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

**Meeting Report  
for  
TSG SA WG5  
meeting: 119Adhoc**



**Stockholm, Sweden, 26/06/2018 to 28/06/2018**

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## 1 Opening of the meeting

Zhulia (Ericsson, meeting host) welcomed the attendees to the Ericsson office in Kista.

## 2 Approval of the agenda

**S5-184000 Agenda**

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

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

## 3 IPR declaration

**S5-184001 IPR and legal declaration**

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

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

## 4 OAM&P

### 4.1 OAM&P Plenary

**S5-184002 Time Plan for OAM&P**

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

**Decision:** The document was **revised to S5-184230**.

**S5-184230 Time Plan for OAM&P**

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

(Replaces S5-184002)

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

**S5-184003 OAM&P SWG action list**

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

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

**S5-184004 Minutes of OAM&P SWG plenary**

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

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

**S5-184014 Revision of SA5#119 OAM&P SWG Exec Report**

*Type: report For: Information  
 Source: Huawei Technologies France*

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

**S5-184061 Discussion paper re-organization of 5G management specifications**

*Type: discussion For: Endorsement  
 Source: Huawei*

**Decision:** The document was **revised to S5-184271**.

**S5-184271 Discussion paper re-organization of 5G management specifications**

*Type: discussion For: Endorsement  
 Source: Huawei,Ericsson*

(Replaces S5-184061)

**Decision:** The document was **revised to S5-184365**.

**S5-184365 Discussion paper re-organization of 5G management specifications**

*Type: discussion For: Endorsement  
 Source: Huawei,Ericsson*

(Replaces S5-184271)

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

**S5-184182 LS from BBF to SA5 on Cooperation on Network Slicing**

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

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

**S5-184183 LS from IETF to SA5 on IETF work related to the management and orchestration of network slicing**

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

**Decision:** The document was **replied to in S5-184272**.

**S5-184272 Reply to: LS from IETF to SA5 on IETF work related to the management and orchestration of network slicing**

*Type: LS out For: approval  
 to IETF  
 Source: Huawei*

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

**S5-184184 LS from ITU-T SG15 to SA5 on transport network management to support 3GPP 5G (reply to 3GPP TSG SA5 – ols12-182369)**

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

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

**S5-184187 LS from GSMA to SA5 on Publication of new paper on network slicing and future plans**

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

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

**S5-184188 Reply LS from RAN2 to SA5 on Bluetooth/WLAN measurement collection in MDT**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-1808793*

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

**S5-184189 Reply LS from RAN2 to SA5 on adding measurements on average number of total active UEs**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-1809158*

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

**S5-184190 LS from RAN2 cc SA5 on RAN2 progress on ANR**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R2-1809226*

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

**S5-184191 Reply LS from RAN3 cc SA5 on adding new service type in QMC reporting**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: R3-183320*

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

**S5-184192 LS from SA2 cc SA5 on QoS Prediction**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-185846*

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

**S5-184193 LS from SA2 cc SA5 on 5G GUTI and EPS Interworking**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S2-186176*

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

**S5-184194 Resubmitted LS from SA4 to SA5 on Attributes for QoE measurement collection**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: S4-180240*

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

**S5-184197 Discussion paper on reduction of number of TS for 5G management**

*Type: discussion For: Endorsement  
 Source: Ericsson Limited*

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

**S5-184234 OAM executive report**

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

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

### 4.2 Rel-15 Operations, Administration, Maintenance and Provisioning (OAM&P)

#### 4.2.1 Management and orchestration of 5G networks and network slicing

**S5-184005 Minutes of Management and orchestration of 5G networks and network slicing**

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

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

**S5-184062 pCR 28.530 Rapporteur clean-up proposal on editor notes**

*Type: pCR For: Approval  
 28.530 v1.0.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-184231**.

**S5-184231 pCR 28.530 Rapporteur clean-up proposal on editor notes**

*Type: pCR For: Approval  
 28.530 v1.0.0  
 Source: Huawei*

(Replaces S5-184062)

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

**S5-184063 pCR 28.530 Rapporteur clean-up proposal on alignment of SBMA**

*Type: pCR For: Approval  
 28.530 v1.0.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-184232**.

**S5-184232 pCR 28.530 Rapporteur clean-up proposal on alignment of SBMA**

*Type: pCR For: Approval  
 28.530 v1.0.0  
 Source: Huawei*

(Replaces S5-184063)

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

**S5-184064 pCR 28.530 Add UC for network management data analysis**

*Type: pCR For: Approval  
 28.530 v1.0.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-184237**.

**S5-184237 pCR 28.530 Add UC for network management data analysis**

*Type: pCR For: Approval  
 28.530 v1.0.0  
 Source: Huawei*

(Replaces S5-184064)

**Decision:** The document was **revised to S5-184343**.

**S5-184343 pCR 28.530 Add UC for network management data analysis**

*Type: pCR For: Approval  
 28.530 v1.0.0  
 Source: Huawei*

(Replaces S5-184237)

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

**S5-184065 pCR 28.533 Add MS overview**

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

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

**S5-184066 pCR 28.533 Re-organize the deployment model sections**

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

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

**S5-184067 pCR 28.533 Add deployment model for management service and ONAP federation**

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

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

**S5-184068 pCR 28.533 Add deployment model for management of network and network slice**

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

**Decision:** The document was **revised to S5-184319**.

**S5-184319 pCR 28.533 Add deployment model for management of network and network slice**

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

(Replaces S5-184068)

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

**S5-184069 pCR 28.533 Solutions for management of 5G network and network slicing**

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

**Decision:** The document was **revised to S5-184236**.

**S5-184236 pCR 28.533 Solutions for management of 5G network and network slicing**

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

(Replaces S5-184069)

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

**S5-184070 pCR 28.533 Add overview of PM measurements**

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

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

**S5-184071 pCR 28.533 add DAMF deployment scenario**

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

**Decision:** The document was **revised to S5-184314**.

**S5-184314 pCR 28.533 add DAMF deployment scenario**

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

(Replaces S5-184071)

**Decision:** The document was **revised to S5-184344**.

**S5-184344 pCR 28.533 add DAMF deployment scenario**

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

(Replaces S5-184314)

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

**S5-184072 pCR 28.533 Exposure governance precondition**

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

**Decision:** The document was **revised to S5-184316**.

**S5-184316 pCR 28.533 Exposure governance precondition**

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

(Replaces S5-184072)

