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



**Meeting Report  
for  
TSG SA WG5  
meeting: 123**

**Montreal, Canada, 21/01/2019 to 25/01/2019**

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## 1 Opening of the meeting

Edwin Tse (Ericsson) welcomed the delegates to the city of Montreal on behalf of NAF. He gave some useful tips and history about the city.

## 2 Approval of the agenda

**S5-191000 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.

**S5-191001 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

**S5-191002 Report from last SA5 meeting**

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

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

### 4.2 Last SA meeting report

**S5-191305 SA5 status report at last SA meeting**

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

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

**S5-191306 SA5 results at last SA meeting**

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

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

### 4.3 Inter-organizational reports

## 5 Cross-SWG issues

### 5.1 Administrative issues at SA5 level

**S5-191003 Leaders meeting agenda**

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

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

**S5-191004 Leaders meeting minutes**

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

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

**S5-191005 SA5 Working Procedures**

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

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

**S5-191006 SA5 Meeting Facility Requirements**

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

**Decision:** The document was **withdrawn**.

**S5-191007 Process for management of draft TSs/TRs**

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

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

**S5-191008 CR Quality Check**

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

**Discussion:**

Mirko (MCC) commented that NETSLICE Rel-15 CRs with cat-B or wrong cat-F were being still sent. He recommended to start discussing a Rel-16 WID to address these changes since it was too late to keep adding features to Rel-15 and it would be hard to defend this at Plenary level.

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

**S5-191009 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

**S5-191282 Reply LS from CT4 cc SA5 on API specification and API version number maintenance**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C4-188646*

**Discussion:**

Maryse (Nokia) commented that Charging SWG would follow the guidelines in TS 29.501. Charging will answer the LS in their Charging meeting.

Olaf (Nokia) commented that CT4's requirements and SA5's were different.

Ericsson commented that this was not agreeable to them and that there were unfinished email discussions.

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

**S5-191283 Ls Response from BBF to 3GPP SA2 cc SA5 liaison S2-1811575 on ‘general status of work’**

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

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

**S5-191284 LS Response from BBF cc SA5 to 3GPP SA2 liaison S2-1812643**

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

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

**S5-191286 LS from ETSI ISG NFV to SA5 on Publication of SOL001 V 2.5.1**

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

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

**S5-191287 Lsout from ETSI NFV to 3GPP SA5 on NFV Specification Adoption**

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

**Discussion:**

Jan (Ericsson) asked whether SA5 had to create CRs to update the specifications as a result of this. An action point for OAM was created for that effect.

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

**S5-191288 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:**

ORANGE commented that they were referring to 800 series TRs, which wasn't normative and in some cases really early work that wasn't relevant anymore.

It was postponed in order to prepare a proper response.

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

**S5-191293 LS from ITU-T to SA5 on consent of Recommendation Y.3103 (formerly Y.IMT2020-BM) (reply to 3GPP TSG SA5 -LS15)**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: ITU-T SG13*

**Discussion:**

ORANGE: there are some common things, although their scope is very large. They don’t seem eager to collaborate or try to get to a converging solution.

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

**S5-191294 LS from ITU-T to SA5 on 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 considered that this should be discussed, so it was decided to postpone it.

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

### 5.4 SA5 meeting calendar

**S5-191010 SA5 Meeting Calendar**

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

**Discussion:**

Ericsson commented that RAN2 and RAN3 would be late in March 2020 so in some cases SA5 could get to those dates if our work depended on their work.

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

### 5.5 Review of the Work Plan

**S5-191011 3GPP SA5 Work Plan**

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

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

## 6 OAM&P

### 6.1 OAM&P Plenary

**S5-191012 Time Plan for OAM&P**

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

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

**S5-191338 Time Plan for OAM&P**

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

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

**S5-191013 OAM Executive Report**

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

**Decision:** The document was **revised to S5-191503**.

**S5-191503 OAM Executive Report**

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

(Replaces S5-191013)

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

**S5-191014 OAM&P SWG action list**

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

**Decision:** The document was **revised to S5-191395**.

**S5-191395 OAM&P SWG action list**

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

(Replaces S5-191014)

**Decision:** The document was **revised to S5-191493**.

**S5-191493 OAM&P SWG action list**

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

(Replaces S5-191395)

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

**S5-191015 Minutes of OAM&P SWG opening session**

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

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

**S5-191074 Improvement of handling of revisions in OAM&P SWG**

*Type: discussion For: Endorsement  
 Source: OAM&P SWG chair*

**Decision:** The document was **revised to S5-191339**.

**S5-191339 Improvement of handling of revisions in OAM&P SWG**

*Type: discussion For: Endorsement  
 Source: OAM&P SWG chair*

(Replaces S5-191074)

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

**S5-191242 LS reply on energy efficiency**

*Type: LS out For: Agreement  
 to ITU-T SG5, cc ETSI TC EE  
 Source: Orange Romania*

**Decision:** The document was **revised to S5-191344**.

**S5-191344 LS reply on energy efficiency**

*Type: LS out For: Approval  
 to ITU-T SG5, cc ETSI TC EE  
 Source: Orange Romania*

(Replaces S5-191242)

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

**S5-191271 LS on Reply on Reply LS on Slice related Data Analytics**

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

**Decision:** The document was **revised to S5-191342**.

**S5-191342 LS on Reply on Reply LS on Slice related Data Analytics**

*Type: LS out For: Approval  
 to SA2, cc SA, RAN, RAN3, RAN2  
 Source: Ericsson Telecomunicazioni SpA*

(Replaces S5-191271)

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

**S5-191280 Ls from GSMA cc SA5 on Cooperation on Generic Slice Template definition**

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

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

**S5-191289 Reply LS from RAn3 cc SA5 on QoS monitoring**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-187051*

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

**S5-191290 Ls from SA2 to SA5 on Collection of Slice Related Data Analytics from UEs**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-1813384*

**Decision:** The document was **replied to in S5-191340**.

**S5-191340 Reply to: Ls from SA2 to SA5 on Collection of Slice Related Data Analytics from UEs**

*Type: LS out For: approval  
 to SA2, cc SA, SA4, RAN, RAN WG3, RAN2  
 Source: Ericsson*

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

**S5-191291 LS from SA2 to SA5 on slice related Data Analytics**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-1813404*

**Decision:** The document was **replied to in S5-191342**.

**S5-191292 Reply LS from SA4 to SA5 on Attributes for QoE measurement collection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S4-181418*

**Decision:** The document was **replied to in S5-191343**.

**S5-191343 Reply to: Reply LS from SA4 to SA5 on Attributes for QoE measurement collection**

*Type: LS out For: approval  
 to SA4, RAN2, RAN3, CT1  
 Source: Ericsson*

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

**S5-191295 Resubmitted Ls from ITU-T to SA5 on Energy Efficiency (reply to ETSI TC EE - EE(18)053033-E)**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: ITU-T SG5*

**Decision:** The document was **replied to in S5-191344**.

**S5-191461 Overview of the 5G specification structure**

*Type: discussion For: Information  
 Source: Huawei*

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

### 6.2 New OAM&P Work Item proposals

**S5-191016 Minutes of New Work Item proposals - OAM&P**

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

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

**S5-191196 New WID on Study on non-public networks management**

*Type: SID new For: Approval  
 Source: Huawei*

**Decision:** The document was **revised to S5-191345**.

**S5-191345 New Study on non-public networks management**

*Type: SID new For: Agreement  
 Source: Huawei*

(Replaces S5-191196)

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

**S5-191232 New SID: Study on management and orchestration aspects with integrated satellite components in a 5G networks**

*Type: SID new For: Approval  
 Source: THALES*

**Decision:** The document was **revised to S5-191346**.

**S5-191346 New SID: Study on management and orchestration aspects with integrated satellite components in a 5G network**

*Type: SID new For: Agreement  
 Source: THALES*

(Replaces S5-191232)

**Decision:** The document was **revised to S5-191412**.

**S5-191412 New SID: Study on management and orchestration aspects with integrated satellite components in a 5G network**

*Type: SID new For: Agreement  
 Source: THALES*

(Replaces S5-191346)

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

**S5-191235 Discussion on a new Work Item proposal on integration of 3GPP and ONAP**

*Type: discussion For: Endorsement  
 Source: AT&T, Deutsche Telekom, Ericsson, Huawei, Nokia, Orange*

**Decision:** The document was **revised to S5-191347**.

**S5-191347 Discussion on a new Work Item proposal on integration of 3GPP and ONAP**

*Type: discussion For: Endorsement  
 Source: AT&T, Deutsche Telekom, Ericsson, Huawei, Nokia, Orange*

(Replaces S5-191235)

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

**S5-191237 New WID proposal on integration of ONAP and 3GPP management framework**

*Type: WID new For: Approval  
 Source: AT&T, Orange*

**Decision:** The document was **revised to S5-191348**.

**S5-191348 New WID proposal on integration of ONAP and 3GPP management framework**

*Type: WID new For: Agreement  
 Source: AT&T, Orange,Deutsche Telekom*

(Replaces S5-191237)

**Decision:** The document was **revised to S5-191413**.

**S5-191413 New WID proposal on integration of ONAP and 3GPP management framework**

*Type: WID new For: Agreement  
 Source: AT&T, Orange,Deutsche Telekom*

(Replaces S5-191348)

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

**S5-191303 Supporting document for S5-19123 (Proposed New SID on Management and orchestration aspects with integrated satellite components in a 5G networks)**

*Type: discussion For: Discussion  
 Source: THALES*

**Abstract:**

A set of slides to support the introduction of S5-19123

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

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

**S5-191017 Minutes of OAM&P Maintenance and Rel-16 small Enhancements**

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

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

**S5-191066 CR Rel-15 28.552 Revise performance measurements for UDM**

*Type: CR For: (not specified)  
 28.552 v15.1.0 CR-0038 Cat: F (Rel-15)  
  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191349**.

**S5-191349 CR Rel-15 28.552 Revise performance measurements for UDM**

*Type: CR For: -  
 28.552 v15.1.0 CR-0038 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei Telecommunication India*

(Replaces S5-191066)

**Decision:** The document was **revised to S5-191414**.

**S5-191414 CR Rel-15 28.552 Revise performance measurements for UDM**

*Type: CR For: -  
 28.552 v15.1.0 CR-0038 rev 2 Cat: F (Rel-15)  
  
 Source: Huawei Telecommunication India*

(Replaces S5-191349)

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

**S5-191067 CR Rel-16 28.552 Revise performance measurements for UDM**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0039 Cat: A (Rel-16)  
  
 Source: Huawei Telecommunication India*

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

**S5-191350 CR Rel-16 28.552 Revise performance measurements for UDM**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0039 rev 1 Cat: F (Rel-16)  
  
 Source: Huawei Telecommunication India*

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

**S5-191068 CR Rel-15 28.554 Revise KPI subscribers of single network slice instance through UDM**

*Type: CR For: Agreement  
 28.554 v15.1.0 CR-0005 Cat: F (Rel-15)  
  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191351**.

**S5-191351 CR Rel-15 28.554 Revise KPI subscribers of single network slice instance through UDM**

*Type: CR For: Agreement  
 28.554 v15.1.0 CR-0005 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei Telecommunication India*

(Replaces S5-191068)

**Decision:** The document was **revised to S5-191494**.

**S5-191494 CR Rel-15 28.554 Revise KPI subscribers of single network slice instance through UDM**

*Type: CR For: Agreement  
 28.554 v15.1.0 CR-0005 rev 2 Cat: F (Rel-15)  
  
 Source: Huawei Telecommunication India*

(Replaces S5-191351)

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

**S5-191069 CR Rel-16 28.554 Revise KPI subscribers of single network slice instance through UDM**

*Type: CR For: Agreement  
 28.554 v15.1.0 CR-0006 Cat: A (Rel-16)  
  
 Source: Huawei Telecommunication India*

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

**S5-191352 CR Rel-16 28.554 Revise KPI subscribers of single network slice instance through UDM**

*Type: CR For: Agreement  
 28.554 v15.1.0 CR-0006 rev 1 Cat: A (Rel-16)  
  
 Source: Huawei Telecommunication India*

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

**S5-191075 Update State management data definition Solution Set to support JSON**

*Type: CR For: Agreement  
 28.626 v15.0.0 CR-0006 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191353 Update State management data definition Solution Set to support JSON**

*Type: CR For: Agreement  
 28.626 v15.0.0 CR-0006 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191077 R15 CR 28.541 Add definition of beam IOC**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0042 Cat: B (Rel-15)  
  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S5-191354**.

**S5-191354 R15 CR 28.541 Add NRM Info Model definitions for beam managed object class**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0042 rev 1 Cat: B (Rel-15)  
  
 Source: Pivotal Commware, Intel, PIWorks, ZTE*

(Replaces S5-191077)

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

**S5-191078 R15 CR TS 28.532 change notificationIRP to notificationMnSProducer**

*Type: CR For: Agreement  
 28.532 v15.1.0 CR-0027 Cat: F (Rel-15)  
  
 Source: ZTE Corporation*

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

**S5-191082 Cell and frequency relation**

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

**Decision:** The document was **revised to S5-191355**.

**S5-191355 Cell and frequency relation**

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

(Replaces S5-191082)

**Decision:** The document was **revised to S5-191500**.

**S5-191500 Cell and frequency relation**

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

(Replaces S5-191355)

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

**S5-191084 CR Rel-15 28541 Add NR attributes**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0043 Cat: F (Rel-15)  
  
 Source: Ericsson Inc.*

(Replaces S5-186363)

**Decision:** The document was **revised to S5-191356**.

**S5-191356 CR Rel-15 28541 Add NR attributes**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0043 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson Inc.*

(Replaces S5-191084)

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

**S5-191085 TS 28541 use of nCI and plmnIdList**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0044 Cat: F (Rel-15)  
  
 Source: Ericsson Hungary Ltd*

**Decision:** The document was **revised to S5-191357**.

**S5-191357 TS 28541 correct the use of nCI and plmnIdList**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0044 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson Hungary Ltd*

(Replaces S5-191085)

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

**S5-191116 Add exposure governance related use case and business level requirement**

*Type: CR For: Agreement  
 28.500 v15.0.0 CR-0006 Cat: F (Rel-15)  
  
 Source: Huawei Telecommunication India*

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

**S5-191117 Add exposure governance related use case and business level requirement**

*Type: CR For: Agreement  
 28.530 v15.1.0 CR-0004 Cat: F (Rel-16)  
  
 Source: Huawei Telecommunication India*

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

**S5-191118 Add exposure governance related use case and business level requirement**

*Type: CR For: Agreement  
 28.530 v15.1.0 CR-0005 Cat: F (Rel-15)  
  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191358**.

**S5-191358 Add exposure governance related use case and business level requirement**

*Type: CR For: Agreement  
 28.530 v15.1.0 CR-0005 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei Telecommunication India*

(Replaces S5-191118)

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

**S5-191134 Rel-15 CR TS 28.531 Update management services tables**

*Type: CR For: Approval  
 28.531 v15.1.0 CR-0012 Cat: F (Rel-15)  
  
 Source: Huawei*

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

**S5-191135 Rel-16 CR TS 28.531 Update management services tables**

*Type: CR For: Approval  
 28.531 v16.0.0 CR-0013 Cat: A (Rel-16)  
  
 Source: Huawei*

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

**S5-191136 Rel-15 CR TS 28.531 Correction on procedure of Network Slice Subnet Instance Deallocation**

*Type: CR For: Approval  
 28.531 v15.1.0 CR-0014 Cat: F (Rel-15)  
  
 Source: Huawei*

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

**S5-191137 Rel-16 CR TS 28.531 Correction on procedure of Network Slice Subnet Instance Deallocation**

*Type: CR For: Approval  
 28.531 v16.0.0 CR-0015 Cat: A (Rel-16)  
  
 Source: Huawei*

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

**S5-191138 Rel-15 CR TS 28.532 Add stage 2 and stage 3 definition for MnS Query**

*Type: CR For: Approval  
 28.532 v15.1.0 CR-0028 Cat: B (Rel-15)  
  
 Source: Huawei*

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

**S5-191139 Rel-15 CR TS 28.541 Remove duplicate definition for ExternalNRCellCU**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0045 Cat: F (Rel-15)  
  
 Source: Huawei*

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

**S5-191140 Rel-15 CR TS 28.541 Correct class diagram for view on external entities**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0046 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191462**.

**S5-191462 Rel-15 CR TS 28.541 Correct class diagram for view on external entities**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0046 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-191140)

**Decision:** The document was **revised to S5-191501**.

**S5-191501 Rel-15 CR TS 28.541 Correct class diagram for view on external entities**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0046 rev 2 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-191462)

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

**S5-191141 Rel-15 CR TS 28.532 Correction of references**

*Type: CR For: Approval  
 28.532 v15.1.0 CR-0029 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191359**.

**S5-191359 Rel-15 CR TS 28.532 Correction of references**

*Type: CR For: Approval  
 28.532 v15.1.0 CR-0029 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-191141)

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

**S5-191142 Rel-15 CR TS 28.541 Correct the definition for resourceSharingLevel**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0047 Cat: F (Rel-15)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191440**.

**S5-191440 Rel-15 CR TS 28.541 Correct the definition for resourceSharingLevel**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0047 rev 1 Cat: F (Rel-15)  
  
 Source: Huawei*

(Replaces S5-191142)

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

**S5-191149 CR Rel-15 28.550 Add the missing RESTFul API definitions**

*Type: CR For: Agreement  
 28.550 v15.0.0 CR-0001 Cat: F (Rel-15)  
  
 Source: Intel*

**Decision:** The document was **revised to S5-191397**.

**S5-191397 CR Rel-15 28.550 Add the missing RESTFul API definitions**

*Type: CR For: Agreement  
 28.550 v15.0.0 CR-0001 rev 1 Cat: F (Rel-15)  
  
 Source: Intel*

(Replaces S5-191149)

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

**S5-191150 Discussion paper on stage 3 protocol for performance data streaming**

*Type: discussion For: Endorsement  
 28.550 v..  
 Source: Intel*

**Decision:** The document was **revised to S5-191418**.

**S5-191418 Discussion paper on stage 3 protocol for performance data streaming**

*Type: discussion For: Endorsement  
 28.550 v..  
 Source: Intel*

(Replaces S5-191150)

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

**S5-191151 CR Rel-15 28.552 Editorial clean-up**

*Type: CR For: Agreement  
 28.552 v15.1.0 CR-0048 Cat: F (Rel-15)  
  
 Source: Intel, Ericsson*

**Decision:** The document was **revised to S5-191419**.

**S5-191419 CR Rel-15 28.552 Editorial clean-up**

*Type: CR For: Agreement  
 28.552 v15.1.0 CR-0048 rev 1 Cat: F (Rel-15)  
  
 Source: Intel, Ericsson*

(Replaces S5-191151)

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

**S5-191152 CR Rel-16 28.552 Editorial clean-up**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0049 Cat: F (Rel-16)  
  
 Source: Intel,Ericsson*

**Decision:** The document was **revised to S5-191420**.

**S5-191420 CR Rel-16 28.552 Editorial clean-up**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0049 rev 1 Cat: F (Rel-16)  
  
 Source: Intel,Ericsson*

(Replaces S5-191152)

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

**S5-191203 CR Rel-11 28.658 Correct PLMN ID List Type in Solution Set Stage 2**

*Type: CR For: Approval  
 28.658 v11.6.0 CR-0037 rev 2 Cat: F (Rel-11)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-187427)

**Decision:** The document was **revised to S5-191421**.

**S5-191421 CR Rel-11 28.658 Correct PLMN ID List Type in Stage 2**

*Type: CR For: Approval  
 28.658 v11.6.0 CR-0037 rev 3 Cat: F (Rel-11)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-191203)

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

**S5-191204 Correction of references**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0048 Cat: F (Rel-15)  
  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-191427**.

**S5-191427 Correction of references**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0048 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson España S.A.*

(Replaces S5-191204)

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

**S5-191205 CR Rel-12 28.658 Correct PLMN ID List Type in Solution Set Stage 2**

*Type: CR For: Approval  
 28.658 v12.2.0 CR-0038 rev 2 Cat: A (Rel-12)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-187428)

**Decision:** The document was **revised to S5-191422**.

**S5-191422 CR Rel-12 28.658 Correct PLMN ID List Type in Stage 2**

*Type: CR For: Approval  
 28.658 v12.2.0 CR-0038 rev 3 Cat: A (Rel-12)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-191205)

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

**S5-191206 CR Rel-13 28.658 Correct PLMN ID List Type in Solution Set Stage 2**

*Type: CR For: Approval  
 28.658 v13.1.0 CR-0039 rev 2 Cat: A (Rel-13)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-187429)

**Decision:** The document was **revised to S5-191423**.

**S5-191423 CR Rel-13 28.658 Correct PLMN ID List Type in Stage 2**

*Type: CR For: Approval  
 28.658 v13.1.0 CR-0039 rev 3 Cat: A (Rel-13)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-191206)

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

**S5-191207 Removal of reference to a temporary joint working group**

*Type: CR For: Approval  
 32.156 v15.1.0 CR-0022 Cat: F (Rel-15)  
  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-191428**.

**S5-191428 Removal of reference to a temporary joint working group**

*Type: CR For: Approval  
 32.156 v15.1.0 CR-0022 rev 1 Cat: A (Rel-15)  
  
 Source: Ericsson España S.A.*

(Replaces S5-191207)

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

**S5-191208 CR Rel-14 28.658 Correct PLMN ID List Type in Solution Set Stage 2**

*Type: CR For: Approval  
 28.658 v14.1.0 CR-0040 rev 2 Cat: A (Rel-14)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-187430)

**Decision:** The document was **revised to S5-191424**.

**S5-191424 CR Rel-14 28.658 Correct PLMN ID List Type in Stage 2**

*Type: CR For: Approval  
 28.658 v14.1.0 CR-0040 rev 3 Cat: A (Rel-14)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-191208)

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

**S5-191209 Removal of reference to a temporary joint working group**

*Type: CR For: Approval  
 32.156 v16.0.0 CR-0023 Cat: A (Rel-16)  
  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-191429**.

