**S5-192371 Rel-16 CR 28.550 Add operations for establishing and terminating streaming connection**

*Type: CR For: Approval  
 28.550 v15.0.0 CR-0004 rev 1 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

(Replaces S5-192142)

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

**S5-192143 Rel-16 CR 28.550 Add performance threshold monitoring service**

*Type: CR For: Approval  
 28.550 v15.0.0 CR-0005 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

**Decision:** The document was **revised to S5-192372**.

**S5-192372 Rel-16 CR 28.550 Add performance threshold monitoring service**

*Type: CR For: Approval  
 28.550 v15.0.0 CR-0005 rev 1 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

(Replaces S5-192143)

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

**S5-192144 Rel-16 CR 28.552 Add measurements related to registration via untrusted non-3GPP access for AMF**

*Type: CR For: Approval  
 28.550 v15.0.0 CR-0006 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

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

**S5-192145 Rel-16 CR 28.552 Add measurements related to registration via untrusted non-3GPP access for AMF**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0067 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

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

**S5-192146 Rel-16 CR 28.552 Add measurements related to inter-AMF handover**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0068 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

**Decision:** The document was **revised to S5-192383**.

**S5-192383 Rel-16 CR 28.552 Add measurements related to inter-AMF handover**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0068 rev 1 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

(Replaces S5-192146)

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

**S5-192147 Rel-16 CR 28.622 Add IOCs for threshold monitoring control**

*Type: CR For: Approval  
 28.622 v15.2.0 CR-0030 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

**Decision:** The document was **revised to S5-192373**.

**S5-192373 Rel-16 CR 28.622 Add IOCs for threshold monitoring control**

*Type: CR For: Approval  
 28.622 v15.2.0 CR-0030 rev 1 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

(Replaces S5-192147)

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

**S5-192148 Rel-16 CR 28.623 Add IOCs for threshold monitoring control**

*Type: CR For: Approval  
 28.623 v15.1.0 CR-0019 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

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

**S5-192374 Rel-16 CR 28.623 Add IOCs for threshold monitoring control**

*Type: CR For: Approval  
 28.623 v15.1.0 CR-0019 rev 1 Cat: B (Rel-16)  
  
 Source: Intel Finland Oy*

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

**S5-192150 Updated WID Performance assurance for 5G networks including network slicing**

*Type: WID revised For: Approval  
 Source: Intel Finland Oy*

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

**S5-192154 R16 CR TS 28.552 Add PDCP Split Volume measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0069 Cat: B (Rel-16)  
  
 Source: ZTE Corporation, China Mobile*

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

**S5-192178 Rel-16 CR 28.552 Add mean radio resource utilization of network slice instance measurements**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0070 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192397**.

**S5-192397 Rel-16 CR 28.552 Add mean radio resource utilization of network slice instance measurements**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0070 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-192178)

**Decision:** The document was **revised to S5-192441**.

**S5-192441 Rel-16 CR 28.552 Add mean radio resource utilization of network slice instance measurements**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0070 rev 2 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-192397)

**ACTION: Consider to keep the format consistency of TS 28.552 between “the existing PRB related performance measurements (5.1.1.2.1 DL Total PRB Usage, 5.1.1.2.2 UL Total PRB Usage)”and the agreed measurement “radio resource utilization of network slice”in S5 192441  
 (action on: SA WG5 all / due by: 2019-05-20)**

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

**S5-192179 Discussion paper on TS 28.552 re-organization approach**

*Type: discussion For: Endorsement  
 28.552 v..  
 Source: Huawei*

**Decision:** The document was **revised to S5-192375**.

**S5-192375 Discussion paper on TS 28.552 re-organization approach**

*Type: discussion For: Endorsement  
 28.552 v..  
 Source: Huawei*

(Replaces S5-192179)

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

**S5-192216 Rel-16 CR TS 28.552 Add measurements related to DRB retainability**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0071 Cat: B (Rel-16)  
  
 Source: Ericsson Hungary Ltd*

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

**S5-192219 Rel-16 CR TS 28.554 Add KPI of DRB Retainability**

*Type: CR For: Approval  
 28.554 v15.1.0 CR-0010 Cat: B (Rel-16)  
  
 Source: Ericsson Hungary Ltd*

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

**S5-192398 Rel-16 CR TS 28.554 Add KPI of DRB Retainability**

*Type: CR For: Approval  
 28.554 v15.1.0 CR-0010 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson Hungary Ltd*

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

**S5-192220 LS on Data activity reporting**

*Type: LS out For: Approval  
 to RAN3  
 Source: Ericsson Hungary Ltd*

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

**S5-192399 LS on Data activity reporting**

*Type: LS out For: Approval  
 to RAN3  
 Source: Ericsson Hungary Ltd*

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

**S5-192260 Update definition of mean number of PDU sessions KPI**

*Type: CR For: (not specified)  
 28.554 v15.1.0 CR-0011 Cat: F (Rel-16)  
  
 Source: ETRI*

**Decision:** The document was **revised to S5-192385**.

**S5-192385 Update definition of mean number of PDU sessions KPI**

*Type: CR For: -  
 28.554 v15.1.0 CR-0011 rev 1 Cat: F (Rel-16)  
  
 Source: ETRI*

(Replaces S5-192260)

**Decision:** The document was **revised to S5-192400**.

**S5-192400 Update definition of mean number of PDU sessions KPI**

*Type: CR For: -  
 28.554 v15.1.0 CR-0011 rev 2 Cat: F (Rel-15)  
  
 Source: ETRI*

(Replaces S5-192385)

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

**S5-192261 5G\_SLICE\_ePA**

*Type: CR For: (not specified)  
 28.554 v15.1.0 CR-0012 Cat: B (Rel-16)  
  
 Source: ETRI*

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

**S5-192262 Rel-16 CR 28.552 Correction of percentage unrestricted volume measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0072 Cat: F (Rel-16)  
  
 Source: P.I. WORKS*

**Abstract:**

Correction of measurement names in line with definition

**Decision:** The document was **revised to S5-192401**.

**S5-192401 Rel-16 CR 28.552 Correction of percentage unrestricted volume measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0072 rev 1 Cat: A (Rel-16)  
  
 Source: P.I. WORKS*

(Replaces S5-192262)

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

**S5-192305 Tdoc discussion sequence**

*Type: other For: Information  
 Source: Intel*

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

**S5-192402 Rel-15 CR 28.552 Correction of percentage unrestricted volume measurements**

*Type: CR For: Agreement  
 28.552 v15.1.0 CR-0073 Cat: F (Rel-15)  
  
 Source: P.I. Works*

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

**S5-192413 Discussion paper around DC related measurement**

*Type: discussion For: discussion  
 Source: ZTE*

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

#### 6.4.8 Discovery of management services in 5G

**S5-192027 Minutes of Discovery of management services in 5G**

*Type: report For: (not specified)  
 Source: Rapporteur (Huawei)*

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

**S5-192161 Add discovery of specified service interface access information use case and requirement**

*Type: CR For: Agreement  
 28.533 v15.1.0 CR-0013 Cat: B (Rel-16)  
  
 Source: Huawei Technologies France*

**Decision:** The document was **revised to S5-192387**.

**S5-192387 Add discovery of specified service interface access information use case and requirement**

*Type: CR For: Agreement  
 28.533 v15.1.0 CR-0013 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei Technologies France*

(Replaces S5-192161)

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

**S5-192164 Add MnS exposure governance use case and requirement**

*Type: CR For: Agreement  
 28.533 v15.1.0 CR-0014 Cat: B (Rel-16)  
  
 Source: Huawei Technologies France*

**Decision:** The document was **revised to S5-192388**.

**S5-192388 Add MnS exposure governance use case and requirement**

*Type: CR For: Agreement  
 28.533 v15.1.0 CR-0014 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei Technologies France*

(Replaces S5-192164)

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

**S5-192165 Discussion paper on discovery of MnS in 5G**

*Type: discussion For: Endorsement  
 Source: Huawei Technologies France*

**Decision:** The document was **revised to S5-192386**.

**S5-192386 Discussion paper on discovery of MnS in 5G**

*Type: discussion For: Endorsement  
 Source: Huawei Technologies France*

(Replaces S5-192165)

**Decision:** The document was **revised to S5-192453**.

**S5-192453 Discussion paper on discovery of MnS in 5G**

*Type: discussion For: Endorsement  
 Source: Huawei Technologies France*

(Replaces S5-192386)

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

**S5-192176 Revised WID on discovery of management services in 5G**

*Type: WID revised For: Agreement  
 Source: Huawei Technologies France*

**Discussion:**

Just a change in the dates. The change was agreed but the revised WID doesn't need to be sent to SA.

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

**S5-192229 MnS discovery**

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

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

#### 6.4.9 NRM enhancements

**S5-192028 Minutes of NRM enhancements**

*Type: report For: (not specified)  
 Source: Rapporteur (Nokia)*

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

**S5-192196 TD Support Service Managed Object**

*Type: discussion For: Endorsement  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192389**.

**S5-192389 TD Support Service Managed Object**

*Type: discussion For: Endorsement  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192196)

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

**S5-192197 TD Support Registration State of Managed Service**

*Type: discussion For: Endorsement  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192409**.

**S5-192409 TD Support Registration State of Managed Service**

*Type: discussion For: Endorsement  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192197)

**Decision:** The document was **revised to S5-192456**.

**S5-192456 TD Support Registration State of Managed Service**

*Type: discussion For: Endorsement  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192409)

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

**S5-192198 TD Support State of Managed Service**

*Type: discussion For: Endorsement  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192410**.

**S5-192410 TD Support State of Managed Service**

*Type: discussion For: Endorsement  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192198)

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

**S5-192411 Revised WID on NRM enhancements**

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

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

#### 6.4.10 Trace Management in the context of Services Based Management Architecture

**S5-192029 Minutes of Trace Management in the context of Services Based Management Architecture**

*Type: report For: (not specified)  
 Source: Rapporteur (Nokia)*

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

#### 6.4.11 Integration of ONAP and 3GPP 5G management framework (Preliminary work before SA approval)

**S5-192030 Minutes of Integration of ONAP DCAE and 3GPP management architecture**

*Type: report For: (not specified)  
 Source: Rapporteur ORANGE)*

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

**S5-192074 Draft CR 28.532 Add RESTful HTTP-based SS of fault supervision for integration with ONAP VES**

*Type: discussion For: Discussion  
 28.532 v..  
 Source: AT&T, Deutsche Telekom, Orange*

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

### 6.5 OAM&P Studies

#### 6.5.1 Study on integration of ONAP DCAE and 3GPP management architecture

**S5-192031 Minutes of Study on integration of ONAP DCAE and 3GPP management architecture**

*Type: report For: (not specified)  
 Source: Rapporteur ORANGE)*

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

**S5-192073 pCR TS 28.890 – Heartbeat and Communication Surveillance**

*Type: pCR For: Approval  
 28.890 v1.1.0  
 Source: AT&T, Deutsche Telekom, Orange*

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

**S5-192390 Draft TR 28.890**

*Type: draft TR For: Approval  
 28.890 v1.2.0  
 Source: ORANGE*

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

#### 6.5.2 Study on integration of ONAP and 3GPP configuration management services for 5G networks

**S5-192032 Minutes of Study on integration of ONAP and 3GPP configuration management services for 5G networks**

*Type: report For: (not specified)  
 Source: Rapporteur (Ericsson)*

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

**S5-192135 pCR 28.890 Update clause 6.2.2 Management principles**

*Type: pCR For: Approval  
 28.890 v1.1.0  
 Source: Huawei*

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

**S5-192136 pCR 28.890 Add Handling of configuration notification**

*Type: pCR For: Approval  
 28.890 v1.1.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192391**.

**S5-192391 pCR 28.890 Add Handling of configuration notification**

*Type: pCR For: Approval  
 28.890 v1.1.0  
 Source: Huawei,Ericsson*

(Replaces S5-192136)

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

**S5-192201 Rel-16 pCR TR 28.890 Minor Technical Corrections**

*Type: pCR For: (not specified)  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

**Decision:** The document was **revised to S5-192392**.

**S5-192392 Rel-16 pCR TR 28.890 Minor Technical Corrections**

*Type: pCR For: -  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

(Replaces S5-192201)

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

**S5-192204 Rel-16 pCR 28.890 Add the description of 3GPP provisioning management service**

*Type: pCR For: (not specified)  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

**Decision:** The document was **revised to S5-192393**.

**S5-192393 Rel-16 pCR 28.890 Add the description of 3GPP provisioning management service**

*Type: pCR For: -  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

(Replaces S5-192204)

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

**S5-192207 Rel-16 pCR 28.890 Add the description of SDNC**

*Type: pCR For: (not specified)  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

**Decision:** The document was **revised to S5-192394**.

**S5-192394 Rel-16 pCR 28.890 Add the description of SDNC**

*Type: pCR For: -  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

(Replaces S5-192207)

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

**S5-192209 Rel-16 pCR 28.890 Configuration Management handling**

*Type: pCR For: (not specified)  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

**Decision:** The document was **revised to S5-192395**.

**S5-192395 Rel-16 pCR 28.890 Configuration Management handling**

*Type: pCR For: -  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

(Replaces S5-192209)

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

**S5-192210 Rel-16 pCR 28.890 Add Handling of configuration notification**

*Type: pCR For: (not specified)  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

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

**S5-192212 Rel-16 pCR 28.890 Conclusion on CM**

*Type: pCR For: (not specified)  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

**Decision:** The document was **revised to S5-192396**.

**S5-192396 Rel-16 pCR 28.890 Conclusion on CM**

*Type: pCR For: -  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

(Replaces S5-192212)

**Decision:** The document was **revised to S5-192443**.

**S5-192443 Rel-16 pCR 28.890 Conclusion on CM**

*Type: pCR For: -  
 28.890 v1.1.0  
 Source: Nanjing Ericsson Panda Com Ltd*

(Replaces S5-192396)

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

**S5-192270 Presentation of TR 28.890 for Approval to SA#83**

*Type: TS or TR cover For: Approval  
 28.890 v1.1.0  
 Source: AT&T, Ericsson, Orange*

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

#### 6.5.3 Study on protocol enhancement for real time communication

**S5-192033 Minutes of Study on protocol enhancement for real time communication**

*Type: report For: (not specified)  
 Source: Rapporteur(Nokia)*

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

#### 6.5.4 Study on management aspects of edge computing

**S5-192034 Minutes of Study on management aspects of edge computing**

*Type: report For: (not specified)  
 Source: Rapporteur (Intel)*

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

**S5-192080 pCR 28.803 use case for performance measurements related to end-to-end QoS**

*Type: pCR For: Approval  
 28.803 v0.3.0  
 Source: Intel China Ltd.*

**Decision:** The document was **revised to S5-192403**.

**S5-192403 pCR 28.803 use case for performance measurements related to end-to-end QoS**

*Type: pCR For: Approval  
 28.803 v0.3.0  
 Source: Intel China Ltd.*

(Replaces S5-192080)

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

**S5-192081 pCR 28.803 solution for edge computing deployment**

*Type: pCR For: Approval  
 28.803 v0.3.0  
 Source: Intel China Ltd.*

**Decision:** The document was **revised to S5-192404**.

**S5-192404 pCR 28.803 solution for edge computing deployment**

*Type: pCR For: Approval  
 28.803 v0.3.0  
 Source: Intel China Ltd.*

(Replaces S5-192081)

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

**S5-192082 pCR 28.803 Add use case on PCF and NEF discovery for EC**

*Type: pCR For: Approval  
 28.803 v0.3.0  
 Source: Intel China Ltd.*

**Decision:** The document was **revised to S5-192405**.

**S5-192405 pCR 28.803 Add use case on PCF and NEF discovery for EC**

*Type: pCR For: Approval  
 28.803 v0.3.0  
 Source: Intel China Ltd.*

(Replaces S5-192082)

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

**S5-192083 [Draft] LS on PCF and NEF discovery for Edge Computing**

*Type: LS out For: Approval  
 to 3GPP SA2  
 Source: Intel China Ltd.*

**Decision:** The document was **revised to S5-192406**.

**S5-192406 LS on PCF and NEF discovery for Edge Computing**

*Type: LS out For: Approval  
 to SA2  
 Source: Intel China Ltd.*

(Replaces S5-192083)

**Decision:** The document was **revised to S5-192444**.

**S5-192444 LS on PCF and NEF discovery for Edge Computing**

*Type: LS out For: Approval  
 to SA2  
 Source: Intel China Ltd.*

(Replaces S5-192406)

**Decision:** The document was **revised to S5-192454**.

**S5-192454 LS on PCF and NEF discovery for Edge Computing**

*Type: LS out For: Approval  
 to SA2  
 Source: Intel China Ltd.*

(Replaces S5-192444)

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

**S5-192315 Revised Study on management aspects of edge computing**

*Type: SID revised For: Agreement  
 Source: Intel*

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

**S5-192433 Draft TR 28.803**

*Type: draft TR For: Approval  
 28.803 v0.4.0  
 Source: Intel*

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

#### 6.5.5 Study on tenancy concept in 5G networks and network slicing management

**S5-192035 Minutes of Study on tenancy concept in 5G networks and network slicing management**

*Type: report For: (not specified)  
 Source: Rapporteur (Huawei)*

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

**S5-192155 pCR 28.804 Add managed data isolation concept**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Technologies France*

**Decision:** The document was **revised to S5-192407**.

**S5-192407 pCR 28.804 Add managed data isolation concept**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Technologies France*

(Replaces S5-192155)

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

**S5-192156 pCR 28.804 Add UC for dedicated and for shared performance managed data**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Technologies France*

**Decision:** The document was **revised to S5-192408**.

**S5-192408 pCR 28.804 Add UC for dedicated and for shared performance managed data**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: China mobile,Huawei*

(Replaces S5-192156)

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

**S5-192157 pCR 28.804 Add potential solutions and recommendations**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Technologies France*

**Decision:** The document was **revised to S5-192412**.

**S5-192412 pCR 28.804 Add potential solutions and recommendations**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Technologies France*

(Replaces S5-192157)

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

**S5-192158 pCR 28.804 Add UC for 3GPP network represented as tenant in NFV MANO**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Technologies France*

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

**S5-192159 pCR 28.804 Correct approved tenancy concept and definition**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Technologies France*

**Decision:** The document was **revised to S5-192414**.

**S5-192414 pCR 28.804 Correct approved tenancy concept and definition**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Technologies France*

(Replaces S5-192159)

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

**S5-192177 pCR 28.804 Add tenant types**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192415**.

**S5-192415 pCR 28.804 Add tenant types**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei*

(Replaces S5-192177)

**Decision:** The document was **revised to S5-192445**.

**S5-192445 pCR 28.804 Add tenant types**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei*

(Replaces S5-192415)

**Decision:** The document was **revised to S5-192457**.

**S5-192457 pCR 28.804 Add tenant types**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei*

(Replaces S5-192445)

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

**S5-192461 Draft TR 28.804**

*Type: draft TR For: Approval  
 28.804 v0.3.0  
 Source: Ericsson*

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

#### 6.5.6 Study on management aspects of communication services

**S5-192036 Minutes of Study on management aspects of communication services**

*Type: report For: (not specified)  
 Source: Rapporteur (Ericsson)*

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

**S5-192166 pCR 28.805 Add data analytics for SLA assurance**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei Technologies France*

**Decision:** The document was **revised to S5-192417**.

**S5-192417 pCR 28.805 Add data analytics for SLA assurance**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei Technologies France*

(Replaces S5-192166)

**Decision:** The document was **revised to S5-192446**.

**S5-192446 pCR 28.805 Add data analytics for SLA assurance**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei Technologies France*

(Replaces S5-192417)

**Decision:** The document was **revised to S5-192455**.

**S5-192455 pCR 28.805 Add data analytics for SLA assurance**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei Technologies France*

(Replaces S5-192446)

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

**S5-192167 pCR 28.805 Add UC and requirements for CSI fault and performance monitoring**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei Technologies France*

**Decision:** The document was **revised to S5-192420**.

**S5-192420 pCR 28.805 Add UC and requirements for CSI fault and performance monitoring**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei Technologies France*

(Replaces S5-192167)

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

**S5-192168 pCR 28.805 Update UC MDA-Assisted network provisioning contributing to SLA assurance**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192419**.