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

**S5-184073 pCR 28.533 Exposure governance clarification**

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

**Decision:** The document was **revised to S5-184317**.

**S5-184317 pCR 28.533 Exposure governance clarification**

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

(Replaces S5-184073)

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

**S5-184074 pCR 28.533 Operator network management systems cooperation**

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

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

**S5-184075 pCR 28.533 Management service unique identifier**

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

**Decision:** The document was **revised to S5-184315**.

**S5-184315 pCR 28.533 Management service unique identifier**

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

(Replaces S5-184075)

**Decision:** The document was **revised to S5-184366**.

**S5-184366 pCR 28.533 Management service unique identifier**

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

(Replaces S5-184315)

**Decision:** The document was **revised to S5-184374**.

**S5-184374 pCR 28.533 Management service unique identifier**

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

(Replaces S5-184366)

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

**S5-184093 Discussion paper on management service naming**

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

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

**S5-184094 28533 Discussion paper on management of non-slice-specific aspects of the network or subnetwork**

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

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

**S5-184103 pCR 28.533 Update functional management architecture to include MDAF**

*Type: pCR For: Approval  
 28.533 v0.3.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-184320**.

**S5-184320 pCR 28.533 Update functional management architecture to include MDAF**

*Type: pCR For: Approval  
 28.533 v0.3.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-184103)

**Decision:** The document was **revised to S5-184345**.

**S5-184345 pCR 28.533 Update functional management architecture to include MDAF**

*Type: pCR For: Approval  
 28.533 v0.3.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-184320)

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

**S5-184119 Add high-level use case of network slice capacity management**

*Type: pCR For: Approval  
 28.530 v0.7.0  
 Source: ETRI*

**Abstract:**

This pCR proposes to add a high-level use case of network slice capacity management.

**Decision:** The document was **revised to S5-184233**.

**S5-184233 Add high-level use case of network slice capacity management**

*Type: pCR For: Approval  
 28.530 v0.7.0  
 Source: ETRI*

(Replaces S5-184119)

**Decision:** The document was **revised to S5-184367**.

**S5-184367 Add high-level use case of network slice capacity management**

*Type: pCR For: Approval  
 28.530 v0.7.0  
 Source: ETRI*

(Replaces S5-184233)

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

**S5-184122 Add high-level use case of network slice capacity management**

*Type: pCR For: Approval  
 28.530 v0.7.0  
 Source: ETRI*

(Replaces S5-184119)

**Abstract:**

This pCR proposes to add a high-level use case of network slice capacity management.

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

**S5-184173 pCR 28.533 Update title**

*Type: pCR For: Approval  
 28.533 v0.3.0  
 Source: Ericsson Limited*

**Decision:** The document was **revised to S5-184322**.

**S5-184322 pCR 28.533 Update title**

*Type: pCR For: Approval  
 28.533 v0.3.0  
 Source: Ericsson Limited*

(Replaces S5-184173)

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

**S5-184175 Update TS 32.101 to include management services description**

*Type: discussion For: Agreement  
 Source: Ericsson Limited*

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

**S5-184321 Update TS 32.101 to include management services description**

*Type: discussion For: Agreement  
 Source: Ericsson Limited*

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

**S5-184176 Update the scope of TS 32.103**

*Type: discussion For: Agreement  
 32.103 v..  
 Source: Ericsson Limited*

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

**S5-184177 Discussion paper on Management reference model**

*Type: discussion For: Endorsement  
 Source: Ericsson Limited*

**Decision:** The document was **revised to S5-184341**.

**S5-184341 Discussion paper on Management reference model**

*Type: discussion For: Endorsement  
 Source: Ericsson Limited*

(Replaces S5-184177)

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

**S5-184195 Sequence proposal for management and orchestration of 5G networks and network slicing agenda point 4.2.1**

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

**Decision:** The document was **revised to S5-184238**.

**S5-184238 Sequence proposal for management and orchestration of 5G networks and network slicing agenda point 4.2.1**

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

(Replaces S5-184195)

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

**S5-184318 Draft TS 28.533**

*Type: draft TS For: Approval  
 28.533 v0.4.0  
 Source: Ericsson*

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

**S5-184329 Merge of 28531 and 28532**

*Type: other For: Approval  
 Source: Huawei*

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

**S5-184330 New generic management service spec**

*Type: other For: Approval  
 Source: Huawei*

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

**S5-184342 Draft TS 28.530**

*Type: draft TS For: Approval  
 28.530 v1.1.0  
 Source: Huawei*

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

#### 4.2.2 Provisioning of 5G networks and network slicing

**S5-184006 Minutes of Provisioning of 5G networks and network slicing**

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

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

**S5-184076 pCR 28.531 Rapporteur clean-up proposal**

*Type: pCR For: Approval  
 28.531 v1.0.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-184239**.

**S5-184239 pCR 28.531 Rapporteur clean-up proposal**

*Type: pCR For: Approval  
 28.531 v1.0.0  
 Source: Huawei*

(Replaces S5-184076)

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

**S5-184077 pCR 28.532 Rapporteur clean-up proposal**

*Type: pCR For: Approval  
 28.531 v1.0.0  
 Source: Huawei*

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

**S5-184078 pCR 28.531 Remove some editor's notes**

*Type: pCR For: Approval  
 28.531 v1.0.0  
 Source: Huawei*

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

**S5-184079 pCR 28.532 Update on network slice information model**

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

**Decision:** The document was **revised to S5-184287**.

**S5-184287 pCR 28.532 Update on network slice information model**

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

(Replaces S5-184079)

**Decision:** The document was **revised to S5-184346**.

**S5-184346 pCR 28.532 Update on network slice information model**

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

(Replaces S5-184287)

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

**S5-184080 pCR 28.532 Clean-up network slice related procedures**

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

**Decision:** The document was **revised to S5-184242**.

**S5-184242 pCR 28.532 Clean-up network slice related procedures**

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

(Replaces S5-184080)

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

**S5-184081 pCR 28.532 Clean-up network slice subnet and NF related procedures**

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

**Decision:** The document was **revised to S5-184243**.

**S5-184243 pCR 28.532 Clean-up network slice subnet and NF related procedures**

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

(Replaces S5-184081)

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

**S5-184082 pCR 28.532 Add RESTful solution for createMOI operation**

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

**Decision:** The document was **revised to S5-184244**.

**S5-184244 pCR 28.532 Add RESTful solution for createMOI operation**

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

(Replaces S5-184082)