**S5-191429 Removal of reference to a temporary joint working group**

*Type: CR For: Approval  
 32.156 v16.0.0 CR-0023 rev 1 Cat: A (Rel-16)  
  
 Source: Ericsson España S.A.*

(Replaces S5-191209)

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

**S5-191210 CR Rel-15 28.658 Correct PLMN ID List Type in Solution Set Stage 2**

*Type: CR For: Approval  
 28.658 v15.3.0 CR-0041 rev 2 Cat: A (Rel-15)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-187431)

**Decision:** The document was **revised to S5-191425**.

**S5-191425 CR Rel-15 28.658 Correct PLMN ID List Type in Stage 2**

*Type: CR For: Approval  
 28.658 v15.3.0 CR-0041 rev 3 Cat: A (Rel-15)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-191210)

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

**S5-191211 CR Rel-16 28.658 Correct PLMN ID List Type in Solution Set Stage 2**

*Type: CR For: Approval  
 28.658 v16.0.0 CR-0043 Cat: A (Rel-16)  
  
 Source: Ericsson GmbH, Eurolab*

**Decision:** The document was **revised to S5-191426**.

**S5-191426 CR Rel-16 28.658 Correct PLMN ID List Type in Stage 2**

*Type: CR For: Approval  
 28.658 v16.0.0 CR-0043 rev 1 Cat: A (Rel-16)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-191211)

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

**S5-191212 Resolution of Editor's note**

*Type: CR For: Approval  
 28.658 v12.2.0 CR-0044 Cat: F (Rel-12)  
  
 Source: Ericsson España S.A.*

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

**S5-191213 Resolution of Editor's note**

*Type: CR For: Approval  
 28.658 v13.1.0 CR-0045 Cat: A (Rel-13)  
  
 Source: Ericsson España S.A.*

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

**S5-191214 Resolution of Editor's note**

*Type: CR For: Approval  
 28.658 v14.1.0 CR-0046 Cat: A (Rel-14)  
  
 Source: Ericsson España S.A.*

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

**S5-191215 Resolution of Editor's note**

*Type: CR For: Approval  
 28.658 v15.3.0 CR-0047 Cat: A (Rel-15)  
  
 Source: Ericsson España S.A.*

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

**S5-191216 Resolution of Editor's note**

*Type: CR For: Approval  
 28.658 v16.0.0 CR-0048 Cat: A (Rel-16)  
  
 Source: Ericsson España S.A.*

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

**S5-191217 CR Rel-11 28.659 Correct PLMN ID Type in Solution Set Stage 3**

*Type: CR For: Approval  
 28.659 v11.6.0 CR-0028 rev 2 Cat: F (Rel-11)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-187432)

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

**S5-191218 CR Rel-12 28.659 Correct PLMN ID Type in Solution Set Stage 3**

*Type: CR For: Approval  
 28.659 v12.2.0 CR-0029 rev 2 Cat: A (Rel-12)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-187433)

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

**S5-191219 CR Rel-13 28.659 Correct PLMN ID Type in Solution Set Stage 3**

*Type: CR For: Approval  
 28.659 v13.1.0 CR-0030 rev 2 Cat: A (Rel-13)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-187434)

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

**S5-191220 CR Rel-14 28.659 Correct PLMN ID Type in Solution Set Stage 3**

*Type: CR For: Approval  
 28.659 v14.2.0 CR-0031 rev 2 Cat: A (Rel-14)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-187435)

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

**S5-191221 CR Rel-15 28.659 Correct PLMN ID Type in Solution Set Stage 3**

*Type: CR For: Approval  
 28.659 v15.2.0 CR-0032 rev 2 Cat: A (Rel-15)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-187436)

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

**S5-191222 CR Rel-16 28.659 Correct PLMN ID Type in Solution Set Stage 3**

*Type: CR For: Approval  
 28.659 v16.0.0 CR-0034 Cat: A (Rel-16)  
  
 Source: Ericsson GmbH, Eurolab*

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

**S5-191241 Update Generic NRM Solution Set to support JSON**

*Type: CR For: Agreement  
 28.541 v15.1.0 CR-0049 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191261 Add read-only NRM Info Model definitions for NRBeam IOC and attributes**

*Type: CR For: Approval  
 28.541 v15.1.0 CR-0050 Cat: C (Rel-15)  
  
 Source: Pivotal Commware*

**Abstract:**

Add read-only NRM Info Model definitions for NRBeam IOC and attributes

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

**S5-191437 Removal of reference to a temporary joint working group**

*Type: CR For: Agreement  
 32.156 v12.1.0 CR-0024 Cat: A (Rel-12)  
  
 Source: Ericsson*

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

**S5-191438 Removal of reference to a temporary joint working group**

*Type: CR For: Agreement  
 32.156 v13.1.0 CR-0025 Cat: A (Rel-13)  
  
 Source: Ericsson*

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

**S5-191439 Removal of reference to a temporary joint working group**

*Type: CR For: Agreement  
 32.156 v14.1.0 CR-0026 Cat: A (Rel-14)  
  
 Source: Ericsson*

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

**S5-191447 Removal of reference to a temporary joint working group**

*Type: CR For: Agreement  
 32.156 v11.3.0 CR-0027 Cat: F (Rel-11)  
  
 Source: Ericsson*

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

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

#### 6.4.1 Management of QoE measurement collection

**S5-191018 Minutes of Management of QoE measurement collection**

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

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

**S5-191296 pCR R16 28.307-010 Including DASH and MTSI in Scope**

*Type: pCR For: (not specified)  
 28.307 v0.1.0  
 Source: Ericsson*

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

**S5-191297 pCR R16 28.307-010 Restrict to UMTS and LTE**

*Type: pCR For: (not specified)  
 28.307 v0.1.0  
 Source: Ericsson*

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

**S5-191298 pCR R16 28.404-050 Introduce the use case and requirement for changing QoE measurement collection job**

*Type: pCR For: (not specified)  
 28.404 v0.5.0  
 Source: Ericsson*

**Decision:** The document was **revised to S5-191361**.

**S5-191361 pCR R16 28.404-050 Introduce the use case and requirement for changing QoE measurement collection job**

*Type: pCR For: -  
 28.404 v0.5.0  
 Source: Ericsson*

(Replaces S5-191298)

**Decision:** The document was **revised to S5-191415**.

**S5-191415 pCR R16 28.404-050 Introduce the use case and requirement for changing QoE measurement collection job**

*Type: pCR For: -  
 28.404 v0.5.0  
 Source: Ericsson*

(Replaces S5-191361)

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

**S5-191299 pCR R16 28.404-050 Refer to specification level requirements and use cases**

*Type: pCR For: (not specified)  
 28.404 v0.5.0  
 Source: Ericsson*

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

**S5-191300 Presentation of Specification to TSG: TS 28.404**

*Type: TS or TR cover For: (not specified)  
 Source: Ericsson*

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

**S5-191360 Draft TS 28.307**

*Type: draft TS For: Approval  
 28.307 v0.2.0  
 Source: Ericsson*

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

**S5-191362 Draft TS 28.404**

*Type: draft TS For: Approval  
 28.404 v0.6.0  
 Source: Ericsson*

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

#### 6.4.2 Energy Efficiency of 5G

**S5-191019 Minutes of Energy effciency of 5G**

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

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

**S5-191038 pCR TS 28.310 – Add use cases and requirements on data streaming**

*Type: pCR For: Approval  
 28.310 v0.2.0  
 Source: Orange Romania*

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

**S5-191039 pCR TS 28.310 – Add use case on PEE fault supervision, actor roles and telecommunication resources**

*Type: pCR For: Approval  
 28.310 v0.2.0  
 Source: Orange Romania*

**Decision:** The document was **revised to S5-191364**.

**S5-191364 pCR TS 28.310 – Add use case on PEE fault supervision, actor roles and telecommunication resources**

*Type: pCR For: Approval  
 28.310 v0.2.0  
 Source: Orange Romania*

(Replaces S5-191039)

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

**S5-191040 Add Power, Energy and Environmental (PEE) measurements and related use case description**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0037 Cat: B (Rel-16)  
  
 Source: Orange Romania*

**Decision:** The document was **revised to S5-191365**.

**S5-191365 Add Power, Energy and Environmental (PEE) measurements and related use case description**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0037 rev 1 Cat: B (Rel-16)  
  
 Source: Orange Romania*

(Replaces S5-191040)

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

**S5-191265 Discussion paper around Data Volume measurement for EE**

*Type: discussion For: Endorsement  
 28.310 v..  
 Source: Ericsson GmbH, Eurolab*

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

**S5-191266 CR Rel-16 28.552 Add PDCP data volume measurements for EE**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0055 Cat: B (Rel-16)  
  
 Source: Ericsson GmbH, Eurolab*

**Decision:** The document was **revised to S5-191366**.

**S5-191366 CR Rel-16 28.552 Add PDCP data volume measurements for EE**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0055 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-191266)

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

**S5-191363 Draft TS 28.310**

*Type: draft TS For: Approval  
 28.310 v0.3.0  
 Source: ORANGE*

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

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

**S5-191020 Minutes of Study on OAM aspects of LTE and WLAN integration**

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

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

**S5-191164 CR Rel-16 28.658 Enhance ENBFunction for LWIP management**

*Type: CR For: Agreement  
 28.658 v16.0.0 CR-0042 Cat: B (Rel-16)  
  
 Source: Intel*

**Decision:** The document was **revised to S5-191367**.

**S5-191367 CR Rel-16 28.658 Enhance ENBFunction for LWIP management**

*Type: CR For: Agreement  
 28.658 v16.0.0 CR-0042 rev 1 Cat: B (Rel-16)  
  
 Source: Intel*

(Replaces S5-191164)

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

**S5-191165 CR Rel-16 28.659 Enhance ENBFunction for LWIP management**

*Type: CR For: Agreement  
 28.659 v16.0.0 CR-0033 Cat: B (Rel-16)  
  
 Source: Intel*

**Decision:** The document was **revised to S5-191368**.

**S5-191368 CR Rel-16 28.659 Enhance ENBFunction for LWIP management**

*Type: CR For: Agreement  
 28.659 v16.0.0 CR-0033 rev 1 Cat: B (Rel-16)  
  
 Source: Intel*

(Replaces S5-191165)

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

**S5-191166 CR Rel-16 32.425 Add measurements related to user data transmission via WLAN for LWIP**

*Type: CR For: Agreement  
 32.425 v16.1.0 CR-0178 Cat: B (Rel-16)  
  
 Source: Intel*

**Decision:** The document was **revised to S5-191369**.

**S5-191369 CR Rel-16 32.425 Add measurements related to user data transmission via WLAN for LWIP**

*Type: CR For: Agreement  
 32.425 v16.1.0 CR-0178 rev 1 Cat: B (Rel-16)  
  
 Source: Intel*

(Replaces S5-191166)

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

**S5-191167 CR Rel-16 32.425 Add measurements related to RRC procedures for LWIP**

*Type: CR For: Agreement  
 32.425 v16.1.0 CR-0179 Cat: B (Rel-16)  
  
 Source: Intel*

**Decision:** The document was **revised to S5-191370**.

**S5-191370 CR Rel-16 32.425 Add measurements related to RRC procedures for LWIP**

*Type: CR For: Agreement  
 32.425 v16.1.0 CR-0179 rev 1 Cat: B (Rel-16)  
  
 Source: Intel*

(Replaces S5-191167)

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

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

**S5-191021 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

**S5-191022 Minutes of Methodology for 5G management specifications**

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

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

**S5-191083 YANG solution style guide**

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

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

**S5-191224 Discussion paper on stage 2 template for data types**

*Type: discussion For: Endorsement  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191225 pCR 32.160 Implement Edithelp comments**

*Type: pCR For: Approval  
 32.160 v1.0.1  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191226 pCR 32.160 Update editors note on attributes**

*Type: pCR For: Approval  
 32.160 v1.0.1  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191227 pCR 32.160 Introduce stage 2 template for data types**

*Type: pCR For: Approval  
 32.160 v1.0.1  
 Source: Ericsson Telecomunicazioni SpA*

**Decision:** The document was **revised to S5-191371**.

**S5-191371 pCR 32.160 Introduce stage 2 template for data types**

*Type: pCR For: Approval  
 32.160 v1.0.1  
 Source: Ericsson Telecomunicazioni SpA*

(Replaces S5-191227)

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

**S5-191264 Some thoughts on XML, JSON and YANG style guides**

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

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

**S5-191372 Draft TS 32.160**

*Type: draft TS For: Approval  
 32.160 v1.1.0  
 Source: Ericsson*

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

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

**S5-191023 Minutes of Intent driven management service for mobile networks**

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

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

**S5-191062 pCR 28.812 Role of a formal language**

*Type: pCR For: (not specified)  
 28.812 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191063 pCR 28.812 Abstraction versus layering**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191064 pCR 28.812 BSS layer intent scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

**Decision:** The document was **revised to S5-191373**.

**S5-191373 pCR 28.812 BSS layer intent scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

(Replaces S5-191064)

**Decision:** The document was **revised to S5-191416**.

**S5-191416 pCR 28.812 BSS layer intent scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

(Replaces S5-191373)

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

**S5-191065 pCR 28.812 Physical layer intent scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

**Decision:** The document was **revised to S5-191374**.

**S5-191374 pCR 28.812 Physical layer intent scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

(Replaces S5-191065)

**Decision:** The document was **revised to S5-191487**.

**S5-191487 pCR 28.812 Physical layer intent scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

(Replaces S5-191374)

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

**S5-191120 pCR 28.812 Reorganize clause 5 to categorize the scenarios**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191375**.

**S5-191375 pCR 28.812 Reorganize clause 5 to categorize the scenarios**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Huawei*

(Replaces S5-191120)

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

**S5-191121 pCR 28.812 Add description for intent-CSP and Intent-NOP**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191377**.

**S5-191377 pCR 28.812 Add description for intent-CSP and Intent-NOP**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Huawei*

(Replaces S5-191121)

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

**S5-191122 pCR 28.812 Add intent driven virtualized NE deployment scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191378**.

**S5-191378 pCR 28.812 Add intent driven virtualized NE deployment scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Huawei*

(Replaces S5-191122)

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

**S5-191123 pCR 28.812 Update clause 4.1.3 Intent expression**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191379**.

**S5-191379 pCR 28.812 Update clause 4.1.3 Intent expression**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Huawei*

(Replaces S5-191123)

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

**S5-191124 pCR 28.812 Add description of using domain specific language for intent expression**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Huawei*

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

**S5-191199 pCR28.812 Add intent driven NSI capacity planning scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: ETRI*

**Abstract:**

This pCR proposes to add a scenario of intent-driven network slice resource capacity planning.

**Decision:** The document was **revised to S5-191380**.

**S5-191380 pCR28.812 Add intent driven NSI capacity planning scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: ETRI*

(Replaces S5-191199)

**Decision:** The document was **revised to S5-191495**.

**S5-191495 pCR28.812 Add intent driven NSI capacity planning scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: ETRI*

(Replaces S5-191380)

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

**S5-191200 pCR28.812 Add intent driven NSI performance assurance scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: ETRI*

**Abstract:**

This pCR proposes to add a scenario of intent-driven network slice instance (NSI) performance assurance.

**Decision:** The document was **revised to S5-191381**.

**S5-191381 pCR28.812 Add intent driven NSI performance assurance scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: ETRI*

(Replaces S5-191200)

**Decision:** The document was **revised to S5-191496**.

**S5-191496 pCR28.812 Add intent driven NSI performance assurance scenario**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: ETRI*

(Replaces S5-191381)

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

**S5-191376 Draft TR 28.812**

*Type: draft TR For: Approval  
 28.812 v0.3.0  
 Source: Huawei*

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

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

**S5-191024 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**.

**S5-191079 R16 CR28.552 Add RSRP measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0040 Cat: B (Rel-16)  
  
 Source: ZTE, Intel*

**Decision:** The document was **revised to S5-191382**.

**S5-191382 R16 CR28.552 Add RSRP measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0040 rev 1 Cat: B (Rel-16)  
  
 Source: ZTE, Intel*

(Replaces S5-191079)

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

**S5-191080 R16 CR28.552 Add UE Rx-Tx time difference related measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0041 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

**Decision:** The document was **revised to S5-191383**.

**S5-191383 R16 CR28.552 Add UE Rx-Tx time difference related measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0041 rev 1 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

(Replaces S5-191080)

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

**S5-191081 R16 CR28.552 Add MCS distribution measurement**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0042 Cat: B (Rel-16)  
  
 Source: ZTE Corporation*

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

**S5-191143 Rel-16 CR TS 28.552 Add measurements of CQI distribution**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0043 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191384**.

**S5-191384 Rel-16 CR TS 28.552 Add measurements of CQI distribution**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0043 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191143)

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

**S5-191144 Rel-16 CR TS 28.552 Add measurements of MCS distribution**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0044 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191441**.

**S5-191441 Rel-16 CR TS 28.552 Add measurements of MCS distribution**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0044 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei,ZTE*

(Replaces S5-191144)

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

**S5-191145 Rel-16 CR TS 28.552 Add measurements of QoS flow release**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0045 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191385**.

**S5-191385 Rel-16 CR TS 28.552 Add measurements related to QoS flow retainability**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0045 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191145)

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

**S5-191146 Rel-16 CR TS 28.554 Add KPI of E-RAB Retainability**

*Type: CR For: Approval  
 28.554 v15.1.0 CR-0007 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191386**.

**S5-191386 Rel-16 CR TS 28.554 Add KPI of QoS flow Retainability**

*Type: CR For: Approval  
 28.554 v15.1.0 CR-0007 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191146)

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

**S5-191147 Rel-16 CR TS 28.552 Add measurements of PDCP data volume in DC scenarios**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0046 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191387**.

**S5-191387 Rel-16 CR TS 28.552 Add measurements of PDCP data volume in DC scenarios**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0046 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191147)

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

**S5-191148 Rel-16 CR TS 28.552 Add QoS flow related performance measurements**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0047 Cat: B (Rel-16)  
  
 Source: Huawei, ZTE, Ericsson*

**Decision:** The document was **revised to S5-191388**.

**S5-191388 Rel-16 CR TS 28.552 Add QoS flow related performance measurements**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0047 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei, ZTE, Ericsson*

(Replaces S5-191148)

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

**S5-191153 Discussion paper on threshold monitoring**

*Type: discussion For: Endorsement  
 Source: Intel*

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

**S5-191154 CR Rel-16 28.550 Add performance threshold monitoring service**

*Type: CR For: Agreement  
 28.550 v15.0.0 CR-0002 Cat: B (Rel-16)  
  
 Source: Intel*

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

**S5-191155 CR Rel-16 28.552 Add QoS flow management related measurements for SMF**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0050 Cat: B (Rel-16)  
  
 Source: Intel*

**Decision:** The document was **revised to S5-191390**.

**S5-191390 CR Rel-16 28.552 Add QoS flow management related measurements for SMF**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0050 rev 1 Cat: B (Rel-16)  
  
 Source: Intel*

(Replaces S5-191155)

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

**S5-191163 CR Rel-16 28.552 Add service request related measurements for AMF**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0051 Cat: B (Rel-16)  
  
 Source: Intel*

**Decision:** The document was **revised to S5-191389**.

**S5-191389 CR Rel-16 28.552 Add service request related measurements for AMF**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0051 rev 1 Cat: B (Rel-16)  
  
 Source: Intel*

(Replaces S5-191163)

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

**S5-191197 Add use case and definitions of PDCP end user throughput measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0052 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191484**.

**S5-191484 Add use case and definitions of PDCP end user throughput measurements**

*Type: CR For: Agreement  
 28.552 v16.0.0 CR-0052 rev 1 Cat: B (Rel-16)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191197)

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

**S5-191198 Discussion on calculation of PDCP data volume in DC-Scenarios**

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

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

**S5-191201 CR Rel-16 28.552 Add measurements and UC related to RRC connection establishment**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0053 Cat: B (Rel-16)  
  
 Source: Ericsson GmbH, Eurolab*

**Decision:** The document was **revised to S5-191392**.

**S5-191392 CR Rel-16 28.552 Add measurements and UC related to RRC connection establishment**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0053 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-191201)

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

**S5-191202 CR Rel-16 28.552 Add measurements and UC related to setup of NG signalling connection**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0054 Cat: B (Rel-16)  
  
 Source: Ericsson GmbH, Eurolab*

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

**S5-191234 Add definitions related to Utilization KPI**

*Type: CR For: Approval  
 28.554 v15.1.0 CR-0008 Cat: B (Rel-16)  
  
 Source: ETRI*

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

**S5-191245 Discussion paper around KPI for DRB Accessibility**

*Type: discussion For: Endorsement  
 Source: Ericsson GmbH, Eurolab*

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

**S5-191248 CR R-16 28.554 Add DRB Accessibility KPI and Use Case**

*Type: CR For: Approval  
 28.554 v15.1.0 CR-0009 Cat: B (Rel-16)  
  
 Source: Ericsson GmbH, Eurolab*

**Decision:** The document was **revised to S5-191481**.

**S5-191481 CR R-16 28.554 Add DRB Accessibility KPI and Use Case**

*Type: CR For: Approval  
 28.554 v15.1.0 CR-0009 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-191248)

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

**S5-191279 R16 CR 28.552 Add Flow measurements for N3**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0056 Cat: B (Rel-16)  
  
 Source: ETRI*

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

**S5-191430 R16 CR 28.552 Add Flow measurements for N3**

*Type: CR For: Approval  
 28.552 v16.0.0 CR-0056 rev 1 Cat: B (Rel-16)  
  
 Source: ETRI*

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

**S5-191341 discussion sequence**

*Type: other For: Information  
 Source: Intel*

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

**S5-191391 LS on use case and definitions of PDCP end user throughput measurements**

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

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

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

**S5-191025 Minutes of Discovery of management services in 5G**

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

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

**S5-191109 Add discovery of MnS use cases and requirements**

*Type: CR For: Agreement  
 28.533 v15.1.0 CR-0009 Cat: B (Rel-16)  
  
 Source: Huawei Telecommunication India*

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

**S5-191110 Add general information for discovery of MnS**

*Type: CR For: Agreement  
 28.533 v15.1.0 CR-0010 Cat: B (Rel-16)  
  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191463**.

**S5-191463 Add general information for discovery of MnS**

*Type: CR For: Agreement  
 28.533 v15.1.0 CR-0010 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei Telecommunication India,Cisco*

(Replaces S5-191110)

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

**S5-191111 Add discovery of MnS capability**

*Type: CR For: Agreement  
 28.533 v15.1.0 CR-0011 Cat: B (Rel-16)  
  
 Source: Huawei Telecommunication India*

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

**S5-191112 Discussion on TS 28.533 content inconsistency and way forward**

*Type: discussion For: Discussion  
 28.533 v..  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191393**.

**S5-191393 Discussion on TS 28.533 content inconsistency and way forward**

*Type: discussion For: Discussion  
 28.533 v..  
 Source: Huawei Telecommunication India*

(Replaces S5-191112)

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

**S5-191114 Revised WID on management service discovery in 5G network management**

*Type: WID revised For: Agreement  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191394**.

**S5-191394 Revised WID on management service discovery in 5G network management**

*Type: WID revised For: Agreement  
 Source: Huawei Telecommunication India*

(Replaces S5-191114)

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

**S5-191119 Add discovery of management service use case and business level requirement**

*Type: CR For: Agreement  
 28.530 v15.1.0 CR-0006 Cat: B (Rel-16)  
  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191396**.