**S5-192419 pCR 28.805 Update UC MDA-Assisted network provisioning contributing to SLA assurance**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

(Replaces S5-192168)

**Decision:** The document was **revised to S5-192447**.

**S5-192447 pCR 28.805 Update UC MDA-Assisted network provisioning contributing to SLA assurance**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

(Replaces S5-192419)

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

**S5-192169 pCR 28.805 Add use case for obtaining an NSI to provide multiple CSIs**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192421**.

**S5-192421 pCR 28.805 Add use case for obtaining an NSI to provide multiple CSIs**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

(Replaces S5-192169)

**Decision:** The document was **revised to S5-192448**.

**S5-192448 pCR 28.805 Add use case for obtaining an NSI to provide multiple CSIs**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

(Replaces S5-192421)

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

**S5-192170 pCR 28.805 Discussion on CSM functionalities and services**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

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

**S5-192171 pCR 28.805 Add use case for exposing limited management capability to verticals**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192422**.

**S5-192422 pCR 28.805 Add use case for exposing limited management capability to verticals**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

(Replaces S5-192171)

**Decision:** The document was **revised to S5-192449**.

**S5-192449 pCR 28.805 Add use case for exposing limited management capability to verticals**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

(Replaces S5-192422)

**Decision:** The document was **revised to S5-192452**.

**S5-192452 pCR 28.805 Add use case for exposing limited management capability to verticals**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

(Replaces S5-192449)

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

**S5-192172 pCR 28.805 Management aspects of 5GLAN services**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

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

**S5-192173 pCR 28.805 Solution for translation of communication service requirements into resource requirements**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

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

**S5-192423 pCR 28.805 Solution for translation of communication service requirements into resource requirements**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

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

**S5-192174 pCR 28.805 Core network assisted network slice overload prevention**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Huawei*

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

**S5-192238 Discussion paper on lifecycle management of communication services**

*Type: discussion For: Endorsement  
 28.805 v..  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-192416**.

**S5-192416 Discussion paper on lifecycle management of communication services**

*Type: discussion For: Endorsement  
 28.805 v..  
 Source: Ericsson España S.A.*

(Replaces S5-192238)

**Decision:** The document was **revised to S5-192451**.

**S5-192451 Discussion paper on lifecycle management of communication services**

*Type: discussion For: Endorsement  
 28.805 v..  
 Source: Ericsson España S.A.*

(Replaces S5-192416)

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

**S5-192253 pCR 28.805 Use case and requirement to activate a resource facing communication service**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Ericsson España S.A.*

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

**S5-192254 pCR 28.805 Use case and requirement to create a resource facing communication service**

*Type: pCR For: Agreement  
 28.805 v0.3.0  
 Source: Ericsson España S.A.*

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

**S5-192255 pCR 28.805 Use case and requirement to de-activate a resource facing communication service**

*Type: pCR For: Agreement  
 28.805 v0.3.0  
 Source: Ericsson España S.A.*

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

**S5-192256 pCR 28.805 Use case and requirement to modify the capacity of a resource facing communication service**

*Type: pCR For: Agreement  
 28.805 v0.3.0  
 Source: Ericsson España S.A.*

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

**S5-192257 pCR 28.805 Use case and requirement to terminate resource facing communication service**

*Type: pCR For: Agreement  
 28.805 v0.3.0  
 Source: Ericsson España S.A.*

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

**S5-192259 Sequence proposal for study on management aspects of communication services**

*Type: other For: Information  
 Source: Ericsson España S.A.*

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

**S5-192264 pCR 28.805 Introduce management model**

*Type: pCR For: Agreement  
 28.805 v0.3.0  
 Source: Ericsson España S.A.*

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

**S5-192268 pCR 28.805 Addressing Edithelp comments**

*Type: pCR For: Approval  
 28.805 v0.3.0  
 Source: Ericsson España S.A.*

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

**S5-192269 pCR 28.805 Update abbreviations list**

*Type: pCR For: Agreement  
 28.805 v0.3.0  
 Source: Ericsson España S.A.*

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

**S5-192450 Draft TR 28.805**

*Type: draft TR For: Approval  
 28.805 v0.4.0  
 Source: Ericsson*

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

#### 6.5.7 Study on Self-Organizing Networks (SON) for 5G

**S5-192037 Minutes of Study on Self-Organizing Networks (SON) for 5G**

*Type: report For: (not specified)  
 Source: Rapporteur (Intel)*

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

**S5-192076 pCR 28.861 editorial changes**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Intel China Ltd.*

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

**S5-192077 pCR 28.861 add requirements for NSI resource allocation optimization UC**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Intel China Ltd.*

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

**S5-192078 pCR 28.861 add use case for Mobility Robustness Optimisation**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Intel China Ltd.*

**Decision:** The document was **revised to S5-192425**.

**S5-192425 pCR 28.861 add use case for Mobility Robustness Optimisation**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Intel China Ltd.*

(Replaces S5-192078)

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

**S5-192079 pCR 28.861 add use case for automatic NSI creation**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Intel China Ltd.*

**Decision:** The document was **revised to S5-192426**.

**S5-192426 pCR 28.861 add use case for automatic NSI creation**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Intel China Ltd.*

(Replaces S5-192079)

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

**S5-192137 pCR 28.861 Add concept, usecase and requirements for Self-healing**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192427**.

**S5-192427 pCR 28.861 Add concept, usecase and requirements for Self-healing**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Huawei*

(Replaces S5-192137)

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

**S5-192138 pCR 28.861 Update the concept, usecase of Self-establishment of eNodeB**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192428**.

**S5-192428 pCR 28.861 Update the concept, usecase of Self-establishment of eNodeB**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Huawei*

(Replaces S5-192138)

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

**S5-192139 pCR 28.861 Add NSI PM input to support CCO**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192429**.

**S5-192429 pCR 28.861 Add NSI PM input to support CCO**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: Huawei*

(Replaces S5-192139)

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

**S5-192221 Add use case and requirements of self-monitoring of network performance**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: ETRI*

**Abstract:**

The existing network performance monitoring depends on either static or policy-based control of monitoring configuration rules. For the optimal performance monitoring of the complex network such as 5G, automation of monitoring processes is essential.

Thi

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

**S5-192430 Add use case and requirements of self-monitoring of network performance**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: ETRI*

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

**S5-192232 pCR TR 28.861 Management Data Analytics Service and SON functions**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: NEC Europe Ltd*

**Decision:** The document was **revised to S5-192431**.

**S5-192431 pCR TR 28.861 Management Data Analytics Service and SON functions**

*Type: pCR For: Approval  
 28.861 v0.3.0  
 Source: NEC Europe Ltd*

(Replaces S5-192232)

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

**S5-192424 Draft TR 28.861**

*Type: draft TR For: Approval  
 28.861 v0.4.0  
 Source: Intel*

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

#### 6.5.8 Study on non-file-based trace reporting

**S5-192038 Minutes of Study on non-file-based trace reporting**

*Type: report For: (not specified)  
 Source: Rapporteur(Nokia)*

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

#### 6.5.9 Study on non-public networks management (Preliminary work before SA approval)

**S5-192039 Minutes of Study on non-public networks management**

*Type: report For: (not specified)  
 Source: Rapporteur (Huawei)*

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

#### 6.5.10 Study on management and orchestration aspects with integrated satellite components in a 5G network (Preliminary work before SA approval)

**S5-192040 Minutes of Study on management and orchestration aspects with integrated satellite components in a 5G network**

*Type: report For: (not specified)  
 Source: Rapporteur (Thales)*

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

## 7 Charging

### 7.1 Charging Plenary

**S5-192041 CH Agenda and Time Plan**

*Type: agenda For: (not specified)  
 Source: CH SWG Chair*

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

**S5-192042 CH Executive Report**

*Type: report For: (not specified)  
 Source: CH SWG Chair*

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

**S5-192048 LS to SA2 and SA5 on VoWiFi – VoLTE handover**

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

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

**S5-192273 Presentation on ETSI FORGE**

*Type: other For: Presentation  
 Source: MCC*

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

**S5-192275 LS to SA2 on VoWiFi – VoLTE handover**

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

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

### 7.2 New Charging Work Item proposals

### 7.3 Charging Maintenance and Rel-16 small Enhancements

**S5-192052 Rel-15 CR 32.291 Correction of Qos Information**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0039 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191157)

**Decision:** The document was **revised to S5-192297**.

**S5-192297 Rel-15 CR 32.291 Correction of Qos Information**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0039 rev 2 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192052)

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

**S5-192053 Rel-15 CR 32.298 Correction of Qos Information**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0694 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191158)

**Decision:** The document was **revised to S5-192298**.

**S5-192298 Rel-15 CR 32.298 Correction of Qos Information**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0694 rev 2 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192053)

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

**S5-192054 Rel-15 CR 32.255 Correction of Qos Information**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0046 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192296**.

**S5-192296 Rel-15 CR 32.255 Correction of Qos Information**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0046 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192054)

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

**S5-192055 Discussion paper on 5GC Qos Information**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-192057 Rel-15 CR 32.255 Correction of user information**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0047 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192299**.

**S5-192299 Rel-15 CR 32.255 Correction of user information**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0047 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192057)

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

**S5-192058 Rel-15 CR 32.291 Correction of user information**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0042 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192300**.

**S5-192300 Rel-15 CR 32.291 Correction of user information**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0042 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192058)

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

**S5-192059 Rel-15 CR 32.291 Correction of dnn data type**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0043 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-192060 Rel-15 CR 32.255 Correction of serving network function**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0048 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192302**.

**S5-192302 Rel-15 CR 32.255 Correction of serving network function**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0048 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192060)

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

**S5-192061 Rel-15 CR 32.291 Correction of serving network function**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0044 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192303**.

**S5-192303 Rel-15 CR 32.291 Correction of serving network function**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0044 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192061)

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

**S5-192062 Rel-15 CR 32.298 Correction of serving network function**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0703 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192351**.

**S5-192351 Rel-15 CR 32.298 Correction of serving network function**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0703 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192062)

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

**S5-192063 Rel-15 CR 32.298 Correction of pDUSessionId**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0704 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192352**.

**S5-192352 Rel-15 CR 32.298 Correction of pDUSessionId**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0704 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192063)

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

**S5-192064 Rel-15 CR 32.298 Correction of missing fields in PDU Information**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0705 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-192065 Rel-14 CR 32.297 Correction of Release Identifier extension**

*Type: CR For: Agreement  
 32.297 v14.0.0 CR-0032 Cat: F (Rel-14)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-192066 Rel-15 CR 32.297 Correction of Release Identifier extension**

*Type: CR For: Agreement  
 32.297 v15.2.0 CR-0033 Cat: A (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-192099 Rel-16 CR 32.255 Correction of Trigger Conditions for FBC**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0049 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192353**.

**S5-192353 Rel-16 CR 32.255 Correction of Trigger Conditions for FBC**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0049 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-192099)

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

**S5-192100 Rel-16 CR 32.290 Correction of Multiple Unit Information in ChargingDataResponse**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0031 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192354**.

**S5-192354 Rel-16 CR 32.290 Correction of Multiple Unit Information in ChargingDataResponse**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0031 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-192100)

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

**S5-192101 Rel-16 CR 32.291 Correction of Multiple Unit Information in ChargingDataResponse**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0045 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192355**.

**S5-192355 Rel-16 CR 32.291 Correction of Multiple Unit Information in ChargingDataResponse**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0045 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-192101)

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

**S5-192102 Rel-16 CR 32.290 Correction of triggers in ChargingDataResponse**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0032 Cat: F (Rel-15)  
  
 Source: Huawei*

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

**S5-192103 Rel-16 CR 32.291 Correction of triggers in ChargingDataResponse**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0046 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192356**.

**S5-192356 Rel-16 CR 32.291 Correction of triggers in ChargingDataResponse**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0046 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-192103)

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

**S5-192104 Rel-16 CR 32.255 Remove Quota Consumption Time**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0050 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192357**.

**S5-192357 Rel-16 CR 32.255 Remove Quota Consumption Time**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0050 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-192104)

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

**S5-192105 Rel-16 CR 32.290 Addition of failure handling and failover**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0033 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192358**.

**S5-192358 Rel-16 CR 32.290 Addition of failure handling and failover**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0033 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-192105)

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

**S5-192106 Rel-16 CR 32.290 Addition of message retry**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0034 Cat: F (Rel-15)  
  
 Source: Huawei*

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

**S5-192107 Rel-16 CR 32.291 Addition of message retry**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0047 Cat: F (Rel-15)  
  
 Source: Huawei*

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

**S5-192108 Rel-16 CR 32.291 Correction of RANSecondaryRATUsageReport occurrence**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0048 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192361**.

**S5-192361 Rel-16 CR 32.291 Correction of RANSecondaryRATUsageReport occurrence**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0048 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-192108)

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

**S5-192120 Rel-15 CR 32.298 Correction of user information**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0707 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192301**.

**S5-192301 Rel-15 CR 32.298 Correction of user information**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0707 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192120)

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

**S5-192175 Addition of message retry**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0054 Cat: F (Rel-15)  
  
 Source: Huawei*

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

**S5-192205 Retry handling for converged Charging**

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

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

**S5-192213 Rel-15 CR 32.291 Correcting the Quota management Indicator in CDR**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0051 Cat: F (Rel-15)  
  
 Source: Ericsson*

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

**S5-192214 Rel-15 CR 32.298 Correcting the Used Unit Container definition**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0708 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S5-192363**.

**S5-192363 Rel-15 CR 32.298 Correcting the Used Unit Container definition**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0708 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson*

(Replaces S5-192214)

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

**S5-192215 Rel-15 CR 32.298 Correcting spelling of timeOfFirstUsage**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0709 Cat: F (Rel-15)  
  
 Source: Ericsson*

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

**S5-192217 Rel-15 CR 32.291 Correcting of table for bindings**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0052 Cat: F (Rel-15)  
  
 Source: Ericsson*

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

**S5-192218 Rel-15 CR 32.298 Correcting of User Location Information definition**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0053 Cat: F (Rel-15)  
  
 Source: Ericsson*

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

**S5-192364 Rel-15 CR 32.298 Correcting of User Location Information definition**

*Type: CR For: Agreement  
 32.298 v15.1.0 CR-0712 Cat: F (Rel-15)  
  
 Source: Ericsson*

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

**S5-192248 Rel-15 CR 32.298 Correction of UE IP Addresses**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0710 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192368**.

**S5-192368 Rel-15 CR 32.298 Correction of UE IP Addresses**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0710 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192248)

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

**S5-192249 Rel-15 CR 32.291 Correction of UE IP Addresses**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0054 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192369**.

**S5-192369 Rel-15 CR 32.291 Correction of UE IP Addresses**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0054 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192249)

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

**S5-192263 Rel-15 CR 32.291 Correction local sequence nb**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0055 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-192362 Rel-15 CR 32.298 Correcting the Quota management Indicator in CDR**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0711 Cat: F (Rel-15)  
  
 Source: Ericsson*

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

**S5-192366 Draft TS 32.256**

*Type: draft TS For: Approval  
 32.256 v0.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

### 7.4 Rel-16 Charging

#### 7.4.1 Volume Based Charging Aspects for VoLTE

**S5-192043 Rel-16 CR 32.298 Support status of VoLTE service delivery**

*Type: CR For: Approval  
 32.298 v15.5.1 CR-0702 Cat: B (Rel-16)  
  
 Source: China Mobile*

**Decision:** The document was **revised to S5-192277**.

**S5-192277 Rel-16 CR 32.298 Support status of VoLTE service delivery**

*Type: CR For: Approval  
 32.298 v15.5.1 CR-0702 rev 1 Cat: B (Rel-16)  
  
 Source: China Mobile*

(Replaces S5-192043)

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

**S5-192044 Rel-16 CR 32.299 Support status of VoLTE service delivery**

*Type: CR For: Approval  
 32.299 v15.5.0 CR-0820 Cat: B (Rel-16)  
  
 Source: China Mobile*

**Decision:** The document was **revised to S5-192278**.

**S5-192278 Rel-16 CR 32.299 Support status of VoLTE service delivery**

*Type: CR For: Approval  
 32.299 v15.5.0 CR-0820 rev 1 Cat: B (Rel-16)  
  
 Source: China Mobile*

(Replaces S5-192044)

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

**S5-192045 Rel-16 CR 32.260 Update description of volume based charging in IMS**

*Type: CR For: Approval  
 32.260 v15.1.0 CR-0396 Cat: B (Rel-16)  
  
 Source: China Mobile*

**Decision:** The document was **revised to S5-192276**.

**S5-192276 Rel-16 CR 32.260 Update description of volume based charging in IMS**

*Type: CR For: Approval  
 32.260 v15.1.0 CR-0396 rev 1 Cat: B (Rel-16)  
  
 Source: China Mobile*

(Replaces S5-192045)

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

#### 7.4.2 Nchf Online and Offline Charging Services

**S5-192109 Rel-16 CR 32.255 Add Offline only charging CHF selection**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0051 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192279**.