**Decision:** The document was **revised to S5-184359**.

**S5-184359 pCR 28.532 Add RESTful solution for createMOI operation**

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

(Replaces S5-184244)

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

**S5-184083 pCR 28.532 Add RESTful solution for getMOIAttributes operation**

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

**Decision:** The document was **revised to S5-184245**.

**S5-184245 pCR 28.532 Add RESTful solution for getMOIAttributes operation**

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

(Replaces S5-184083)

**Decision:** The document was **revised to S5-184347**.

**S5-184347 pCR 28.532 Add RESTful solution for getMOIAttributes operation**

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

(Replaces S5-184245)

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

**S5-184084 pCR 28.532 Add RESTful solution for modifyMOIAttributes operation**

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

**Decision:** The document was **revised to S5-184246**.

**S5-184246 pCR 28.532 Add RESTful solution for modifyMOIAttributes operation**

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

(Replaces S5-184084)

**Decision:** The document was **revised to S5-184348**.

**S5-184348 pCR 28.532 Add RESTful solution for modifyMOIAttributes operation**

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

(Replaces S5-184246)

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

**S5-184085 pCR 28.532 Add RESTful solution for deleteMOI operation**

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

**Decision:** The document was **revised to S5-184247**.

**S5-184247 pCR 28.532 Add RESTful solution for deleteMOI operation**

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

(Replaces S5-184085)

**Decision:** The document was **revised to S5-184349**.

**S5-184349 pCR 28.532 Add RESTful solution for deleteMOI operation**

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

(Replaces S5-184247)

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

**S5-184086 pCR 28.532 Update on the information model parameter perfReq**

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

**Decision:** The document was **revised to S5-184248**.

**S5-184248 pCR 28.532 Update on the information model parameter perfReq**

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

(Replaces S5-184086)

**Decision:** The document was **revised to S5-184350**.

**S5-184350 pCR 28.532 Update on the information model parameter perfReq**

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

(Replaces S5-184248)

**Decision:** The document was **revised to S5-184368**.

**S5-184368 pCR 28.532 Update on the information model parameter perfReq**

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

(Replaces S5-184350)

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

**S5-184104 pCR 28.532 Add component types for provisioning service for sub-networks**

*Type: pCR For: Approval  
 28.532 v0.3.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-184249**.

**S5-184249 pCR 28.532 Add component types for provisioning service for sub-networks**

*Type: pCR For: Approval  
 28.532 v0.3.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-184104)

**Decision:** The document was **revised to S5-184351**.

**S5-184351 pCR 28.532 Add component types for provisioning service for sub-networks**

*Type: pCR For: Approval  
 28.532 v0.3.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-184249)

**Decision:** The document was **revised to S5-184369**.

**S5-184369 pCR 28.532 Add component types for provisioning service for sub-networks**

*Type: pCR For: Approval  
 28.532 v0.3.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-184351)

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

**S5-184120 pCR 28.531 Add use case and requirements for capacity planning of network slice management capability**

*Type: pCR For: Approval  
 28.531 v0.5.0  
 Source: ETRI*

**Abstract:**

This proposal aims to propose requirement and use case of the capacity planning operation for the management of a network slice instance.

**Decision:** The document was **revised to S5-184250**.

**S5-184250 pCR 28.531 Add use case and requirements for capacity planning of network slice management capability**

*Type: pCR For: Approval  
 28.531 v0.5.0  
 Source: ETRI*

(Replaces S5-184120)

**Decision:** The document was **revised to S5-184352**.

**S5-184352 pCR 28.531 Add use case and requirements for capacity planning of network slice management capability**

*Type: pCR For: Approval  
 28.531 v0.5.0  
 Source: ETRI*

(Replaces S5-184250)

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

**S5-184121 Add a procedure of network slice capacity management**

*Type: pCR For: Approval  
 28.532 v0.3.0  
 Source: ETRI*

**Abstract:**

This pCR proposes to add a procedure of network slice capacity planning.

**Decision:** The document was **revised to S5-184251**.

**S5-184251 Add a procedure of network slice capacity management**

*Type: pCR For: Approval  
 28.532 v0.3.0  
 Source: ETRI*

(Replaces S5-184121)

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

**S5-184172 pCR 28.531 Minor update**

*Type: pCR For: Approval  
 28.531 v1.0.0  
 Source: Ericsson Limited*

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

**S5-184174 pCR 28.532 State handling of NSI**

*Type: pCR For: Agreement  
 28.532 v0.3.0  
 Source: Ericsson Limited*

**Decision:** The document was **revised to S5-184325**.

**S5-184325 pCR 28.532 State handling of NSI**

*Type: pCR For: Agreement  
 28.532 v0.3.0  
 Source: Ericsson Limited*

(Replaces S5-184174)

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

**S5-184240 Draft TS 28.532**

*Type: draft TS For: Approval  
 28.532 v1.1.0  
 Source: Huawei*

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

**S5-184241 Draft TS 28.531**

*Type: draft TS For: Approval  
 28.531 v1.1.0  
 Source: Huawei*

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

#### 4.2.3 Network Resource Model (NRM) for 5G networks and network slicing

**S5-184007 Minutes of Network Resource Model (NRM) for 5G networks and network slicing**

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

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

**S5-184018 pCR draft TS 28541 implement Endorsement S5-183625**

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

**Decision:** The document was **revised to S5-184254**.

**S5-184254 pCR draft TS 28541 implement Endorsement S5-183625**

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

(Replaces S5-184018)

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

**S5-184019 pCR draft TS 28540 use of one model Requirement**

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

**Decision:** The document was **revised to S5-184255**.

**S5-184255 pCR draft TS 28541 use of one model Requirement**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Ericsson Inc.*

(Replaces S5-184019)

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

**S5-184020 pCR draft TS 28540 add Requirement**

*Type: pCR For: (not specified)  
 28.540 v0.3.0  
 Source: Ericsson Inc.*

**Decision:** The document was **revised to S5-184024**.

**S5-184021 pCR draft TS 28541 gNB cell state handling**

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

**Decision:** The document was **revised to S5-184256**.

**S5-184256 pCR draft TS 28541 gNB cell state handling**

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

(Replaces S5-184021)

**Decision:** The document was **revised to S5-184353**.

**S5-184353 pCR draft TS 28541 gNB cell state handling**

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

(Replaces S5-184256)

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

**S5-184022 pCR draft TS 28541 merge model of gNB with en-gNB**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Ericsson Inc.*

**Decision:** The document was **revised to S5-184253**.

**S5-184253 pCR draft TS 28541 merge model of gNB with en-gNB**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Ericsson Inc.*

(Replaces S5-184022)

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

**S5-184023 pCR draft TS 28541 BWP config**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Ericsson Inc.*

**Decision:** The document was **revised to S5-184257**.

**S5-184257 pCR draft TS 28541 BWP config**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Ericsson Inc.*

(Replaces S5-184023)

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

**S5-184024 pCR draft TS 28540 add Requirement**

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

(Replaces S5-184020)

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

**S5-184252 pCR draft TS 28540 add Requirement**

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

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

**S5-184048 pCR 28.540 Merge current 5GNRM specifications into one single specification**

*Type: pCR For: Approval  
 28.540 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-184326**.