**S5-191396 Add discovery of management service use case and business level requirement**

*Type: CR For: Agreement  
 28.530 v15.1.0 CR-0006 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei Telecommunication India*

(Replaces S5-191119)

**Decision:** The document was **revised to S5-191488**.

**S5-191488 Add discovery of management service use case and business level requirement**

*Type: CR For: Agreement  
 28.530 v15.1.0 CR-0006 rev 2 Cat: B (Rel-16)  
  
 Source: Huawei Telecommunication India*

(Replaces S5-191396)

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

**S5-191169 pCR to DraftCR S5-187464 cleanup**

*Type: draftCR For: (not specified)  
 28.533 v15.1.0  
 Source: Cisco Systems Inc.*

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

**S5-191170 pCR to DraftCR S5-187530 cleanup**

*Type: draftCR For: (not specified)  
 28.531 v16.0.0  
 Source: Cisco Systems Inc.*

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

**S5-191223 Add deployment example for discovery of MnS**

*Type: CR For: Agreement  
 28.533 v15.1.0 CR-0012 Cat: B (Rel-16)  
  
 Source: Huawei Telecommunication India*

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

**S5-191259 Domain Names for Management Services**

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

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

**S5-191260 DN to URI mapping**

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

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

**S5-191262 Management Service discovery**

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

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

**S5-191263 Issues with the allowed character set of DNs**

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

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

#### 6.4.9 NRM enhancements

**S5-191026 Minutes of NRM enhancements**

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

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

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

**S5-191027 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**.

### 6.5 OAM&P Studies

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

**S5-191028 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**.

**S5-191061 pCR TS 28.890 - Conclusions on FM and PM**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: AT&T, ORANGE*

**Decision:** The document was **revised to S5-191436**.

**S5-191436 pCR TS 28.890 - Conclusions on FM and PM**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: AT&T, ORANGE*

(Replaces S5-191061)

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

**S5-191125 pCR 28.890 Align the term MnS and MnF**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: Huawei*

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

**S5-191126 pCR 28.890 Update clause 5.2.2.3.1 mapping 3GPP alarm notification to ONAP R3 VES JSON API**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: Huawei*

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

**S5-191127 pCR 28.890 Update clause 5.2.3.3.3 Reporting 3GPP Rel-15 PM data to DCAE R3 VES JSON Collector**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: Huawei*

**Decision:** The document was **revised to S5-191433**.

**S5-191433 pCR 28.890 Update clause 5.2.3.3.3 Reporting 3GPP Rel-15 PM data to DCAE R3 VES JSON Collector**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: Huawei*

(Replaces S5-191127)

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

**S5-191128 pCR 28.890 Add Handling of configuration notification**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: Huawei*

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

**S5-191174 pCR TR 28890 Editorial and Minor Technical Corrections**

*Type: pCR For: (not specified)  
 28.890 v1.0.2  
 Source: AT&T, Orange*

**Decision:** The document was **revised to S5-191431**.

**S5-191431 pCR TR 28890 Editorial and Minor Technical Corrections**

*Type: pCR For: -  
 28.890 v1.0.2  
 Source: AT&T, Orange, Huawei,Ericsson*

(Replaces S5-191174)

**Decision:** The document was **revised to S5-191486**.

**S5-191486 pCR TR 28890 Editorial and Minor Technical Corrections**

*Type: pCR For: -  
 28.890 v1.0.2  
 Source: AT&T, Orange, Huawei,Ericsson*

(Replaces S5-191431)

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

**S5-191267 pCR 28.890 Alarm Life Cycle management in ONAP**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: Ericsson España S.A.*

**Decision:** The document was **revised to S5-191434**.

**S5-191434 pCR 28.890 Alarm Life Cycle management in ONAP**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: Ericsson España S.A.*

(Replaces S5-191267)

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

**S5-191268 pCR 28.890 Remove non-valid information**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: Ericsson España S.A.*

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

**S5-191269 pCR 28.890 Remove proposal to modifications to 3GPP specifications**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: Ericsson España S.A.*

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

**S5-191435 pCR 28.890 Remove proposal to modifications to 3GPP specifications**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: Ericsson España S.A.*

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

**S5-191432 Draft TR 28.890**

*Type: draft TR For: Approval  
 28.890 v1.1.0  
 Source: ORANGE*

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

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

**S5-191029 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**.

**S5-191129 pCR 28.890 Replace 3GPP managment system with 3GPP MnF**

*Type: pCR For: Approval  
 28.890 v1.0.2  
 Source: Huawei*

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

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

**S5-191030 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

**S5-191031 Minutes of Study on management aspects of edge computing**

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

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

**S5-191179 pCR 28.803 use case for available UPF to support edge computing**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-191443**.

**S5-191443 pCR 28.803 use case for available UPF to support edge computing**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-191179)

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

**S5-191180 pCR 28.803 use case to NRF configuration**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-191417**.

**S5-191417 pCR 28.803 use case to NRF configuration**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-191180)

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

**S5-191181 pCR 28.803 solutions for UPF lifecycle management**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

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

**S5-191182 pCR 28.803 solutions for SMF configuration**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-191445**.

**S5-191445 pCR 28.803 solutions for SMF configuration**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-191182)

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

**S5-191183 pCR 28.803 solution for NRF configuration**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-191446**.

**S5-191446 pCR 28.803 solution for NRF configuration**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-191183)

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

**S5-191184 pCR 28.803 use case for performance measurements to support edge computing**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

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

**S5-191448 pCR 28.803 use case for performance measurements to support edge computing**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

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

**S5-191185 pCR 28.803 use case for fault management to support edge computing**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

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

**S5-191449 pCR 28.803 use case for fault management to support edge computing**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

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

**S5-191186 pCR 28.803 use case for configuration management to support edge computing**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-191450**.

**S5-191450 pCR 28.803 use case for configuration management to support edge computing**

*Type: pCR For: Approval  
 28.803 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-191186)

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

**S5-191285 LS from ETSI ISG MEC to SA5 on Information on MEC work on 5G**

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

**Decision:** The document was **replied to in S5-191442**.

**S5-191302 Reply LS on information on MEC work in 5G**

*Type: LS out For: Approval  
 to ETSI ISG MEC  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-191442**.

**S5-191442 Reply LS on information on MEC work in 5G**

*Type: LS out For: Approval  
 to ETSI ISG MEC  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-191302)

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

**S5-191444 Draft TR 28.803**

*Type: draft TR For: Approval  
 28.803 v0.3.0  
 Source: Intel*

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

#### 6.5.5 Study on tenancy concept in 5G networks and network slicing management

**S5-191032 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**.

**S5-191070 Tenancy concept isolation**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191451**.

**S5-191451 Tenancy concept isolation**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

(Replaces S5-191070)

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

**S5-191071 Problem statement and open issues of tenancy concept in 3GPP management system**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191452**.

**S5-191452 Problem statement and open issues of tenancy concept in 3GPP management system**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

(Replaces S5-191071)

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

**S5-191072 Use case of management capability exposed to tenants related to communication service**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191453**.

**S5-191453 Use case of management capability exposed to tenants related to communication service**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

(Replaces S5-191072)

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

**S5-191073 Use case of 3GPP network as tenant accessing virtual resource environment**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191454**.

**S5-191454 Use case of 3GPP network as tenant accessing virtual resource environment**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

(Replaces S5-191073)

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

**S5-191113 Add tenancy concept of multiple exposure of same MnS with different management data isolation option**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191455**.

**S5-191455 Add tenancy concept of multiple exposure of same MnS with different management data isolation option**

*Type: pCR For: Approval  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

(Replaces S5-191113)

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

**S5-191115 Use cases for tenancy concept to access MnS capability**

*Type: pCR For: Agreement  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

**Decision:** The document was **revised to S5-191456**.

**S5-191456 Use cases for tenancy concept to access MnS capability**

*Type: pCR For: Agreement  
 28.804 v0.2.0  
 Source: Huawei Telecommunication India*

(Replaces S5-191115)

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

#### 6.5.6 Study on management aspects of communication services

**S5-191033 Minutes of Study on management aspects of communication services**

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

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

**S5-191086 Add UC and requirements for UE communication service status query**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei Telecommunication India*

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

**S5-191187 pCR 28.805 Reorganizing subclauses in clause 4**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191464**.

**S5-191464 pCR 28.805 Reorganizing subclauses in clause 4**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

(Replaces S5-191187)

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

**S5-191188 pCR 28.805 Update on SLA monitoring for network slicing**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191468**.

**S5-191468 pCR 28.805 Update on SLA monitoring for network slicing**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei, Ericsson, DT*

(Replaces S5-191188)

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

**S5-191189 pCR 28.805 Update on UC of realizing a communication service instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191465**.

**S5-191465 pCR 28.805 Update on UC of realizing a communication service instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

(Replaces S5-191189)

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

**S5-191190 pCR 28.805 Update on UC of removing a communication service instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

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

**S5-191466 pCR 28.805 Update on UC of removing a communication service instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

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

**S5-191191 pCR 28.805 Solution for obtaining resource requirements for a given communication service requirement**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191469**.

**S5-191469 pCR 28.805 Solution for obtaining resource requirements for a given communication service requirement**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

(Replaces S5-191191)

**Decision:** The document was **revised to S5-191497**.

**S5-191497 pCR 28.805 Solution for obtaining resource requirements for a given communication service requirement**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

(Replaces S5-191469)

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

**S5-191192 pCR 28.805 Management aspects of NSIs shared by multiple communication services**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191467**.

**S5-191467 pCR 28.805 Management aspects of NSIs shared by multiple communication services**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

(Replaces S5-191192)

**Decision:** The document was **revised to S5-191489**.

**S5-191489 pCR 28.805 Management aspects of NSIs shared by multiple communication services**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

(Replaces S5-191467)

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

**S5-191193 pCR 28.805 Service management aspects of NSI-as-a-service**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191470**.

**S5-191470 pCR 28.805 Service management aspects of NSI-as-a-service**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

(Replaces S5-191193)

**Decision:** The document was **revised to S5-191490**.

**S5-191490 pCR 28.805 Service management aspects of NSI-as-a-service**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

(Replaces S5-191470)

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

**S5-191194 pCR 28.805 Solution for communication service instances realized in a single network slice instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191471**.

**S5-191471 pCR 28.805 Solution for communication service instances realized in a single network slice instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

(Replaces S5-191194)

**Decision:** The document was **revised to S5-191491**.

**S5-191491 pCR 28.805 Solution for communication service instances realized in a single network slice instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

(Replaces S5-191471)

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

**S5-191195 pCR 28.805 Add business roles and services related to verticals**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191458**.

**S5-191458 pCR 28.805 Add business roles and services related to verticals**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Huawei*

(Replaces S5-191195)

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

**S5-191272 Discussion paper on lifecycle management of communication services**

*Type: discussion For: Endorsement  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191459 Discussion paper on lifecycle management of communication services**

*Type: discussion For: Endorsement  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191273 pCR 28.805 Resolution of Editors note on communication service instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

**Decision:** The document was **revised to S5-191457**.

**S5-191457 pCR 28.805 Resolution of Editors note on communication service instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

(Replaces S5-191273)

**Decision:** The document was **revised to S5-191492**.

**S5-191492 pCR 28.805 Resolution of Editors note on communication service instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA,Huawei*

(Replaces S5-191457)

**Decision:** The document was **revised to S5-191498**.

**S5-191498 pCR 28.805 Resolution of Editors note on communication service instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA,Huawei*

(Replaces S5-191492)

**Decision:** The document was **revised to S5-191499**.

**S5-191499 pCR 28.805 Resolution of Editors note on communication service instance**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA,Huawei,Deutsche Telekom*

(Replaces S5-191498)

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

**S5-191274 pCR 28.805 Clarify communication service concept**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

**Decision:** The document was **revised to S5-191460**.

**S5-191460 pCR 28.805 Clarify communication service concept**

*Type: pCR For: Approval  
 28.812 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

(Replaces S5-191274)

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

**S5-191275 pCR 28.805 Use case and requirement to activate a resource communication service**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191276 pCR 28.805 Use case and requirement to create a resource communication service**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191277 pCR 28.805 Use case and requirement to de-activate a resource communication service**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191278 pCR 28.805 Use case and requirement to modify the capacity of a resource communication service**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191301 pCR 28.805 Use case and requirement for adjust network slice resources until network slice is stable**

*Type: pCR For: Approval  
 28.805 v0.2.0  
 Source: Ericsson Telecomunicazioni SpA*

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

**S5-191304 Sequence proposal for study on management aspects of communication services**

*Type: other For: Information  
 Source: Ericsson*

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

**S5-191485 Draft TR 28.805**

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

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

#### 6.5.7 Study on Self-Organizing Networks (SON) for 5G

**S5-191034 Minutes of Study on Self-Organizing Networks (SON) for 5G**

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

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

**S5-191130 Discussion on MDAS and SON**

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

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

**S5-191472 Discussion on MDAS and SON**

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

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

**S5-191131 pCR 28.861 Add concept, usecase and requirements for Automatic Radio Network Configuration Data Preparation**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191473**.

**S5-191473 pCR 28.861 Add concept, usecase and requirements for Automatic Radio Network Configuration Data Preparation**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Huawei*

(Replaces S5-191131)

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

**S5-191132 pCR 28.861 Add concept, usecase and requirements for multi-vendor plug and play NFs**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191474**.

**S5-191474 pCR 28.861 Add concept, usecase and requirements for multi-vendor plug and play NFs**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Huawei*

(Replaces S5-191132)

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

**S5-191133 pCR 28.861 Add NSI Coverage and Capacity Optimization**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191475**.

**S5-191475 pCR 28.861 Add NSI Coverage and Capacity Optimization**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Huawei*

(Replaces S5-191133)

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

**S5-191171 pCR to 28.861 E2E Service Quality Optimization**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Cisco Systems Inc.*

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

**S5-191476 pCR to 28.861 E2E Service Quality Optimization**

*Type: pCR For: -  
 28.861 v0.2.0  
 Source: Cisco Systems Inc.*

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

**S5-191172 pCR 28.861 SON in case of disaggregated RAN**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Cisco Systems Inc.*

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

**S5-191477 pCR 28.861 SON in case of disaggregated RAN**

*Type: pCR For: -  
 28.861 v0.2.0  
 Source: Cisco Systems Inc.*

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

**S5-191173 pCR to the TR 28.861 Categories of SON Actions**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Cisco Systems Inc.*

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

**S5-191478 pCR to the TR 28.861 Categories of SON Actions**

*Type: pCR For: -  
 28.861 v0.2.0  
 Source: Cisco Systems Inc.*

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

**S5-191175 pCR 28.861 restructure and corrections**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-191483**.

**S5-191483 pCR 28.861 restructure and corrections**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-191175)

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

**S5-191176 pCR 28.861 add use case for RACH optimization**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-191479**.

**S5-191479 pCR 28.861 add use case for RACH optimization**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-191176)

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

**S5-191177 pCR 28.861 revise use case for Automatic Neighbour Relation (ANR) optimization**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

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

**S5-191178 pCR 28.861 add use case for beam coverage and capacity optimization**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Intel Corporation (UK) Ltd, ZTE, Pivotal Commware*

**Decision:** The document was **revised to S5-191480**.

**S5-191480 pCR 28.861 add use case for beam coverage and capacity optimization**

*Type: pCR For: Approval  
 28.861 v0.2.0  
 Source: Intel Corporation (UK) Ltd, ZTE, Pivotal Commware*

(Replaces S5-191178)

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

**S5-191243 pCR R16 28.861-020 TR Introduction**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191244 pCR R16 28.861-020 Correction of Scope**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191246 pCR R16 28.861-020 Corrections of references**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191247 pCR R16 28.861-020 Introduction of used abbreviations**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191249 pCR R16 28.861-020 Correcting requirements**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191250 pCR R16 28.861-020 Correction of clause heading**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191251 pCR R16 28.861-020 ANR**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191252 pCR R16 28.861-020 PCI**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191253 pCR R16 28.861-020 LB**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191254 pCR R16 28.861-020 MRO**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191255 pCR R16 28.861-020 RACH**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191256 pCR R16 28.861-020 Energy saving**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191257 pCR R16 28.861-020 D-CCO**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191258 pCR R16 28.861-020 Trace and MDT**

*Type: pCR For: (not specified)  
 28.861 v0.2.0  
 Source: Ericsson*

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

**S5-191482 Draft TR 28.861**

*Type: draft TR For: Approval  
 28.861 v0.3.0  
 Source: Intel*

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

#### 6.5.8 Study on non-file-based trace reporting

**S5-191035 Minutes of Study on non-file-based trace reporting**

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

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

## 7 Charging

### 7.1 Charging Plenary

**S5-191036 CH Agenda and Time Plan**

*Type: agenda For: (not specified)  
 Source: CH SWG Chair*

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

**S5-191037 CH Executive Report**

*Type: report For: (not specified)  
 Source: CH SWG Chair*

**Decision:** The document was **revised to S5-191502**.

**S5-191502 CH Executive Report**

*Type: report For: -  
 Source: CH SWG Chair*

(Replaces S5-191037)

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

**S5-191281 LS reply from CT3 to SA5 on PRA extension for offline charging**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C3-187490*

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

### 7.2 New Charging Work Item proposals

### 7.3 Charging Maintenance and Rel-16 small Enhancements

**S5-191041 Rel-15 CR 32.291 Correction of create operation description for event**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0031 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191328**.

**S5-191328 Rel-15 CR 32.291 Correction of create operation description for event**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0031 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191041)

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

**S5-191042 Rel-15 CR 32.291 Correction of data type associated to volume**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0032 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191411**.

**S5-191411 Rel-15 CR 32.291 Correction of data type associated to volume**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0032 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191042)

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

**S5-191043 Rel-15 CR 32.291 Correction on reference for common data types**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0033 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191329**.

**S5-191329 Rel-15 CR 32.291 Correction on reference for common data types**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0033 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191043)

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

**S5-191044 Rel-15 CR 32.291 Correction of inconsistencies in data types**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0034 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191330**.

**S5-191330 Rel-15 CR 32.291 Correction of inconsistencies in data types**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0034 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191044)

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

**S5-191045 Rel-15 CR 32.298 Correction of NSSAI**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0689 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191332**.

**S5-191332 Rel-15 CR 32.298 Correction of NSSAI**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0689 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191045)

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

**S5-191046 Rel-15 CR 32.298 Correction of subscriber equipment number**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0690 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191047 Rel-15 CR 32.255 Correction of category for subscriber identifier**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0030 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191048 Rel-15 CR 32.260 Correction of GGSN field for SMF address**

*Type: CR For: Agreement  
 32.260 v15.1.0 CR-0395 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191335**.

**S5-191335 Rel-15 CR 32.260 Correction of GGSN field for SMF address**

*Type: CR For: Agreement  
 32.260 v15.1.0 CR-0395 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191048)

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

**S5-191049 Rel-15 CR 32.299 Correction of GGSN field for SMF address**

*Type: CR For: Agreement  
 32.299 v15.5.0 CR-0818 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191050 Rel-15 CR 32.290 Correction of NF Consumer Information**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0024 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191336**.

**S5-191336 Rel-15 CR 32.290 Correction of NF Consumer Information**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0024 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191050)

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

**S5-191051 Rel-15 CR 32.291 Correction of NF Consumer Information**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0035 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191398**.

**S5-191398 Rel-15 CR 32.291 Correction of NF Consumer Information**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0035 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191051)

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

**S5-191052 Rel-15 CR 32.255 Correction of NF Consumer Information**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0031 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191399**.

**S5-191399 Rel-15 CR 32.255 Correction of NF Consumer Information**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0031 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191052)

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

**S5-191053 Rel-15 CR 32.298 Correction of NF Consumer Information**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0691 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191054 Rel-15 CR 32.274 Correction of NF Consumer Information**

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

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

**S5-191055 Rel-15 CR 32.274 Correction of category Invocation result**

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

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

**S5-191056 Rel-15 CR 32.298 Correction of SMSF as NF Consumer**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0692 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191057 Rel-15 CR 32.291 Correction of SMSF as NF Consumer**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0036 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191058 Rel-15 CR 32.299 Correction of missing Presence-Reporting-Area-Node AVP**

*Type: CR For: Agreement  
 32.299 v15.5.0 CR-0819 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191059 Rel-15 CR 32.298 Correction of PresenceReportingAreaNode ASN1 syntax**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0693 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191400**.

**S5-191400 Rel-15 CR 32.298 Correction of PresenceReportingAreaNode ASN1 syntax**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0693 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191059)

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

**S5-191094 Rel-15 CR 32.291 Correction of ValidityTime data type**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0037 Cat: F (Rel-15)  
  
 Source: Huawei*

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

**S5-191156 Rel-15 CR 32.291 Correction of API versioning and externalDocs field**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0038 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191402**.

**S5-191402 Rel-15 CR 32.291 Correction of API versioning and externalDocs field**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0038 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191156)

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

**S5-191157 Rel-15 CR 32.291 Correction of Qos Information**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0039 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191158 Rel-15 CR 32.298 Correction of Qos Information**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0694 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191159 Rel-12 CR 32.298 Correction for multiple recipients in SC-SMO CDR**

*Type: CR For: Agreement  
 32.298 v12.15.0 CR-0695 Cat: F (Rel-12)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191407**.

**S5-191407 Rel-12 CR 32.298 Correction for multiple recipients in SC-SMO CDR**

*Type: CR For: Agreement  
 32.298 v12.15.0 CR-0695 rev 1 Cat: F (Rel-12)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191159)

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

**S5-191160 Rel-13 CR 32.298 Correction for multiple recipients in SC-SMO CDR**

*Type: CR For: Agreement  
 32.298 v13.11.0 CR-0696 Cat: A (Rel-13)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191325**.

**S5-191325 Rel-13 CR 32.298 Correction for multiple recipients in SC-SMO CDR**

*Type: CR For: Agreement  
 32.298 v13.11.0 CR-0696 rev 1 Cat: A (Rel-13)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191160)

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

**S5-191161 Rel-14 CR 32.298 Correction for multiple recipients in SC-SMO CDR**

*Type: CR For: Agreement  
 32.298 v14.7.0 CR-0697 Cat: A (Rel-14)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191326**.

**S5-191326 Rel-14 CR 32.298 Correction for multiple recipients in SC-SMO CDR**

*Type: CR For: Agreement  
 32.298 v14.7.0 CR-0697 rev 1 Cat: A (Rel-14)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191161)

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

**S5-191162 Rel-15 CR 32.298 Correction for multiple recipients in SC-SMO CDR**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0698 Cat: A (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191327**.

**S5-191327 Rel-15 CR 32.298 Correction for multiple recipients in SC-SMO CDR**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0698 rev 1 Cat: A (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191162)

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

**S5-191168 Rel-15 CR 32.290 Correction of SMSF as NF Consumer**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0027 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-191228 Correct usedUnitContainer to sequence of**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0699 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S5-191403**.

**S5-191403 Correct usedUnitContainer to sequence of**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0699 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson*

(Replaces S5-191228)

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

**S5-191229 Correct missing Session Identifier**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0700 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S5-191404**.

**S5-191404 Correct missing Session Identifier**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0700 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson*

(Replaces S5-191229)

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

**S5-191230 Correct missing Session Identifier**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0040 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S5-191405**.

**S5-191405 Correct missing Session Identifier**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0040 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson*

(Replaces S5-191230)

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

**S5-191231 Correct faults in yaml part**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0041 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S5-191331**.

**S5-191331 Correct faults in yaml part**

*Type: CR For: Agreement  
 32.291 v15.1.0 CR-0041 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson*

(Replaces S5-191231)

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

**S5-191233 Correct definition of Individual Partial record mechanism**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0044 Cat: F (Rel-15)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S5-191406**.