**S5-192279 Rel-16 CR 32.255 Add Offline only charging CHF selection**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0051 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-192109)

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

**S5-192110 Rel-16 CR 32.255 Add offline charging service procedures**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0052 Cat: B (Rel-16)  
  
 Source: Huawei*

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

**S5-192111 Rel-16 CR 32.255 Add offline only charging triggers for SSC modes**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0053 Cat: B (Rel-16)  
  
 Source: Huawei*

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

**S5-192112 Rel-16 CR 32.290 Add Offline charging Service Senario**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0035 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192281**.

**S5-192281 Rel-16 CR 32.290 Add Offline charging Service Senario**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0035 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-192112)

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

**S5-192113 Rel-16 CR 32.290 Add Offline charging Service Message**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0036 Cat: B (Rel-16)  
  
 Source: Huawei*

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

**S5-192114 Rel-16 CR 32.291 Add Offline only charging service API**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0049 Cat: B (Rel-16)  
  
 Source: Huawei*

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

**S5-192115 Rel-16 CR 32.291 Add Offline only charging service operations**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0050 Cat: B (Rel-16)  
  
 Source: Huawei*

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

**S5-192116 Discussion on offline charging service API**

*Type: discussion For: Discussion  
 Source: Huawei*

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

**S5-192117 Rel-16 CR 32.298 Add offline charging data for CHF CDR**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0706 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-192282**.

**S5-192282 Rel-16 CR 32.298 Add offline charging data for CHF CDR**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0706 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-192117)

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

**S5-192121 Rel-16 CR 32.255 offline charging service triggers for SSC modes**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0043 rev 2 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191410)

**Decision:** The document was **revised to S5-192280**.

**S5-192280 Rel-16 CR 32.255 offline charging service triggers for SSC modes**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0043 rev 3 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-192121)

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

**S5-192122 Rel-16 CR 32.255 offline charging service procedures**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0045 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191337)

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

**S5-192211 Rel-16 CR 32.255 Adding Offline trigger handling in SMF**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0055 Cat: B (Rel-16)  
  
 Source: Ericsson*

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

**S5-192271 Discussion paper on separate charging services**

*Type: discussion For: Approval  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-192359 Discussion on 5G offline only charging in converged charging**

*Type: discussion For: discussion  
 Source: Huawei*

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

**S5-192370 Revised WID on Nchf Online and Offline Charging Services**

*Type: WID revised For: Agreement  
 Source: Huawei*

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

#### 7.4.3 Charging Enhancement of 5GC interworking with EPC

#### 7.4.4 Network Exposure Charging in 5G System Architecture

**S5-192202 Rel-16 CR 32.254 Add message flows for convergent charging**

*Type: CR For: Agreement  
 32.254 v15.1.0 CR-0004 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S5-192283**.

**S5-192283 Rel-16 CR 32.254 Add message flows for convergent charging**

*Type: CR For: Agreement  
 32.254 v15.1.0 CR-0004 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson*

(Replaces S5-192202)

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

**S5-192203 Rel-16 CR 32.254 Adding CDR generation and handling for convergent charging**

*Type: CR For: Agreement  
 32.254 v15.1.0 CR-0005 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S5-192284**.

**S5-192284 Rel-16 CR 32.254 Adding CDR generation and handling for convergent charging**

*Type: CR For: Agreement  
 32.254 v15.1.0 CR-0005 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson*

(Replaces S5-192203)

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

#### 7.4.5 Charging AMF in 5G System Architecture Phase 1

**S5-192056 Rel-16 CR 32.240 Introduction of AMF in charging architecture**

*Type: CR For: Agreement  
 32.240 v15.4.0 CR-0409 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-192067 Rel-16 pCR 32.256 Introduction of Abbreviations and symbols**

*Type: pCR For: Approval  
 32.256 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192286**.

**S5-192286 Rel-16 pCR 32.256 Introduction of Abbreviations and symbols**

*Type: pCR For: Approval  
 32.256 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192067)

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

**S5-192068 Rel-16 pCR 32.256 Introduction of Scope and References**

*Type: pCR For: Approval  
 32.256 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192285**.

**S5-192285 Rel-16 pCR 32.256 Introduction of Scope and References**

*Type: pCR For: Approval  
 32.256 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192068)

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

**S5-192069 Rel-16 pCR 32.256 Introduction of Architectures**

*Type: pCR For: Approval  
 32.256 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-192070 Rel-16 pCR 32.256 Introduction of charging principles**

*Type: pCR For: Approval  
 32.256 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192287**.

**S5-192287 Rel-16 pCR 32.256 Introduction of charging principles**

*Type: pCR For: Approval  
 32.256 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192070)

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

**S5-192071 Rel-16 pCR 32.256 Introduction of converged charging scenarios principles**

*Type: pCR For: Approval  
 32.256 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192288**.

**S5-192288 Rel-16 pCR 32.256 Introduction of converged charging scenarios principles**

*Type: pCR For: Approval  
 32.256 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192071)

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

**S5-192072 Rel-16 pCR 32.256 Introduction of registration offline message flow**

*Type: pCR For: Approval  
 32.256 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-192289**.

**S5-192289 Rel-16 pCR 32.256 Introduction of registration offline message flow**

*Type: pCR For: Approval  
 32.256 v0.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-192072)

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

### 7.5 Charging Studies

#### 7.5.1 Study on Charging Aspects of Network Slicing

**S5-192096 Rel-16 pCR 32.845 Addition of solution evaluation for solution #1.1**

*Type: pCR For: Agreement  
 32.845 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192290**.

**S5-192290 Rel-16 pCR 32.845 Addition of solution evaluation for solution #1.1**

*Type: pCR For: Agreement  
 32.845 v0.2.0  
 Source: Huawei*

(Replaces S5-192096)

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

**S5-192097 Rel-16 pCR 32.845 Addition of solution for event based charging**

*Type: pCR For: Agreement  
 32.845 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192291**.

**S5-192291 Rel-16 pCR 32.845 Addition of solution for event based charging**

*Type: pCR For: Agreement  
 32.845 v0.2.0  
 Source: Huawei*

(Replaces S5-192097)

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

**S5-192098 Rel-16 pCR 32.845 Addition of Use Case about Network Slice Subscription**

*Type: pCR For: Agreement  
 32.845 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-192292**.

**S5-192292 Rel-16 pCR 32.845 Addition of Use Case about Network Slice Subscription**

*Type: pCR For: Agreement  
 32.845 v0.2.0  
 Source: Huawei*

(Replaces S5-192098)

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

**S5-192208 Rel-16 pCR 32.845 Solution to Performance based Charging**

*Type: pCR For: Agreement  
 32.845 v0.2.0  
 Source: Ericsson*

**Decision:** The document was **revised to S5-192293**.

**S5-192293 Rel-16 pCR 32.845 Solution to Performance based Charging**

*Type: pCR For: Agreement  
 32.845 v0.2.0  
 Source: Ericsson*

(Replaces S5-192208)

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

**S5-192272 Discussion Paper on Network Slice Charging and Management**

*Type: discussion For: Agreement  
 Source: Huawei*

**Decision:** The document was **revised to S5-192294**.

**S5-192294 Discussion Paper on Network Slice Charging and Management**

*Type: discussion For: Endorsement  
 Source: Huawei*

(Replaces S5-192272)

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

**S5-192274 Addition of a few editorial corrections and many clarifications between NW Slice and NW Slice Instance**

*Type: pCR For: Approval  
 32.845 v..  
 Source: Huawei, Vodafone*

**Decision:** The document was **revised to S5-192295**.

**S5-192295 Addition of a few editorial corrections and many clarifications between NW Slice and NW Slice Instance**

*Type: pCR For: Approval  
 32.845 v..  
 Source: Huawei, Vodafone*

(Replaces S5-192274)

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

**S5-192360 Introduction Charging for join session**

*Type: other For: Presentation  
 Source: Nokia*

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

**S5-192365 Draf TR 32.845**

*Type: draft TR For: Approval  
 32.845 v0.3.0  
 Source: Huawei*

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

**S5-192367 Revised SID Study on Charging Aspects of Network Slicing**

*Type: SID revised For: Agreement  
 Source: Huawei*

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

## 8 Any Other Business

**S5-192432 SA5 20th anniversary song**

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

**Decision:** The document was **revised to S5-192440**.

**S5-192440 SA5 20th anniversary song**

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

(Replaces S5-192432)

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

## 9 Closing of the meeting

The Chair thanked the host Chungwua Telecom and the fantastic support of NTUST during the meeting.

After this, the meeting was closed.