**S5-184326 pCR 28.540 Merge current 5GNRM specifications into one single specification**

*Type: pCR For: Approval  
 28.540 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-184048)

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

**S5-184049 pCR TS 28.541 Update the attribute’s properties' setting**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184050 pCR TS 28.543 Update the attribute’s properties' setting**

*Type: pCR For: Approval  
 28.543 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184051 pCR TS 28.543 Update NRF and NSSF transport view diagram with interfaces for international roaming**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-184261**.

**S5-184261 pCR TS 28.543 Update NRF and NSSF transport view diagram with interfaces for international roaming**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-184051)

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

**S5-184052 pCR TS 28.541 Add JSON-based SS definitions for gNB modeling**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184053 pCR TS 28.541 Add XML-based SS definitions for gNB modeling**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184054 pCR TS 28.543 Add XML-based SS definitions for 5GC modeling**

*Type: pCR For: Approval  
 28.543 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184055 Draft CR 28.659 Update E-UTRAN SS definitions to support EN-DC management**

*Type: CR For: Agreement  
 28.659 v15.1.0 CR-0023 Cat: B (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184056 Draft CR 28.657 Add requirement to support ng-eNB management**

*Type: CR For: Agreement  
 28.657 v14.0.0 CR-0007 Cat: B (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184057 Draft CR 28.658 Update E-UTRAN IS definitions to support ng-eNB management**

*Type: CR For: Agreement  
 28.658 v15.0.0 CR-0027 Cat: B (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184058 Draft CR 28.709 Update EPC SS definitions to support management of EN-DC and 5G interworking**

*Type: CR For: Agreement  
 28.709 v14.1.0 CR-0009 Cat: B (Rel-15)  
  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184059 Revised WID Network Resource Model (NRM) for 5G networks and network slicing**

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

**Decision:** The document was **revised to S5-184328**.

**S5-184328 Revised WID Network Resource Model (NRM) for 5G networks and network slicing**

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

(Replaces S5-184059)

**Decision:** The document was **revised to S5-184355**.

**S5-184355 Revised WID Network Resource Model (NRM) for 5G networks and network slicing**

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

(Replaces S5-184328)

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

**S5-184060 Proposal of TDoc discussion sequence for agenda item 4.2.3**

*Type: other For: Information  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184095 pCR 28.543 Add eEP\_RP IOC and update existing EP\_RP(s)**

*Type: pCR For: Approval  
 28.543 v1.0.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-184260**.

**S5-184260 pCR 28.543 Add eEP\_RP IOC and update existing EP\_RP(s)**

*Type: pCR For: Approval  
 28.543 v1.0.0  
 Source: Huawei*

(Replaces S5-184095)

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

**S5-184178 Rel-15 DraftCR 28.659 Update E-UTRAN SS definitions to support EN-DC management**

*Type: draftCR For: Approval  
 28.659 v15.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184179 Rel-15 DraftCR 28.657 Add requirement to support ng-eNB management**

*Type: draftCR For: Approval  
 28.657 v15.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-184262**.

**S5-184262 Rel-15 DraftCR 28.657 Add requirement to support ng-eNB management**

*Type: draftCR For: Approval  
 28.657 v15.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-184179)

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

**S5-184180 Rel-15 DraftCR 28.658 Update E-UTRAN IS definitions to support ng-eNB management**

*Type: draftCR For: Approval  
 28.658 v15.1.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-184263**.

**S5-184263 Rel-15 DraftCR 28.658 Update E-UTRAN IS definitions to support ng-eNB management**

*Type: draftCR For: Approval  
 28.658 v15.1.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-184180)

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

**S5-184181 Rel-15 DraftCR 28.709 Update EPC SS definitions to support management of EN-DC and 5G interworking**

*Type: draftCR For: Approval  
 28.709 v15.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184258 Draft TS 28.541**

*Type: draft TS For: Approval  
 Source: Nokia*

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

**S5-184259 Draft TS 28.543**

*Type: draft TS For: Approval  
 28.543 v1.1.0  
 Source: Nokia*

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

**S5-184286 Draft CR rel-15 28.622 Update EP-RP IOC definition to support 5G NRM**

*Type: draftCR For: Approval  
 28.622 v..  
 Source: Huawei*

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

**S5-184302 Draft TS 28.540**

*Type: draft TS For: Approval  
 28.540 v1.1.0  
 Source: Nokia*

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

**S5-184324 pCR 28.541**

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

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

**S5-184327 pCR 28.541 Merge current 5GNRM Stage 2&3 specifications into one single specification**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Nokia*

**Decision:** The document was **revised to S5-184356**.

**S5-184356 pCR 28.541 Merge current 5GNRM Stage 2&3 specifications into one single specification**

*Type: pCR For: Approval  
 28.541 v1.0.0  
 Source: Nokia*

(Replaces S5-184327)

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

#### 4.2.4 Fault Supervision for 5G networks and network slicing

**S5-184008 Minutes of Fault Supervision for 5G networks and network slicing**

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

**Decision:** The document was **revised to S5-184371**.

**S5-184371 Minutes of Fault Supervision for 5G networks and network slicing**

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

(Replaces S5-184008)

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

**S5-184096 pCR 28.546 Procedures for subscribeAlarmNotify R4**

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

**Decision:** The document was **revised to S5-184274**.

**S5-184274 pCR 28.546 Procedures for subscribeAlarmNotify R4**

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

(Replaces S5-184096)

**Decision:** The document was **revised to S5-184357**.

**S5-184357 pCR 28.546 Procedures for subscribeAlarmNotify R4**

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

(Replaces S5-184274)