**S5-191406 Correct definition of Individual Partial record mechanism**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0044 rev 1 Cat: F (Rel-15)  
  
 Source: Ericsson*

(Replaces S5-191233)

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

**S5-191236 Correct missing error handling**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0028 Cat: F (Rel-15)  
  
 Source: Ericsson*

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

**S5-191238 Correct missing error handling**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0029 Cat: F (Rel-15)  
  
 Source: Ericsson*

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

**S5-191270 Rel-15 CR 32.298 Corrections on ASN.1 syntax and charging modules version**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0701 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-191408**.

**S5-191408 Rel-15 CR 32.298 Corrections on ASN.1 syntax and charging modules version**

*Type: CR For: Agreement  
 32.298 v15.5.1 CR-0701 rev 1 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-191270)

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

**S5-191333 Rel-15 CR 32.290 Correction of create operation for subscriber identifier**

*Type: CR For: Approval  
 32.290 v15.2.0 CR-0030 Cat: F (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

### 7.4 Rel-16 Charging

#### 7.4.1 Volume Based Charging Aspects for VoLTE

#### 7.4.2 Nchf Online and Offline Charging Services

**S5-191076 Discussion on 5G offline charging service**

*Type: discussion For: Discussion  
 Source: Huawei Telecommunication India*

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

**S5-191098 Rel-16 CR 32.255 Offline charging service**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0035 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191307**.

**S5-191307 Rel-16 CR 32.255 Offline only charging service**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0035 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191098)

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

**S5-191099 Rel-16 CR 32.290 Offline charging service**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0025 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191308**.

**S5-191308 Rel-16 CR 32.290 Offline only charging service**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0025 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191099)

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

**S5-191100 Rel-16 CR 32.255 Offline charging service selection**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0036 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191309**.

**S5-191309 Rel-16 CR 32.255 Offline only charging service selection**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0036 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191100)

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

**S5-191101 Rel-16 CR 32.255 Principles of offline charging**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0037 Cat: B (Rel-16)  
  
 Source: Huawei*

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

**S5-191102 Rel-16 CR 32.255 offline charging service CDR generation**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0038 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191310**.

**S5-191310 Rel-16 CR 32.255 offline only charging service CDR generation**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0038 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191102)

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

**S5-191103 Rel-16 CR 32.255 charging information for offline charging**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0039 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191311**.

**S5-191311 Rel-16 CR 32.255 charging information for offline only charging**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0039 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191103)

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

**S5-191104 Rel-16 CR 32.290 Offline charging service Definition**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0026 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191312**.

**S5-191312 Rel-16 CR 32.290 Offline only charging service Definition**

*Type: CR For: Agreement  
 32.290 v15.2.0 CR-0026 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191104)

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

**S5-191105 Rel-16 CR 32.255 offline charging scenario and FBC**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0040 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191313**.

**S5-191313 Rel-16 CR 32.255 offline only charging scenario and FBC**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0040 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191105)

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

**S5-191106 Rel-16 CR 32.255 offline charging scenario and QBC**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0041 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191409**.

**S5-191409 Rel-16 CR 32.255 offline only charging scenario and QBC**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0041 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191106)

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

**S5-191107 Rel-16 CR 32.255 offline charging service procedures**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0042 Cat: B (Rel-16)  
  
 Source: Huawei*

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

**S5-191108 Rel-16 CR 32.255 offline charging service triggers for SSC modes**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0043 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191410**.

**S5-191410 Rel-16 CR 32.255 offline charging service triggers for SSC modes**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0043 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191108)

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

**S5-191334 Discussion on 5G offline charging service**

*Type: discussion For: discussion  
 Source: Huawei*

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

**S5-191337 Rel-16 CR 32.255 offline charging service procedures**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0045 Cat: B (Rel-16)  
  
 Source: Huawei*

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

#### 7.4.3 Charging Enhancement of 5GC interworking with EPC

**S5-191095 Rel-16 CR 32.255 Clarification on the Charging Identifier**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0032 Cat: B (Rel-16)  
  
 Source: Huawei*

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

**S5-191096 Rel-16 CR 32.255 Addition of the Triggers for Interworking**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0033 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191316**.

**S5-191316 Rel-16 CR 32.255 Addition of the Triggers for Interworking**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0033 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191096)

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

**S5-191097 Rel-16 CR 32.255 Addition of the Message Flow for Interworking**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0034 Cat: B (Rel-16)  
  
 Source: Huawei*

**Decision:** The document was **revised to S5-191317**.

**S5-191317 Rel-16 CR 32.255 Addition of the Message Flow for Interworking**

*Type: CR For: Agreement  
 32.255 v15.1.0 CR-0034 rev 1 Cat: B (Rel-16)  
  
 Source: Huawei*

(Replaces S5-191097)

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

#### 7.4.4 Network Exposure Charging in 5G System Architecture

**S5-191239 Add convergent charging architecture**

*Type: CR For: Agreement  
 32.254 v15.1.0 CR-0002 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S5-191314**.

**S5-191314 Add convergent charging architecture**

*Type: CR For: Agreement  
 32.254 v15.1.0 CR-0002 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson*

(Replaces S5-191239)

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

**S5-191240 Add basic principles for convergent charging**

*Type: CR For: Agreement  
 32.254 v15.1.0 CR-0003 Cat: B (Rel-16)  
  
 Source: Ericsson*

**Decision:** The document was **revised to S5-191315**.

**S5-191315 Add basic principles for convergent charging**

*Type: CR For: Agreement  
 32.254 v15.1.0 CR-0003 rev 1 Cat: B (Rel-16)  
  
 Source: Ericsson*

(Replaces S5-191240)

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

#### 7.4.5 Charging AMF in 5G System Architecture Phase 1

**S5-191060 Draft TS 32.256 skeleton v0.0.0**

*Type: draft TS For: Approval  
 32.256 v0.0.0  
 Source: Nokia France*

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

### 7.5 Charging Studies

#### 7.5.1 Study on Charging Aspects of Network Slicing

**S5-191087 Rel-16 pCR TR 32.845 Addition of Key Issues and Solution for Usage based Charging**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191322**.

**S5-191322 Rel-16 pCR TR 32.845 Addition of Key Issues and Solution for Usage based Charging**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

(Replaces S5-191087)

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

**S5-191088 Rel-16 pCR TR 32.845 Addition of Key Issues and Solution for SLA based Charging**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191323**.

**S5-191323 Rel-16 pCR TR 32.845 Addition of Key Issues and Solution for SLA based Charging**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

(Replaces S5-191088)

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

**S5-191089 Rel-16 pCR TR 32.845 Addition of Use Case and Potential Charging Requirements**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191321**.

**S5-191321 Rel-16 pCR TR 32.845 Addition of Use Case and Potential Charging Requirements**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

(Replaces S5-191089)

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

**S5-191090 Rel-16 pCR TR 32.845 Addition of the References and Abbreviations**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191401**.

**S5-191401 Rel-16 pCR TR 32.845 Addition of the References and Abbreviations**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

(Replaces S5-191090)

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

**S5-191091 Rel-16 pCR TR 32.845 Introduce the Roles related Network Slicing**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191319**.

**S5-191319 Rel-16 pCR TR 32.845 Introduce the Roles related Network Slicing**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

(Replaces S5-191091)

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

**S5-191092 Rel-16 pCR TR 32.845 Introduce the Network Slicing Related Concept**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191318**.

**S5-191318 Rel-16 pCR TR 32.845 Introduce the Network Slicing Related Concept**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

(Replaces S5-191092)

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

**S5-191093 Rel-16 pCR TR 32.845 Addition of Charging Aspect Requirements**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-191320**.

**S5-191320 Rel-16 pCR TR 32.845 Addition of Charging Aspect Requirements**

*Type: pCR For: Agreement  
 32.845 v0.1.0  
 Source: Huawei*

(Replaces S5-191093)

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

**S5-191324 Draft TR 32.845**

*Type: draft TR For: Approval  
 32.845 v0.2.0  
 Source: Huawei*

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

## 8 Any Other Business

## 9 Closing of the meeting

The Chair thanked the host and the delegates for the hard work and wished the Chinese and Korean delegates Happy New Year. After this, the meeting was finished.