## Annex A: List of contribution documents

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| S5-192000 | Agenda | WG Chairman | approved |  |  |
| S5-192001 | IPR and legal declaration | WG Chairman | noted |  |  |
| S5-192002 | Report from last SA5 meeting | MCC | approved |  |  |
| S5-192003 | Leaders meeting agenda | WG Chairman | noted |  |  |
| S5-192004 | Leaders meeting minutes | WG Chairman | noted |  |  |
| S5-192005 | SA5 Working Procedures | WG Vice Chair (Huawei) | noted |  |  |
| S5-192006 | SA5 Meeting Facility Requirements | WG Vice Chair (Orange) | noted |  |  |
| S5-192007 | Process for management of draft TSs/TRs | WG Chairman | noted |  |  |
| S5-192008 | CR Quality Check | MCC | noted |  |  |
| S5-192009 | Status of email approvals | WG Vice Chair (Orange) | available |  |  |
| S5-192010 | SA5 Meeting Calendar | WG Chairman | noted |  |  |
| S5-192011 | 3GPP SA5 Work Plan | MCC | noted |  |  |
| S5-192012 | Time Plan for OAM&P | WG Vice Chair (Huawei) | revised |  | S5-192306 |
| S5-192013 | OAM Executive Report | WG Vice Chair (ORANGE) | revised |  | S5-192458 |
| S5-192014 | OAM&P SWG action list | WG Vice Chair (Huawei) | revised |  | S5-192307 |
| S5-192015 | SA5 status report at last SA meeting | WG Chairman | noted |  |  |
| S5-192016 | SA5 results at last SA meeting | WG Chairman | noted |  |  |
| S5-192017 | Minutes of OAM&P SWG opening session | WG Vice Chair (Ericsson) | noted |  |  |
| S5-192018 | Minutes of New Work Item proposals - OAM&P | WG Vice Chair (Orange) | withdrawn |  |  |
| S5-192019 | Minutes of OAM&P Maintenance and Rel-16 small Enhancements | MCC | noted |  |  |
| S5-192020 | Minutes of Management of QoE measurement collection | Rapporteur (Ericsson) | noted |  |  |
| S5-192021 | Minutes of Energy effciency of 5G | Rapporteur (ORANGE) | noted |  |  |
| S5-192022 | Minutes of Study on OAM aspects of LTE and WLAN integration | Rapporteur (Intel) | noted |  |  |
| S5-192023 | Minutes of Network policy management for mobile networks based on NFV scenarios | Rapporteur (China Mobile) | withdrawn |  |  |
| S5-192024 | Minutes of Methodology for 5G management specifications | Rapporteur (Ericsson) | noted |  |  |
| S5-192025 | Minutes of Intent driven management service for mobile networks | Rapporteur (Huawei) | revised |  | S5-192442 |
| S5-192026 | Minutes of Enhancement of performance assurance for 5G networks including network slicing | Rapporteur (Intel) | noted |  |  |
| S5-192027 | Minutes of Discovery of management services in 5G | Rapporteur (Huawei) | noted |  |  |
| S5-192028 | Minutes of NRM enhancements | Rapporteur (Nokia) | noted |  |  |
| S5-192029 | Minutes of Trace Management in the context of Services Based Management Architecture | Rapporteur (Nokia) | withdrawn |  |  |
| S5-192030 | Minutes of Integration of ONAP DCAE and 3GPP management architecture | Rapporteur ORANGE) | noted |  |  |
| S5-192031 | Minutes of Study on integration of ONAP DCAE and 3GPP management architecture | Rapporteur ORANGE) | noted |  |  |
| S5-192032 | Minutes of Study on integration of ONAP and 3GPP configuration management services for 5G networks | Rapporteur (Ericsson) | noted |  |  |
| S5-192033 | Minutes of Study on protocol enhancement for real time communication | Rapporteur(Nokia) | withdrawn |  |  |
| S5-192034 | Minutes of Study on management aspects of edge computing | Rapporteur (Intel) | noted |  |  |
| S5-192035 | Minutes of Study on tenancy concept in 5G networks and network slicing management | Rapporteur (Huawei) | noted |  |  |
| S5-192036 | Minutes of Study on management aspects of communication services | Rapporteur (Ericsson) | noted |  |  |
| S5-192037 | Minutes of Study on Self-Organizing Networks (SON) for 5G | Rapporteur (Intel) | noted |  |  |
| S5-192038 | Minutes of Study on non-file-based trace reporting | Rapporteur(Nokia) | withdrawn |  |  |
| S5-192039 | Minutes of Study on non-public networks management | Rapporteur (Huawei) | withdrawn |  |  |
| S5-192040 | Minutes of Study on management and orchestration aspects with integrated satellite components in a 5G network | Rapporteur (Thales) | withdrawn |  |  |
| S5-192041 | CH Agenda and Time Plan | CH SWG Chair | approved |  |  |
| S5-192042 | CH Executive Report | CH SWG Chair | noted |  |  |
| S5-192043 | Rel-16 CR 32.298 Support status of VoLTE service delivery | China Mobile | revised |  | S5-192277 |
| S5-192044 | Rel-16 CR 32.299 Support status of VoLTE service delivery | China Mobile | revised |  | S5-192278 |
| S5-192045 | Rel-16 CR 32.260 Update description of volume based charging in IMS | China Mobile | revised |  | S5-192276 |
| S5-192046 | Resubmitted LS from ITU-T to SA5 on Draft new Recommendation E.RQST – “KPI targets for mobile networks” | ITU-T SG12 | postponed |  |  |
| S5-192047 | Resubmitted LS from ITU-T to SA5 - Update of Technical Report – “Transport network support of IMT-2020/5G” | ITU-T SG15 | replied to |  |  |
| S5-192048 | LS to SA2 and SA5 on VoWiFi – VoLTE handover | GSMA | postponed |  |  |
| S5-192049 | Reply LS from SA2 to SA5 on Slice related Data Analytics | S2-1901294 | replied to |  |  |
| S5-192050 | Ls from SA2 ccSA5 on providing information on SLA fulfilment to NG-RAN | S2-1901382 | replied to |  |  |
| S5-192051 | Ls from SA4 cc SA5 on Collection of Slice Related Data Analytics from UEs | S4-190195 | noted |  |  |
| S5-192052 | Rel-15 CR 32.291 Correction of Qos Information | Nokia, Nokia Shanghai Bell | revised | S5-191157 | S5-192297 |
| S5-192053 | Rel-15 CR 32.298 Correction of Qos Information | Nokia, Nokia Shanghai Bell | revised | S5-191158 | S5-192298 |
| S5-192054 | Rel-15 CR 32.255 Correction of Qos Information | Nokia, Nokia Shanghai Bell | revised |  | S5-192296 |
| S5-192055 | Discussion paper on 5GC Qos Information | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-192056 | Rel-16 CR 32.240 Introduction of AMF in charging architecture | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-192057 | Rel-15 CR 32.255 Correction of user information | Nokia, Nokia Shanghai Bell | revised |  | S5-192299 |
| S5-192058 | Rel-15 CR 32.291 Correction of user information | Nokia, Nokia Shanghai Bell | revised |  | S5-192300 |
| S5-192059 | Rel-15 CR 32.291 Correction of dnn data type | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-192060 | Rel-15 CR 32.255 Correction of serving network function | Nokia, Nokia Shanghai Bell | revised |  | S5-192302 |
| S5-192061 | Rel-15 CR 32.291 Correction of serving network function | Nokia, Nokia Shanghai Bell | revised |  | S5-192303 |
| S5-192062 | Rel-15 CR 32.298 Correction of serving network function | Nokia, Nokia Shanghai Bell | revised |  | S5-192351 |
| S5-192063 | Rel-15 CR 32.298 Correction of pDUSessionId | Nokia, Nokia Shanghai Bell | revised |  | S5-192352 |
| S5-192064 | Rel-15 CR 32.298 Correction of missing fields in PDU Information | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-192065 | Rel-14 CR 32.297 Correction of Release Identifier extension | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-192066 | Rel-15 CR 32.297 Correction of Release Identifier extension | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-192067 | Rel-16 pCR 32.256 Introduction of Abbreviations and symbols | Nokia, Nokia Shanghai Bell | revised |  | S5-192286 |
| S5-192068 | Rel-16 pCR 32.256 Introduction of Scope and References | Nokia, Nokia Shanghai Bell | revised |  | S5-192285 |
| S5-192069 | Rel-16 pCR 32.256 Introduction of Architectures | Nokia, Nokia Shanghai Bell | approved |  |  |
| S5-192070 | Rel-16 pCR 32.256 Introduction of charging principles | Nokia, Nokia Shanghai Bell | revised |  | S5-192287 |
| S5-192071 | Rel-16 pCR 32.256 Introduction of converged charging scenarios principles | Nokia, Nokia Shanghai Bell | revised |  | S5-192288 |
| S5-192072 | Rel-16 pCR 32.256 Introduction of registration offline message flow | Nokia, Nokia Shanghai Bell | revised |  | S5-192289 |
| S5-192073 | pCR TS 28.890 – Heartbeat and Communication Surveillance | AT&T, Deutsche Telekom, Orange | approved |  |  |
| S5-192074 | Draft CR 28.532 Add RESTful HTTP-based SS of fault supervision for integration with ONAP VES | AT&T, Deutsche Telekom, Orange | noted |  |  |
| S5-192075 | SA5 presentation to ZTA congress - Integration of 3GPP and ONAP | AT&T, Orange,Deutsche Telekom | revised |  | S5-192311 |
| S5-192076 | pCR 28.861 editorial changes | Intel China Ltd. | approved |  |  |
| S5-192077 | pCR 28.861 add requirements for NSI resource allocation optimization UC | Intel China Ltd. | approved |  |  |
| S5-192078 | pCR 28.861 add use case for Mobility Robustness Optimisation | Intel China Ltd. | revised |  | S5-192425 |
| S5-192079 | pCR 28.861 add use case for automatic NSI creation | Intel China Ltd. | revised |  | S5-192426 |
| S5-192080 | pCR 28.803 use case for performance measurements related to end-to-end QoS | Intel China Ltd. | revised |  | S5-192403 |
| S5-192081 | pCR 28.803 solution for edge computing deployment | Intel China Ltd. | revised |  | S5-192404 |
| S5-192082 | pCR 28.803 Add use case on PCF and NEF discovery for EC | Intel China Ltd. | revised |  | S5-192405 |
| S5-192083 | [Draft] LS on PCF and NEF discovery for Edge Computing | Intel China Ltd. | revised |  | S5-192406 |
| S5-192084 | Rel-16 CR TS 32.425 Add measurements related to Secondary Node Addition for E-UTRA-NR Dual Connectivity | ZTE, China Mobile | not pursued |  | - |
| S5-192085 | Rel-16 CR TS 32.425 Add measurements related to Secondary Node Release for E-UTRA-NR Dual Connectivity | ZTE, China Mobile | not pursued |  |  |
| S5-192086 | Rel-16 CR TS 32.425 Add measurements related to Secondary Node Change for E-UTRA-NR Dual Connectivity | ZTE, China Mobile | not pursued |  |  |
| S5-192087 | Rel-16 CR TS 28.552 Add measurements related to Secondary Node Addition for MR-DC Dual Connectivity | ZTE Corporation, China Mobile | not pursued |  |  |
| S5-192088 | Rel-16 CR TS 28.552 Add measurements related to Secondary Node Change for MR-DC Dual Connectivity | ZTE Corporation, China Mobile | not pursued |  |  |
| S5-192089 | Rel-16 CR TS 28.552 Add measurements related to Secondary Node Release for MR-DC Dual Connectivity | ZTE Corporation, China Mobile | not pursued |  |  |
| S5-192090 | Rel-16 CR TS 28.552 Add measurements of RRC connection re-establishment | ZTE Corporation, China Mobile | revised |  | S5-192377 |
| S5-192091 | Rel-16 CR TS 28.552 Add measurements of RRC connection resume | ZTE Corporation, China Mobile | revised |  | S5-192378 |
| S5-192092 | Rel-15 CR TS 28.541 Add NRM Info Model definitions for beam managed object class | Pivotal Commware, ZTE, Intel, P.I. Works, China Mobile | revised |  | S5-192312 |
| S5-192093 | R16 CR TS28.552 Add RSRP measurements | ZTE, Intel, China Mobile | revised |  | S5-192379 |
| S5-192094 | R16 CR TS 28.552 Add UE Rx-Tx time difference related measurements | ZTE Corporation, China Mobile | revised |  | S5-192380 |
| S5-192095 | R16 CR TS 28.552 Add PDCP throughput measurements | ZTE Corporation, China Mobile | not pursued |  |  |
| S5-192096 | Rel-16 pCR 32.845 Addition of solution evaluation for solution #1.1 | Huawei | revised |  | S5-192290 |
| S5-192097 | Rel-16 pCR 32.845 Addition of solution for event based charging | Huawei | revised |  | S5-192291 |
| S5-192098 | Rel-16 pCR 32.845 Addition of Use Case about Network Slice Subscription | Huawei | revised |  | S5-192292 |
| S5-192099 | Rel-16 CR 32.255 Correction of Trigger Conditions for FBC | Huawei | revised |  | S5-192353 |
| S5-192100 | Rel-16 CR 32.290 Correction of Multiple Unit Information in ChargingDataResponse | Huawei | revised |  | S5-192354 |
| S5-192101 | Rel-16 CR 32.291 Correction of Multiple Unit Information in ChargingDataResponse | Huawei | revised |  | S5-192355 |
| S5-192102 | Rel-16 CR 32.290 Correction of triggers in ChargingDataResponse | Huawei | not pursued |  |  |
| S5-192103 | Rel-16 CR 32.291 Correction of triggers in ChargingDataResponse | Huawei | revised |  | S5-192356 |
| S5-192104 | Rel-16 CR 32.255 Remove Quota Consumption Time | Huawei | revised |  | S5-192357 |
| S5-192105 | Rel-16 CR 32.290 Addition of failure handling and failover | Huawei | revised |  | S5-192358 |
| S5-192106 | Rel-16 CR 32.290 Addition of message retry | Huawei | merged |  | S5-192358 |
| S5-192107 | Rel-16 CR 32.291 Addition of message retry | Huawei | not pursued |  |  |
| S5-192108 | Rel-16 CR 32.291 Correction of RANSecondaryRATUsageReport occurrence | Huawei | revised |  | S5-192361 |
| S5-192109 | Rel-16 CR 32.255 Add Offline only charging CHF selection | Huawei | revised |  | S5-192279 |
| S5-192110 | Rel-16 CR 32.255 Add offline charging service procedures | Huawei | withdrawn |  |  |
| S5-192111 | Rel-16 CR 32.255 Add offline only charging triggers for SSC modes | Huawei | withdrawn |  |  |
| S5-192112 | Rel-16 CR 32.290 Add Offline charging Service Senario | Huawei | revised |  | S5-192281 |
| S5-192113 | Rel-16 CR 32.290 Add Offline charging Service Message | Huawei | not pursued |  |  |
| S5-192114 | Rel-16 CR 32.291 Add Offline only charging service API | Huawei | not pursued |  |  |
| S5-192115 | Rel-16 CR 32.291 Add Offline only charging service operations | Huawei | not pursued |  |  |
| S5-192116 | Discussion on offline charging service API | Huawei | noted |  |  |
| S5-192117 | Rel-16 CR 32.298 Add offline charging data for CHF CDR | Huawei | revised |  | S5-192282 |
| S5-192118 | Add en-gNB to List of NE types and List of interfaces | Nokia, NTT DOCOMO | not pursued |  | - |
| S5-192119 | Add en-gNB to E-UTRAN Trace Record Content | Nokia, NTT DOCOMO | not pursued |  |  |
| S5-192120 | Rel-15 CR 32.298 Correction of user information | Nokia, Nokia Shanghai Bell | revised |  | S5-192301 |
| S5-192121 | Rel-16 CR 32.255 offline charging service triggers for SSC modes | Huawei | revised | S5-191410 | S5-192280 |
| S5-192122 | Rel-16 CR 32.255 offline charging service procedures | Huawei | agreed | S5-191337 |  |
| S5-192123 | Add use case and definitions of QoS flow measurement over N3 | ETRI | revised |  | S5-192381 |
| S5-192124 | Rel-15 CR 28.541 Align the term mFIdList and constituentNSSIIdList | Huawei | revised |  | S5-192330 |
| S5-192125 | Rel-15 CR 28.541 Correct the definition of nSSIId | Huawei | revised |  | S5-192313 |
| S5-192126 | Rel-15 CR 28.541 Add missing attribute constraints for class definition of NSSFFunction | Huawei | revised |  | S5-192314 |
| S5-192127 | Rel-15 CR 28.541 Correct attribute constraints for RRMpolicy related attributes in NRCellCU | Huawei | revised |  | S5-192316 |
| S5-192128 | 28.812 Update concept of IDMS | Huawei | revised |  | S5-192343 |
| S5-192129 | pCR 28.812 Add intent driven NF capacity expanding scenario | Huawei | revised |  | S5-192344 |
| S5-192130 | pCR 28.812 Add description of automation | Huawei | revised |  | S5-192345 |
| S5-192131 | pCR 28.812 Add conclusion | Huawei | revised |  | S5-192349 |
| S5-192132 | pCR 28.812 Add abbreviations | Huawei | approved |  |  |
| S5-192133 | pCR 28.812 Add Intent driven 5GLAN service creation scenario | Huawei | revised |  | S5-192347 |
| S5-192134 | pCR 28.812 Add Intent translation description | Huawei | revised |  | S5-192348 |
| S5-192135 | pCR 28.890 Update clause 6.2.2 Management principles | Huawei | approved |  |  |
| S5-192136 | pCR 28.890 Add Handling of configuration notification | Huawei | revised |  | S5-192391 |
| S5-192137 | pCR 28.861 Add concept, usecase and requirements for Self-healing | Huawei | revised |  | S5-192427 |
| S5-192138 | pCR 28.861 Update the concept, usecase of Self-establishment of eNodeB | Huawei | revised |  | S5-192428 |
| S5-192139 | pCR 28.861 Add NSI PM input to support CCO | Huawei | revised |  | S5-192429 |
| S5-192140 | Add use case and definitions of packet loss rate measurement over N3 | ETRI | revised |  | S5-192382 |
| S5-192141 | Rel-15 CR 28.550 Add the missing RESTFul API definitions | Intel Finland Oy | revised |  | S5-192317 |
| S5-192142 | Rel-16 CR 28.550 Add operations for establishing and terminating streaming connection | Intel Finland Oy | revised |  | S5-192371 |
| S5-192143 | Rel-16 CR 28.550 Add performance threshold monitoring service | Intel Finland Oy | revised |  | S5-192372 |
| S5-192144 | Rel-16 CR 28.552 Add measurements related to registration via untrusted non-3GPP access for AMF | Intel Finland Oy | withdrawn |  |  |
| S5-192145 | Rel-16 CR 28.552 Add measurements related to registration via untrusted non-3GPP access for AMF | Intel Finland Oy | agreed |  |  |
| S5-192146 | Rel-16 CR 28.552 Add measurements related to inter-AMF handover | Intel Finland Oy | revised |  | S5-192383 |
| S5-192147 | Rel-16 CR 28.622 Add IOCs for threshold monitoring control | Intel Finland Oy | revised |  | S5-192373 |
| S5-192148 | Rel-16 CR 28.623 Add IOCs for threshold monitoring control | Intel Finland Oy | not pursued |  | - |
| S5-192149 | Rel-16 CR 32.425 Add measurements related to WLAN connection status report | Intel Finland Oy | agreed |  |  |
| S5-192150 | Updated WID Performance assurance for 5G networks including network slicing | Intel Finland Oy | agreed |  |  |
| S5-192151 | Rel-15 CR 28.550 Correction on MDAS | Intel Finland Oy | revised |  | S5-192350 |
| S5-192152 | Rel-15 CR 28.531 Correct management service term | Huawei | revised |  | S5-192318 |