**Decision:** The document was **revised to S5-184370**.

**S5-184370 pCR 28.546 Procedures for subscribeAlarmNotify R4**

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

(Replaces S5-184357)

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

**S5-184097 pCR 28.546 VR alarm correlation R4**

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

**Decision:** The document was **revised to S5-184275**.

**S5-184275 pCR 28.546 VR alarm correlation R4**

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

(Replaces S5-184097)

**Decision:** The document was **revised to S5-184358**.

**S5-184358 pCR 28.546 VR alarm correlation R4**

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

(Replaces S5-184275)

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

**S5-184098 pCR 28.546 Update FS management services**

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

**Decision:** The document was **revised to S5-184270**.

**S5-184270 pCR 28.546 Update FS management services**

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

(Replaces S5-184098)

**Decision:** The document was **revised to S5-184354**.

**S5-184354 pCR 28.546 Update FS management services**

*Type: pCR For: Approval  
 28.546 v0.2.0  
 Source: Huawei,ZTE*

(Replaces S5-184270)

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

**S5-184099 pCR 28.545 Update FS management services**

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

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

**S5-184264 pCR 28.545 Update FS management services**

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

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

**S5-184129 pCR 28.545 add use cases about notify changed alarm**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

**Decision:** The document was **revised to S5-184267**.

**S5-184267 pCR 28.545 add use cases about notify changed alarm**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

(Replaces S5-184129)

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

**S5-184130 pCR 28.545 add use cases about notify cleared alarm**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

**Decision:** The document was **revised to S5-184268**.

**S5-184268 pCR 28.545 add use cases about notify cleared alarm**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

(Replaces S5-184130)

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

**S5-184131 pCR 28.545 add use cases about notify acknowledgement state change**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

**Decision:** The document was **revised to S5-184269**.

**S5-184269 pCR 28.545 add use cases about notify acknowledgement state change**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

(Replaces S5-184131)

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

**S5-184132 pCR 28.545 add service names**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

**Decision:** The document was **revised to S5-184265**.

**S5-184265 pCR 28.545 add service names**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

(Replaces S5-184132)

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

**S5-184133 pCR 28.545 Change the service names in the use cases and requirements**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

**Decision:** The document was **revised to S5-184266**.

**S5-184266 pCR 28.545 Change the service names in the use cases and requirements**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

(Replaces S5-184133)

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

**S5-184134 pCR 28.546 update the service names**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

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

**S5-184273 pCR 28.546 update the service names**

*Type: pCR For: Approval  
 28.545 v0.3.0  
 Source: ZTE, China Mobile*

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

**S5-184135 pCR 28.546 Remove annex and duplicated reference**

*Type: pCR For: Approval  
 28.546 v0.2.0  
 Source: ZTE, China Mobile*

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

**S5-184136 pCR 28.546 skeleton of stage3**

*Type: pCR For: Approval  
 28.546 v0.2.0  
 Source: ZTE, China Mobile*

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

**S5-184137 pCR 28.546 Add RESTful Solution of subscribe operation**

*Type: pCR For: Approval  
 28.546 v0.2.0  
 Source: ZTE, China Mobile*

**Decision:** The document was **revised to S5-184331**.

**S5-184331 pCR 28.546 Add RESTful Solution of subscribe operation**

*Type: pCR For: Approval  
 28.546 v0.2.0  
 Source: ZTE, China Mobile*

(Replaces S5-184137)

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

**S5-184162 pCR 28.546 Add stage 3 definitions**

*Type: pCR For: Approval  
 28.546 v0.2.0  
 Source: Nokia Germany*

**Decision:** The document was **revised to S5-184235**.

**S5-184235 pCR 28.546 Add stage 3 definitions**

*Type: pCR For: Approval  
 28.546 v0.2.0  
 Source: Nokia Germany*

(Replaces S5-184162)

**Decision:** The document was **revised to S5-184333**.

**S5-184333 pCR 28.546 Add stage 3 definitions**

*Type: pCR For: Approval  
 28.546 v0.2.0  
 Source: Nokia Germany*

(Replaces S5-184235)

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

**S5-184229 Discussion Sequence Proposal for 4.2.4**

*Type: other For: Information  
 Source: ZTE*

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

**S5-184332 Draft TS 28.546**

*Type: draft TS For: Approval  
 28.546 v0.3.0  
 Source: Nokia*

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

**S5-184338 Draft TS 28.545**

*Type: draft TS For: Approval  
 28.545 v0.4.0  
 Source: ZTE*

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

#### 4.2.5 Assurance data and Performance Management for 5G networks and network slicing

**S5-184009 Minutes of Assurance data and Performance Management for 5G networks and network slicing**

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

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

**S5-184087 pCR 28.550 Global alignment of management service names**

*Type: pCR For: Approval  
 28.550 v1.0.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-184323**.

**S5-184323 pCR 28.550 Global alignment of management service names**

*Type: pCR For: Approval  
 28.550 v1.0.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-184087)

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

**S5-184088 pCR 28.550 Update UC and requirements on management data analytics**

*Type: pCR For: Approval  
 28.550 v1.0.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-184276**.

**S5-184276 pCR 28.550 Update UC and requirements on management data analytics**

*Type: pCR For: Approval  
 28.550 v1.0.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-184088)

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

**S5-184089 pCR 28.551 Add component types for measurement job management services**

*Type: pCR For: Approval  
 28.551 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-184279**.

**S5-184279 pCR 28.551 Add component types for measurement job management services**

*Type: pCR For: Approval  
 28.551 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-184089)

**Decision:** The document was **revised to S5-184361**.

**S5-184361 pCR 28.551 Add component types for measurement job management services**

*Type: pCR For: Approval  
 28.551 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-184279)

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

**S5-184090 pCR 28.551 Add component types for performance data file reporting services**

*Type: pCR For: Approval  
 28.551 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

**Decision:** The document was **revised to S5-184280**.

**S5-184280 pCR 28.551 Add component types for performance data file reporting services**

*Type: pCR For: Approval  
 28.551 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-184090)

**Decision:** The document was **revised to S5-184362**.

**S5-184362 pCR 28.551 Add component types for performance data file reporting services**

*Type: pCR For: Approval  
 28.551 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

(Replaces S5-184280)