## Annex A: List of contribution documents

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| S5-191000 | Agenda | WG Chairman | approved |  |  |
| S5-191001 | IPR and legal declaration | WG Chairman | noted |  |  |
| S5-191002 | Report from last SA5 meeting | MCC | approved |  |  |
| S5-191003 | Leaders meeting agenda | WG Chairman | noted |  |  |
| S5-191004 | Leaders meeting minutes | WG Chairman | noted |  |  |
| S5-191005 | SA5 Working Procedures | WG Vice Chair (Huawei) | noted |  |  |
| S5-191006 | SA5 Meeting Facility Requirements | WG Vice Chair (Orange) | withdrawn |  |  |
| S5-191007 | Process for management of draft TSs/TRs | WG Chairman | noted |  |  |
| S5-191008 | CR Quality Check | MCC | noted |  |  |
| S5-191009 | Status of email approvals | WG Vice Chair (Orange) | available |  |  |
| S5-191010 | SA5 Meeting Calendar | WG Chairman | noted |  |  |
| S5-191011 | 3GPP SA5 Work Plan | MCC | noted |  |  |
| S5-191012 | Time Plan for OAM&P | WG Vice Chair (Huawei) | noted |  | - |
| S5-191013 | OAM Executive Report | WG Vice Chair (Huawei) | revised |  | S5-191503 |
| S5-191014 | OAM&P SWG action list | WG Vice Chair (Huawei) | revised |  | S5-191395 |
| S5-191015 | Minutes of OAM&P SWG opening session | WG Vice Chair (ORANGE) | noted |  |  |
| S5-191016 | Minutes of New Work Item proposals - OAM&P | WG Vice Chair (Ericsson) | noted |  |  |
| S5-191017 | Minutes of OAM&P Maintenance and Rel-16 small Enhancements | MCC | noted |  |  |
| S5-191018 | Minutes of Management of QoE measurement collection | Rapporteur (Ericsson) | noted |  |  |
| S5-191019 | Minutes of Energy effciency of 5G | Rapporteur (ORANGE) | noted |  |  |
| S5-191020 | Minutes of Study on OAM aspects of LTE and WLAN integration | Rapporteur (Intel) | noted |  |  |
| S5-191021 | Minutes of Network policy management for mobile networks based on NFV scenarios | Rapporteur (China Mobile) | withdrawn |  |  |
| S5-191022 | Minutes of Methodology for 5G management specifications | Rapporteur (Ericsson) | noted |  |  |
| S5-191023 | Minutes of Intent driven management service for mobile networks | Rapporteur (Huawei) | noted |  |  |
| S5-191024 | Minutes of Enhancement of performance assurance for 5G networks including network slicing | Rapporteur (Intel) | noted |  |  |
| S5-191025 | Minutes of Discovery of management services in 5G | Rapporteur (Huawei) | noted |  |  |
| S5-191026 | Minutes of NRM enhancements | Rapporteur (Nokia) | withdrawn |  |  |
| S5-191027 | Minutes of Trace Management in the context of Services Based Management Architecture | Rapporteur (Nokia) | withdrawn |  |  |
| S5-191028 | Minutes of Study on integration of ONAP DCAE and 3GPP management architecture | Rapporteur ORANGE) | noted |  |  |
| S5-191029 | Minutes of Study on integration of ONAP and 3GPP configuration management services for 5G networks | Rapporteur (Ericsson) | noted |  |  |
| S5-191030 | Minutes of Study on protocol enhancement for real time communication | Rapporteur(Nokia) | withdrawn |  |  |
| S5-191031 | Minutes of Study on management aspects of edge computing | Rapporteur (Intel) | noted |  |  |
| S5-191032 | Minutes of Study on tenancy concept in 5G networks and network slicing management | Rapporteur (Huawei) | noted |  |  |
| S5-191033 | Minutes of Study on management aspects of communication services | Rapporteur (Ericsson) | noted |  |  |
| S5-191034 | Minutes of Study on Self-Organizing Networks (SON) for 5G | Rapporteur (Intel) | noted |  |  |
| S5-191035 | Minutes of Study on non-file-based trace reporting | Rapporteur(Nokia) | withdrawn |  |  |
| S5-191036 | CH Agenda and Time Plan | CH SWG Chair | approved |  |  |
| S5-191037 | CH Executive Report | CH SWG Chair | revised |  | S5-191502 |
| S5-191038 | pCR TS 28.310 – Add use cases and requirements on data streaming | Orange Romania | approved |  |  |
| S5-191039 | pCR TS 28.310 – Add use case on PEE fault supervision, actor roles and telecommunication resources | Orange Romania | revised |  | S5-191364 |
| S5-191040 | Add Power, Energy and Environmental (PEE) measurements and related use case description | Orange Romania | revised |  | S5-191365 |
| S5-191041 | Rel-15 CR 32.291 Correction of create operation description for event | Nokia, Nokia Shanghai Bell | revised |  | S5-191328 |
| S5-191042 | Rel-15 CR 32.291 Correction of data type associated to volume | Nokia, Nokia Shanghai Bell | revised |  | S5-191411 |
| S5-191043 | Rel-15 CR 32.291 Correction on reference for common data types | Nokia, Nokia Shanghai Bell | revised |  | S5-191329 |
| S5-191044 | Rel-15 CR 32.291 Correction of inconsistencies in data types | Nokia, Nokia Shanghai Bell | revised |  | S5-191330 |
| S5-191045 | Rel-15 CR 32.298 Correction of NSSAI | Nokia, Nokia Shanghai Bell | revised |  | S5-191332 |
| S5-191046 | Rel-15 CR 32.298 Correction of subscriber equipment number | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-191047 | Rel-15 CR 32.255 Correction of category for subscriber identifier | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-191048 | Rel-15 CR 32.260 Correction of GGSN field for SMF address | Nokia, Nokia Shanghai Bell | revised |  | S5-191335 |
| S5-191049 | Rel-15 CR 32.299 Correction of GGSN field for SMF address | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-191050 | Rel-15 CR 32.290 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | revised |  | S5-191336 |
| S5-191051 | Rel-15 CR 32.291 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | revised |  | S5-191398 |
| S5-191052 | Rel-15 CR 32.255 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | revised |  | S5-191399 |
| S5-191053 | Rel-15 CR 32.298 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-191054 | Rel-15 CR 32.274 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-191055 | Rel-15 CR 32.274 Correction of category Invocation result | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-191056 | Rel-15 CR 32.298 Correction of SMSF as NF Consumer | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-191057 | Rel-15 CR 32.291 Correction of SMSF as NF Consumer | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-191058 | Rel-15 CR 32.299 Correction of missing Presence-Reporting-Area-Node AVP | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-191059 | Rel-15 CR 32.298 Correction of PresenceReportingAreaNode ASN1 syntax | Nokia, Nokia Shanghai Bell | revised |  | S5-191400 |
| S5-191060 | Draft TS 32.256 skeleton v0.0.0 | Nokia France | noted |  |  |
| S5-191061 | pCR TS 28.890 - Conclusions on FM and PM | AT&T, ORANGE | revised |  | S5-191436 |
| S5-191062 | pCR 28.812 Role of a formal language | Ericsson Telecomunicazioni SpA | withdrawn |  |  |
| S5-191063 | pCR 28.812 Abstraction versus layering | Ericsson Telecomunicazioni SpA | noted |  |  |
| S5-191064 | pCR 28.812 BSS layer intent scenario | Ericsson Telecomunicazioni SpA | revised |  | S5-191373 |
| S5-191065 | pCR 28.812 Physical layer intent scenario | Ericsson Telecomunicazioni SpA | revised |  | S5-191374 |
| S5-191066 | CR Rel-15 28.552 Revise performance measurements for UDM | Huawei Telecommunication India | revised |  | S5-191349 |
| S5-191067 | CR Rel-16 28.552 Revise performance measurements for UDM | Huawei Telecommunication India | not pursued |  | - |
| S5-191068 | CR Rel-15 28.554 Revise KPI subscribers of single network slice instance through UDM | Huawei Telecommunication India | revised |  | S5-191351 |
| S5-191069 | CR Rel-16 28.554 Revise KPI subscribers of single network slice instance through UDM | Huawei Telecommunication India | not pursued |  | - |
| S5-191070 | Tenancy concept isolation | Huawei Telecommunication India | revised |  | S5-191451 |
| S5-191071 | Problem statement and open issues of tenancy concept in 3GPP management system | Huawei Telecommunication India | revised |  | S5-191452 |
| S5-191072 | Use case of management capability exposed to tenants related to communication service | Huawei Telecommunication India | revised |  | S5-191453 |
| S5-191073 | Use case of 3GPP network as tenant accessing virtual resource environment | Huawei Telecommunication India | revised |  | S5-191454 |
| S5-191074 | Improvement of handling of revisions in OAM&P SWG | OAM&P SWG chair | revised |  | S5-191339 |
| S5-191075 | Update State management data definition Solution Set to support JSON | Nokia, Nokia Shanghai Bell | not pursued |  | - |
| S5-191076 | Discussion on 5G offline charging service | Huawei Telecommunication India | noted |  |  |
| S5-191077 | R15 CR 28.541 Add definition of beam IOC | ZTE Corporation | revised |  | S5-191354 |
| S5-191078 | R15 CR TS 28.532 change notificationIRP to notificationMnSProducer | ZTE Corporation | not pursued |  |  |
| S5-191079 | R16 CR28.552 Add RSRP measurements | ZTE, Intel | revised |  | S5-191382 |
| S5-191080 | R16 CR28.552 Add UE Rx-Tx time difference related measurements | ZTE Corporation | revised |  | S5-191383 |
| S5-191081 | R16 CR28.552 Add MCS distribution measurement | ZTE Corporation | merged |  | S5-191441 |
| S5-191082 | Cell and frequency relation | Ericsson Hungary Ltd | revised |  | S5-191355 |
| S5-191083 | YANG solution style guide | Ericsson Hungary Ltd | noted |  |  |
| S5-191084 | CR Rel-15 28541 Add NR attributes | Ericsson Inc. | revised | S5-186363 | S5-191356 |
| S5-191085 | TS 28541 use of nCI and plmnIdList | Ericsson Hungary Ltd | revised |  | S5-191357 |
| S5-191086 | Add UC and requirements for UE communication service status query | Huawei Telecommunication India | noted |  |  |
| S5-191087 | Rel-16 pCR TR 32.845 Addition of Key Issues and Solution for Usage based Charging | Huawei | revised |  | S5-191322 |
| S5-191088 | Rel-16 pCR TR 32.845 Addition of Key Issues and Solution for SLA based Charging | Huawei | revised |  | S5-191323 |
| S5-191089 | Rel-16 pCR TR 32.845 Addition of Use Case and Potential Charging Requirements | Huawei | revised |  | S5-191321 |
| S5-191090 | Rel-16 pCR TR 32.845 Addition of the References and Abbreviations | Huawei | revised |  | S5-191401 |
| S5-191091 | Rel-16 pCR TR 32.845 Introduce the Roles related Network Slicing | Huawei | revised |  | S5-191319 |
| S5-191092 | Rel-16 pCR TR 32.845 Introduce the Network Slicing Related Concept | Huawei | revised |  | S5-191318 |
| S5-191093 | Rel-16 pCR TR 32.845 Addition of Charging Aspect Requirements | Huawei | revised |  | S5-191320 |
| S5-191094 | Rel-15 CR 32.291 Correction of ValidityTime data type | Huawei | agreed |  |  |
| S5-191095 | Rel-16 CR 32.255 Clarification on the Charging Identifier | Huawei | postponed |  |  |
| S5-191096 | Rel-16 CR 32.255 Addition of the Triggers for Interworking | Huawei | revised |  | S5-191316 |
| S5-191097 | Rel-16 CR 32.255 Addition of the Message Flow for Interworking | Huawei | revised |  | S5-191317 |
| S5-191098 | Rel-16 CR 32.255 Offline charging service | Huawei | revised |  | S5-191307 |
| S5-191099 | Rel-16 CR 32.290 Offline charging service | Huawei | revised |  | S5-191308 |
| S5-191100 | Rel-16 CR 32.255 Offline charging service selection | Huawei | revised |  | S5-191309 |
| S5-191101 | Rel-16 CR 32.255 Principles of offline charging | Huawei | not pursued |  |  |
| S5-191102 | Rel-16 CR 32.255 offline charging service CDR generation | Huawei | revised |  | S5-191310 |
| S5-191103 | Rel-16 CR 32.255 charging information for offline charging | Huawei | revised |  | S5-191311 |
| S5-191104 | Rel-16 CR 32.290 Offline charging service Definition | Huawei | revised |  | S5-191312 |
| S5-191105 | Rel-16 CR 32.255 offline charging scenario and FBC | Huawei | revised |  | S5-191313 |
| S5-191106 | Rel-16 CR 32.255 offline charging scenario and QBC | Huawei | revised |  | S5-191409 |
| S5-191107 | Rel-16 CR 32.255 offline charging service procedures | Huawei | withdrawn |  |  |
| S5-191108 | Rel-16 CR 32.255 offline charging service triggers for SSC modes | Huawei | revised |  | S5-191410 |
| S5-191109 | Add discovery of MnS use cases and requirements | Huawei Telecommunication India | withdrawn |  |  |
| S5-191110 | Add general information for discovery of MnS | Huawei Telecommunication India | revised |  | S5-191463 |
| S5-191111 | Add discovery of MnS capability | Huawei Telecommunication India | withdrawn |  |  |
| S5-191112 | Discussion on TS 28.533 content inconsistency and way forward | Huawei Telecommunication India | revised |  | S5-191393 |
| S5-191113 | Add tenancy concept of multiple exposure of same MnS with different management data isolation option | Huawei Telecommunication India | revised |  | S5-191455 |
| S5-191114 | Revised WID on management service discovery in 5G network management | Huawei Telecommunication India | revised |  | S5-191394 |
| S5-191115 | Use cases for tenancy concept to access MnS capability | Huawei Telecommunication India | revised |  | S5-191456 |
| S5-191116 | Add exposure governance related use case and business level requirement | Huawei Telecommunication India | withdrawn |  |  |
| S5-191117 | Add exposure governance related use case and business level requirement | Huawei Telecommunication India | not pursued |  | - |
| S5-191118 | Add exposure governance related use case and business level requirement | Huawei Telecommunication India | revised |  | S5-191358 |
| S5-191119 | Add discovery of management service use case and business level requirement | Huawei Telecommunication India | revised |  | S5-191396 |
| S5-191120 | pCR 28.812 Reorganize clause 5 to categorize the scenarios | Huawei | revised |  | S5-191375 |
| S5-191121 | pCR 28.812 Add description for intent-CSP and Intent-NOP | Huawei | revised |  | S5-191377 |
| S5-191122 | pCR 28.812 Add intent driven virtualized NE deployment scenario | Huawei | revised |  | S5-191378 |
| S5-191123 | pCR 28.812 Update clause 4.1.3 Intent expression | Huawei | revised |  | S5-191379 |
| S5-191124 | pCR 28.812 Add description of using domain specific language for intent expression | Huawei | noted |  |  |
| S5-191125 | pCR 28.890 Align the term MnS and MnF | Huawei | approved |  |  |
| S5-191126 | pCR 28.890 Update clause 5.2.2.3.1 mapping 3GPP alarm notification to ONAP R3 VES JSON API | Huawei | merged |  | S5-191431 |
| S5-191127 | pCR 28.890 Update clause 5.2.3.3.3 Reporting 3GPP Rel-15 PM data to DCAE R3 VES JSON Collector | Huawei | revised |  | S5-191433 |
| S5-191128 | pCR 28.890 Add Handling of configuration notification | Huawei | noted |  |  |
| S5-191129 | pCR 28.890 Replace 3GPP managment system with 3GPP MnF | Huawei | approved |  |  |
| S5-191130 | Discussion on MDAS and SON | Huawei | noted |  | - |
| S5-191131 | pCR 28.861 Add concept, usecase and requirements for Automatic Radio Network Configuration Data Preparation | Huawei | revised |  | S5-191473 |
| S5-191132 | pCR 28.861 Add concept, usecase and requirements for multi-vendor plug and play NFs | Huawei | revised |  | S5-191474 |
| S5-191133 | pCR 28.861 Add NSI Coverage and Capacity Optimization | Huawei | revised |  | S5-191475 |
| S5-191134 | Rel-15 CR TS 28.531 Update management services tables | Huawei | agreed |  |  |
| S5-191135 | Rel-16 CR TS 28.531 Update management services tables | Huawei | agreed |  |  |
| S5-191136 | Rel-15 CR TS 28.531 Correction on procedure of Network Slice Subnet Instance Deallocation | Huawei | agreed |  |  |
| S5-191137 | Rel-16 CR TS 28.531 Correction on procedure of Network Slice Subnet Instance Deallocation | Huawei | agreed |  |  |
| S5-191138 | Rel-15 CR TS 28.532 Add stage 2 and stage 3 definition for MnS Query | Huawei | not pursued |  |  |
| S5-191139 | Rel-15 CR TS 28.541 Remove duplicate definition for ExternalNRCellCU | Huawei | agreed |  |  |
| S5-191140 | Rel-15 CR TS 28.541 Correct class diagram for view on external entities | Huawei | revised |  | S5-191462 |
| S5-191141 | Rel-15 CR TS 28.532 Correction of references | Huawei | revised |  | S5-191359 |
| S5-191142 | Rel-15 CR TS 28.541 Correct the definition for resourceSharingLevel | Huawei | revised |  | S5-191440 |
| S5-191143 | Rel-16 CR TS 28.552 Add measurements of CQI distribution | Huawei | revised |  | S5-191384 |
| S5-191144 | Rel-16 CR TS 28.552 Add measurements of MCS distribution | Huawei | revised |  | S5-191441 |
| S5-191145 | Rel-16 CR TS 28.552 Add measurements of QoS flow release | Huawei | revised |  | S5-191385 |
| S5-191146 | Rel-16 CR TS 28.554 Add KPI of E-RAB Retainability | Huawei | revised |  | S5-191386 |
| S5-191147 | Rel-16 CR TS 28.552 Add measurements of PDCP data volume in DC scenarios | Huawei | revised |  | S5-191387 |
| S5-191148 | Rel-16 CR TS 28.552 Add QoS flow related performance measurements | Huawei, ZTE, Ericsson | revised |  | S5-191388 |
| S5-191149 | CR Rel-15 28.550 Add the missing RESTFul API definitions | Intel | revised |  | S5-191397 |
| S5-191150 | Discussion paper on stage 3 protocol for performance data streaming | Intel | revised |  | S5-191418 |
| S5-191151 | CR Rel-15 28.552 Editorial clean-up | Intel, Ericsson | revised |  | S5-191419 |
| S5-191152 | CR Rel-16 28.552 Editorial clean-up | Intel,Ericsson | revised |  | S5-191420 |
| S5-191153 | Discussion paper on threshold monitoring | Intel | noted |  |  |
| S5-191154 | CR Rel-16 28.550 Add performance threshold monitoring service | Intel | not pursued |  |  |
| S5-191155 | CR Rel-16 28.552 Add QoS flow management related measurements for SMF | Intel | revised |  | S5-191390 |
| S5-191156 | Rel-15 CR 32.291 Correction of API versioning and externalDocs field | Nokia, Nokia Shanghai Bell | revised |  | S5-191402 |
| S5-191157 | Rel-15 CR 32.291 Correction of Qos Information | Nokia, Nokia Shanghai Bell | postponed |  |  |
| S5-191158 | Rel-15 CR 32.298 Correction of Qos Information | Nokia, Nokia Shanghai Bell | postponed |  |  |
| S5-191159 | Rel-12 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | revised |  | S5-191407 |
| S5-191160 | Rel-13 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | revised |  | S5-191325 |
| S5-191161 | Rel-14 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | revised |  | S5-191326 |
| S5-191162 | Rel-15 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | revised |  | S5-191327 |
| S5-191163 | CR Rel-16 28.552 Add service request related measurements for AMF | Intel | revised |  | S5-191389 |
| S5-191164 | CR Rel-16 28.658 Enhance ENBFunction for LWIP management | Intel | revised |  | S5-191367 |
| S5-191165 | CR Rel-16 28.659 Enhance ENBFunction for LWIP management | Intel | revised |  | S5-191368 |
| S5-191166 | CR Rel-16 32.425 Add measurements related to user data transmission via WLAN for LWIP | Intel | revised |  | S5-191369 |
| S5-191167 | CR Rel-16 32.425 Add measurements related to RRC procedures for LWIP | Intel | revised |  | S5-191370 |
| S5-191168 | Rel-15 CR 32.290 Correction of SMSF as NF Consumer | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S5-191169 | pCR to DraftCR S5-187464 cleanup | Cisco Systems Inc. | noted |  |  |
| S5-191170 | pCR to DraftCR S5-187530 cleanup | Cisco Systems Inc. | noted |  |  |
| S5-191171 | pCR to 28.861 E2E Service Quality Optimization | Cisco Systems Inc. | noted |  | - |
| S5-191172 | pCR 28.861 SON in case of disaggregated RAN | Cisco Systems Inc. | noted |  | - |
| S5-191173 | pCR to the TR 28.861 Categories of SON Actions | Cisco Systems Inc. | noted |  | - |
| S5-191174 | pCR TR 28890 Editorial and Minor Technical Corrections | AT&T, Orange | revised |  | S5-191431 |
| S5-191175 | pCR 28.861 restructure and corrections | Intel Corporation (UK) Ltd | revised |  | S5-191483 |
| S5-191176 | pCR 28.861 add use case for RACH optimization | Intel Corporation (UK) Ltd | revised |  | S5-191479 |
| S5-191177 | pCR 28.861 revise use case for Automatic Neighbour Relation (ANR) optimization | Intel Corporation (UK) Ltd | approved |  |  |
| S5-191178 | pCR 28.861 add use case for beam coverage and capacity optimization | Intel Corporation (UK) Ltd, ZTE, Pivotal Commware | revised |  | S5-191480 |
| S5-191179 | pCR 28.803 use case for available UPF to support edge computing | Intel Corporation (UK) Ltd | revised |  | S5-191443 |
| S5-191180 | pCR 28.803 use case to NRF configuration | Intel Corporation (UK) Ltd | revised |  | S5-191417 |
| S5-191181 | pCR 28.803 solutions for UPF lifecycle management | Intel Corporation (UK) Ltd | approved |  |  |
| S5-191182 | pCR 28.803 solutions for SMF configuration | Intel Corporation (UK) Ltd | revised |  | S5-191445 |
| S5-191183 | pCR 28.803 solution for NRF configuration | Intel Corporation (UK) Ltd | revised |  | S5-191446 |
| S5-191184 | pCR 28.803 use case for performance measurements to support edge computing | Intel Corporation (UK) Ltd | noted |  | - |
| S5-191185 | pCR 28.803 use case for fault management to support edge computing | Intel Corporation (UK) Ltd | noted |  | - |
| S5-191186 | pCR 28.803 use case for configuration management to support edge computing | Intel Corporation (UK) Ltd | revised |  | S5-191450 |
| S5-191187 | pCR 28.805 Reorganizing subclauses in clause 4 | Huawei | revised |  | S5-191464 |
| S5-191188 | pCR 28.805 Update on SLA monitoring for network slicing | Huawei | revised |  | S5-191468 |
| S5-191189 | pCR 28.805 Update on UC of realizing a communication service instance | Huawei | revised |  | S5-191465 |
| S5-191190 | pCR 28.805 Update on UC of removing a communication service instance | Huawei | noted |  | - |
| S5-191191 | pCR 28.805 Solution for obtaining resource requirements for a given communication service requirement | Huawei | revised |  | S5-191469 |
| S5-191192 | pCR 28.805 Management aspects of NSIs shared by multiple communication services | Huawei | revised |  | S5-191467 |
| S5-191193 | pCR 28.805 Service management aspects of NSI-as-a-service | Huawei | revised |  | S5-191470 |
| S5-191194 | pCR 28.805 Solution for communication service instances realized in a single network slice instance | Huawei | revised |  | S5-191471 |
| S5-191195 | pCR 28.805 Add business roles and services related to verticals | Huawei | revised |  | S5-191458 |
| S5-191196 | New WID on Study on non-public networks management | Huawei | revised |  | S5-191345 |
| S5-191197 | Add use case and definitions of PDCP end user throughput measurements | Nokia, Nokia Shanghai Bell | revised |  | S5-191484 |
| S5-191198 | Discussion on calculation of PDCP data volume in DC-Scenarios | Huawei | noted |  |  |
| S5-191199 | pCR28.812 Add intent driven NSI capacity planning scenario | ETRI | revised |  | S5-191380 |
| S5-191200 | pCR28.812 Add intent driven NSI performance assurance scenario | ETRI | revised |  | S5-191381 |
| S5-191201 | CR Rel-16 28.552 Add measurements and UC related to RRC connection establishment | Ericsson GmbH, Eurolab | revised |  | S5-191392 |
| S5-191202 | CR Rel-16 28.552 Add measurements and UC related to setup of NG signalling connection | Ericsson GmbH, Eurolab | agreed |  |  |
| S5-191203 | CR Rel-11 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | revised | S5-187427 | S5-191421 |
| S5-191204 | Correction of references | Ericsson España S.A. | revised |  | S5-191427 |
| S5-191205 | CR Rel-12 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | revised | S5-187428 | S5-191422 |
| S5-191206 | CR Rel-13 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | revised | S5-187429 | S5-191423 |
| S5-191207 | Removal of reference to a temporary joint working group | Ericsson España S.A. | revised |  | S5-191428 |
| S5-191208 | CR Rel-14 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | revised | S5-187430 | S5-191424 |
| S5-191209 | Removal of reference to a temporary joint working group | Ericsson España S.A. | revised |  | S5-191429 |
| S5-191210 | CR Rel-15 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | revised | S5-187431 | S5-191425 |
| S5-191211 | CR Rel-16 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | revised |  | S5-191426 |
| S5-191212 | Resolution of Editor's note | Ericsson España S.A. | agreed |  |  |
| S5-191213 | Resolution of Editor's note | Ericsson España S.A. | agreed |  |  |
| S5-191214 | Resolution of Editor's note | Ericsson España S.A. | agreed |  |  |
| S5-191215 | Resolution of Editor's note | Ericsson España S.A. | agreed |  |  |
| S5-191216 | Resolution of Editor's note | Ericsson España S.A. | agreed |  |  |
| S5-191217 | CR Rel-11 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | agreed | S5-187432 |  |
| S5-191218 | CR Rel-12 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | agreed | S5-187433 |  |
| S5-191219 | CR Rel-13 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | agreed | S5-187434 |  |
| S5-191220 | CR Rel-14 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | agreed | S5-187435 |  |
| S5-191221 | CR Rel-15 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | agreed | S5-187436 |  |
| S5-191222 | CR Rel-16 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | agreed |  |  |
| S5-191223 | Add deployment example for discovery of MnS | Huawei Telecommunication India | withdrawn |  |  |
| S5-191224 | Discussion paper on stage 2 template for data types | Ericsson Telecomunicazioni SpA | endorsed |  |  |
| S5-191225 | pCR 32.160 Implement Edithelp comments | Ericsson Telecomunicazioni SpA | approved |  |  |
| S5-191226 | pCR 32.160 Update editors note on attributes | Ericsson Telecomunicazioni SpA | approved |  |  |
| S5-191227 | pCR 32.160 Introduce stage 2 template for data types | Ericsson Telecomunicazioni SpA | revised |  | S5-191371 |
| S5-191228 | Correct usedUnitContainer to sequence of | Ericsson | revised |  | S5-191403 |
| S5-191229 | Correct missing Session Identifier | Ericsson | revised |  | S5-191404 |
| S5-191230 | Correct missing Session Identifier | Ericsson | revised |  | S5-191405 |
| S5-191231 | Correct faults in yaml part | Ericsson | revised |  | S5-191331 |
| S5-191232 | New SID: Study on management and orchestration aspects with integrated satellite components in a 5G networks | THALES | revised |  | S5-191346 |
| S5-191233 | Correct definition of Individual Partial record mechanism | Ericsson | revised |  | S5-191406 |
| S5-191234 | Add definitions related to Utilization KPI | ETRI | not pursued |  |  |
| S5-191235 | Discussion on a new Work Item proposal on integration of 3GPP and ONAP | AT&T, Deutsche Telekom, Ericsson, Huawei, Nokia, Orange | revised |  | S5-191347 |
| S5-191236 | Correct missing error handling | Ericsson | postponed |  |  |
| S5-191237 | New WID proposal on integration of ONAP and 3GPP management framework | AT&T, Orange | revised |  | S5-191348 |
| S5-191238 | Correct missing error handling | Ericsson | not pursued |  |  |
| S5-191239 | Add convergent charging architecture | Ericsson | revised |  | S5-191314 |
| S5-191240 | Add basic principles for convergent charging | Ericsson | revised |  | S5-191315 |
| S5-191241 | Update Generic NRM Solution Set to support JSON | Nokia, Nokia Shanghai Bell | not pursued |  | - |
| S5-191242 | LS reply on energy efficiency | Orange Romania | revised |  | S5-191344 |
| S5-191243 | pCR R16 28.861-020 TR Introduction | Ericsson | approved |  |  |
| S5-191244 | pCR R16 28.861-020 Correction of Scope | Ericsson | approved |  |  |
| S5-191245 | Discussion paper around KPI for DRB Accessibility | Ericsson GmbH, Eurolab | endorsed |  |  |
| S5-191246 | pCR R16 28.861-020 Corrections of references | Ericsson | approved |  |  |
| S5-191247 | pCR R16 28.861-020 Introduction of used abbreviations | Ericsson | approved |  |  |
| S5-191248 | CR R-16 28.554 Add DRB Accessibility KPI and Use Case | Ericsson GmbH, Eurolab | revised |  | S5-191481 |
| S5-191249 | pCR R16 28.861-020 Correcting requirements | Ericsson | approved |  |  |
| S5-191250 | pCR R16 28.861-020 Correction of clause heading | Ericsson | approved |  |  |
| S5-191251 | pCR R16 28.861-020 ANR | Ericsson | approved |  |  |
| S5-191252 | pCR R16 28.861-020 PCI | Ericsson | approved |  |  |
| S5-191253 | pCR R16 28.861-020 LB | Ericsson | approved |  |  |
| S5-191254 | pCR R16 28.861-020 MRO | Ericsson | approved |  |  |
| S5-191255 | pCR R16 28.861-020 RACH | Ericsson | approved |  |  |
| S5-191256 | pCR R16 28.861-020 Energy saving | Ericsson | approved |  |  |
| S5-191257 | pCR R16 28.861-020 D-CCO | Ericsson | approved |  |  |
| S5-191258 | pCR R16 28.861-020 Trace and MDT | Ericsson | approved |  |  |
| S5-191259 | Domain Names for Management Services | Nokia Corporation | noted |  |  |
| S5-191260 | DN to URI mapping | Nokia Corporation | noted |  |  |
| S5-191261 | Add read-only NRM Info Model definitions for NRBeam IOC and attributes | Pivotal Commware | merged |  | S5-191354 |