| S5-192153 | Rel-16 CR 28.531 Correct management service term | Huawei | revised |  | S5-192319 |
| S5-192154 | R16 CR TS 28.552 Add PDCP Split Volume measurements | ZTE Corporation, China Mobile | not pursued |  |  |
| S5-192155 | pCR 28.804 Add managed data isolation concept | Huawei Technologies France | revised |  | S5-192407 |
| S5-192156 | pCR 28.804 Add UC for dedicated and for shared performance managed data | Huawei Technologies France | revised |  | S5-192408 |
| S5-192157 | pCR 28.804 Add potential solutions and recommendations | Huawei Technologies France | revised |  | S5-192412 |
| S5-192158 | pCR 28.804 Add UC for 3GPP network represented as tenant in NFV MANO | Huawei Technologies France | noted |  |  |
| S5-192159 | pCR 28.804 Correct approved tenancy concept and definition | Huawei Technologies France | revised |  | S5-192414 |
| S5-192160 | Discussion paper on PEE measurement data collection for NG-RAN split options | Huawei | noted |  |  |
| S5-192161 | Add discovery of specified service interface access information use case and requirement | Huawei Technologies France | revised |  | S5-192387 |
| S5-192162 | Discussion paper on READ and WRITE controls on multiple MnS consumers | Huawei | noted |  |  |
| S5-192163 | Resolution of the editor's note in W4.3.a.2 | Huawei | noted |  |  |
| S5-192164 | Add MnS exposure governance use case and requirement | Huawei Technologies France | revised |  | S5-192388 |
| S5-192165 | Discussion paper on discovery of MnS in 5G | Huawei Technologies France | revised |  | S5-192386 |
| S5-192166 | pCR 28.805 Add data analytics for SLA assurance | Huawei Technologies France | revised |  | S5-192417 |
| S5-192167 | pCR 28.805 Add UC and requirements for CSI fault and performance monitoring | Huawei Technologies France | revised |  | S5-192420 |
| S5-192168 | pCR 28.805 Update UC MDA-Assisted network provisioning contributing to SLA assurance | Huawei | revised |  | S5-192419 |
| S5-192169 | pCR 28.805 Add use case for obtaining an NSI to provide multiple CSIs | Huawei | revised |  | S5-192421 |
| S5-192170 | pCR 28.805 Discussion on CSM functionalities and services | Huawei | noted |  |  |
| S5-192171 | pCR 28.805 Add use case for exposing limited management capability to verticals | Huawei | revised |  | S5-192422 |
| S5-192172 | pCR 28.805 Management aspects of 5GLAN services | Huawei | noted |  |  |
| S5-192173 | pCR 28.805 Solution for translation of communication service requirements into resource requirements | Huawei | noted |  | - |
| S5-192174 | pCR 28.805 Core network assisted network slice overload prevention | Huawei | noted |  | - |
| S5-192175 | Addition of message retry | Huawei | not pursued |  |  |
| S5-192176 | Revised WID on discovery of management services in 5G | Huawei Technologies France | noted |  | - |
| S5-192177 | pCR 28.804 Add tenant types | Huawei | revised |  | S5-192415 |
| S5-192178 | Rel-16 CR 28.552 Add mean radio resource utilization of network slice instance measurements | Huawei | revised |  | S5-192397 |
| S5-192179 | Discussion paper on TS 28.552 re-organization approach | Huawei | revised |  | S5-192375 |
| S5-192180 | Add missing NR cell and freq relation | Ericsson Inc. | revised |  | S5-192320 |
| S5-192181 | Correct cardinality of EP to target | Ericsson Inc. | agreed |  |  |
| S5-192182 | Correct Import table | Ericsson Inc. | revised |  | S5-192321 |
| S5-192183 | Remove ExternalNRCellCU.pLMNIdList | Ericsson Inc. | agreed |  |  |
| S5-192184 | Use bS (not bs) to prefix all BS attributes | Ericsson Inc. | agreed |  |  |
| S5-192185 | Correct PLMN Id definition | Ericsson Inc. | revised |  | S5-192322 |
| S5-192186 | YANG solution style guide | Ericsson Inc. | noted |  |  |
| S5-192187 | Correction of State attributes descriptions | Ericsson Japan K.K. (ARIB) | revised |  | S5-192323 |
| S5-192188 | pCR R16 28405-040 Remove duplicated references | Ericsson | approved |  |  |
| S5-192189 | pCR R16 28405-040 Activating and reporting in UTRAN | Ericsson | approved |  |  |
| S5-192190 | Update State management SS to support JSON | Nokia, Nokia Shanghai Bell | revised |  | S5-192324 |
| S5-192191 | Update Generic NRM Solution Set to support JSON | Nokia, Nokia Shanghai Bell | revised |  | S5-192325 |
| S5-192192 | Update 5G JSON Solution Set to align with generic NRM | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-192193 | Update YANG Solution Set to align with Stage 2 definition | Nokia, Nokia Shanghai Bell | revised |  | S5-192326 |
| S5-192194 | Update Information Service to fix Network Slice modeling issue | Nokia, Nokia Shanghai Bell | revised |  | S5-192327 |
| S5-192195 | Update Solution Set to fix Network Slice modeling issue | Nokia, Nokia Shanghai Bell | revised |  | S5-192328 |
| S5-192196 | TD Support Service Managed Object | Nokia, Nokia Shanghai Bell | revised |  | S5-192389 |
| S5-192197 | TD Support Registration State of Managed Service | Nokia, Nokia Shanghai Bell | revised |  | S5-192409 |
| S5-192198 | TD Support State of Managed Service | Nokia, Nokia Shanghai Bell | revised |  | S5-192410 |
| S5-192199 | pCR R16 28405-040 Handover handling in UTRAN | Ericsson | revised |  | S5-192340 |
| S5-192200 | pCR R16 28405-040 Align terminology | Ericsson | noted |  |  |
| S5-192201 | Rel-16 pCR TR 28.890 Minor Technical Corrections | Nanjing Ericsson Panda Com Ltd | revised |  | S5-192392 |
| S5-192202 | Rel-16 CR 32.254 Add message flows for convergent charging | Ericsson | revised |  | S5-192283 |
| S5-192203 | Rel-16 CR 32.254 Adding CDR generation and handling for convergent charging | Ericsson | revised |  | S5-192284 |
| S5-192204 | Rel-16 pCR 28.890 Add the description of 3GPP provisioning management service | Nanjing Ericsson Panda Com Ltd | revised |  | S5-192393 |
| S5-192205 | Retry handling for converged Charging | Ericsson | noted |  |  |
| S5-192206 | Abstraction versus layering | Ericsson Inc. | withdrawn |  |  |
| S5-192207 | Rel-16 pCR 28.890 Add the description of SDNC | Nanjing Ericsson Panda Com Ltd | revised |  | S5-192394 |
| S5-192208 | Rel-16 pCR 32.845 Solution to Performance based Charging | Ericsson | revised |  | S5-192293 |
| S5-192209 | Rel-16 pCR 28.890 Configuration Management handling | Nanjing Ericsson Panda Com Ltd | revised |  | S5-192395 |
| S5-192210 | Rel-16 pCR 28.890 Add Handling of configuration notification | Nanjing Ericsson Panda Com Ltd | merged |  | S5-192391 |
| S5-192211 | Rel-16 CR 32.255 Adding Offline trigger handling in SMF | Ericsson | not pursued |  |  |
| S5-192212 | Rel-16 pCR 28.890 Conclusion on CM | Nanjing Ericsson Panda Com Ltd | revised |  | S5-192396 |
| S5-192213 | Rel-15 CR 32.291 Correcting the Quota management Indicator in CDR | Ericsson | not pursued |  |  |
| S5-192214 | Rel-15 CR 32.298 Correcting the Used Unit Container definition | Ericsson | revised |  | S5-192363 |
| S5-192215 | Rel-15 CR 32.298 Correcting spelling of timeOfFirstUsage | Ericsson | agreed |  |  |
| S5-192216 | Rel-16 CR TS 28.552 Add measurements related to DRB retainability | Ericsson Hungary Ltd | not pursued |  |  |
| S5-192217 | Rel-15 CR 32.291 Correcting of table for bindings | Ericsson | agreed |  |  |
| S5-192218 | Rel-15 CR 32.298 Correcting of User Location Information definition | Ericsson | withdrawn |  | - |
| S5-192219 | Rel-16 CR TS 28.554 Add KPI of DRB Retainability | Ericsson Hungary Ltd | not pursued |  | - |
| S5-192220 | LS on Data activity reporting | Ericsson Hungary Ltd | not pursued |  | - |
| S5-192221 | Add use case and requirements of self-monitoring of network performance | ETRI | noted |  | - |
| S5-192222 | Add availability in service profile of network slice resource model | Nokia, Nokia Shanghai Bell | revised |  | S5-192329 |
| S5-192223 | Rel-15 CR 28.541 Add mFIdList attribute definition | Ericsson Hungary Ltd | merged |  | S5-192330 |
| S5-192224 | Discussion paper around sST attribute | Ericsson Hungary Ltd | revised |  | S5-192331 |
| S5-192225 | Rel-15 CR 28.541 Add sST attribute to ServiceProfile | Ericsson Hungary Ltd | revised |  | S5-192434 |
| S5-192226 | Rel-15 CR 28.541 Update to sST attribute stage 3 | Ericsson Hungary Ltd | revised |  | S5-192418 |
| S5-192227 | Some thoughts on XML, JSON and YANG style guides | Nokia Germany | noted |  |  |
| S5-192228 | Correct the DN to URI mapping rules | Nokia Germany | revised |  | S5-192338 |
| S5-192229 | MnS discovery | Nokia Germany | noted |  |  |
| S5-192230 | Rel-15 CR 28.628 Correction of AAS IP Throughput load rate definition | P.I. WORKS | agreed |  |  |
| S5-192231 | Discussion paper on Scope and boundaries for Intent Based Management | Ericsson Japan K.K. | withdrawn |  |  |
| S5-192232 | pCR TR 28.861 Management Data Analytics Service and SON functions | NEC Europe Ltd | revised |  | S5-192431 |
| S5-192233 | pCR 28.812 Clarification of the scope | Ericsson Japan K.K. | withdrawn |  |  |
| S5-192234 | pCR 28.812 Clarification of the dimensions | Ericsson Japan K.K. | withdrawn |  |  |
| S5-192235 | pCR 28.812 Use case for multi-tier intent management | Ericsson Japan K.K. | withdrawn |  |  |
| S5-192236 | pCR 32.160 Stage 2 to stage 3 mapping | Ericsson España S.A. | noted |  |  |
| S5-192237 | LS on Reply LS on Slice related Data Analytics | Ericsson España S.A. | revised |  | S5-192308 |
| S5-192238 | Discussion paper on lifecycle management of communication services | Ericsson España S.A. | revised |  | S5-192416 |
| S5-192239 | Presentation of Specification to TSG TS 32.160 | Ericsson España S.A. | withdrawn |  |  |
| S5-192240 | Discussion on Stage 2 to stage 3 mapping | Ericsson España S.A. | noted |  |  |
| S5-192241 | Rel-16 28.541 Name datatypes SliceProfile and ServiceProfile | Ericsson España S.A. | withdrawn |  |  |
| S5-192242 | CR Rel-16 28.541 Add datatype definition for TAC | Ericsson España S.A. | withdrawn |  |  |
| S5-192243 | CR Rel-16 28.541 Add datatype definition for S-NSSAI | Ericsson España S.A. | withdrawn |  |  |
| S5-192244 | CR Rel-15 28.541 Add datatype definition for CoverageAreaTA | Ericsson España S.A. | revised |  | S5-192332 |
| S5-192245 | CR Rel-15 28.541 Name datatypes SliceProfile and ServiceProfile | Ericsson España S.A. | revised |  | S5-192333 |
| S5-192246 | CR Rel-15 28.541 Add datatype definition for S-NSSAI | Ericsson España S.A. | revised |  | S5-192334 |
| S5-192247 | CR Rel-15 28.541 Add datatype definition for TAC | Ericsson España S.A. | revised |  | S5-192335 |
| S5-192248 | Rel-15 CR 32.298 Correction of UE IP Addresses | Nokia, Nokia Shanghai Bell | revised |  | S5-192368 |
| S5-192249 | Rel-15 CR 32.291 Correction of UE IP Addresses | Nokia, Nokia Shanghai Bell | revised |  | S5-192369 |
| S5-192250 | CR Rel-15 28.541 Add datatype definition for NfProfile | Ericsson España S.A. | withdrawn |  |  |
| S5-192251 | CR Rel-15 28.541 Add datatype definition for PerfReq | Ericsson España S.A. | not pursued |  | - |
| S5-192252 | CR Rel-15 28.541 Name datatype RRMPolicyRatio2 | Ericsson España S.A. | revised |  | S5-192336 |
| S5-192253 | pCR 28.805 Use case and requirement to activate a resource facing communication service | Ericsson España S.A. | not treated |  |  |
| S5-192254 | pCR 28.805 Use case and requirement to create a resource facing communication service | Ericsson España S.A. | not treated |  |  |
| S5-192255 | pCR 28.805 Use case and requirement to de-activate a resource facing communication service | Ericsson España S.A. | not treated |  |  |
| S5-192256 | pCR 28.805 Use case and requirement to modify the capacity of a resource facing communication service | Ericsson España S.A. | not treated |  |  |
| S5-192257 | pCR 28.805 Use case and requirement to terminate resource facing communication service | Ericsson España S.A. | not treated |  |  |
| S5-192258 | pCR 32.160 Align template for datatype with 28.541 | Ericsson España S.A. | revised |  | S5-192342 |
| S5-192259 | Sequence proposal for study on management aspects of communication services | Ericsson España S.A. | noted |  |  |
| S5-192260 | Update definition of mean number of PDU sessions KPI | ETRI | revised |  | S5-192385 |
| S5-192261 | 5G\_SLICE\_ePA | ETRI | withdrawn |  |  |
| S5-192262 | Rel-16 CR 28.552 Correction of percentage unrestricted volume measurements | P.I. WORKS | revised |  | S5-192401 |
| S5-192263 | Rel-15 CR 32.291 Correction local sequence nb | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-192264 | pCR 28.805 Introduce management model | Ericsson España S.A. | not treated |  |  |
| S5-192265 | pCR R16 28404-060 Corrections according to edithelp | Ericsson and edithelp | approved |  |  |
| S5-192266 | pCR 28812-030 edithelp | Huawei Tech.(UK) Co., Ltd | approved |  |  |
| S5-192267 | Overview of the 5G specification structure | Huawei Tech.(UK) Co., Ltd | noted |  |  |
| S5-192268 | pCR 28.805 Addressing Edithelp comments | Ericsson España S.A. | approved |  |  |
| S5-192269 | pCR 28.805 Update abbreviations list | Ericsson España S.A. | not treated |  |  |
| S5-192270 | Presentation of TR 28.890 for Approval to SA#83 | AT&T, Ericsson, Orange | approved |  |  |
| S5-192271 | Discussion paper on separate charging services | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-192272 | Discussion Paper on Network Slice Charging and Management | Huawei | revised |  | S5-192294 |
| S5-192273 | Presentation on ETSI FORGE | MCC | noted | - | - |
| S5-192274 | Addition of a few editorial corrections and many clarifications between NW Slice and NW Slice Instance | Huawei, Vodafone | revised | - | S5-192295 |
| S5-192275 | LS to SA2 on VoWiFi – VoLTE handover | Ericsson | approved | - | - |
| S5-192276 | Rel-16 CR 32.260 Update description of volume based charging in IMS | China Mobile | agreed | S5-192045 | - |
| S5-192277 | Rel-16 CR 32.298 Support status of VoLTE service delivery | China Mobile | agreed | S5-192043 | - |
| S5-192278 | Rel-16 CR 32.299 Support status of VoLTE service delivery | China Mobile | agreed | S5-192044 | - |
| S5-192279 | Rel-16 CR 32.255 Add Offline only charging CHF selection | Huawei | agreed | S5-192109 | - |
| S5-192280 | Rel-16 CR 32.255 offline charging service triggers for SSC modes | Huawei | agreed | S5-192121 | - |
| S5-192281 | Rel-16 CR 32.290 Add Offline charging Service Senario | Huawei | agreed | S5-192112 | - |
| S5-192282 | Rel-16 CR 32.298 Add offline charging data for CHF CDR | Huawei | agreed | S5-192117 | - |
| S5-192283 | Rel-16 CR 32.254 Add message flows for convergent charging | Ericsson | agreed | S5-192202 | - |
| S5-192284 | Rel-16 CR 32.254 Adding CDR generation and handling for convergent charging | Ericsson | agreed | S5-192203 | - |
| S5-192285 | Rel-16 pCR 32.256 Introduction of Scope and References | Nokia, Nokia Shanghai Bell | approved | S5-192068 | - |
| S5-192286 | Rel-16 pCR 32.256 Introduction of Abbreviations and symbols | Nokia, Nokia Shanghai Bell | approved | S5-192067 | - |
| S5-192287 | Rel-16 pCR 32.256 Introduction of charging principles | Nokia, Nokia Shanghai Bell | approved | S5-192070 | - |
| S5-192288 | Rel-16 pCR 32.256 Introduction of converged charging scenarios principles | Nokia, Nokia Shanghai Bell | approved | S5-192071 | - |
| S5-192289 | Rel-16 pCR 32.256 Introduction of registration offline message flow | Nokia, Nokia Shanghai Bell | approved | S5-192072 | - |
| S5-192290 | Rel-16 pCR 32.845 Addition of solution evaluation for solution #1.1 | Huawei | approved | S5-192096 | - |
| S5-192291 | Rel-16 pCR 32.845 Addition of solution for event based charging | Huawei | approved | S5-192097 | - |
| S5-192292 | Rel-16 pCR 32.845 Addition of Use Case about Network Slice Subscription | Huawei | approved | S5-192098 | - |
| S5-192293 | Rel-16 pCR 32.845 Solution to Performance based Charging | Ericsson | approved | S5-192208 | - |
| S5-192294 | Discussion Paper on Network Slice Charging and Management | Huawei | endorsed | S5-192272 | - |
| S5-192295 | Addition of a few editorial corrections and many clarifications between NW Slice and NW Slice Instance | Huawei, Vodafone | approved | S5-192274 | - |
| S5-192296 | Rel-15 CR 32.255 Correction of Qos Information | Nokia, Nokia Shanghai Bell | agreed | S5-192054 | - |
| S5-192297 | Rel-15 CR 32.291 Correction of Qos Information | Nokia, Nokia Shanghai Bell | agreed | S5-192052 | - |
| S5-192298 | Rel-15 CR 32.298 Correction of Qos Information | Nokia, Nokia Shanghai Bell | agreed | S5-192053 | - |
| S5-192299 | Rel-15 CR 32.255 Correction of user information | Nokia, Nokia Shanghai Bell | agreed | S5-192057 | - |
| S5-192300 | Rel-15 CR 32.291 Correction of user information | Nokia, Nokia Shanghai Bell | agreed | S5-192058 | - |
| S5-192301 | Rel-15 CR 32.298 Correction of user information | Nokia, Nokia Shanghai Bell | agreed | S5-192120 | - |
| S5-192302 | Rel-15 CR 32.255 Correction of serving network function | Nokia, Nokia Shanghai Bell | agreed | S5-192060 | - |
| S5-192303 | Rel-15 CR 32.291 Correction of serving network function | Nokia, Nokia Shanghai Bell | agreed | S5-192061 | - |
| S5-192304 | Reply to: Resubmitted LS from ITU-T to SA5 - Update of Technical Report – “Transport network support of IMT-2020/5G” | Ericsson | revised | - | S5-192459 |
| S5-192305 | Tdoc discussion sequence | Intel | noted | - | - |
| S5-192306 | Time Plan for OAM&P | WG Vice Chair (Huawei) | noted | S5-192012 | - |
| S5-192307 | OAM&P SWG action list | WG Vice Chair (Huawei) | noted | S5-192014 | - |