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

**S5-184091 pCR 28.551 Add component types for performance data streaming services**

*Type: pCR For: Approval  
 28.551 v0.2.0  
 Source: Intel Corporation (UK) Ltd*

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

**S5-184092 Discussion paper on KPI collection and reporting**

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

**Decision:** The document was **revised to S5-184278**.

**S5-184278 Discussion paper on KPI collection and reporting**

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

(Replaces S5-184092)

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

**S5-184100 pCR 28.552 modification of Average delay DL air-interface**

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

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

**S5-184101 pCR 28.551 Add procedures for Network Slice Subnet Data Analytics**

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

**Decision:** The document was **revised to S5-184334**.

**S5-184334 pCR 28.551 Add procedures for Network Slice Subnet Data Analytics**

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

(Replaces S5-184101)

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

**S5-184102 pCR 28.550 Add UC and requirement for management analytics KPIs for networks**

*Type: pCR For: Approval  
 28.550 v1.0.0  
 Source: Huawei*

**Decision:** The document was **revised to S5-184277**.

**S5-184277 pCR 28.550 Add UC and requirement for management analytics KPIs for networks**

*Type: pCR For: Approval  
 28.550 v1.0.0  
 Source: Huawei*

(Replaces S5-184102)

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

**S5-184153 pCR 28.552 Add measurement for UE Context Rel initiated by CU and revise the associated UC**

*Type: pCR For: (not specified)  
 28.552 v0.3.0  
 Source: China Mobile E-Commerce Co.*

**Decision:** The document was **revised to S5-184281**.

**S5-184281 pCR 28.552 Add measurement for UE Context Rel initiated by CU and revise the associated UC**

*Type: pCR For: -  
 28.552 v0.3.0  
 Source: China Mobile E-Commerce Co.*

(Replaces S5-184153)

**Decision:** The document was **revised to S5-184363**.

**S5-184363 pCR 28.552 Add measurement for UE Context Rel initiated by CU and revise the associated UC**

*Type: pCR For: -  
 28.552 v0.3.0  
 Source: China Mobile E-Commerce Co.*

(Replaces S5-184281)

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

**S5-184154 pCR 28.552 Add measurement on the processor usage of virtualized gNB-CU**

*Type: pCR For: Approval  
 28.552 v0.3.0  
 Source: China Mobile E-Commerce Co.*

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

**S5-184155 pCR 28.554 Add a new use case of registration success rate**

*Type: pCR For: Approval  
 28.554 v1.0.0  
 Source: China Mobile E-Commerce Co.*

**Decision:** The document was **revised to S5-184284**.

**S5-184284 pCR 28.554 Add a new use case of registration success rate**

*Type: pCR For: Approval  
 28.554 v1.0.0  
 Source: China Mobile E-Commerce Co.*

(Replaces S5-184155)

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

**S5-184156 pCR 28.554 Add a KPI definition of registration success rate**

*Type: pCR For: Approval  
 28.554 v1.0.0  
 Source: China Mobile E-Commerce Co.*

**Decision:** The document was **revised to S5-184285**.

**S5-184285 pCR 28.554 Add a KPI definition of registration success rate**

*Type: pCR For: Approval  
 28.554 v1.0.0  
 Source: China Mobile E-Commerce Co.*

(Replaces S5-184156)

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

**S5-184163 pCR 28.553 PDU session measurements clarifications**

*Type: pCR For: Approval  
 28.553 v0.3.0  
 Source: Ericsson GmbH, Eurolab*

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

**S5-184164 pCR 28.554 PDU session KPI and UC update**

*Type: pCR For: Approval  
 28.554 v1.0.0  
 Source: Ericsson GmbH, Eurolab*

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

**S5-184165 pCR 28.552 Add Use Case and Measurements related to UE throughput**

*Type: pCR For: Approval  
 28.552 v0.3.0  
 Source: Ericsson GmbH, Eurolab*

**Decision:** The document was **revised to S5-184335**.

**S5-184335 pCR 28.552 Add Use Case and Measurements related to UE throughput**

*Type: pCR For: Approval  
 28.552 v0.3.0  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-184165)

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

**S5-184166 pCR 28.552 Add Use Case and Measurements related to Unrestricted Volume**

*Type: pCR For: Approval  
 28.552 v0.3.0  
 Source: Ericsson GmbH, Eurolab*

**Decision:** The document was **revised to S5-184336**.

**S5-184336 pCR 28.552 Add Use Case and Measurements related to Unrestricted Volume**

*Type: pCR For: Approval  
 28.552 v0.3.0  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-184166)

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

**S5-184167 pCR 28.554 Add KPI and UC related to UE throughput in RAN**

*Type: pCR For: Approval  
 28.554 v1.0.0  
 Source: Ericsson GmbH, Eurolab*

**Decision:** The document was **revised to S5-184340**.

**S5-184340 pCR 28.554 Add KPI and UC related to UE throughput in RAN**

*Type: pCR For: Approval  
 28.554 v1.0.0  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-184167)

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

**S5-184169 LS on L2 measurement specification for NR in R15**

*Type: LS out For: (not specified)  
 to 3GPP RAN2, 3GPP RAN3, cc 3GPP RAN1  
 Source: Ericsson GmbH, Eurolab*

**Decision:** The document was **revised to S5-184337**.

**S5-184337 LS on L2 measurement specification for NR in R15**

*Type: LS out For: -  
 to 3GPP RAN2, 3GPP RAN3, cc 3GPP RAN1  
 Source: Ericsson GmbH, Eurolab*

(Replaces S5-184169)

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

**S5-184170 Discussion paper on restructuring of TS 28.552 clause 5**

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

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

**S5-184171 pCR 28.552 Add measurements related to non-split scenario**

*Type: pCR For: Approval  
 28.552 v0.3.0  
 Source: Ericsson GmbH, Eurolab*

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

**S5-184196 Tdoc discussion sequence for WI on Assurance data and PM for 5G networks and network slicing**

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

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

**S5-184282 Draft TS 28.552**

*Type: draft TS For: Approval  
 28.552 v0.4.0  
 Source: Intel*

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

**S5-184283 Draft TS 28.553**

*Type: draft TS For: Approval  
 28.553 v0.4.0  
 Source: Intel*

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

**S5-184339 Draft TS 28.554**

*Type: draft TS For: Approval  
 28.554 v1.1.0  
 Source: China Mobile*

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

**S5-184360 Draft TS 28.550**

*Type: draft TS For: Approval  
 28.550 v1.1.0  
 Source: Intel*

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

**S5-184372 Draft TS 28.551**

*Type: draft TS For: Approval  
 28.551 v0.3.0  
 Source: Intel*

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

#### 4.2.6 5G Trace management

**S5-184010 Minutes of Management of 5G Trace management**

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

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

#### 4.2.7 Management and virtualization aspects of 5G networks

**S5-184011 Minutes of Management and virtualization aspects of 5G networks**

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

**Decision:** The document was **revised to S5-184373**.

**S5-184373 Minutes of Management and virtualization aspects of 5G networks**

*Type: report For: -  
 Source: Rapporteur Intel)*

(Replaces S5-184011)