| S5-191262 | Management Service discovery | Nokia Corporation | noted |  |  |
| S5-191263 | Issues with the allowed character set of DNs | Nokia Corporation | noted |  |  |
| S5-191264 | Some thoughts on XML, JSON and YANG style guides | Nokia Corporation | noted |  |  |
| S5-191265 | Discussion paper around Data Volume measurement for EE | Ericsson GmbH, Eurolab | endorsed |  |  |
| S5-191266 | CR Rel-16 28.552 Add PDCP data volume measurements for EE | Ericsson GmbH, Eurolab | revised |  | S5-191366 |
| S5-191267 | pCR 28.890 Alarm Life Cycle management in ONAP | Ericsson España S.A. | revised |  | S5-191434 |
| S5-191268 | pCR 28.890 Remove non-valid information | Ericsson España S.A. | merged |  | S5-191431 |
| S5-191269 | pCR 28.890 Remove proposal to modifications to 3GPP specifications | Ericsson España S.A. | noted |  | - |
| S5-191270 | Rel-15 CR 32.298 Corrections on ASN.1 syntax and charging modules version | Nokia, Nokia Shanghai Bell | revised |  | S5-191408 |
| S5-191271 | LS on Reply on Reply LS on Slice related Data Analytics | Ericsson Telecomunicazioni SpA | revised |  | S5-191342 |
| S5-191272 | Discussion paper on lifecycle management of communication services | Ericsson Telecomunicazioni SpA | noted |  | - |
| S5-191273 | pCR 28.805 Resolution of Editors note on communication service instance | Ericsson Telecomunicazioni SpA | revised |  | S5-191457 |
| S5-191274 | pCR 28.805 Clarify communication service concept | Ericsson Telecomunicazioni SpA | revised |  | S5-191460 |
| S5-191275 | pCR 28.805 Use case and requirement to activate a resource communication service | Ericsson Telecomunicazioni SpA | noted |  |  |
| S5-191276 | pCR 28.805 Use case and requirement to create a resource communication service | Ericsson Telecomunicazioni SpA | noted |  |  |
| S5-191277 | pCR 28.805 Use case and requirement to de-activate a resource communication service | Ericsson Telecomunicazioni SpA | noted |  |  |
| S5-191278 | pCR 28.805 Use case and requirement to modify the capacity of a resource communication service | Ericsson Telecomunicazioni SpA | noted |  |  |
| S5-191279 | R16 CR 28.552 Add Flow measurements for N3 | ETRI | not pursued |  | - |
| S5-191280 | Ls from GSMA cc SA5 on Cooperation on Generic Slice Template definition | GSMA | noted |  |  |
| S5-191281 | LS reply from CT3 to SA5 on PRA extension for offline charging | C3-187490 | noted |  |  |
| S5-191282 | Reply LS from CT4 cc SA5 on API specification and API version number maintenance | C4-188646 | noted |  |  |
| S5-191283 | Ls Response from BBF to 3GPP SA2 cc SA5 liaison S2-1811575 on ‘general status of work’ | BBF | noted |  |  |
| S5-191284 | LS Response from BBF cc SA5 to 3GPP SA2 liaison S2-1812643 | BBF | noted |  |  |
| S5-191285 | LS from ETSI ISG MEC to SA5 on Information on MEC work on 5G | ETSI ISG MEC | replied to |  |  |
| S5-191286 | LS from ETSI ISG NFV to SA5 on Publication of SOL001 V 2.5.1 | ETSI ISG NFV | noted |  |  |
| S5-191287 | Lsout from ETSI NFV to 3GPP SA5 on NFV Specification Adoption | ETSI ISG NFV | noted |  |  |
| S5-191288 | LS from ITU-T to SA5 on Draft new Recommendation E.RQST – “KPI targets for mobile networks” | ITU-T SG12 | postponed |  |  |
| S5-191289 | Reply LS from RAn3 cc SA5 on QoS monitoring | R3-187051 | noted |  |  |
| S5-191290 | Ls from SA2 to SA5 on Collection of Slice Related Data Analytics from UEs | S2-1813384 | replied to |  |  |
| S5-191291 | LS from SA2 to SA5 on slice related Data Analytics | S2-1813404 | replied to |  |  |
| S5-191292 | Reply LS from SA4 to SA5 on Attributes for QoE measurement collection | S4-181418 | replied to |  |  |
| S5-191293 | LS from ITU-T to SA5 on consent of Recommendation Y.3103 (formerly Y.IMT2020-BM) (reply to 3GPP TSG SA5 -LS15) | ITU-T SG13 | noted |  |  |
| S5-191294 | LS from ITU-T to SA5 on Update of Technical Report – “Transport network support of IMT-2020/5G” | ITU-T SG15 | postponed |  |  |
| S5-191295 | Resubmitted Ls from ITU-T to SA5 on Energy Efficiency (reply to ETSI TC EE - EE(18)053033-E) | ITU-T SG5 | replied to |  |  |
| S5-191296 | pCR R16 28.307-010 Including DASH and MTSI in Scope | Ericsson | approved |  |  |
| S5-191297 | pCR R16 28.307-010 Restrict to UMTS and LTE | Ericsson | approved |  |  |
| S5-191298 | pCR R16 28.404-050 Introduce the use case and requirement for changing QoE measurement collection job | Ericsson | revised |  | S5-191361 |
| S5-191299 | pCR R16 28.404-050 Refer to specification level requirements and use cases | Ericsson | approved |  |  |
| S5-191300 | Presentation of Specification to TSG: TS 28.404 | Ericsson | approved |  |  |
| S5-191301 | pCR 28.805 Use case and requirement for adjust network slice resources until network slice is stable | Ericsson Telecomunicazioni SpA | merged |  | S5-191468 |
| S5-191302 | Reply LS on information on MEC work in 5G | Intel Corporation (UK) Ltd | revised |  | S5-191442 |
| S5-191303 | Supporting document for S5-19123 (Proposed New SID on Management and orchestration aspects with integrated satellite components in a 5G networks) | THALES | noted |  |  |
| S5-191304 | Sequence proposal for study on management aspects of communication services | Ericsson | noted | - | - |
| S5-191305 | SA5 status report at last SA meeting | WG Chair | noted | - | - |
| S5-191306 | SA5 results at last SA meeting | WG Chair | noted | - | - |
| S5-191307 | Rel-16 CR 32.255 Offline only charging service | Huawei | agreed | S5-191098 | - |
| S5-191308 | Rel-16 CR 32.290 Offline only charging service | Huawei | agreed | S5-191099 | - |
| S5-191309 | Rel-16 CR 32.255 Offline only charging service selection | Huawei | agreed | S5-191100 | - |
| S5-191310 | Rel-16 CR 32.255 offline only charging service CDR generation | Huawei | agreed | S5-191102 | - |
| S5-191311 | Rel-16 CR 32.255 charging information for offline only charging | Huawei | agreed | S5-191103 | - |
| S5-191312 | Rel-16 CR 32.290 Offline only charging service Definition | Huawei | agreed | S5-191104 | - |
| S5-191313 | Rel-16 CR 32.255 offline only charging scenario and FBC | Huawei | agreed | S5-191105 | - |
| S5-191314 | Add convergent charging architecture | Ericsson | agreed | S5-191239 | - |
| S5-191315 | Add basic principles for convergent charging | Ericsson | agreed | S5-191240 | - |
| S5-191316 | Rel-16 CR 32.255 Addition of the Triggers for Interworking | Huawei | agreed | S5-191096 | - |
| S5-191317 | Rel-16 CR 32.255 Addition of the Message Flow for Interworking | Huawei | agreed | S5-191097 | - |
| S5-191318 | Rel-16 pCR TR 32.845 Introduce the Network Slicing Related Concept | Huawei | approved | S5-191092 | - |
| S5-191319 | Rel-16 pCR TR 32.845 Introduce the Roles related Network Slicing | Huawei | approved | S5-191091 | - |
| S5-191320 | Rel-16 pCR TR 32.845 Addition of Charging Aspect Requirements | Huawei | approved | S5-191093 | - |
| S5-191321 | Rel-16 pCR TR 32.845 Addition of Use Case and Potential Charging Requirements | Huawei | approved | S5-191089 | - |
| S5-191322 | Rel-16 pCR TR 32.845 Addition of Key Issues and Solution for Usage based Charging | Huawei | approved | S5-191087 | - |
| S5-191323 | Rel-16 pCR TR 32.845 Addition of Key Issues and Solution for SLA based Charging | Huawei | approved | S5-191088 | - |
| S5-191324 | Draft TR 32.845 | Huawei | approved | - | - |
| S5-191325 | Rel-13 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | agreed | S5-191160 | - |
| S5-191326 | Rel-14 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | agreed | S5-191161 | - |
| S5-191327 | Rel-15 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | agreed | S5-191162 | - |
| S5-191328 | Rel-15 CR 32.291 Correction of create operation description for event | Nokia, Nokia Shanghai Bell | agreed | S5-191041 | - |
| S5-191329 | Rel-15 CR 32.291 Correction on reference for common data types | Nokia, Nokia Shanghai Bell | agreed | S5-191043 | - |
| S5-191330 | Rel-15 CR 32.291 Correction of inconsistencies in data types | Nokia, Nokia Shanghai Bell | agreed | S5-191044 | - |
| S5-191331 | Correct faults in yaml part | Ericsson | agreed | S5-191231 | - |
| S5-191332 | Rel-15 CR 32.298 Correction of NSSAI | Nokia, Nokia Shanghai Bell | agreed | S5-191045 | - |
| S5-191333 | Rel-15 CR 32.290 Correction of create operation for subscriber identifier | Nokia, Nokia Shanghai Bell | agreed | - | - |
| S5-191334 | Discussion on 5G offline charging service | Huawei | noted | - | - |
| S5-191335 | Rel-15 CR 32.260 Correction of GGSN field for SMF address | Nokia, Nokia Shanghai Bell | agreed | S5-191048 | - |
| S5-191336 | Rel-15 CR 32.290 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | agreed | S5-191050 | - |
| S5-191337 | Rel-16 CR 32.255 offline charging service procedures | Huawei | postponed | - | - |
| S5-191338 | Time Plan for OAM&P | WG Vice Chair (Huawei) | withdrawn | - | - |
| S5-191339 | Improvement of handling of revisions in OAM&P SWG | OAM&P SWG chair | endorsed | S5-191074 | - |
| S5-191340 | Reply to: Ls from SA2 to SA5 on Collection of Slice Related Data Analytics from UEs | Ericsson | approved | - | - |
| S5-191341 | discussion sequence | Intel | noted | - | - |
| S5-191342 | LS on Reply on Reply LS on Slice related Data Analytics | Ericsson Telecomunicazioni SpA | approved | S5-191271 | - |
| S5-191343 | Reply to: Reply LS from SA4 to SA5 on Attributes for QoE measurement collection | Ericsson | approved | - | - |
| S5-191344 | LS reply on energy efficiency | Orange Romania | approved | S5-191242 | - |
| S5-191345 | New Study on non-public networks management | Huawei | agreed | S5-191196 | - |
| S5-191346 | New SID: Study on management and orchestration aspects with integrated satellite components in a 5G network | THALES | revised | S5-191232 | S5-191412 |
| S5-191347 | Discussion on a new Work Item proposal on integration of 3GPP and ONAP | AT&T, Deutsche Telekom, Ericsson, Huawei, Nokia, Orange | endorsed | S5-191235 | - |
| S5-191348 | New WID proposal on integration of ONAP and 3GPP management framework | AT&T, Orange,Deutsche Telekom | revised | S5-191237 | S5-191413 |
| S5-191349 | CR Rel-15 28.552 Revise performance measurements for UDM | Huawei Telecommunication India | revised | S5-191066 | S5-191414 |
| S5-191350 | CR Rel-16 28.552 Revise performance measurements for UDM | Huawei Telecommunication India | withdrawn | - | - |
| S5-191351 | CR Rel-15 28.554 Revise KPI subscribers of single network slice instance through UDM | Huawei Telecommunication India | revised | S5-191068 | S5-191494 |
| S5-191352 | CR Rel-16 28.554 Revise KPI subscribers of single network slice instance through UDM | Huawei Telecommunication India | withdrawn | - | - |
| S5-191353 | Update State management data definition Solution Set to support JSON | Nokia, Nokia Shanghai Bell | withdrawn | - | - |
| S5-191354 | R15 CR 28.541 Add NRM Info Model definitions for beam managed object class | Pivotal Commware, Intel, PIWorks, ZTE | not pursued | S5-191077 | - |
| S5-191355 | Cell and frequency relation | Ericsson Hungary Ltd | revised | S5-191082 | S5-191500 |
| S5-191356 | CR Rel-15 28541 Add NR attributes | Ericsson Inc. | agreed | S5-191084 | - |
| S5-191357 | TS 28541 correct the use of nCI and plmnIdList | Ericsson Hungary Ltd | agreed | S5-191085 | - |
| S5-191358 | Add exposure governance related use case and business level requirement | Huawei Telecommunication India | not pursued | S5-191118 | - |
| S5-191359 | Rel-15 CR TS 28.532 Correction of references | Huawei | agreed | S5-191141 | - |
| S5-191360 | Draft TS 28.307 | Ericsson | approved | - | - |
| S5-191361 | pCR R16 28.404-050 Introduce the use case and requirement for changing QoE measurement collection job | Ericsson | revised | S5-191298 | S5-191415 |
| S5-191362 | Draft TS 28.404 | Ericsson | approved | - | - |
| S5-191363 | Draft TS 28.310 | ORANGE | approved | - | - |
| S5-191364 | pCR TS 28.310 – Add use case on PEE fault supervision, actor roles and telecommunication resources | Orange Romania | approved | S5-191039 | - |
| S5-191365 | Add Power, Energy and Environmental (PEE) measurements and related use case description | Orange Romania | not pursued | S5-191040 | - |
| S5-191366 | CR Rel-16 28.552 Add PDCP data volume measurements for EE | Ericsson GmbH, Eurolab | agreed | S5-191266 | - |
| S5-191367 | CR Rel-16 28.658 Enhance ENBFunction for LWIP management | Intel | agreed | S5-191164 | - |
| S5-191368 | CR Rel-16 28.659 Enhance ENBFunction for LWIP management | Intel | agreed | S5-191165 | - |
| S5-191369 | CR Rel-16 32.425 Add measurements related to user data transmission via WLAN for LWIP | Intel | agreed | S5-191166 | - |
| S5-191370 | CR Rel-16 32.425 Add measurements related to RRC procedures for LWIP | Intel | agreed | S5-191167 | - |
| S5-191371 | pCR 32.160 Introduce stage 2 template for data types | Ericsson Telecomunicazioni SpA | approved | S5-191227 | - |
| S5-191372 | Draft TS 32.160 | Ericsson | approved | - | - |
| S5-191373 | pCR 28.812 BSS layer intent scenario | Ericsson Telecomunicazioni SpA | revised | S5-191064 | S5-191416 |
| S5-191374 | pCR 28.812 Physical layer intent scenario | Ericsson Telecomunicazioni SpA | revised | S5-191065 | S5-191487 |
| S5-191375 | pCR 28.812 Reorganize clause 5 to categorize the scenarios | Huawei | approved | S5-191120 | - |
| S5-191376 | Draft TR 28.812 | Huawei | approved | - | - |
| S5-191377 | pCR 28.812 Add description for intent-CSP and Intent-NOP | Huawei | approved | S5-191121 | - |
| S5-191378 | pCR 28.812 Add intent driven virtualized NE deployment scenario | Huawei | approved | S5-191122 | - |
| S5-191379 | pCR 28.812 Update clause 4.1.3 Intent expression | Huawei | approved | S5-191123 | - |
| S5-191380 | pCR28.812 Add intent driven NSI capacity planning scenario | ETRI | revised | S5-191199 | S5-191495 |
| S5-191381 | pCR28.812 Add intent driven NSI performance assurance scenario | ETRI | revised | S5-191200 | S5-191496 |
| S5-191382 | R16 CR28.552 Add RSRP measurements | ZTE, Intel | not pursued | S5-191079 | - |
| S5-191383 | R16 CR28.552 Add UE Rx-Tx time difference related measurements | ZTE Corporation | not pursued | S5-191080 | - |
| S5-191384 | Rel-16 CR TS 28.552 Add measurements of CQI distribution | Huawei | agreed | S5-191143 | - |
| S5-191385 | Rel-16 CR TS 28.552 Add measurements related to QoS flow retainability | Huawei | agreed | S5-191145 | - |
| S5-191386 | Rel-16 CR TS 28.554 Add KPI of QoS flow Retainability | Huawei | agreed | S5-191146 | - |
| S5-191387 | Rel-16 CR TS 28.552 Add measurements of PDCP data volume in DC scenarios | Huawei | agreed | S5-191147 | - |
| S5-191388 | Rel-16 CR TS 28.552 Add QoS flow related performance measurements | Huawei, ZTE, Ericsson | agreed | S5-191148 | - |
| S5-191389 | CR Rel-16 28.552 Add service request related measurements for AMF | Intel | agreed | S5-191163 | - |
| S5-191390 | CR Rel-16 28.552 Add QoS flow management related measurements for SMF | Intel | agreed | S5-191155 | - |
| S5-191391 | LS on use case and definitions of PDCP end user throughput measurements | Nokia | approved | - | - |
| S5-191392 | CR Rel-16 28.552 Add measurements and UC related to RRC connection establishment | Ericsson GmbH, Eurolab | agreed | S5-191201 | - |
| S5-191393 | Discussion on TS 28.533 content inconsistency and way forward | Huawei Telecommunication India | noted | S5-191112 | - |
| S5-191394 | Revised WID on management service discovery in 5G network management | Huawei Telecommunication India | noted | S5-191114 | - |
| S5-191395 | OAM&P SWG action list | WG Vice Chair (Huawei) | revised | S5-191014 | S5-191493 |
| S5-191396 | Add discovery of management service use case and business level requirement | Huawei Telecommunication India | revised | S5-191119 | S5-191488 |
| S5-191397 | CR Rel-15 28.550 Add the missing RESTFul API definitions | Intel | not pursued | S5-191149 | - |
| S5-191398 | Rel-15 CR 32.291 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | agreed | S5-191051 | - |
| S5-191399 | Rel-15 CR 32.255 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | agreed | S5-191052 | - |
| S5-191400 | Rel-15 CR 32.298 Correction of PresenceReportingAreaNode ASN1 syntax | Nokia, Nokia Shanghai Bell | agreed | S5-191059 | - |
| S5-191401 | Rel-16 pCR TR 32.845 Addition of the References and Abbreviations | Huawei | approved | S5-191090 | - |
| S5-191402 | Rel-15 CR 32.291 Correction of API versioning and externalDocs field | Nokia, Nokia Shanghai Bell | agreed | S5-191156 | - |
| S5-191403 | Correct usedUnitContainer to sequence of | Ericsson | agreed | S5-191228 | - |
| S5-191404 | Correct missing Session Identifier | Ericsson | agreed | S5-191229 | - |
| S5-191405 | Correct missing Session Identifier | Ericsson | agreed | S5-191230 | - |
| S5-191406 | Correct definition of Individual Partial record mechanism | Ericsson | agreed | S5-191233 | - |
| S5-191407 | Rel-12 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | agreed | S5-191159 | - |
| S5-191408 | Rel-15 CR 32.298 Corrections on ASN.1 syntax and charging modules version | Nokia, Nokia Shanghai Bell | agreed | S5-191270 | - |
| S5-191409 | Rel-16 CR 32.255 offline only charging scenario and QBC | Huawei | agreed | S5-191106 | - |
| S5-191410 | Rel-16 CR 32.255 offline charging service triggers for SSC modes | Huawei | postponed | S5-191108 | - |
| S5-191411 | Rel-15 CR 32.291 Correction of data type associated to volume | Nokia, Nokia Shanghai Bell | agreed | S5-191042 | - |
| S5-191412 | New SID: Study on management and orchestration aspects with integrated satellite components in a 5G network | THALES | agreed | S5-191346 | - |
| S5-191413 | New WID proposal on integration of ONAP and 3GPP management framework | AT&T, Orange,Deutsche Telekom | agreed | S5-191348 | - |
| S5-191414 | CR Rel-15 28.552 Revise performance measurements for UDM | Huawei Telecommunication India | agreed | S5-191349 | - |
| S5-191415 | pCR R16 28.404-050 Introduce the use case and requirement for changing QoE measurement collection job | Ericsson | approved | S5-191361 | - |
| S5-191416 | pCR 28.812 BSS layer intent scenario | Ericsson Telecomunicazioni SpA | approved | S5-191373 | - |
| S5-191417 | pCR 28.803 use case to NRF configuration | Intel Corporation (UK) Ltd | approved | S5-191180 | - |
| S5-191418 | Discussion paper on stage 3 protocol for performance data streaming | Intel | endorsed | S5-191150 | - |
| S5-191419 | CR Rel-15 28.552 Editorial clean-up | Intel, Ericsson | agreed | S5-191151 | - |
| S5-191420 | CR Rel-16 28.552 Editorial clean-up | Intel,Ericsson | agreed | S5-191152 | - |
| S5-191421 | CR Rel-11 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | agreed | S5-191203 | - |
| S5-191422 | CR Rel-12 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | agreed | S5-191205 | - |
| S5-191423 | CR Rel-13 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | agreed | S5-191206 | - |
| S5-191424 | CR Rel-14 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | agreed | S5-191208 | - |
| S5-191425 | CR Rel-15 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | agreed | S5-191210 | - |
| S5-191426 | CR Rel-16 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | agreed | S5-191211 | - |
| S5-191427 | Correction of references | Ericsson España S.A. | agreed | S5-191204 | - |
| S5-191428 | Removal of reference to a temporary joint working group | Ericsson España S.A. | agreed | S5-191207 | - |
| S5-191429 | Removal of reference to a temporary joint working group | Ericsson España S.A. | agreed | S5-191209 | - |
| S5-191430 | R16 CR 28.552 Add Flow measurements for N3 | ETRI | withdrawn | - | - |
| S5-191431 | pCR TR 28890 Editorial and Minor Technical Corrections | AT&T, Orange, Huawei,Ericsson | revised | S5-191174 | S5-191486 |
| S5-191432 | Draft TR 28.890 | ORANGE | approved | - | - |
| S5-191433 | pCR 28.890 Update clause 5.2.3.3.3 Reporting 3GPP Rel-15 PM data to DCAE R3 VES JSON Collector | Huawei | approved | S5-191127 | - |
| S5-191434 | pCR 28.890 Alarm Life Cycle management in ONAP | Ericsson España S.A. | approved | S5-191267 | - |
| S5-191435 | pCR 28.890 Remove proposal to modifications to 3GPP specifications | Ericsson España S.A. | withdrawn | - | - |
| S5-191436 | pCR TS 28.890 - Conclusions on FM and PM | AT&T, ORANGE | approved | S5-191061 | - |
| S5-191437 | Removal of reference to a temporary joint working group | Ericsson | agreed | - | - |
| S5-191438 | Removal of reference to a temporary joint working group | Ericsson | agreed | - | - |
| S5-191439 | Removal of reference to a temporary joint working group | Ericsson | agreed | - | - |
| S5-191440 | Rel-15 CR TS 28.541 Correct the definition for resourceSharingLevel | Huawei | agreed | S5-191142 | - |
| S5-191441 | Rel-16 CR TS 28.552 Add measurements of MCS distribution | Huawei,ZTE | agreed | S5-191144 | - |
| S5-191442 | Reply LS on information on MEC work in 5G | Intel Corporation (UK) Ltd | approved | S5-191302 | - |
| S5-191443 | pCR 28.803 use case for available UPF to support edge computing | Intel Corporation (UK) Ltd | approved | S5-191179 | - |
| S5-191444 | Draft TR 28.803 | Intel | approved | - | - |
| S5-191445 | pCR 28.803 solutions for SMF configuration | Intel Corporation (UK) Ltd | approved | S5-191182 | - |
| S5-191446 | pCR 28.803 solution for NRF configuration | Intel Corporation (UK) Ltd | approved | S5-191183 | - |
| S5-191447 | Removal of reference to a temporary joint working group | Ericsson | agreed | - | - |
| S5-191448 | pCR 28.803 use case for performance measurements to support edge computing | Intel Corporation (UK) Ltd | withdrawn | - | - |
| S5-191449 | pCR 28.803 use case for fault management to support edge computing | Intel Corporation (UK) Ltd | withdrawn | - | - |
| S5-191450 | pCR 28.803 use case for configuration management to support edge computing | Intel Corporation (UK) Ltd | noted | S5-191186 | - |
| S5-191451 | Tenancy concept isolation | Huawei Telecommunication India | noted | S5-191070 | - |
| S5-191452 | Problem statement and open issues of tenancy concept in 3GPP management system | Huawei Telecommunication India | noted | S5-191071 | - |
| S5-191453 | Use case of management capability exposed to tenants related to communication service | Huawei Telecommunication India | noted | S5-191072 | - |
| S5-191454 | Use case of 3GPP network as tenant accessing virtual resource environment | Huawei Telecommunication India | noted | S5-191073 | - |
| S5-191455 | Add tenancy concept of multiple exposure of same MnS with different management data isolation option | Huawei Telecommunication India | noted | S5-191113 | - |
| S5-191456 | Use cases for tenancy concept to access MnS capability | Huawei Telecommunication India | noted | S5-191115 | - |
| S5-191457 | pCR 28.805 Resolution of Editors note on communication service instance | Ericsson Telecomunicazioni SpA | revised | S5-191273 | S5-191492 |
| S5-191458 | pCR 28.805 Add business roles and services related to verticals | Huawei | noted | S5-191195 | - |
| S5-191459 | Discussion paper on lifecycle management of communication services | Ericsson Telecomunicazioni SpA | withdrawn | - | - |
| S5-191460 | pCR 28.805 Clarify communication service concept | Ericsson Telecomunicazioni SpA | approved | S5-191274 | - |
| S5-191461 | Overview of the 5G specification strcuture | Huawei | noted | - | - |
| S5-191462 | Rel-15 CR TS 28.541 Correct class diagram for view on external entities | Huawei | revised | S5-191140 | S5-191501 |
| S5-191463 | Add general information for discovery of MnS | Huawei Telecommunication India,Cisco | not pursued | S5-191110 | - |
| S5-191464 | pCR 28.805 Reorganizing subclauses in clause 4 | Huawei | approved | S5-191187 | - |
| S5-191465 | pCR 28.805 Update on UC of realizing a communication service instance | Huawei | approved | S5-191189 | - |
| S5-191466 | pCR 28.805 Update on UC of removing a communication service instance | Huawei | withdrawn | - | - |
| S5-191467 | pCR 28.805 Management aspects of NSIs shared by multiple communication services | Huawei | revised | S5-191192 | S5-191489 |
| S5-191468 | pCR 28.805 Update on SLA monitoring for network slicing | Huawei, Ericsson, DT | approved | S5-191188 | - |
| S5-191469 | pCR 28.805 Solution for obtaining resource requirements for a given communication service requirement | Huawei | revised | S5-191191 | S5-191497 |
| S5-191470 | pCR 28.805 Service management aspects of NSI-as-a-service | Huawei | revised | S5-191193 | S5-191490 |
| S5-191471 | pCR 28.805 Solution for communication service instances realized in a single network slice instance | Huawei | revised | S5-191194 | S5-191491 |
| S5-191472 | Discussion on MDAS and SON | Huawei | withdrawn | - | - |
| S5-191473 | pCR 28.861 Add concept, usecase and requirements for Automatic Radio Network Configuration Data Preparation | Huawei | approved | S5-191131 | - |
| S5-191474 | pCR 28.861 Add concept, usecase and requirements for multi-vendor plug and play NFs | Huawei | approved | S5-191132 | - |
| S5-191475 | pCR 28.861 Add NSI Coverage and Capacity Optimization | Huawei | noted | S5-191133 | - |
| S5-191476 | pCR to 28.861 E2E Service Quality Optimization | Cisco Systems Inc. | withdrawn | - | - |
| S5-191477 | pCR 28.861 SON in case of disaggregated RAN | Cisco Systems Inc. | withdrawn | - | - |
| S5-191478 | pCR to the TR 28.861 Categories of SON Actions | Cisco Systems Inc. | withdrawn | - | - |
| S5-191479 | pCR 28.861 add use case for RACH optimization | Intel Corporation (UK) Ltd | approved | S5-191176 | - |
| S5-191480 | pCR 28.861 add use case for beam coverage and capacity optimization | Intel Corporation (UK) Ltd, ZTE, Pivotal Commware | noted | S5-191178 | - |
| S5-191481 | CR R-16 28.554 Add DRB Accessibility KPI and Use Case | Ericsson GmbH, Eurolab | agreed | S5-191248 | - |
| S5-191482 | Draft TR 28.861 | Intel | approved | - | - |
| S5-191483 | pCR 28.861 restructure and corrections | Intel Corporation (UK) Ltd | approved | S5-191175 | - |
| S5-191484 | Add use case and definitions of PDCP end user throughput measurements | Nokia, Nokia Shanghai Bell | agreed | S5-191197 | - |
| S5-191485 | Draft TR 28.805 | Ericsson | approved | - | - |
| S5-191486 | pCR TR 28890 Editorial and Minor Technical Corrections | AT&T, Orange, Huawei,Ericsson | approved | S5-191431 | - |
| S5-191487 | pCR 28.812 Physical layer intent scenario | Ericsson Telecomunicazioni SpA | approved | S5-191374 | - |
| S5-191488 | Add discovery of management service use case and business level requirement | Huawei Telecommunication India | not pursued | S5-191396 | - |
| S5-191489 | pCR 28.805 Management aspects of NSIs shared by multiple communication services | Huawei | approved | S5-191467 | - |
| S5-191490 | pCR 28.805 Service management aspects of NSI-as-a-service | Huawei | approved | S5-191470 | - |
| S5-191491 | pCR 28.805 Solution for communication service instances realized in a single network slice instance | Huawei | approved | S5-191471 | - |
| S5-191492 | pCR 28.805 Resolution of Editors note on communication service instance | Ericsson Telecomunicazioni SpA,Huawei | revised | S5-191457 | S5-191498 |
| S5-191493 | OAM&P SWG action list | WG Vice Chair (Huawei) | noted | S5-191395 | - |
| S5-191494 | CR Rel-15 28.554 Revise KPI subscribers of single network slice instance through UDM | Huawei Telecommunication India | agreed | S5-191351 | - |
| S5-191495 | pCR28.812 Add intent driven NSI capacity planning scenario | ETRI | approved | S5-191380 | - |
| S5-191496 | pCR28.812 Add intent driven NSI performance assurance scenario | ETRI | approved | S5-191381 | - |
| S5-191497 | pCR 28.805 Solution for obtaining resource requirements for a given communication service requirement | Huawei | noted | S5-191469 | - |
| S5-191498 | pCR 28.805 Resolution of Editors note on communication service instance | Ericsson Telecomunicazioni SpA,Huawei | revised | S5-191492 | S5-191499 |
| S5-191499 | pCR 28.805 Resolution of Editors note on communication service instance | Ericsson Telecomunicazioni SpA,Huawei,Deutsche Telekom | approved | S5-191498 | - |
| S5-191500 | Cell and frequency relation | Ericsson Hungary Ltd | endorsed | S5-191355 | - |
| S5-191501 | Rel-15 CR TS 28.541 Correct class diagram for view on external entities | Huawei | agreed | S5-191462 | - |
| S5-191502 | CH Executive Report | CH SWG Chair | noted | S5-191037 | - |
| S5-191503 | OAM Executive Report | WG Vice Chair (Huawei) | noted | S5-191013 | - |