| S5-192308 | LS on Reply LS on Slice related Data Analytics | Ericsson España S.A. | approved | S5-192237 | - |
| S5-192309 | Reply to: Ls from SA2 ccSA5 on providing information on SLA fulfilment to NG-RAN | Nokia | approved | - | - |
| S5-192310 | LS on Status of QoE work in SA5 | Ericsson | approved | - | - |
| S5-192311 | SA5 presentation to ZTA congress - Integration of 3GPP and ONAP | AT&T, Orange,Deutsche Telekom | agreed | S5-192075 | - |
| S5-192312 | Rel-15 CR TS 28.541 Add NRM Info Model definitions for beam managed object class | Pivotal Commware, ZTE, Intel, P.I. Works, China Mobile | not pursued | S5-192092 | - |
| S5-192313 | Rel-15 CR 28.541 Correct the definition of nSSIId | Huawei | agreed | S5-192125 | - |
| S5-192314 | Rel-15 CR 28.541 Add missing attribute constraints for class definition of NSSFFunction | Huawei | agreed | S5-192126 | - |
| S5-192315 | Revised Study on management aspects of edge computing | Intel | withdrawn | - | - |
| S5-192316 | Rel-15 CR 28.541 Correct attribute constraints for RRMpolicy related attributes in NRCellCU | Huawei | agreed | S5-192127 | - |
| S5-192317 | Rel-15 CR 28.550 Add the missing RESTFul API definitions | Intel Finland Oy | agreed | S5-192141 | - |
| S5-192318 | Rel-15 CR 28.531 Correct management service term | Huawei | agreed | S5-192152 | - |
| S5-192319 | Rel-16 CR 28.531 Correct management service term | Huawei | agreed | S5-192153 | - |
| S5-192320 | Add missing NR cell and freq relation | Ericsson Inc. | not pursued | S5-192180 | - |
| S5-192321 | Correct Import table | Ericsson Inc. | agreed | S5-192182 | - |
| S5-192322 | Correct PLMN Id definition | Ericsson Inc. | agreed | S5-192185 | - |
| S5-192323 | Correction of State attributes descriptions | Ericsson Japan K.K. (ARIB) | agreed | S5-192187 | - |
| S5-192324 | Update State management SS to support JSON | Nokia, Nokia Shanghai Bell | agreed | S5-192190 | - |
| S5-192325 | Update Generic NRM Solution Set to support JSON | Nokia, Nokia Shanghai Bell | agreed | S5-192191 | - |
| S5-192326 | Update YANG Solution Set to align with Stage 2 definition | Nokia, Nokia Shanghai Bell | agreed | S5-192193 | - |
| S5-192327 | Update Information Service to fix Network Slice modeling issue | Nokia, Nokia Shanghai Bell | agreed | S5-192194 | - |
| S5-192328 | Update Solution Set to fix Network Slice modeling issue | Nokia, Nokia Shanghai Bell | agreed | S5-192195 | - |
| S5-192329 | Add availability in service profile of network slice resource model | Nokia, Nokia Shanghai Bell | agreed | S5-192222 | - |
| S5-192330 | Rel-15 CR 28.541 Align the term mFIdList and constituentNSSIIdList | Huawei,Ericsson | agreed | S5-192124 | - |
| S5-192331 | Discussion paper around sST attribute | Ericsson Hungary Ltd | endorsed | S5-192224 | - |
| S5-192332 | CR Rel-15 28.541 Add datatype definition for CoverageAreaTA | Ericsson España S.A. | revised | S5-192244 | S5-192436 |
| S5-192333 | CR Rel-16 28.541 Name datatypes SliceProfile and ServiceProfile | Ericsson España S.A. | agreed | S5-192245 | - |
| S5-192334 | CR Rel-16 28.541 Add datatype definition for S-NSSAI | Ericsson España S.A. | agreed | S5-192246 | - |
| S5-192335 | CR Rel-16 28.541 Add datatype definition for TAC | Ericsson España S.A. | agreed | S5-192247 | - |
| S5-192336 | CR Rel-15 28.541 Name datatype RRMPolicyRatio2 | Ericsson España S.A. | agreed | S5-192252 | - |
| S5-192337 | CR Rel-15 28.541 Add datatype definition for PerfReq | Ericsson España S.A. | withdrawn | - | - |
| S5-192338 | Correct the DN to URI mapping rules | Nokia Germany | revised | S5-192228 | S5-192460 |
| S5-192339 | Draft TS 28.405 | Ericsson | approved | - | - |
| S5-192340 | pCR R16 28405-040 Handover handling in UTRAN | Ericsson | approved | S5-192199 | - |
| S5-192341 | LSReply to 3GPP SA5 on network slicing | ETSI ISG NFV | noted | - | - |
| S5-192342 | pCR 32.160 Align template for datatype with 28.541 | Ericsson España S.A. | approved | S5-192258 | - |
| S5-192343 | 28.812 Update concept of IDMS | Huawei | approved | S5-192128 | - |
| S5-192344 | pCR 28.812 Add intent driven NF capacity expanding scenario | Huawei | approved | S5-192129 | - |
| S5-192345 | pCR 28.812 Add description of automation | Huawei | revised | S5-192130 | S5-192438 |
| S5-192346 | Draft TR 28.812 | Huawei | approved | - | - |
| S5-192347 | pCR 28.812 Add Intent driven 5GLAN service creation scenario | Huawei | revised | S5-192133 | S5-192439 |
| S5-192348 | pCR 28.812 Add Intent translation description | Huawei | noted | S5-192134 | - |
| S5-192349 | pCR 28.812 Add conclusion | Huawei | noted | S5-192131 | - |
| S5-192350 | Rel-15 CR 28.550 Correction on MDAS | Intel Finland Oy | agreed | S5-192151 | - |
| S5-192351 | Rel-15 CR 32.298 Correction of serving network function | Nokia, Nokia Shanghai Bell | agreed | S5-192062 | - |
| S5-192352 | Rel-15 CR 32.298 Correction of pDUSessionId | Nokia, Nokia Shanghai Bell | agreed | S5-192063 | - |
| S5-192353 | Rel-16 CR 32.255 Correction of Trigger Conditions for FBC | Huawei | agreed | S5-192099 | - |
| S5-192354 | Rel-16 CR 32.290 Correction of Multiple Unit Information in ChargingDataResponse | Huawei | agreed | S5-192100 | - |
| S5-192355 | Rel-16 CR 32.291 Correction of Multiple Unit Information in ChargingDataResponse | Huawei | agreed | S5-192101 | - |
| S5-192356 | Rel-16 CR 32.291 Correction of triggers in ChargingDataResponse | Huawei | agreed | S5-192103 | - |
| S5-192357 | Rel-16 CR 32.255 Remove Quota Consumption Time | Huawei | agreed | S5-192104 | - |
| S5-192358 | Rel-16 CR 32.290 Addition of failure handling and failover | Huawei | agreed | S5-192105 | - |
| S5-192359 | Discussion on 5G offline only charging in converged charging | Huawei | noted | - | - |
| S5-192360 | Introduction Charging for join session | Nokia | noted | - | - |
| S5-192361 | Rel-16 CR 32.291 Correction of RANSecondaryRATUsageReport occurrence | Huawei | agreed | S5-192108 | - |
| S5-192362 | Rel-15 CR 32.298 Correcting the Quota management Indicator in CDR | Ericsson | agreed | - | - |
| S5-192363 | Rel-15 CR 32.298 Correcting the Used Unit Container definition | Ericsson | agreed | S5-192214 | - |
| S5-192364 | Rel-15 CR 32.298 Correcting of User Location Information definition | Ericsson | agreed | - | - |
| S5-192365 | Draf TR 32.845 | Huawei | approved | - | - |
| S5-192366 | Draft TS 32.256 | Nokia, Nokia Shanghai Bell | approved | - | - |
| S5-192367 | Revised SID Study on Charging Aspects of Network Slicing | Huawei | noted | - | - |
| S5-192368 | Rel-15 CR 32.298 Correction of UE IP Addresses | Nokia, Nokia Shanghai Bell | agreed | S5-192248 | - |
| S5-192369 | Rel-15 CR 32.291 Correction of UE IP Addresses | Nokia, Nokia Shanghai Bell | agreed | S5-192249 | - |
| S5-192370 | Revised WID on Nchf Online and Offline Charging Services | Huawei | noted | - | - |
| S5-192371 | Rel-16 CR 28.550 Add operations for establishing and terminating streaming connection | Intel Finland Oy | agreed | S5-192142 | - |
| S5-192372 | Rel-16 CR 28.550 Add performance threshold monitoring service | Intel Finland Oy | not pursued | S5-192143 | - |
| S5-192373 | Rel-16 CR 28.622 Add IOCs for threshold monitoring control | Intel Finland Oy | not pursued | S5-192147 | - |
| S5-192374 | Rel-16 CR 28.623 Add IOCs for threshold monitoring control | Intel Finland Oy | withdrawn | - | - |
| S5-192375 | Discussion paper on TS 28.552 re-organization approach | Huawei | endorsed | S5-192179 | - |
| S5-192376 | Rel-16 CR TS 32.425 Add measurements related to Secondary Node Addition for E-UTRA-NR Dual Connectivity | ZTE, China Mobile | withdrawn | - | - |
| S5-192377 | Rel-16 CR TS 28.552 Add measurements of RRC connection re-establishment | ZTE Corporation, China Mobile | agreed | S5-192090 | - |
| S5-192378 | Rel-16 CR TS 28.552 Add measurements of RRC connection resume | ZTE Corporation, China Mobile | agreed | S5-192091 | - |
| S5-192379 | R16 CR TS28.552 Add RSRP measurements | ZTE, Intel, China Mobile | not pursued | S5-192093 | - |
| S5-192380 | R16 CR TS 28.552 Add UE Rx-Tx time difference related measurements | ZTE Corporation, China Mobile | not pursued | S5-192094 | - |
| S5-192381 | Add use case and definitions of QoS level measurement over N3 | ETRI | agreed | S5-192123 | - |
| S5-192382 | Add use case and definitions of packet loss measurement over N3 | ETRI | not pursued | S5-192140 | - |
| S5-192383 | Rel-16 CR 28.552 Add measurements related to inter-AMF handover | Intel Finland Oy | agreed | S5-192146 | - |
| S5-192384 | Draft TS 32.160 | Ericsson | approved | - | - |
| S5-192385 | Update definition of mean number of PDU sessions KPI | ETRI | revised | S5-192260 | S5-192400 |
| S5-192386 | Discussion paper on discovery of MnS in 5G | Huawei Technologies France | revised | S5-192165 | S5-192453 |
| S5-192387 | Add discovery of specified service interface access information use case and requirement | Huawei Technologies France | not pursued | S5-192161 | - |
| S5-192388 | Add MnS exposure governance use case and requirement | Huawei Technologies France | not pursued | S5-192164 | - |
| S5-192389 | TD Support Service Managed Object | Nokia, Nokia Shanghai Bell | endorsed | S5-192196 | - |
| S5-192390 | Draft TR 28.890 | ORANGE | approved | - | - |
| S5-192391 | pCR 28.890 Add Handling of configuration notification | Huawei,Ericsson | approved | S5-192136 | - |
| S5-192392 | Rel-16 pCR TR 28.890 Minor Technical Corrections | Nanjing Ericsson Panda Com Ltd | approved | S5-192201 | - |
| S5-192393 | Rel-16 pCR 28.890 Add the description of 3GPP provisioning management service | Nanjing Ericsson Panda Com Ltd | approved | S5-192204 | - |
| S5-192394 | Rel-16 pCR 28.890 Add the description of SDNC | Nanjing Ericsson Panda Com Ltd | approved | S5-192207 | - |
| S5-192395 | Rel-16 pCR 28.890 Configuration Management handling | Nanjing Ericsson Panda Com Ltd | approved | S5-192209 | - |
| S5-192396 | Rel-16 pCR 28.890 Conclusion on CM | Nanjing Ericsson Panda Com Ltd | revised | S5-192212 | S5-192443 |
| S5-192397 | Rel-16 CR 28.552 Add mean radio resource utilization of network slice instance measurements | Huawei | revised | S5-192178 | S5-192441 |
| S5-192398 | Rel-16 CR TS 28.554 Add KPI of DRB Retainability | Ericsson Hungary Ltd | withdrawn | - | - |
| S5-192399 | LS on Data activity reporting | Ericsson Hungary Ltd | withdrawn | - | - |
| S5-192400 | Update definition of mean number of PDU sessions KPI | ETRI | agreed | S5-192385 | - |
| S5-192401 | Rel-16 CR 28.552 Correction of percentage unrestricted volume measurements | P.I. WORKS | agreed | S5-192262 | - |
| S5-192402 | Rel-15 CR 28.552 Correction of percentage unrestricted volume measurements | P.I. Works | agreed | - | - |
| S5-192403 | pCR 28.803 use case for performance measurements related to end-to-end QoS | Intel China Ltd. | approved | S5-192080 | - |
| S5-192404 | pCR 28.803 solution for edge computing deployment | Intel China Ltd. | approved | S5-192081 | - |
| S5-192405 | pCR 28.803 Add use case on PCF and NEF discovery for EC | Intel China Ltd. | approved | S5-192082 | - |
| S5-192406 | LS on PCF and NEF discovery for Edge Computing | Intel China Ltd. | revised | S5-192083 | S5-192444 |
| S5-192407 | pCR 28.804 Add managed data isolation concept | Huawei Technologies France | noted | S5-192155 | - |
| S5-192408 | pCR 28.804 Add UC for dedicated and for shared performance managed data | China mobile,Huawei | noted | S5-192156 | - |
| S5-192409 | TD Support Registration State of Managed Service | Nokia, Nokia Shanghai Bell | revised | S5-192197 | S5-192456 |
| S5-192410 | TD Support State of Managed Service | Nokia, Nokia Shanghai Bell | endorsed | S5-192198 | - |
| S5-192411 | Revised WID on NRM enhancements | Nokia, Nokia Shanghai Bell | agreed | - | - |
| S5-192412 | pCR 28.804 Add potential solutions and recommendations | Huawei Technologies France | noted | S5-192157 | - |
| S5-192413 | Discussion paper around DC related measurement | ZTE | noted | - | - |
| S5-192414 | pCR 28.804 Correct approved tenancy concept and definition | Huawei Technologies France | noted | S5-192159 | - |
| S5-192415 | pCR 28.804 Add tenant types | Huawei | revised | S5-192177 | S5-192445 |
| S5-192416 | Discussion paper on lifecycle management of communication services | Ericsson España S.A. | revised | S5-192238 | S5-192451 |
| S5-192417 | pCR 28.805 Add data analytics for SLA assurance | Huawei Technologies France | revised | S5-192166 | S5-192446 |
| S5-192418 | Rel-15 CR 28.541 Update to sST attribute stage 3 | Ericsson Hungary Ltd | agreed | S5-192226 | - |
| S5-192419 | pCR 28.805 Update UC MDA-Assisted network provisioning contributing to SLA assurance | Huawei | revised | S5-192168 | S5-192447 |
| S5-192420 | pCR 28.805 Add UC and requirements for CSI fault and performance monitoring | Huawei Technologies France | noted | S5-192167 | - |
| S5-192421 | pCR 28.805 Add use case for obtaining an NSI to provide multiple CSIs | Huawei | revised | S5-192169 | S5-192448 |
| S5-192422 | pCR 28.805 Add use case for exposing limited management capability to verticals | Huawei | revised | S5-192171 | S5-192449 |
| S5-192423 | pCR 28.805 Solution for translation of communication service requirements into resource requirements | Huawei | withdrawn | - | - |
| S5-192424 | Draft TR 28.861 | Intel | approved | - | - |
| S5-192425 | pCR 28.861 add use case for Mobility Robustness Optimisation | Intel China Ltd. | approved | S5-192078 | - |
| S5-192426 | pCR 28.861 add use case for automatic NSI creation | Intel China Ltd. | noted | S5-192079 | - |
| S5-192427 | pCR 28.861 Add concept, usecase and requirements for Self-healing | Huawei | approved | S5-192137 | - |
| S5-192428 | pCR 28.861 Update the concept, usecase of Self-establishment of eNodeB | Huawei | approved | S5-192138 | - |
| S5-192429 | pCR 28.861 Add NSI PM input to support CCO | Huawei | noted | S5-192139 | - |
| S5-192430 | Add use case and requirements of self-monitoring of network performance | ETRI | withdrawn | - | - |
| S5-192431 | pCR TR 28.861 Management Data Analytics Service and SON functions | NEC Europe Ltd | approved | S5-192232 | - |
| S5-192432 | SA5 20th anniversary song | WG Chair | revised | - | S5-192440 |
| S5-192433 | Draft TR 28.803 | Intel | approved | - | - |
| S5-192434 | Rel-15 CR 28.541 Add sST attribute to ServiceProfile | Ericsson Hungary Ltd | agreed | S5-192225 | - |
| S5-192435 | Rel-15 CR TS 28.541 Add NRM Info Model definitions for beam managed object class | Pivotal Commware, ZTE, Intel, P.I. Works, China Mobile | withdrawn | - | - |
| S5-192436 | CR Rel-16 28.541 Add datatype definition for CoverageAreaTA | Ericsson España S.A. | agreed | S5-192332 | - |
| S5-192437 | Draft TS 28.404 | Ericsson | approved | - | - |
| S5-192438 | pCR 28.812 Add description of automation | Huawei | approved | S5-192345 | - |
| S5-192439 | pCR 28.812 Add Intent driven 5GLAN service creation scenario | Huawei | approved | S5-192347 | - |
| S5-192440 | SA5 20th anniversary song | WG Chair | noted | S5-192432 | - |
| S5-192441 | Rel-16 CR 28.552 Add mean radio resource utilization of network slice instance measurements | Huawei | agreed | S5-192397 | - |
| S5-192442 | Minutes of Intent driven management service for mobile networks | Rapporteur (Huawei) | noted | S5-192025 | - |
| S5-192443 | Rel-16 pCR 28.890 Conclusion on CM | Nanjing Ericsson Panda Com Ltd | approved | S5-192396 | - |
| S5-192444 | LS on PCF and NEF discovery for Edge Computing | Intel China Ltd. | revised | S5-192406 | S5-192454 |
| S5-192445 | pCR 28.804 Add tenant types | Huawei | revised | S5-192415 | S5-192457 |
| S5-192446 | pCR 28.805 Add data analytics for SLA assurance | Huawei Technologies France | revised | S5-192417 | S5-192455 |
| S5-192447 | pCR 28.805 Update UC MDA-Assisted network provisioning contributing to SLA assurance | Huawei | approved | S5-192419 | - |
| S5-192448 | pCR 28.805 Add use case for obtaining an NSI to provide multiple CSIs | Huawei | approved | S5-192421 | - |
| S5-192449 | pCR 28.805 Add use case for exposing limited management capability to verticals | Huawei | revised | S5-192422 | S5-192452 |
| S5-192450 | Draft TR 28.805 | Ericsson | approved | - | - |
| S5-192451 | Discussion paper on lifecycle management of communication services | Ericsson España S.A. | endorsed | S5-192416 | - |
| S5-192452 | pCR 28.805 Add use case for exposing limited management capability to verticals | Huawei | approved | S5-192449 | - |
| S5-192453 | Discussion paper on discovery of MnS in 5G | Huawei Technologies France | endorsed | S5-192386 | - |
| S5-192454 | LS on PCF and NEF discovery for Edge Computing | Intel China Ltd. | approved | S5-192444 | - |
| S5-192455 | pCR 28.805 Add data analytics for SLA assurance | Huawei Technologies France | approved | S5-192446 | - |
| S5-192456 | TD Support Registration State of Managed Service | Nokia, Nokia Shanghai Bell | endorsed | S5-192409 | - |
| S5-192457 | pCR 28.804 Add tenant types | Huawei | approved | S5-192445 | - |
| S5-192458 | OAM Executive Report | WG Vice Chair (ORANGE) | noted | S5-192013 | - |
| S5-192459 | Reply to: Resubmitted LS from ITU-T to SA5 - Update of Technical Report – “Transport network support of IMT-2020/5G” | Ericsson | approved | S5-192304 | - |
| S5-192460 | Correct the DN to URI mapping rules | Nokia Germany | not pursued | S5-192338 | - |
| S5-192461 | Draft TR 28.804 | Ericsson | approved | - | - |