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

**S5-184105 TS 28.510 scope extension**

*Type: CR For: Approval  
 28.510 v14.2.0 CR-0004 Cat: B (Rel-15)  
  
 Source: Intel K.K.*

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

**S5-184106 TS 28.511 scope extension**

*Type: CR For: Approval  
 28.511 v14.1.0 CR-0003 Cat: B (Rel-15)  
  
 Source: Intel K.K.*

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

**S5-184107 TS 28.525 scope extension**

*Type: CR For: Approval  
 28.525 v14.2.0 CR-0018 Cat: B (Rel-15)  
  
 Source: Intel K.K.*

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

**S5-184108 TS 28.526 scope extension**

*Type: CR For: Approval  
 28.526 v14.1.0 CR-0011 Cat: B (Rel-15)  
  
 Source: Intel K.K.*

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

**S5-184109 NRM enhancement to support NFV**

*Type: CR For: Approval  
 28.622 v15.0.0 CR-0025 Cat: B (Rel-15)  
  
 Source: Intel K.K.*

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

**S5-184110 pCR 28.500 add the relationship between NE and PNF**

*Type: other For: Approval  
 28.500 v..  
 Source: Intel K.K.*

**Decision:** The document was **revised to S5-184308**.

**S5-184308 DraftCR 28.500 add the relationship between NE and PNF**

*Type: draftCR For: Approval  
 28.500 v15.0.0  
 Source: Intel K.K.*

(Replaces S5-184110)

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

**S5-184111 pCR 28.500 add Relation between 5G management and NFV-MA**

*Type: other For: Approval  
 28.500 v..  
 Source: Intel K.K.*

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

**S5-184309 pCR 28.500 add Relation between 5G management and NFV-MA**

*Type: other For: Approval  
 28.500 v..  
 Source: Intel K.K.*

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

**S5-184168 Discussion paper on relation between 3GPP NRMs and ETSI ISG NFV entities**

*Type: discussion For: Endorsement  
 28.500 v..  
 Source: Intel K.K.*

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

#### 4.2.8 REST Solution Sets

**S5-184012 Minutes for REST Solution Sets**

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

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

**S5-184157 pCR 32.158 Clarify resource URI structure**

*Type: pCR For: Approval  
 32.158 v1.0.0  
 Source: Nokia Germany*

**Decision:** The document was **revised to S5-184310**.

**S5-184310 pCR 32.158 Clarify resource URI structure**

*Type: pCR For: Approval  
 32.158 v1.0.0  
 Source: Nokia Germany*

(Replaces S5-184157)

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

**S5-184158 pCR 32.158 Clarify design pattern for reading a resource**

*Type: pCR For: Approval  
 32.158 v1.0.0  
 Source: Nokia Germany*

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

**S5-184159 pCR 32.158 Clarify design pattern for updating a resource**

*Type: pCR For: Approval  
 32.158 v1.0.0  
 Source: Nokia Germany*

**Decision:** The document was **revised to S5-184311**.

**S5-184311 pCR 32.158 Clarify design pattern for updating a resource**

*Type: pCR For: Approval  
 32.158 v1.0.0  
 Source: Nokia Germany*

(Replaces S5-184159)

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

**S5-184160 pCR 32.158 Add design pattern for partially updating a resource**

*Type: pCR For: Approval  
 32.158 v1.0.0  
 Source: Nokia Germany*

**Decision:** The document was **revised to S5-184312**.

**S5-184312 pCR 32.158 Add design pattern for partially updating a resource**

*Type: pCR For: Approval  
 32.158 v1.0.0  
 Source: Nokia Germany*

(Replaces S5-184160)

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

**S5-184161 pCR 32.158 Add resource representation formats**

*Type: pCR For: Approval  
 32.158 v1.0.0  
 Source: Nokia Germany*

**Decision:** The document was **revised to S5-184313**.

**S5-184313 pCR 32.158 Add resource representation formats**

*Type: pCR For: Approval  
 32.158 v1.0.0  
 Source: Nokia Germany*

(Replaces S5-184161)

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

**S5-184364 Draft TS 32.158**

*Type: draft TS For: Approval  
 32.158 v1.1.0  
 Source: Nokia*

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

## 5 Charging

## 

### 5.1 Charging Plenary

**S5-184013 CH Agenda and Time Plan**

*Type: agenda For: (not specified)  
 Source: CH SWG Chair*

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

**S5-184015 Discussion paper on value of secondary RAT type**

*Type: discussion For: Discussion  
 Source: China Mobile*

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

**S5-184185 LS from CT3 to SA5 on Addition of AVP code definitions**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C3-183701*

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

**S5-184186 LS from CT3 cc SA5 on clarification for spending limit control functionality**

*Type: LS in For: (not specified)  
 Original outgoing LS: -, to -, cc -  
 Source: C3-183783*

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

**S5-184301 CH Executive Report**

*Type: report For: Information  
 Source: CH SWG Chair*

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

### 5.2 Rel-15 Charging

### 

#### 5.2.1 Data Charging in 5G System Architecture Phase 1

**S5-184017 pCR 32.255 Update the category of charging information**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: China Mobile*

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

**S5-184025 Rel-15 pCR 32.255 Correction on the mesage flow for PDU Session establishment**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184209**.

**S5-184209 Rel-15 pCR 32.255 Correction on the mesage flow for PDU Session establishment**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.,Nokia, Nokia Shanghai Bell*

(Replaces S5-184025)

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

**S5-184026 Discussion Paper on the Trigger Configuration**

*Type: discussion For: Agreement  
 32.255 v..  
 Source: Huawei Technologies Co. Ltd.*

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

**S5-184027 Discussion Paper on Usage Reporting**

*Type: discussion For: Agreement  
 32.255 v..  
 Source: Huawei Technologies Co. Ltd.*

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

**S5-184028 Rel-15 pCR 32.255 Proposal for the Charging Session**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184206**.