## Annex B: List of change requests

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Spec | CR | Rev | Rel | Cat | WI | Decision |
| S5-191116 | Add exposure governance related use case and business level requirement | Huawei Telecommunication India | 28.500 | 0006 | - | Rel-15 | F | NETSLICE | withdrawn |
| S5-191117 | Add exposure governance related use case and business level requirement | Huawei Telecommunication India | 28.530 | 0004 | - | Rel-16 | F | NETSLICE | not pursued |
| S5-191118 | Add exposure governance related use case and business level requirement | Huawei Telecommunication India | 28.530 | 0005 | - | Rel-15 | F | NETSLICE | revised |
| S5-191358 | Add exposure governance related use case and business level requirement | Huawei Telecommunication India | 28.530 | 0005 | 1 | Rel-15 | F | NETSLICE | not pursued |
| S5-191119 | Add discovery of management service use case and business level requirement | Huawei Telecommunication India | 28.530 | 0006 | - | Rel-16 | B | 5GDMS | revised |
| S5-191396 | Add discovery of management service use case and business level requirement | Huawei Telecommunication India | 28.530 | 0006 | 1 | Rel-16 | B | 5GDMS | revised |
| S5-191488 | Add discovery of management service use case and business level requirement | Huawei Telecommunication India | 28.530 | 0006 | 2 | Rel-16 | B | 5GDMS | not pursued |
| S5-191134 | Rel-15 CR TS 28.531 Update management services tables | Huawei | 28.531 | 0012 | - | Rel-15 | F | NETSLICE-PRO\_NS | agreed |
| S5-191135 | Rel-16 CR TS 28.531 Update management services tables | Huawei | 28.531 | 0013 | - | Rel-16 | A | NETSLICE-PRO\_NS | agreed |
| S5-191136 | Rel-15 CR TS 28.531 Correction on procedure of Network Slice Subnet Instance Deallocation | Huawei | 28.531 | 0014 | - | Rel-15 | F | NETSLICE-PRO\_NS | agreed |
| S5-191137 | Rel-16 CR TS 28.531 Correction on procedure of Network Slice Subnet Instance Deallocation | Huawei | 28.531 | 0015 | - | Rel-16 | A | NETSLICE-PRO\_NS | agreed |
| S5-191078 | R15 CR TS 28.532 change notificationIRP to notificationMnSProducer | ZTE Corporation | 28.532 | 0027 | - | Rel-15 | F | NETSLICE-FS5G | not pursued |
| S5-191138 | Rel-15 CR TS 28.532 Add stage 2 and stage 3 definition for MnS Query | Huawei | 28.532 | 0028 | - | Rel-15 | B | NETSLICE | not pursued |
| S5-191141 | Rel-15 CR TS 28.532 Correction of references | Huawei | 28.532 | 0029 | - | Rel-15 | F | NETSLICE | revised |
| S5-191359 | Rel-15 CR TS 28.532 Correction of references | Huawei | 28.532 | 0029 | 1 | Rel-15 | F | NETSLICE | agreed |
| S5-191109 | Add discovery of MnS use cases and requirements | Huawei Telecommunication India | 28.533 | 0009 | - | Rel-16 | B | 5GDMS | withdrawn |
| S5-191110 | Add general information for discovery of MnS | Huawei Telecommunication India | 28.533 | 0010 | - | Rel-16 | B | 5GDMS | revised |
| S5-191463 | Add general information for discovery of MnS | Huawei Telecommunication India,Cisco | 28.533 | 0010 | 1 | Rel-16 | B | 5GDMS | not pursued |
| S5-191111 | Add discovery of MnS capability | Huawei Telecommunication India | 28.533 | 0011 | - | Rel-16 | B | 5GDMS | withdrawn |
| S5-191223 | Add deployment example for discovery of MnS | Huawei Telecommunication India | 28.533 | 0012 | - | Rel-16 | B | 5GDMS | withdrawn |
| S5-191077 | R15 CR 28.541 Add definition of beam IOC | ZTE Corporation | 28.541 | 0042 | - | Rel-15 | B | NETSLICE-5GNRM | revised |
| S5-191354 | R15 CR 28.541 Add NRM Info Model definitions for beam managed object class | Pivotal Commware, Intel, PIWorks, ZTE | 28.541 | 0042 | 1 | Rel-15 | B | NETSLICE-5GNRM | not pursued |
| S5-191084 | CR Rel-15 28541 Add NR attributes | Ericsson Inc. | 28.541 | 0043 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-191356 | CR Rel-15 28541 Add NR attributes | Ericsson Inc. | 28.541 | 0043 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-191085 | TS 28541 use of nCI and plmnIdList | Ericsson Hungary Ltd | 28.541 | 0044 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-191357 | TS 28541 correct the use of nCI and plmnIdList | Ericsson Hungary Ltd | 28.541 | 0044 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-191139 | Rel-15 CR TS 28.541 Remove duplicate definition for ExternalNRCellCU | Huawei | 28.541 | 0045 | - | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-191140 | Rel-15 CR TS 28.541 Correct class diagram for view on external entities | Huawei | 28.541 | 0046 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-191462 | Rel-15 CR TS 28.541 Correct class diagram for view on external entities | Huawei | 28.541 | 0046 | 1 | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-191501 | Rel-15 CR TS 28.541 Correct class diagram for view on external entities | Huawei | 28.541 | 0046 | 2 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-191142 | Rel-15 CR TS 28.541 Correct the definition for resourceSharingLevel | Huawei | 28.541 | 0047 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-191440 | Rel-15 CR TS 28.541 Correct the definition for resourceSharingLevel | Huawei | 28.541 | 0047 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-191204 | Correction of references | Ericsson España S.A. | 28.541 | 0048 | - | Rel-15 | F | NETSLICE-5GNRM | revised |
| S5-191427 | Correction of references | Ericsson España S.A. | 28.541 | 0048 | 1 | Rel-15 | F | NETSLICE-5GNRM | agreed |
| S5-191241 | Update Generic NRM Solution Set to support JSON | Nokia, Nokia Shanghai Bell | 28.541 | 0049 | - | Rel-15 | F | NETSLICE-5GNRM | not pursued |
| S5-191261 | Add read-only NRM Info Model definitions for NRBeam IOC and attributes | Pivotal Commware | 28.541 | 0050 | - | Rel-15 | C | NETSLICE-5GNRM | merged |
| S5-191149 | CR Rel-15 28.550 Add the missing RESTFul API definitions | Intel | 28.550 | 0001 | - | Rel-15 | F | NETSLICE-ADPM5G | revised |
| S5-191397 | CR Rel-15 28.550 Add the missing RESTFul API definitions | Intel | 28.550 | 0001 | 1 | Rel-15 | F | NETSLICE-ADPM5G | not pursued |
| S5-191154 | CR Rel-16 28.550 Add performance threshold monitoring service | Intel | 28.550 | 0002 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-191040 | Add Power, Energy and Environmental (PEE) measurements and related use case description | Orange Romania | 28.552 | 0037 | - | Rel-16 | B | EE\_5G | revised |
| S5-191365 | Add Power, Energy and Environmental (PEE) measurements and related use case description | Orange Romania | 28.552 | 0037 | 1 | Rel-16 | B | EE\_5G | not pursued |
| S5-191066 | CR Rel-15 28.552 Revise performance measurements for UDM | Huawei Telecommunication India | 28.552 | 0038 | - | Rel-15 | F | NETSLICE-ADPM5G | revised |
| S5-191349 | CR Rel-15 28.552 Revise performance measurements for UDM | Huawei Telecommunication India | 28.552 | 0038 | 1 | Rel-15 | F | NETSLICE-ADPM5G | revised |
| S5-191414 | CR Rel-15 28.552 Revise performance measurements for UDM | Huawei Telecommunication India | 28.552 | 0038 | 2 | Rel-15 | F | NETSLICE-ADPM5G | agreed |
| S5-191067 | CR Rel-16 28.552 Revise performance measurements for UDM | Huawei Telecommunication India | 28.552 | 0039 | - | Rel-16 | A | NETSLICE-ADPM5G | not pursued |
| S5-191350 | CR Rel-16 28.552 Revise performance measurements for UDM | Huawei Telecommunication India | 28.552 | 0039 | 1 | Rel-16 | F | NETSLICE-ADPM5G | withdrawn |
| S5-191079 | R16 CR28.552 Add RSRP measurements | ZTE, Intel | 28.552 | 0040 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191382 | R16 CR28.552 Add RSRP measurements | ZTE, Intel | 28.552 | 0040 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-191080 | R16 CR28.552 Add UE Rx-Tx time difference related measurements | ZTE Corporation | 28.552 | 0041 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191383 | R16 CR28.552 Add UE Rx-Tx time difference related measurements | ZTE Corporation | 28.552 | 0041 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-191081 | R16 CR28.552 Add MCS distribution measurement | ZTE Corporation | 28.552 | 0042 | - | Rel-16 | B | 5G\_SLICE\_ePA | merged |
| S5-191143 | Rel-16 CR TS 28.552 Add measurements of CQI distribution | Huawei | 28.552 | 0043 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191384 | Rel-16 CR TS 28.552 Add measurements of CQI distribution | Huawei | 28.552 | 0043 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191144 | Rel-16 CR TS 28.552 Add measurements of MCS distribution | Huawei | 28.552 | 0044 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191441 | Rel-16 CR TS 28.552 Add measurements of MCS distribution | Huawei,ZTE | 28.552 | 0044 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191145 | Rel-16 CR TS 28.552 Add measurements of QoS flow release | Huawei | 28.552 | 0045 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191385 | Rel-16 CR TS 28.552 Add measurements related to QoS flow retainability | Huawei | 28.552 | 0045 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191147 | Rel-16 CR TS 28.552 Add measurements of PDCP data volume in DC scenarios | Huawei | 28.552 | 0046 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191387 | Rel-16 CR TS 28.552 Add measurements of PDCP data volume in DC scenarios | Huawei | 28.552 | 0046 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191148 | Rel-16 CR TS 28.552 Add QoS flow related performance measurements | Huawei, ZTE, Ericsson | 28.552 | 0047 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191388 | Rel-16 CR TS 28.552 Add QoS flow related performance measurements | Huawei, ZTE, Ericsson | 28.552 | 0047 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191151 | CR Rel-15 28.552 Editorial clean-up | Intel, Ericsson | 28.552 | 0048 | - | Rel-15 | F | NETSLICE-ADPM5G | revised |
| S5-191419 | CR Rel-15 28.552 Editorial clean-up | Intel, Ericsson | 28.552 | 0048 | 1 | Rel-15 | F | NETSLICE-ADPM5G | agreed |
| S5-191152 | CR Rel-16 28.552 Editorial clean-up | Intel,Ericsson | 28.552 | 0049 | - | Rel-16 | F | 5G\_SLICE\_ePA | revised |
| S5-191420 | CR Rel-16 28.552 Editorial clean-up | Intel,Ericsson | 28.552 | 0049 | 1 | Rel-16 | F | 5G\_SLICE\_ePA | agreed |
| S5-191155 | CR Rel-16 28.552 Add QoS flow management related measurements for SMF | Intel | 28.552 | 0050 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191390 | CR Rel-16 28.552 Add QoS flow management related measurements for SMF | Intel | 28.552 | 0050 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191163 | CR Rel-16 28.552 Add service request related measurements for AMF | Intel | 28.552 | 0051 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191389 | CR Rel-16 28.552 Add service request related measurements for AMF | Intel | 28.552 | 0051 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191197 | Add use case and definitions of PDCP end user throughput measurements | Nokia, Nokia Shanghai Bell | 28.552 | 0052 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191484 | Add use case and definitions of PDCP end user throughput measurements | Nokia, Nokia Shanghai Bell | 28.552 | 0052 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191201 | CR Rel-16 28.552 Add measurements and UC related to RRC connection establishment | Ericsson GmbH, Eurolab | 28.552 | 0053 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191392 | CR Rel-16 28.552 Add measurements and UC related to RRC connection establishment | Ericsson GmbH, Eurolab | 28.552 | 0053 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191202 | CR Rel-16 28.552 Add measurements and UC related to setup of NG signalling connection | Ericsson GmbH, Eurolab | 28.552 | 0054 | - | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191266 | CR Rel-16 28.552 Add PDCP data volume measurements for EE | Ericsson GmbH, Eurolab | 28.552 | 0055 | - | Rel-16 | B | EE\_5G | revised |
| S5-191366 | CR Rel-16 28.552 Add PDCP data volume measurements for EE | Ericsson GmbH, Eurolab | 28.552 | 0055 | 1 | Rel-16 | B | EE\_5G | agreed |
| S5-191279 | R16 CR 28.552 Add Flow measurements for N3 | ETRI | 28.552 | 0056 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-191430 | R16 CR 28.552 Add Flow measurements for N3 | ETRI | 28.552 | 0056 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | withdrawn |
| S5-191068 | CR Rel-15 28.554 Revise KPI subscribers of single network slice instance through UDM | Huawei Telecommunication India | 28.554 | 0005 | - | Rel-15 | F | NETSLICE-ADPM5G | revised |
| S5-191351 | CR Rel-15 28.554 Revise KPI subscribers of single network slice instance through UDM | Huawei Telecommunication India | 28.554 | 0005 | 1 | Rel-15 | F | NETSLICE-ADPM5G | revised |
| S5-191494 | CR Rel-15 28.554 Revise KPI subscribers of single network slice instance through UDM | Huawei Telecommunication India | 28.554 | 0005 | 2 | Rel-15 | F | NETSLICE-ADPM5G | agreed |
| S5-191069 | CR Rel-16 28.554 Revise KPI subscribers of single network slice instance through UDM | Huawei Telecommunication India | 28.554 | 0006 | - | Rel-16 | A | NETSLICE-ADPM5G | not pursued |
| S5-191352 | CR Rel-16 28.554 Revise KPI subscribers of single network slice instance through UDM | Huawei Telecommunication India | 28.554 | 0006 | 1 | Rel-16 | A | 5G\_SLICE\_ePA | withdrawn |
| S5-191146 | Rel-16 CR TS 28.554 Add KPI of E-RAB Retainability | Huawei | 28.554 | 0007 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191386 | Rel-16 CR TS 28.554 Add KPI of QoS flow Retainability | Huawei | 28.554 | 0007 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191234 | Add definitions related to Utilization KPI | ETRI | 28.554 | 0008 | - | Rel-16 | B | 5G\_SLICE\_ePA | not pursued |
| S5-191248 | CR R-16 28.554 Add DRB Accessibility KPI and Use Case | Ericsson GmbH, Eurolab | 28.554 | 0009 | - | Rel-16 | B | 5G\_SLICE\_ePA | revised |
| S5-191481 | CR R-16 28.554 Add DRB Accessibility KPI and Use Case | Ericsson GmbH, Eurolab | 28.554 | 0009 | 1 | Rel-16 | B | 5G\_SLICE\_ePA | agreed |
| S5-191075 | Update State management data definition Solution Set to support JSON | Nokia, Nokia Shanghai Bell | 28.626 | 0006 | - | Rel-15 | F | NETSLICE-5GNRM | not pursued |
| S5-191353 | Update State management data definition Solution Set to support JSON | Nokia, Nokia Shanghai Bell | 28.626 | 0006 | 1 | Rel-15 | F | NETSLICE-5GNRM | withdrawn |
| S5-191203 | CR Rel-11 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0037 | 2 | Rel-11 | F | OAM-FMC-IRP | revised |
| S5-191421 | CR Rel-11 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0037 | 3 | Rel-11 | F | OAM-FMC-IRP | agreed |
| S5-191205 | CR Rel-12 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0038 | 2 | Rel-12 | A | OAM-FMC-IRP | revised |
| S5-191422 | CR Rel-12 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0038 | 3 | Rel-12 | A | OAM-FMC-IRP | agreed |
| S5-191206 | CR Rel-13 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0039 | 2 | Rel-13 | A | OAM-FMC-IRP | revised |
| S5-191423 | CR Rel-13 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0039 | 3 | Rel-13 | A | OAM-FMC-IRP | agreed |
| S5-191208 | CR Rel-14 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0040 | 2 | Rel-14 | A | OAM-FMC-IRP | revised |
| S5-191424 | CR Rel-14 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0040 | 3 | Rel-14 | A | OAM-FMC-IRP | agreed |
| S5-191210 | CR Rel-15 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0041 | 2 | Rel-15 | A | OAM-FMC-IRP | revised |
| S5-191425 | CR Rel-15 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0041 | 3 | Rel-15 | A | OAM-FMC-IRP | agreed |
| S5-191164 | CR Rel-16 28.658 Enhance ENBFunction for LWIP management | Intel | 28.658 | 0042 | - | Rel-16 | B | OAM\_LTE\_WLAN | revised |
| S5-191367 | CR Rel-16 28.658 Enhance ENBFunction for LWIP management | Intel | 28.658 | 0042 | 1 | Rel-16 | B | OAM\_LTE\_WLAN | agreed |
| S5-191211 | CR Rel-16 28.658 Correct PLMN ID List Type in Solution Set Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0043 | - | Rel-16 | A | OAM-FMC-IRP | revised |
| S5-191426 | CR Rel-16 28.658 Correct PLMN ID List Type in Stage 2 | Ericsson GmbH, Eurolab | 28.658 | 0043 | 1 | Rel-16 | A | OAM-FMC-IRP | agreed |
| S5-191212 | Resolution of Editor's note | Ericsson España S.A. | 28.658 | 0044 | - | Rel-12 | F | TEI12 | agreed |
| S5-191213 | Resolution of Editor's note | Ericsson España S.A. | 28.658 | 0045 | - | Rel-13 | A | TEI12 | agreed |
| S5-191214 | Resolution of Editor's note | Ericsson España S.A. | 28.658 | 0046 | - | Rel-14 | A | TEI12 | agreed |
| S5-191215 | Resolution of Editor's note | Ericsson España S.A. | 28.658 | 0047 | - | Rel-15 | A | TEI12 | agreed |
| S5-191216 | Resolution of Editor's note | Ericsson España S.A. | 28.658 | 0048 | - | Rel-16 | A | TEI12 | agreed |
| S5-191217 | CR Rel-11 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | 28.659 | 0028 | 2 | Rel-11 | F | OAM-FMC-IRP | agreed |
| S5-191218 | CR Rel-12 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | 28.659 | 0029 | 2 | Rel-12 | A | OAM-FMC-IRP | agreed |
| S5-191219 | CR Rel-13 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | 28.659 | 0030 | 2 | Rel-13 | A | OAM-FMC-IRP | agreed |
| S5-191220 | CR Rel-14 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | 28.659 | 0031 | 2 | Rel-14 | A | OAM-FMC-IRP | agreed |
| S5-191221 | CR Rel-15 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | 28.659 | 0032 | 2 | Rel-15 | A | OAM-FMC-IRP | agreed |
| S5-191165 | CR Rel-16 28.659 Enhance ENBFunction for LWIP management | Intel | 28.659 | 0033 | - | Rel-16 | B | OAM\_LTE\_WLAN | revised |
| S5-191368 | CR Rel-16 28.659 Enhance ENBFunction for LWIP management | Intel | 28.659 | 0033 | 1 | Rel-16 | B | OAM\_LTE\_WLAN | agreed |
| S5-191222 | CR Rel-16 28.659 Correct PLMN ID Type in Solution Set Stage 3 | Ericsson GmbH, Eurolab | 28.659 | 0034 | - | Rel-16 | A | OAM-FMC-IRP | agreed |
| S5-191207 | Removal of reference to a temporary joint working group | Ericsson España S.A. | 32.156 | 0022 | - | Rel-15 | F | TEI12 | revised |
| S5-191428 | Removal of reference to a temporary joint working group | Ericsson España S.A. | 32.156 | 0022 | 1 | Rel-15 | A | TEI11 | agreed |
| S5-191209 | Removal of reference to a temporary joint working group | Ericsson España S.A. | 32.156 | 0023 | - | Rel-16 | A | TEI15 | revised |
| S5-191429 | Removal of reference to a temporary joint working group | Ericsson España S.A. | 32.156 | 0023 | 1 | Rel-16 | A | TEI11 | agreed |
| S5-191437 | Removal of reference to a temporary joint working group | Ericsson | 32.156 | 0024 | - | Rel-12 | A | TEI11 | agreed |
| S5-191438 | Removal of reference to a temporary joint working group | Ericsson | 32.156 | 0025 | - | Rel-13 | A | TEI11 | agreed |
| S5-191439 | Removal of reference to a temporary joint working group | Ericsson | 32.156 | 0026 | - | Rel-14 | A | TEI11 | agreed |
| S5-191447 | Removal of reference to a temporary joint working group | Ericsson | 32.156 | 0027 | - | Rel-11 | F | TEI11 | agreed |
| S5-191239 | Add convergent charging architecture | Ericsson | 32.254 | 0002 | - | Rel-16 | B | 5GS\_Ph1\_NEFCH | revised |
| S5-191314 | Add convergent charging architecture | Ericsson | 32.254 | 0002 | 1 | Rel-16 | B | 5GS\_Ph1\_NEFCH | agreed |
| S5-191240 | Add basic principles for convergent charging | Ericsson | 32.254 | 0003 | - | Rel-16 | B | 5GS\_Ph1\_NEFCH | revised |
| S5-191315 | Add basic principles for convergent charging | Ericsson | 32.254 | 0003 | 1 | Rel-16 | B | 5GS\_Ph1\_NEFCH | agreed |
| S5-191047 | Rel-15 CR 32.255 Correction of category for subscriber identifier | Nokia, Nokia Shanghai Bell | 32.255 | 0030 | - | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-191052 | Rel-15 CR 32.255 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | 32.255 | 0031 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191399 | Rel-15 CR 32.255 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | 32.255 | 0031 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191095 | Rel-16 CR 32.255 Clarification on the Charging Identifier | Huawei | 32.255 | 0032 | - | Rel-16 | B | 5GIEPC\_CH | postponed |
| S5-191096 | Rel-16 CR 32.255 Addition of the Triggers for Interworking | Huawei | 32.255 | 0033 | - | Rel-16 | B | 5GIEPC\_CH | revised |
| S5-191316 | Rel-16 CR 32.255 Addition of the Triggers for Interworking | Huawei | 32.255 | 0033 | 1 | Rel-16 | B | 5GIEPC\_CH | agreed |
| S5-191097 | Rel-16 CR 32.255 Addition of the Message Flow for Interworking | Huawei | 32.255 | 0034 | - | Rel-16 | B | 5GIEPC\_CH | revised |
| S5-191317 | Rel-16 CR 32.255 Addition of the Message Flow for Interworking | Huawei | 32.255 | 0034 | 1 | Rel-16 | B | 5GIEPC\_CH | agreed |
| S5-191098 | Rel-16 CR 32.255 Offline charging service | Huawei | 32.255 | 0035 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-191307 | Rel-16 CR 32.255 Offline only charging service | Huawei | 32.255 | 0035 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-191100 | Rel-16 CR 32.255 Offline charging service selection | Huawei | 32.255 | 0036 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-191309 | Rel-16 CR 32.255 Offline only charging service selection | Huawei | 32.255 | 0036 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-191101 | Rel-16 CR 32.255 Principles of offline charging | Huawei | 32.255 | 0037 | - | Rel-16 | B | OFSBI\_CH | not pursued |
| S5-191102 | Rel-16 CR 32.255 offline charging service CDR generation | Huawei | 32.255 | 0038 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-191310 | Rel-16 CR 32.255 offline only charging service CDR generation | Huawei | 32.255 | 0038 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-191103 | Rel-16 CR 32.255 charging information for offline charging | Huawei | 32.255 | 0039 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-191311 | Rel-16 CR 32.255 charging information for offline only charging | Huawei | 32.255 | 0039 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-191105 | Rel-16 CR 32.255 offline charging scenario and FBC | Huawei | 32.255 | 0040 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-191313 | Rel-16 CR 32.255 offline only charging scenario and FBC | Huawei | 32.255 | 0040 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-191106 | Rel-16 CR 32.255 offline charging scenario and QBC | Huawei | 32.255 | 0041 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-191409 | Rel-16 CR 32.255 offline only charging scenario and QBC | Huawei | 32.255 | 0041 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-191107 | Rel-16 CR 32.255 offline charging service procedures | Huawei | 32.255 | 0042 | - | Rel-16 | B | OFSBI\_CH | withdrawn |
| S5-191108 | Rel-16 CR 32.255 offline charging service triggers for SSC modes | Huawei | 32.255 | 0043 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-191410 | Rel-16 CR 32.255 offline charging service triggers for SSC modes | Huawei | 32.255 | 0043 | 1 | Rel-16 | B | OFSBI\_CH | postponed |
| S5-191233 | Correct definition of Individual Partial record mechanism | Ericsson | 32.255 | 0044 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-191406 | Correct definition of Individual Partial record mechanism | Ericsson | 32.255 | 0044 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-191337 | Rel-16 CR 32.255 offline charging service procedures | Huawei | 32.255 | 0045 | - | Rel-16 | B | OFSBI\_CH | postponed |
| S5-191048 | Rel-15 CR 32.260 Correction of GGSN field for SMF address | Nokia, Nokia Shanghai Bell | 32.260 | 0395 | - | Rel-15 | F | 5GS\_Ph1\_IMSCH | revised |
| S5-191335 | Rel-15 CR 32.260 Correction of GGSN field for SMF address | Nokia, Nokia Shanghai Bell | 32.260 | 0395 | 1 | Rel-15 | F | 5GS\_Ph1\_IMSCH | agreed |
| S5-191054 | Rel-15 CR 32.274 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | 32.274 | 0065 | - | Rel-15 | F | 5GS\_Ph1-SMSCH | agreed |
| S5-191055 | Rel-15 CR 32.274 Correction of category Invocation result | Nokia, Nokia Shanghai Bell | 32.274 | 0066 | - | Rel-15 | F | 5GS\_Ph1-SMSCH | agreed |
| S5-191050 | Rel-15 CR 32.290 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | 32.290 | 0024 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191336 | Rel-15 CR 32.290 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | 32.290 | 0024 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191099 | Rel-16 CR 32.290 Offline charging service | Huawei | 32.290 | 0025 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-191308 | Rel-16 CR 32.290 Offline only charging service | Huawei | 32.290 | 0025 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-191104 | Rel-16 CR 32.290 Offline charging service Definition | Huawei | 32.290 | 0026 | - | Rel-16 | B | OFSBI\_CH | revised |
| S5-191312 | Rel-16 CR 32.290 Offline only charging service Definition | Huawei | 32.290 | 0026 | 1 | Rel-16 | B | OFSBI\_CH | agreed |
| S5-191168 | Rel-15 CR 32.290 Correction of SMSF as NF Consumer | Nokia, Nokia Shanghai Bell | 32.290 | 0027 | - | Rel-15 | F | 5GS\_Ph1-SMSCH | agreed |
| S5-191236 | Correct missing error handling | Ericsson | 32.290 | 0028 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | postponed |
| S5-191238 | Correct missing error handling | Ericsson | 32.290 | 0029 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | not pursued |
| S5-191333 | Rel-15 CR 32.290 Correction of create operation for subscriber identifier | Nokia, Nokia Shanghai Bell | 32.290 | 0030 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191041 | Rel-15 CR 32.291 Correction of create operation description for event | Nokia, Nokia Shanghai Bell | 32.291 | 0031 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191328 | Rel-15 CR 32.291 Correction of create operation description for event | Nokia, Nokia Shanghai Bell | 32.291 | 0031 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191042 | Rel-15 CR 32.291 Correction of data type associated to volume | Nokia, Nokia Shanghai Bell | 32.291 | 0032 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-191411 | Rel-15 CR 32.291 Correction of data type associated to volume | Nokia, Nokia Shanghai Bell | 32.291 | 0032 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-191043 | Rel-15 CR 32.291 Correction on reference for common data types | Nokia, Nokia Shanghai Bell | 32.291 | 0033 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191329 | Rel-15 CR 32.291 Correction on reference for common data types | Nokia, Nokia Shanghai Bell | 32.291 | 0033 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191044 | Rel-15 CR 32.291 Correction of inconsistencies in data types | Nokia, Nokia Shanghai Bell | 32.291 | 0034 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191330 | Rel-15 CR 32.291 Correction of inconsistencies in data types | Nokia, Nokia Shanghai Bell | 32.291 | 0034 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191051 | Rel-15 CR 32.291 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | 32.291 | 0035 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191398 | Rel-15 CR 32.291 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | 32.291 | 0035 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191057 | Rel-15 CR 32.291 Correction of SMSF as NF Consumer | Nokia, Nokia Shanghai Bell | 32.291 | 0036 | - | Rel-15 | F | 5GS\_Ph1-SMSCH | agreed |
| S5-191094 | Rel-15 CR 32.291 Correction of ValidityTime data type | Huawei | 32.291 | 0037 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191156 | Rel-15 CR 32.291 Correction of API versioning and externalDocs field | Nokia, Nokia Shanghai Bell | 32.291 | 0038 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191402 | Rel-15 CR 32.291 Correction of API versioning and externalDocs field | Nokia, Nokia Shanghai Bell | 32.291 | 0038 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191157 | Rel-15 CR 32.291 Correction of Qos Information | Nokia, Nokia Shanghai Bell | 32.291 | 0039 | - | Rel-15 | F | 5GS\_Ph1-DCH | postponed |
| S5-191230 | Correct missing Session Identifier | Ericsson | 32.291 | 0040 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191405 | Correct missing Session Identifier | Ericsson | 32.291 | 0040 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191231 | Correct faults in yaml part | Ericsson | 32.291 | 0041 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191331 | Correct faults in yaml part | Ericsson | 32.291 | 0041 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191045 | Rel-15 CR 32.298 Correction of NSSAI | Nokia, Nokia Shanghai Bell | 32.298 | 0689 | - | Rel-15 | F | 5GS\_Ph1-DCH | revised |
| S5-191332 | Rel-15 CR 32.298 Correction of NSSAI | Nokia, Nokia Shanghai Bell | 32.298 | 0689 | 1 | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-191046 | Rel-15 CR 32.298 Correction of subscriber equipment number | Nokia, Nokia Shanghai Bell | 32.298 | 0690 | - | Rel-15 | F | 5GS\_Ph1-DCH | agreed |
| S5-191053 | Rel-15 CR 32.298 Correction of NF Consumer Information | Nokia, Nokia Shanghai Bell | 32.298 | 0691 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191056 | Rel-15 CR 32.298 Correction of SMSF as NF Consumer | Nokia, Nokia Shanghai Bell | 32.298 | 0692 | - | Rel-15 | F | 5GS\_Ph1-SMSCH | agreed |
| S5-191059 | Rel-15 CR 32.298 Correction of PresenceReportingAreaNode ASN1 syntax | Nokia, Nokia Shanghai Bell | 32.298 | 0693 | - | Rel-15 | F | AULC-CH | revised |
| S5-191400 | Rel-15 CR 32.298 Correction of PresenceReportingAreaNode ASN1 syntax | Nokia, Nokia Shanghai Bell | 32.298 | 0693 | 1 | Rel-15 | F | AULC-CH | agreed |
| S5-191158 | Rel-15 CR 32.298 Correction of Qos Information | Nokia, Nokia Shanghai Bell | 32.298 | 0694 | - | Rel-15 | F | 5GS\_Ph1-DCH | postponed |
| S5-191159 | Rel-12 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | 32.298 | 0695 | - | Rel-12 | F | SMS-SC-CH | revised |
| S5-191407 | Rel-12 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | 32.298 | 0695 | 1 | Rel-12 | F | SMS-SC-CH | agreed |
| S5-191160 | Rel-13 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | 32.298 | 0696 | - | Rel-13 | A | SMS-SC-CH | revised |
| S5-191325 | Rel-13 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | 32.298 | 0696 | 1 | Rel-13 | A | SMS-SC-CH | agreed |
| S5-191161 | Rel-14 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | 32.298 | 0697 | - | Rel-14 | A | SMS-SC-CH | revised |
| S5-191326 | Rel-14 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | 32.298 | 0697 | 1 | Rel-14 | A | SMS-SC-CH | agreed |
| S5-191162 | Rel-15 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | 32.298 | 0698 | - | Rel-15 | A | SMS-SC-CH | revised |
| S5-191327 | Rel-15 CR 32.298 Correction for multiple recipients in SC-SMO CDR | Nokia, Nokia Shanghai Bell | 32.298 | 0698 | 1 | Rel-15 | A | SMS-SC-CH | agreed |
| S5-191228 | Correct usedUnitContainer to sequence of | Ericsson | 32.298 | 0699 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191403 | Correct usedUnitContainer to sequence of | Ericsson | 32.298 | 0699 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191229 | Correct missing Session Identifier | Ericsson | 32.298 | 0700 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191404 | Correct missing Session Identifier | Ericsson | 32.298 | 0700 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191270 | Rel-15 CR 32.298 Corrections on ASN.1 syntax and charging modules version | Nokia, Nokia Shanghai Bell | 32.298 | 0701 | - | Rel-15 | F | 5GS\_Ph1-SBI\_CH | revised |
| S5-191408 | Rel-15 CR 32.298 Corrections on ASN.1 syntax and charging modules version | Nokia, Nokia Shanghai Bell | 32.298 | 0701 | 1 | Rel-15 | F | 5GS\_Ph1-SBI\_CH | agreed |
| S5-191049 | Rel-15 CR 32.299 Correction of GGSN field for SMF address | Nokia, Nokia Shanghai Bell | 32.299 | 0818 | - | Rel-15 | F | 5GS\_Ph1\_IMSCH | agreed |
| S5-191058 | Rel-15 CR 32.299 Correction of missing Presence-Reporting-Area-Node AVP | Nokia, Nokia Shanghai Bell | 32.299 | 0819 | - | Rel-15 | F | AULC-CH | agreed |
| S5-191166 | CR Rel-16 32.425 Add measurements related to user data transmission via WLAN for LWIP | Intel | 32.425 | 0178 | - | Rel-16 | B | OAM\_LTE\_WLAN | revised |
| S5-191369 | CR Rel-16 32.425 Add measurements related to user data transmission via WLAN for LWIP | Intel | 32.425 | 0178 | 1 | Rel-16 | B | OAM\_LTE\_WLAN | agreed |
| S5-191167 | CR Rel-16 32.425 Add measurements related to RRC procedures for LWIP | Intel | 32.425 | 0179 | - | Rel-16 | B | OAM\_LTE\_WLAN | revised |
| S5-191370 | CR Rel-16 32.425 Add measurements related to RRC procedures for LWIP | Intel | 32.425 | 0179 | 1 | Rel-16 | B | OAM\_LTE\_WLAN | agreed |