## Annex B: List of change requests

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Spec | CR | Rev | Rel | Cat | WI | Decision |
| S5-192152 | Rel-15 CR 28.531 Correct management service term | Huawei | 28.531 | 0016 | - | Rel-15 | F | NETSLICE-PRO\_NS | revised |
| S5-192318 | Rel-15 CR 28.531 Correct management service term | Huawei | 28.531 | 0016 | 1 | Rel-15 | F | NETSLICE-PRO\_NS | agreed |
| S5-192153 | Rel-16 CR 28.531 Correct management service term | Huawei | 28.531 | 0017 | - | Rel-16 | A | NETSLICE-PRO\_NS | revised |
| S5-192319 | Rel-16 CR 28.531 Correct management service term | Huawei | 28.531 | 0017 | 1 | Rel-16 | A | NETSLICE-PRO\_NS | agreed |
| S5-192161 | Add discovery of specified service interface access information use case and requirement | Huawei Technologies France | 28.533 | 0013 | - | Rel-16 | B | 5GDMS | revised |
| S5-192387 | Add discovery of specified service interface access information use case and requirement | Huawei Technologies France | 28.533 | 0013 | 1 | Rel-16 | B | 5GDMS | not pursued |
| S5-192164 | Add MnS exposure governance use case and requirement | Huawei Technologies France | 28.533 | 0014 | - | Rel-16 | B | 5GDMS | revised |
| S5-192388 | Add MnS exposure governance use case and requirement | Huawei Technologies France | 28.533 | 0014 | 1 | Rel-16 | B | 5GDMS | not pursued |
| S5-192092 | Rel-15 CR TS 28.541 Add NRM Info Model definitions for beam managed object class | Pivotal Commware, ZTE, Intel, P.I. Works, China Mobile | 28.541 | 0051 | - | Rel-15 | C | NETSLICE-5GNRM | revised |
| S5-192312 | Rel-15 CR TS 28.541 Add NRM Info Model definitions for beam managed object class | Pivotal Commware, ZTE, Intel, P.I. Works, China Mobile | 28.541 | 0051 | 1 | Rel-15 | C | NETSLICE-5GNRM | not pursued |
| S5-192435 | Rel-15 CR TS 28.541 Add NRM Info Model definitions for beam managed object class | Pivotal Commware, ZTE, Intel, P.I. Works, China Mobile | 28.541 | 0051 | 2 | Rel-15 | C | NETSLICE-5GNRM | withdrawn |
| S5-192124 | Rel-15 CR 28.541 Align the term mFIdList and constituentNSSIIdList | Huawei | 28.541 | 0052 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192330 | Rel-15 CR 28.541 Align the term mFIdList and constituentNSSIIdList | Huawei,Ericsson | 28.541 | 0052 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192125 | Rel-15 CR 28.541 Correct the definition of nSSIId | Huawei | 28.541 | 0053 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192313 | Rel-15 CR 28.541 Correct the definition of nSSIId | Huawei | 28.541 | 0053 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192126 | Rel-15 CR 28.541 Add missing attribute constraints for class definition of NSSFFunction | Huawei | 28.541 | 0054 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192314 | Rel-15 CR 28.541 Add missing attribute constraints for class definition of NSSFFunction | Huawei | 28.541 | 0054 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192127 | Rel-15 CR 28.541 Correct attribute constraints for RRMpolicy related attributes in NRCellCU | Huawei | 28.541 | 0055 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192316 | Rel-15 CR 28.541 Correct attribute constraints for RRMpolicy related attributes in NRCellCU | Huawei | 28.541 | 0055 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192180 | Add missing NR cell and freq relation | Ericsson Inc. | 28.541 | 0056 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192320 | Add missing NR cell and freq relation | Ericsson Inc. | 28.541 | 0056 | 1 | Rel-15 | F | NETSLICE-5GNRM | not pursued |
| S5-192181 | Correct cardinality of EP to target | Ericsson Inc. | 28.541 | 0057 | - | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192182 | Correct Import table | Ericsson Inc. | 28.541 | 0058 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192321 | Correct Import table | Ericsson Inc. | 28.541 | 0058 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192183 | Remove ExternalNRCellCU.pLMNIdList | Ericsson Inc. | 28.541 | 0059 | - | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192184 | Use bS (not bs) to prefix all BS attributes | Ericsson Inc. | 28.541 | 0060 | - | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192187 | Correction of State attributes descriptions | Ericsson Japan K.K. (ARIB) | 28.541 | 0061 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192323 | Correction of State attributes descriptions | Ericsson Japan K.K. (ARIB) | 28.541 | 0061 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192192 | Update 5G JSON Solution Set to align with generic NRM | Nokia, Nokia Shanghai Bell | 28.541 | 0062 | - | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192193 | Update YANG Solution Set to align with Stage 2 definition | Nokia, Nokia Shanghai Bell | 28.541 | 0063 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192326 | Update YANG Solution Set to align with Stage 2 definition | Nokia, Nokia Shanghai Bell | 28.541 | 0063 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192194 | Update Information Service to fix Network Slice modeling issue | Nokia, Nokia Shanghai Bell | 28.541 | 0064 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192327 | Update Information Service to fix Network Slice modeling issue | Nokia, Nokia Shanghai Bell | 28.541 | 0064 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192195 | Update Solution Set to fix Network Slice modeling issue | Nokia, Nokia Shanghai Bell | 28.541 | 0065 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192328 | Update Solution Set to fix Network Slice modeling issue | Nokia, Nokia Shanghai Bell | 28.541 | 0065 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192222 | Add availability in service profile of network slice resource model | Nokia, Nokia Shanghai Bell | 28.541 | 0066 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192329 | Add availability in service profile of network slice resource model | Nokia, Nokia Shanghai Bell | 28.541 | 0066 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192223 | Rel-15 CR 28.541 Add mFIdList attribute definition | Ericsson Hungary Ltd | 28.541 | 0067 | - | Rel-15 | F | NETSLICE-5GNRM | merged |
| S5-192225 | Rel-15 CR 28.541 Add sST attribute to ServiceProfile | Ericsson Hungary Ltd | 28.541 | 0068 | - | Rel-15 | B | NETSLICE-5GNRM | revised |
| S5-192434 | Rel-15 CR 28.541 Add sST attribute to ServiceProfile | Ericsson Hungary Ltd | 28.541 | 0068 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192226 | Rel-15 CR 28.541 Update to sST attribute stage 3 | Ericsson Hungary Ltd | 28.541 | 0069 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192418 | Rel-15 CR 28.541 Update to sST attribute stage 3 | Ericsson Hungary Ltd | 28.541 | 0069 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192241 | Rel-16 28.541 Name datatypes SliceProfile and ServiceProfile | Ericsson España S.A. | 28.541 | 0070 | - | Rel-16 | F | NETSLICE-5GNRM | withdrawn |
| S5-192242 | CR Rel-16 28.541 Add datatype definition for TAC | Ericsson España S.A. | 28.541 | 0071 | - | Rel-16 | F | NETSLICE-5GNRM | withdrawn |
| S5-192243 | CR Rel-16 28.541 Add datatype definition for S-NSSAI | Ericsson España S.A. | 28.541 | 0072 | - | Rel-16 | F | NETSLICE-5GNRM | withdrawn |
| S5-192244 | CR Rel-15 28.541 Add datatype definition for CoverageAreaTA | Ericsson España S.A. | 28.541 | 0073 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192332 | CR Rel-15 28.541 Add datatype definition for CoverageAreaTA | Ericsson España S.A. | 28.541 | 0073 | 1 | Rel-16 | F | eNRM | revised |
| S5-192436 | CR Rel-16 28.541 Add datatype definition for CoverageAreaTA | Ericsson España S.A. | 28.541 | 0073 | 2 | Rel-16 | F | eNRM | agreed |
| S5-192245 | CR Rel-15 28.541 Name datatypes SliceProfile and ServiceProfile | Ericsson España S.A. | 28.541 | 0074 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192333 | CR Rel-16 28.541 Name datatypes SliceProfile and ServiceProfile | Ericsson España S.A. | 28.541 | 0074 | 1 | Rel-16 | F | eNRM | agreed |
| S5-192246 | CR Rel-15 28.541 Add datatype definition for S-NSSAI | Ericsson España S.A. | 28.541 | 0075 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192334 | CR Rel-16 28.541 Add datatype definition for S-NSSAI | Ericsson España S.A. | 28.541 | 0075 | 1 | Rel-16 | F | eNRM | agreed |
| S5-192247 | CR Rel-15 28.541 Add datatype definition for TAC | Ericsson España S.A. | 28.541 | 0076 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192335 | CR Rel-16 28.541 Add datatype definition for TAC | Ericsson España S.A. | 28.541 | 0076 | 1 | Rel-16 | F | eNRM | agreed |
| S5-192250 | CR Rel-15 28.541 Add datatype definition for NfProfile | Ericsson España S.A. | 28.541 | 0077 | - | Rel-15 | F | NETSLICE-5GNRM | withdrawn |
| S5-192251 | CR Rel-15 28.541 Add datatype definition for PerfReq | Ericsson España S.A. | 28.541 | 0078 | - | Rel-15 | F | NETSLICE-5GNRM | not pursued |
| S5-192337 | CR Rel-15 28.541 Add datatype definition for PerfReq | Ericsson España S.A. | 28.541 | 0078 | 1 | Rel-15 | F | NETSLICE-5GNRM | withdrawn |
| S5-192252 | CR Rel-15 28.541 Name datatype RRMPolicyRatio2 | Ericsson España S.A. | 28.541 | 0079 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192336 | CR Rel-15 28.541 Name datatype RRMPolicyRatio2 | Ericsson España S.A. | 28.541 | 0079 | 1 | Rel-16 | F | eNRM | agreed |
| S5-192141 | Rel-15 CR 28.550 Add the missing RESTFul API definitions | Intel Finland Oy | 28.550 | 0003 | - | Rel-15 | F | NETSLICE-ADPM5G | revised |
| S5-192317 | Rel-15 CR 28.550 Add the missing RESTFul API definitions | Intel Finland Oy | 28.550 | 0003 | 1 | Rel-15 | F | NETSLICE-ADPM5G | agreed |
| S5-192142 | Rel-16 CR 28.550 Add operations for establishing and terminating streaming connection | Intel Finland Oy | 28.550 | 0004 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192371 | Rel-16 CR 28.550 Add operations for establishing and terminating streaming connection | Intel Finland Oy | 28.550 | 0004 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-192143 | Rel-16 CR 28.550 Add performance threshold monitoring service | Intel Finland Oy | 28.550 | 0005 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192372 | Rel-16 CR 28.550 Add performance threshold monitoring service | Intel Finland Oy | 28.550 | 0005 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192144 | Rel-16 CR 28.552 Add measurements related to registration via untrusted non-3GPP access for AMF | Intel Finland Oy | 28.550 | 0006 | - | Rel-16 | B | 5G\_SLICE\_ePA | withdrawn |
| S5-192151 | Rel-15 CR 28.550 Correction on MDAS | Intel Finland Oy | 28.550 | 0007 | - | Rel-15 | F | NETSLICE-ADPM5G | revised |
| S5-192350 | Rel-15 CR 28.550 Correction on MDAS | Intel Finland Oy | 28.550 | 0007 | 1 | Rel-15 | F | NETSLICE-ADPM5G | agreed |
| S5-192087 | Rel-16 CR TS 28.552 Add measurements related to Secondary Node Addition for MR-DC Dual Connectivity | ZTE Corporation, China Mobile | 28.552 | 0057 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192088 | Rel-16 CR TS 28.552 Add measurements related to Secondary Node Change for MR-DC Dual Connectivity | ZTE Corporation, China Mobile | 28.552 | 0058 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192089 | Rel-16 CR TS 28.552 Add measurements related to Secondary Node Release for MR-DC Dual Connectivity | ZTE Corporation, China Mobile | 28.552 | 0059 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192090 | Rel-16 CR TS 28.552 Add measurements of RRC connection re-establishment | ZTE Corporation, China Mobile | 28.552 | 0060 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192377 | Rel-16 CR TS 28.552 Add measurements of RRC connection re-establishment | ZTE Corporation, China Mobile | 28.552 | 0060 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-192091 | Rel-16 CR TS 28.552 Add measurements of RRC connection resume | ZTE Corporation, China Mobile | 28.552 | 0061 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192378 | Rel-16 CR TS 28.552 Add measurements of RRC connection resume | ZTE Corporation, China Mobile | 28.552 | 0061 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-192093 | R16 CR TS28.552 Add RSRP measurements | ZTE, Intel, China Mobile | 28.552 | 0062 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192379 | R16 CR TS28.552 Add RSRP measurements | ZTE, Intel, China Mobile | 28.552 | 0062 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192094 | R16 CR TS 28.552 Add UE Rx-Tx time difference related measurements | ZTE Corporation, China Mobile | 28.552 | 0063 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192380 | R16 CR TS 28.552 Add UE Rx-Tx time difference related measurements | ZTE Corporation, China Mobile | 28.552 | 0063 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192095 | R16 CR TS 28.552 Add PDCP throughput measurements | ZTE Corporation, China Mobile | 28.552 | 0064 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192123 | Add use case and definitions of QoS flow measurement over N3 | ETRI | 28.552 | 0065 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192381 | Add use case and definitions of QoS level measurement over N3 | ETRI | 28.552 | 0065 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-192140 | Add use case and definitions of packet loss rate measurement over N3 | ETRI | 28.552 | 0066 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192382 | Add use case and definitions of packet loss measurement over N3 | ETRI | 28.552 | 0066 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192145 | Rel-16 CR 28.552 Add measurements related to registration via untrusted non-3GPP access for AMF | Intel Finland Oy | 28.552 | 0067 | - | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-192146 | Rel-16 CR 28.552 Add measurements related to inter-AMF handover | Intel Finland Oy | 28.552 | 0068 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192383 | Rel-16 CR 28.552 Add measurements related to inter-AMF handover | Intel Finland Oy | 28.552 | 0068 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-192154 | R16 CR TS 28.552 Add PDCP Split Volume measurements | ZTE Corporation, China Mobile | 28.552 | 0069 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192178 | Rel-16 CR 28.552 Add mean radio resource utilization of network slice instance measurements | Huawei | 28.552 | 0070 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192397 | Rel-16 CR 28.552 Add mean radio resource utilization of network slice instance measurements | Huawei | 28.552 | 0070 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192441 | Rel-16 CR 28.552 Add mean radio resource utilization of network slice instance measurements | Huawei | 28.552 | 0070 | 2 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-192216 | Rel-16 CR TS 28.552 Add measurements related to DRB retainability | Ericsson Hungary Ltd | 28.552 | 0071 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192262 | Rel-16 CR 28.552 Correction of percentage unrestricted volume measurements | P.I. WORKS | 28.552 | 0072 | - | Rel-16 | F | 5G\_SLICE\_ePA | revised |
| S5-192401 | Rel-16 CR 28.552 Correction of percentage unrestricted volume measurements | P.I. WORKS | 28.552 | 0072 | 1 | Rel-16 | A | NETSLICE-ADPM5G | agreed |
| S5-192402 | Rel-15 CR 28.552 Correction of percentage unrestricted volume measurements | P.I. Works | 28.552 | 0073 | - | Rel-15 | F | NETSLICE-ADPM5G | agreed |
| S5-192219 | Rel-16 CR TS 28.554 Add KPI of DRB Retainability | Ericsson Hungary Ltd | 28.554 | 0010 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192398 | Rel-16 CR TS 28.554 Add KPI of DRB Retainability | Ericsson Hungary Ltd | 28.554 | 0010 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | withdrawn |
| S5-192260 | Update definition of mean number of PDU sessions KPI | ETRI | 28.554 | 0011 | - | Rel-16 | F | 5G\_SLICE\_ePA | revised |
| S5-192385 | Update definition of mean number of PDU sessions KPI | ETRI | 28.554 | 0011 | 1 | Rel-16 | F | 5G\_SLICE\_ePA | revised |
| S5-192400 | Update definition of mean number of PDU sessions KPI | ETRI | 28.554 | 0011 | 2 | Rel-15 | F | NETSLICE-ADPM5G | agreed |
| S5-192261 | 5G\_SLICE\_ePA | ETRI | 28.554 | 0012 | - | Rel-16 | B | 5G\_SLICE\_ePA | withdrawn |
| S5-192147 | Rel-16 CR 28.622 Add IOCs for threshold monitoring control | Intel Finland Oy | 28.622 | 0030 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-192373 | Rel-16 CR 28.622 Add IOCs for threshold monitoring control | Intel Finland Oy | 28.622 | 0030 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192148 | Rel-16 CR 28.623 Add IOCs for threshold monitoring control | Intel Finland Oy | 28.623 | 0019 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192374 | Rel-16 CR 28.623 Add IOCs for threshold monitoring control | Intel Finland Oy | 28.623 | 0019 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | withdrawn |
| S5-192191 | Update Generic NRM Solution Set to support JSON | Nokia, Nokia Shanghai Bell | 28.623 | 0020 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192325 | Update Generic NRM Solution Set to support JSON | Nokia, Nokia Shanghai Bell | 28.623 | 0020 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192190 | Update State management SS to support JSON | Nokia, Nokia Shanghai Bell | 28.626 | 0007 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-192324 | Update State management SS to support JSON | Nokia, Nokia Shanghai Bell | 28.626 | 0007 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-192230 | Rel-15 CR 28.628 Correction of AAS IP Throughput load rate definition | P.I. WORKS | 28.628 | 0017 | - | Rel-15 | F | OAM\_SON\_AAS | agreed |
| S5-192185 | Correct PLMN Id definition | Ericsson Inc. | 28.658 | 0049 | - | Rel-15 | F | OAM-FMC-IRP | revised |
| S5-192322 | Correct PLMN Id definition | Ericsson Inc. | 28.658 | 0049 | 1 | Rel-16 | F | TEI16 | agreed |
| S5-192228 | Correct the DN to URI mapping rules | Nokia Germany | 32.158 | 0002 | - | Rel-15 | F | REST\_SS | revised |
| S5-192338 | Correct the DN to URI mapping rules | Nokia Germany | 32.158 | 0002 | 1 | Rel-15 | F | REST\_SS | revised |
| S5-192460 | Correct the DN to URI mapping rules | Nokia Germany | 32.158 | 0002 | 2 | Rel-15 | F | REST\_SS | not pursued |
| S5-192056 | Rel-16 CR 32.240 Introduction of AMF in charging architecture | Nokia, Nokia Shanghai Bell | 32.240 | 0409 | - | Rel-16 | B | 5GS\_Ph1\_AMFCH | agreed |
| S5-192202 | Rel-16 CR 32.254 Add message flows for convergent charging | Ericsson | 32.254 | 0004 | - | Rel-16 | B | 5GS\_Ph1\_NEFCH | revised |
| S5-192283 | Rel-16 CR 32.254 Add message flows for convergent charging | Ericsson | 32.254 | 0004 | 1 | Rel-16 | B | 5GS\_Ph1\_NEFCH | agreed |
| S5-192203 | Rel-16 CR 32.254 Adding CDR generation and handling for convergent charging | Ericsson | 32.254 | 0005 | - | Rel-16 | B | 5GS\_Ph1\_NEFCH | revised |
| S5-192284 | Rel-16 CR 32.254 Adding CDR generation and handling for convergent charging | Ericsson | 32.254 | 0005 | 1 | Rel-16 | B | 5GS\_Ph1\_NEFCH | agreed |
| S5-192121 | Rel-16 CR 32.255 offline charging service triggers for SSC modes | Huawei | 32.255 | 0043 | 2 | Rel-16 | B | OFSBI\_CH | revised |
| S5-192280 | Rel-16 CR 32.255 offline charging service triggers for SSC modes | Huawei | 32.255 | 0043 | 3 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-192122 | Rel-16 CR 32.255 offline charging service procedures | Huawei | 32.255 | 0045 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-192054 | Rel-15 CR 32.255 Correction of Qos Information | Nokia, Nokia Shanghai Bell | 32.255 | 0046 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192296 | Rel-15 CR 32.255 Correction of Qos Information | Nokia, Nokia Shanghai Bell | 32.255 | 0046 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192057 | Rel-15 CR 32.255 Correction of user information | Nokia, Nokia Shanghai Bell | 32.255 | 0047 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192299 | Rel-15 CR 32.255 Correction of user information | Nokia, Nokia Shanghai Bell | 32.255 | 0047 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192060 | Rel-15 CR 32.255 Correction of serving network function | Nokia, Nokia Shanghai Bell | 32.255 | 0048 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192302 | Rel-15 CR 32.255 Correction of serving network function | Nokia, Nokia Shanghai Bell | 32.255 | 0048 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192099 | Rel-16 CR 32.255 Correction of Trigger Conditions for FBC | Huawei | 32.255 | 0049 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192353 | Rel-16 CR 32.255 Correction of Trigger Conditions for FBC | Huawei | 32.255 | 0049 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192104 | Rel-16 CR 32.255 Remove Quota Consumption Time | Huawei | 32.255 | 0050 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192357 | Rel-16 CR 32.255 Remove Quota Consumption Time | Huawei | 32.255 | 0050 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192109 | Rel-16 CR 32.255 Add Offline only charging CHF selection | Huawei | 32.255 | 0051 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-192279 | Rel-16 CR 32.255 Add Offline only charging CHF selection | Huawei | 32.255 | 0051 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-192110 | Rel-16 CR 32.255 Add offline charging service procedures | Huawei | 32.255 | 0052 | - | Rel-16 | B | OFSBI\_CH | withdrawn |
| S5-192111 | Rel-16 CR 32.255 Add offline only charging triggers for SSC modes | Huawei | 32.255 | 0053 | - | Rel-16 | B | OFSBI\_CH | withdrawn |
| S5-192175 | Addition of message retry | Huawei | 32.255 | 0054 | - | Rel-15 | F | 5GS\_Ph1-DCH | not pursued |
| S5-192211 | Rel-16 CR 32.255 Adding Offline trigger handling in SMF | Ericsson | 32.255 | 0055 | - | Rel-16 | B | OFSBI\_CH | not pursued |
| S5-192045 | Rel-16 CR 32.260 Update description of volume based charging in IMS | China Mobile | 32.260 | 0396 | - | Rel-16 | B | VBCLTE | revised |
| S5-192276 | Rel-16 CR 32.260 Update description of volume based charging in IMS | China Mobile | 32.260 | 0396 | 1 | Rel-16 | B | VBCLTE | agreed |
| S5-192100 | Rel-16 CR 32.290 Correction of Multiple Unit Information in ChargingDataResponse | Huawei | 32.290 | 0031 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-192354 | Rel-16 CR 32.290 Correction of Multiple Unit Information in ChargingDataResponse | Huawei | 32.290 | 0031 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-192102 | Rel-16 CR 32.290 Correction of triggers in ChargingDataResponse | Huawei | 32.290 | 0032 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | not pursued |
| S5-192105 | Rel-16 CR 32.290 Addition of failure handling and failover | Huawei | 32.290 | 0033 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-192358 | Rel-16 CR 32.290 Addition of failure handling and failover | Huawei | 32.290 | 0033 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-192106 | Rel-16 CR 32.290 Addition of message retry | Huawei | 32.290 | 0034 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | merged |
| S5-192112 | Rel-16 CR 32.290 Add Offline charging Service Senario | Huawei | 32.290 | 0035 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-192281 | Rel-16 CR 32.290 Add Offline charging Service Senario | Huawei | 32.290 | 0035 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-192113 | Rel-16 CR 32.290 Add Offline charging Service Message | Huawei | 32.290 | 0036 | - | Rel-16 | B | OFSBI\_CH | not pursued |
| S5-192052 | Rel-15 CR 32.291 Correction of Qos Information | Nokia, Nokia Shanghai Bell | 32.291 | 0039 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192297 | Rel-15 CR 32.291 Correction of Qos Information | Nokia, Nokia Shanghai Bell | 32.291 | 0039 | 2 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192058 | Rel-15 CR 32.291 Correction of user information | Nokia, Nokia Shanghai Bell | 32.291 | 0042 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192300 | Rel-15 CR 32.291 Correction of user information | Nokia, Nokia Shanghai Bell | 32.291 | 0042 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192059 | Rel-15 CR 32.291 Correction of dnn data type | Nokia, Nokia Shanghai Bell | 32.291 | 0043 | - | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192061 | Rel-15 CR 32.291 Correction of serving network function | Nokia, Nokia Shanghai Bell | 32.291 | 0044 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192303 | Rel-15 CR 32.291 Correction of serving network function | Nokia, Nokia Shanghai Bell | 32.291 | 0044 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192101 | Rel-16 CR 32.291 Correction of Multiple Unit Information in ChargingDataResponse | Huawei | 32.291 | 0045 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-192355 | Rel-16 CR 32.291 Correction of Multiple Unit Information in ChargingDataResponse | Huawei | 32.291 | 0045 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-192103 | Rel-16 CR 32.291 Correction of triggers in ChargingDataResponse | Huawei | 32.291 | 0046 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-192356 | Rel-16 CR 32.291 Correction of triggers in ChargingDataResponse | Huawei | 32.291 | 0046 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-192107 | Rel-16 CR 32.291 Addition of message retry | Huawei | 32.291 | 0047 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | not pursued |
| S5-192108 | Rel-16 CR 32.291 Correction of RANSecondaryRATUsageReport occurrence | Huawei | 32.291 | 0048 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-192361 | Rel-16 CR 32.291 Correction of RANSecondaryRATUsageReport occurrence | Huawei | 32.291 | 0048 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-192114 | Rel-16 CR 32.291 Add Offline only charging service API | Huawei | 32.291 | 0049 | - | Rel-16 | B | OFSBI\_CH | not pursued |
| S5-192115 | Rel-16 CR 32.291 Add Offline only charging service operations | Huawei | 32.291 | 0050 | - | Rel-16 | B | OFSBI\_CH | not pursued |
| S5-192213 | Rel-15 CR 32.291 Correcting the Quota management Indicator in CDR | Ericsson | 32.291 | 0051 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | not pursued |
| S5-192217 | Rel-15 CR 32.291 Correcting of table for bindings | Ericsson | 32.291 | 0052 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-192218 | Rel-15 CR 32.298 Correcting of User Location Information definition | Ericsson | 32.291 | 0053 | - | Rel-15 | F | 5GS\_Ph1-DCH | withdrawn |
| S5-192249 | Rel-15 CR 32.291 Correction of UE IP Addresses | Nokia, Nokia Shanghai Bell | 32.291 | 0054 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192369 | Rel-15 CR 32.291 Correction of UE IP Addresses | Nokia, Nokia Shanghai Bell | 32.291 | 0054 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192263 | Rel-15 CR 32.291 Correction local sequence nb | Nokia, Nokia Shanghai Bell | 32.291 | 0055 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-192065 | Rel-14 CR 32.297 Correction of Release Identifier extension | Nokia, Nokia Shanghai Bell | 32.297 | 0032 | - | Rel-14 | F | TEI14 | agreed |
| S5-192066 | Rel-15 CR 32.297 Correction of Release Identifier extension | Nokia, Nokia Shanghai Bell | 32.297 | 0033 | - | Rel-15 | A | TEI14 | agreed |
| S5-192053 | Rel-15 CR 32.298 Correction of Qos Information | Nokia, Nokia Shanghai Bell | 32.298 | 0694 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192298 | Rel-15 CR 32.298 Correction of Qos Information | Nokia, Nokia Shanghai Bell | 32.298 | 0694 | 2 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192043 | Rel-16 CR 32.298 Support status of VoLTE service delivery | China Mobile | 32.298 | 0702 | - | Rel-16 | B | VBCLTE | revised |
| S5-192277 | Rel-16 CR 32.298 Support status of VoLTE service delivery | China Mobile | 32.298 | 0702 | 1 | Rel-16 | B | VBCLTE | agreed |
| S5-192062 | Rel-15 CR 32.298 Correction of serving network function | Nokia, Nokia Shanghai Bell | 32.298 | 0703 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192351 | Rel-15 CR 32.298 Correction of serving network function | Nokia, Nokia Shanghai Bell | 32.298 | 0703 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192063 | Rel-15 CR 32.298 Correction of pDUSessionId | Nokia, Nokia Shanghai Bell | 32.298 | 0704 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192352 | Rel-15 CR 32.298 Correction of pDUSessionId | Nokia, Nokia Shanghai Bell | 32.298 | 0704 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192064 | Rel-15 CR 32.298 Correction of missing fields in PDU Information | Nokia, Nokia Shanghai Bell | 32.298 | 0705 | - | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192117 | Rel-16 CR 32.298 Add offline charging data for CHF CDR | Huawei | 32.298 | 0706 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-192282 | Rel-16 CR 32.298 Add offline charging data for CHF CDR | Huawei | 32.298 | 0706 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-192120 | Rel-15 CR 32.298 Correction of user information | Nokia, Nokia Shanghai Bell | 32.298 | 0707 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192301 | Rel-15 CR 32.298 Correction of user information | Nokia, Nokia Shanghai Bell | 32.298 | 0707 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192214 | Rel-15 CR 32.298 Correcting the Used Unit Container definition | Ericsson | 32.298 | 0708 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192363 | Rel-15 CR 32.298 Correcting the Used Unit Container definition | Ericsson | 32.298 | 0708 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192215 | Rel-15 CR 32.298 Correcting spelling of timeOfFirstUsage | Ericsson | 32.298 | 0709 | - | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192248 | Rel-15 CR 32.298 Correction of UE IP Addresses | Nokia, Nokia Shanghai Bell | 32.298 | 0710 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-192368 | Rel-15 CR 32.298 Correction of UE IP Addresses | Nokia, Nokia Shanghai Bell | 32.298 | 0710 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192362 | Rel-15 CR 32.298 Correcting the Quota management Indicator in CDR | Ericsson | 32.298 | 0711 | - | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192364 | Rel-15 CR 32.298 Correcting of User Location Information definition | Ericsson | 32.298 | 0712 | - | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-192044 | Rel-16 CR 32.299 Support status of VoLTE service delivery | China Mobile | 32.299 | 0820 | - | Rel-16 | B | VBCLTE | revised |
| S5-192278 | Rel-16 CR 32.299 Support status of VoLTE service delivery | China Mobile | 32.299 | 0820 | 1 | Rel-16 | B | VBCLTE | agreed |
| S5-192118 | Add en-gNB to List of NE types and List of interfaces | Nokia, NTT DOCOMO | 32.422 | 0300 | - | Rel-15 | F | QOED | not pursued |
| S5-192119 | Add en-gNB to E-UTRAN Trace Record Content | Nokia, NTT DOCOMO | 32.423 | 0096 | - | Rel-15 | F | QOED | not pursued |
| S5-192084 | Rel-16 CR TS 32.425 Add measurements related to Secondary Node Addition for E-UTRA-NR Dual Connectivity | ZTE, China Mobile | 32.425 | 0180 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192376 | Rel-16 CR TS 32.425 Add measurements related to Secondary Node Addition for E-UTRA-NR Dual Connectivity | ZTE, China Mobile | 32.425 | 0180 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | withdrawn |
| S5-192085 | Rel-16 CR TS 32.425 Add measurements related to Secondary Node Release for E-UTRA-NR Dual Connectivity | ZTE, China Mobile | 32.425 | 0181 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192086 | Rel-16 CR TS 32.425 Add measurements related to Secondary Node Change for E-UTRA-NR Dual Connectivity | ZTE, China Mobile | 32.425 | 0182 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-192149 | Rel-16 CR 32.425 Add measurements related to WLAN connection status report | Intel Finland Oy | 32.425 | 0183 | - | Rel-16 | B | OAM\_LTE\_WLAN | agreed |

## Annex C: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Original | Title | From | Decision | Reply TDoc |
| S5-192046 |  | Resubmitted LS from ITU-T to SA5 on Draft new Recommendation E.RQST – “KPI targets for mobile networks” | ITU-T SG12 | postponed | (none) |
| S5-192047 |  | Resubmitted LS from ITU-T to SA5 - Update of Technical Report – “Transport network support of IMT-2020/5G” | ITU-T SG15 | replied to | S5-192459 |
| S5-192048 |  | LS to SA2 and SA5 on VoWiFi – VoLTE handover | GSMA | postponed | (none) |
| S5-192049 |  | Reply LS from SA2 to SA5 on Slice related Data Analytics | S2-1901294 | replied to | S5-192308 |
| S5-192050 |  | Ls from SA2 ccSA5 on providing information on SLA fulfilment to NG-RAN | S2-1901382 | replied to | S5-192309 |
| S5-192051 |  | Ls from SA4 cc SA5 on Collection of Slice Related Data Analytics from UEs | S4-190195 | noted | (none) |

### C2: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| S5-192275 | LS to SA2 on VoWiFi – VoLTE handover | SA2 | CT1 |  |
| S5-192308 | LS on Reply LS on Slice related Data Analytics | SA2 | - | S5-192049 |
| S5-192309 | Reply to: Ls from SA2 ccSA5 on providing information on SLA fulfilment to NG-RAN | SA2,RAN2 | RAN3 | S5-192050 |
| S5-192454 | LS on PCF and NEF discovery for Edge Computing | SA2 | - | - |
| S5-192459 | Reply to: Resubmitted LS from ITU-T to SA5 - Update of Technical Report – “Transport network support of IMT-2020/5G” | ITU-T SG15 | RAN, ITU-T SG13 | S5-192047 |
| S5-192310 | LS on Status of QoE work in SA5 | SA2 | - | - |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | Source | new/revised |
| S5-192150 | Updated WID Performance assurance for 5G networks including network slicing | Intel Finland Oy | WID revised |
| S5-192411 | Revised WID on NRM enhancements | Nokia, Nokia Shanghai Bell | WID revised |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Spec | vers | Doc title |
| S5-192339 | 28.405 | 0.5.0 | Draft TS 28.405 |
| S5-192346 | 28.812 | 0.4.0 | Draft TR 28.812 |
| S5-192365 | 32.845 | 0.3.0 | Draf TR 32.845 |
| S5-192366 | 32.256 | 0.1.0 | Draft TS 32.256 |
| S5-192384 | 32.160 | 1.2.0 | Draft TS 32.160 |
| S5-192390 | 28.890 | 1.2.0 | Draft TR 28.890 |
| S5-192424 | 28.861 | 0.4.0 | Draft TR 28.861 |
| S5-192433 | 28.803 | 0.4.0 | Draft TR 28.803 |
| S5-192437 | 28.804 | 0.3.0 | Draft TS 28.404 |
| S5-192450 | 28.805 | 0.4.0 | Draft TR 28.805 |
| S5-192461 | 28.804 | 0.3.0 | Draft TR 28.804 |

## Annex F: List of action items

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Meeting/Number | Agenda item | Document | Details | Responsible | Due by |
| 124/1 | 6.3 | S5-192326 | Create a stage 3 CR dependent on this CR. | SA WG5 all | 2019-05-19 |
| 124/2 | 6.3 | S5-192326 | Discuss how to handle the stage 2 and 3 misalingment with a process: responsible people, solution with draftCRs,etc… | SA5 leadership | 2019-05-19 |
| 124/3 | 6.4.7 | S5-192441 | Consider to keep the format consistency of TS 28.552 between “the existing PRB related performance measurements (5.1.1.2.1 DL Total PRB Usage, 5.1.1.2.2 UL Total PRB Usage)”and the agreed measurement “radio resource utilization of network slice”in S5 192441 | SA WG5 all | 2019-05-20 |

## Annex G: List of participants

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| TITLE | Family Name | Given Name | Role | Employer Organization | Employer Category Code | Organization Represented | Organization Represented Category Code |
| Dr. | Al-kanani | Hassan | Delegate | NEC Europe Ltd | ETSI | NEC Europe Ltd | ETSI |
| Mr. | Andrianov | Anatoly | Delegate | Nokia Germany | ETSI | Nokia | ATIS |
| Mrs. | Ayani | Zhulia | Delegate | Ericsson LM | ETSI | Ericsson Japan K.K. | ARIB |
| Mr. | Cano Soveri | Mirko | SECRETARY | ETSI | ETSI | ETSI | ETSI |
| Dr. | Chen | Ai | Delegate | China Mobile Com. Corporation | CCSA | China Mobile M2M Company Ltd. | CCSA |
| Miss | CHEN | SHAN | Delegate | Huawei Tech.(UK) Co., Ltd | ETSI | HUAWEI TECH. GmbH | ETSI |
| Mr. | Chou | Joey | Delegate | Intel Corporation (UK) Ltd | ETSI | Intel China Ltd. | CCSA |
| Dr. | Cornily | Jean Michel | ViceChairman | Orange | ETSI | Orange Spain | ETSI |
| Mr. | Costello | Tim | Delegate | BT plc | ETSI | BT plc | ETSI |
| Mr. | Edwards | Robert | Delegate | Matrixx | ETSI | Matrixx | ETSI |
| Mrs. | Gardella | Maryse | Subgrp chair | Nokia France | ETSI | Nokia Belgium | ETSI |
| Mr. | Groenendijk | Jan | Delegate | Ericsson LM | ETSI | Ericsson España S.A. | ETSI |
| Mr. | Harper | Colby | Delegate | Pivotal Commware | ATIS | Pivotal Commware | ATIS |
| Mr. | Horvat | Attila | Delegate | Huawei Technologies Sweden AB | ETSI | Huawei Technologies Co. Ltd. | ETSI |
| Mr. | IJntema | Wieger | Delegate | TNO | ETSI | KPN N.V. | ETSI |
| Mr. | Jahangir | Zeeshan | Delegate | T-Mobile USA Inc. | ATIS | T-Mobile USA Inc. | ATIS |
| Mr. | Jesske | Roland | Delegate | Deutsche Telekom AG | ETSI | Deutsche Telekom AG | ETSI |
| Mr. | Kim | Jeong Yun | Delegate | ETRI | RESEARCH PU | ETRI | TTA |
| Mr. | Klotz | Michael | Delegate | Deutsche Telekom AG | ETSI | Deutsche Telekom AG | ETSI |
| Mr. | Li | Gang | Delegate | Nanjing Ericsson Panda Com Ltd | CCSA | Nanjing Ericsson Panda Com Ltd | CCSA |
| Mr. | Li | Rihui | Delegate | ZTE Trunking Technology Corp. | CCSA | ZTE Trunking Technology Corp. | CCSA |
| Ing. | Moggio | Fabrizio | Delegate | TELECOM ITALIA S.p.A. | ETSI | TELECOM ITALIA S.p.A. | ETSI |
| Mr. | Petersen | Robert | Rapporteur | Ericsson LM | ETSI | Ericsson Telecomunicazioni SpA | ETSI |
| Miss | Ping | Jing | Delegate | Nokia Germany | ETSI | Nokia Shanghai Bell | CCSA |
| Dr. | Pollakowski | Olaf | Delegate | Nokia Germany | ETSI | Nokia Germany | ETSI |
| Mr. | Potter | Benjamin | Delegate | AT&T GNS Belgium SPRL | ETSI | AT&T GNS Belgium SPRL | ETSI |
| Mr. | Rahman | Moshiur | Delegate | HUAWEI TECH. GmbH | ETSI | Huawei Technologies Sweden AB | ETSI |
| Mr. | Smith | David K. | Delegate | AT&T GNS Belgium SPRL | ETSI | AT&T GNS Belgium SPRL | ETSI |
| Mr. | Sofuoglu | Serkan | Delegate | P.I. WORKS | ETSI | P.I. WORKS | ETSI |
| Mr. | Törnkvist | Robert | Delegate | Ericsson LM | ETSI | Ericsson France S.A.S | ETSI |
| Mr. | Tovinger | Thomas | Chairman | Ericsson LM | ETSI | Ericsson LM | ETSI |
| Mr. | Tse | Edwin | Delegate | Ericsson LM | ETSI | Ericsson Inc. | ATIS |
| Prof. | Wei | Hung-Yu | Delegate | National Taiwan University | ETSI | National Taiwan University | ETSI |
| Mr. | Xu | Ruiyue | Delegate | Huawei Tech.(UK) Co., Ltd | ETSI | Huawei Device Co., Ltd | CCSA |
| Mr. | Yao | Yizhi | Delegate | Intel Corporation (UK) Ltd | ETSI | Intel Finland Oy | ETSI |
| Mr. | Zhang | Kai | Delegate | Huawei Tech.(UK) Co., Ltd | ETSI | HuaWei Technologies Co., Ltd | CCSA |
| Mr. | Zhu | Lei | Delegate | Huawei Tech.(UK) Co., Ltd | ETSI | Huawei Technologies France | ETSI |
| Mr. | Zhu | Weihong | Delegate | ZTE Corporation | ETSI | ZTE Corporation | ETSI |
| Miss | Zou | Lan | Delegate | Huawei Tech.(UK) Co., Ltd | ETSI | HUAWEI Technologies Japan K.K. | ARIB |

## Annex H: List of future meetings

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Title | Start date | End date (OP) | Town | Country | Reference |
| SA5#125 | 2019-04-08 | 2019-04-12 | US | US | S5-125 |
| SA5#126 | 2019-05-13 | 2019-05-17 | Sophia Antipolis | FR | S5-126 |
| SA5-Ad Hoc Possibility TBC | 2019-06-24 | 2019-06-28 | Sapporo | JP | S5-ah-40151 |
| SA5#127 | 2019-08-19 | 2019-08-23 | Bruges | BE | S5-127 |
| SA5-Ad Hoc TBC | 2019-10-21 | 2019-10-25 | TBD |  | S5-ah-40152 |
| SA5-OAM Ad Hoc | 2019-10-21 | 2019-10-25 | Sophia Antipolis | FR | S5-ah-34467 |
| SA5#128 | 2019-11-18 | 2019-11-22 | China | CN | S5-128 |