## Annex C: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Original | Title | From | Decision | Reply in |
| S5-191280 |  | Ls from GSMA cc SA5 on Cooperation on Generic Slice Template definition | GSMA | noted |  |
| S5-191281 |  | LS reply from CT3 to SA5 on PRA extension for offline charging | C3-187490 | noted |  |
| S5-191282 |  | Reply LS from CT4 cc SA5 on API specification and API version number maintenance | C4-188646 | noted |  |
| S5-191283 |  | Ls Response from BBF to 3GPP SA2 cc SA5 liaison S2-1811575 on ‘general status of work’ | BBF | noted |  |
| S5-191284 |  | LS Response from BBF cc SA5 to 3GPP SA2 liaison S2-1812643 | BBF | noted |  |
| S5-191285 |  | LS from ETSI ISG MEC to SA5 on Information on MEC work on 5G | ETSI ISG MEC | replied to | S5-191442 |
| S5-191286 |  | LS from ETSI ISG NFV to SA5 on Publication of SOL001 V 2.5.1 | ETSI ISG NFV | noted |  |
| S5-191287 |  | Lsout from ETSI NFV to 3GPP SA5 on NFV Specification Adoption | ETSI ISG NFV | noted |  |
| S5-191288 |  | LS from ITU-T to SA5 on Draft new Recommendation E.RQST – “KPI targets for mobile networks” | ITU-T SG12 | postponed |  |
| S5-191289 |  | Reply LS from RAn3 cc SA5 on QoS monitoring | R3-187051 | noted |  |
| S5-191290 |  | Ls from SA2 to SA5 on Collection of Slice Related Data Analytics from UEs | S2-1813384 | replied to | S5-191340 |
| S5-191291 |  | LS from SA2 to SA5 on slice related Data Analytics | S2-1813404 | replied to | S5-191342 |
| S5-191292 |  | Reply LS from SA4 to SA5 on Attributes for QoE measurement collection | S4-181418 | replied to | S5-191343 |
| S5-191293 |  | LS from ITU-T to SA5 on consent of Recommendation Y.3103 (formerly Y.IMT2020-BM) (reply to 3GPP TSG SA5 -LS15) | ITU-T SG13 | noted |  |
| S5-191294 |  | LS from ITU-T to SA5 on Update of Technical Report – “Transport network support of IMT-2020/5G” | ITU-T SG15 | postponed |  |
| S5-191295 |  | Resubmitted Ls from ITU-T to SA5 on Energy Efficiency (reply to ETSI TC EE - EE(18)053033-E) | ITU-T SG5 | replied to | S5-191344 |

### C2: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| S5-191340 | Reply to: Ls from SA2 to SA5 on Collection of Slice Related Data Analytics from UEs | SA2 | SA, SA4, RAN, RAN WG3, RAN2 | S5-191290 |
| S5-191342 | LS on Reply on Reply LS on Slice related Data Analytics | SA2 | SA, RAN, RAN3, RAN2 | S5-191291 |
| S5-191343 | Reply to: Reply LS from SA4 to SA5 on Attributes for QoE measurement collection | SA4, RAN2, RAN3, CT1 | - | S5-191292 |
| S5-191344 | LS reply on energy efficiency | ITU-T SG5 | ETSI TC EE | S5-191295 |
| S5-191391 | LS on use case and definitions of PDCP end user throughput measurements | RAN2 | - |  |
| S5-191442 | Reply LS on information on MEC work in 5G | ETSI ISG MEC | - | S5-191285 |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | Source | new/revised |
| S5-191345 | New Study on non-public networks management | Huawei | SID new |
| S5-191412 | New SID: Study on management and orchestration aspects with integrated satellite components in a 5G network | THALES | SID new |
| S5-191413 | New WID proposal on integration of ONAP and 3GPP management framework | AT&T, Orange,Deutsche Telekom | WID new |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Spec | vers | Doc title |
| S5-191060 | 32.256 | 0.0.0 | Draft TS 32.256 skeleton v0.0.0 |
| S5-191324 | 32.845 | 0.2.0 | Draft TR 32.845 |
| S5-191360 | 28.307 | 0.2.0 | Draft TS 28.307 |
| S5-191362 | 28.404 | 0.6.0 | Draft TS 28.404 |
| S5-191363 | 28.310 | 0.3.0 | Draft TS 28.310 |
| S5-191372 | 32.160 | 1.1.0 | Draft TS 32.160 |
| S5-191376 | 28.812 | 0.3.0 | Draft TR 28.812 |
| S5-191432 | 28.890 | 1.1.0 | Draft TR 28.890 |
| S5-191444 | 28.803 | 0.3.0 | Draft TR 28.803 |
| S5-191482 | 28.861 | 0.3.0 | Draft TR 28.861 |
| S5-191485 | 28.805 | 0.3.0 | Draft TR 28.805 |

## Annex F: List of participants

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| TITLE | Family Name | Given Name | Employer Organization | Employer Category Code | Organization Represented | Organization Represented Category Code |
| Dr. | Al-kanani | Hassan | NEC Europe Ltd | ETSI | NEC Telecom MODUS Ltd. | ETSI |
| Mr. | Andrianov | Anatoly | Nokia Germany | ETSI | Nokia Japan | ARIB |
| Mrs. | Ayani | Zhulia | Ericsson LM | ETSI | Ericsson España S.A. | ETSI |
| Mrs. | Badulescu | Cristina | Ericsson LM | ETSI | Ericsson Inc. | ATIS |
| Mrs. | bor-yaliniz | irem | Huawei Technologies Co. Ltd. | ETSI | Huawei Technologies (Korea) | TTA |
| Mr. | Cano Soveri | Mirko | ETSI | ETSI | ETSI | ETSI |
| Miss | CHEN | SHAN | Huawei Tech.(UK) Co., Ltd | ETSI | Huawei Tech.(UK) Co., Ltd | ETSI |
| Dr. | Cornily | Jean Michel | Orange | ETSI | Orange Romania | ETSI |
| Mr. | Edwards | Robert | Matrixx | ETSI | Matrixx | ETSI |
| Mrs. | Gardella | Maryse | Nokia France | ETSI | Nokia France | ETSI |
| Mr. | Groenendijk | Jan | Ericsson LM | ETSI | Ericsson Telecomunicazioni SpA | ETSI |
| Mr. | Harper | Colby | Pivotal Commware | ATIS | Pivotal Commware | ATIS |
| Mr. | Horvat | Attila | Huawei Technologies Sweden AB | ETSI | HiSilicon Technologies Co. Ltd | CCSA |
| Mr. | Jahangir | Zeeshan | T-Mobile USA Inc. | ATIS | T-Mobile USA Inc. | ATIS |
| Mr. | Jan | Onnegren | Ericsson LM | ETSI | Ericsson GmbH, Eurolab | ETSI |
| Mr. | Jesske | Roland | Deutsche Telekom AG | ETSI | Deutsche Telekom AG | ETSI |
| Mr. | Kim | Jeong Yun | ETRI | RESEARCH PU | ETRI | TTA |
| Mr. | Klotz | Michael | Deutsche Telekom AG | ETSI | Deutsche Telekom AG | ETSI |
| Dr. | Lagha | Naceur | Amdocs Software Systems Ltd | ETSI | Amdocs Software Systems Ltd | ETSI |
| Mr. | Li | Gang | Nanjing Ericsson Panda Com Ltd | CCSA | Nanjing Ericsson Panda Com Ltd | CCSA |
| Mr. | McNamee | Alan | Openet Telecom | ETSI | Openet Telecom | ETSI |
| Mr. | MICHEL | Cyril | THALES | ETSI | THALES | ETSI |
| Ing. | Moggio | Fabrizio | TELECOM ITALIA S.p.A. | ETSI | TELECOM ITALIA S.p.A. | ETSI |
| Mr. | Petersen | Robert | Ericsson LM | ETSI | Ericsson India Private Limited | TSDSI |
| Dr. | Pliakas | Thomas | CloudStreet Oy | ETSI | CloudStreet Oy | ETSI |
| Mr. | Potter | Benjamin | AT&T GNS Belgium SPRL | ETSI | AT&T GNS Belgium SPRL | ETSI |
| Mr. | Rahman | Moshiur | HUAWEI TECH. GmbH | ETSI | Huawei Technologies Japan K.K. | TTC |
| Mr. | Sakae | Kozo | DOCOMO Communications Lab. | ETSI | NTT DOCOMO INC. | TTC |
| Dr. | Senarath | Gamini | Huawei Technologies Co. Ltd. | ETSI | Futurewei Technologies | ATIS |
| Mr. | Smith | David K. | AT&T GNS Belgium SPRL | ETSI | AT&T GNS Belgium SPRL | ETSI |
| Mr. | Thalanany | Sebastian | US Cellular Corporation | ETSI | US Cellular Corporation | ETSI |
| Mr. | Toche | Christian | Huawei Technologies France | ETSI | Huawei Device Co., Ltd | CCSA |
| Mr. | Törnkvist | Robert | Ericsson LM | ETSI | Ericsson-LG Co., LTD | TTA |
| Mr. | Tovinger | Thomas | Ericsson LM | ETSI | Ericsson LM | ETSI |
| Mr. | Tse | Edwin | Ericsson LM | ETSI | Ericsson Hungary Ltd | ETSI |
| Mr. | Xu | Ruiyue | Huawei Tech.(UK) Co., Ltd | ETSI | HUAWEI TECH. GmbH | ETSI |
| Mr. | Yao | Yizhi | Intel Corporation (UK) Ltd | ETSI | Intel | ATIS |
| Mr. | Zhang | Kai | Huawei Tech.(UK) Co., Ltd | ETSI | HUAWEI Technologies Japan K.K. | ARIB |
| Mr. | Zhu | Lei | Huawei Tech.(UK) Co., Ltd | ETSI | Huawei Telecommunication India | TSDSI |
| Mr. | Zhu | Weihong | ZTE Corporation | ETSI | ZTE Corporation | CCSA |
| Miss | Zou | Lan | Huawei Tech.(UK) Co., Ltd | ETSI | HuaWei Technologies Co., Ltd | CCSA |

## Annex H: List of future meetings

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Title | Start date | End date (OP) | Town | Country | Reference |
| SA5#124 | 2019-02-25 | 2019-03-01 | Taipei | TW | S5-124 |
| SA5#125 | 2019-04-08 | 2019-04-12 | Newport Beach | US | S5-125 |
| SA5#126 | 2019-05-13 | 2019-05-17 | Sophia Antipolis | FR | S5-126 |
| SA5-Ad Hoc | 2019-06-24 | 2019-06-28 | Sapporo | JP | S5-ah-40151 |
| SA5#127 | 2019-08-19 | 2019-08-23 | Bruges | BE | S5-127 |
| 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 |