**S5-184206 Rel-15 pCR 32.255 Proposal for the Charging Session**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184028)

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

**S5-184029 Rel-15 pCR 32.255 Proposal on PCC Rules for Converged Charging**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184202**.

**S5-184202 Rel-15 pCR 32.255 Proposal on PCC Rules for Converged Charging**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184029)

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

**S5-184030 Rel-15 pCR 32.255 Proposal on the Centralized or Decentralized unit determination and Centralized rating scenarios**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

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

**S5-184031 Rel-15 pCR 32.255 Proposal on the Chargeable Events**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

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

**S5-184032 Rel-15 pCR 32.255 Proposal on the Message Content**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184205**.

**S5-184205 Rel-15 pCR 32.255 Proposal on the Message Content**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.,Nokia, Nokia Shanghai Bell*

(Replaces S5-184032)

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

**S5-184033 Rel-15 pCR 32.255 Proposal on the Roaming Requirement**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184210**.

**S5-184210 Rel-15 pCR 32.255 Proposal on the Roaming Requirement**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184033)

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

**S5-184034 Rel-15 pCR 32.255 Proposal on the Trigger Configuration**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184199**.

**S5-184199 Rel-15 pCR 32.255 Proposal on the Trigger Configuration**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.,Nokia, Nokia Shanghai Bell*

(Replaces S5-184034)

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

**S5-184035 Rel-15 pCR 32.255 Proposal on the Triggers**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184198**.

**S5-184198 Rel-15 pCR 32.255 Proposal on the Triggers**

*Type: pCR For: Agreement  
 32.255 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184035)

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

**S5-184112 Rel-15 pCR TS 32.255 Update Triggers description**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-184200**.

**S5-184200 Rel-15 pCR TS 32.255 Update Triggers description**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-184112)

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

**S5-184113 Rel-15 pCR TS 32.255 Update CDR generation description**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-184215**.

**S5-184215 Rel-15 pCR TS 32.255 Update CDR generation description**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-184113)

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

**S5-184114 Rel-15 pCR TS 32.255 Introduce Charging characteristics**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-184216**.

**S5-184216 Rel-15 pCR TS 32.255 Introduce Charging characteristics**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-184114)

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

**S5-184115 Discussion paper on usage reporting**

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

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

**S5-184116 Rel-15 pCR TS 32.255 Update Message description for usage**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184117 Rel-15 pCR TS 32.255 Update PDU session flows**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184118 Rel-15 pCR TS 32.255 Introduce non-3GPP access**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-184214**.

**S5-184214 Rel-15 pCR TS 32.255 Introduce non-3GPP access**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-184118)

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

**S5-184123 Rel-15 pCR TS 32.255 Update CDR description for usage**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-184217**.

**S5-184217 Rel-15 pCR TS 32.255 Update CDR description for usage**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-184123)

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

**S5-184124 Rel-15 pCR TS 32.255 Edithelp Clean-up**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184140 Rel-15 pCR TS 32.255 Introduce Network sharing (MOCN).**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184141 Rel-15 pCR 32.255 Proposal on requirement clarifications**

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

**Decision:** The document was **revised to S5-184208**.

**S5-184208 Rel-15 pCR 32.255 Proposal on requirement clarifications**

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

(Replaces S5-184141)

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

**S5-184142 Rel-15 pCR 32.255 Roaming handling clarification**

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

**Decision:** The document was **revised to S5-184211**.

**S5-184211 Rel-15 pCR 32.255 Roaming handling clarification**

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

(Replaces S5-184142)

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

**S5-184143 Rel-15 pCR 32.255 Change to table format for trigger conditions**

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

**Decision:** The document was **revised to S5-184201**.

**S5-184201 Rel-15 pCR 32.255 Change to table format for trigger conditions**

*Type: pCR For: Approval  
 32.255 v1.0.0  
 Source: Ericsson,Huawei Technologies Co. Ltd., Nokia, Nokia Shanghai Bell*

(Replaces S5-184143)

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

**S5-184144 Rel-15 pCR 32.255 New flow for PDU session modification**

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

**Decision:** The document was **revised to S5-184213**.

**S5-184213 Rel-15 pCR 32.255 New flow for PDU session modification**

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

(Replaces S5-184144)

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

**S5-184145 Rel-15 pCR 32.255 Addition of rating output in CDR**

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

**Decision:** The document was **revised to S5-184218**.

**S5-184218 Rel-15 pCR 32.255 Addition of rating output in CDR**

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

(Replaces S5-184145)

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

**S5-184203 Rel-15 draftCR 32.290 ConvergedCharging service definition update**

*Type: draftCR For: Approval  
 32.290 v15.0.0  
 Source: Openet*

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

**S5-184204 LS to SA2 Introduction of a new charging method for PCC Rule.**

*Type: LS out For: Approval  
 to SA2, cc CT3  
 Source: Huawei Technologies Co. Ltd.*

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

**S5-184207 Rel-15 draftCR 32.290 Charging Session definition**

*Type: draftCR For: Approval  
 32.290 v15.0.0  
 Source: Huawei Technologies Co. Ltd.*

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

**S5-184212 Rel-15 draftCR 32.290 Introduce container concept**

*Type: draftCR For: Approval  
 32.290 v15.0.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184299 Draft TS 32.255**

*Type: draft TS For: Approval  
 32.255 v1.1.0  
 Source: Nokia, Nokia Shanghai Bell*

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

#### 5.2.2 Service Based Interface for 5G Charging

**S5-184016 pCR 32.291 Update the category of charging attributes**

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

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

**S5-184036 Rel-15 pCR 32.290 Correction on the Converged Charging Scenarios**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184219**.

**S5-184219 Rel-15 draftCR 32.290 Correction on the Converged Charging Scenarios**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184036)

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

**S5-184037 Discussion Paper on Immediate start of service delivery**

*Type: discussion For: Information  
 32.290 v..  
 Source: Huawei Technologies Co. Ltd.*

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

**S5-184038 Rel-15 pCR 32.290 Proposal on Charging Service Operation**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184225**.

**S5-184225 Rel-15 draftCR 32.290 Proposal on Charging Service Operation**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184038)

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

**S5-184039 Rel-15 pCR 32.290 Proposal on CTF in 5G Charging**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184222**.

**S5-184222 Rel-15 draftCR 32.290 Proposal on CTF in 5G Charging**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184039)

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

**S5-184040 Rel-15 pCR 32.290 Proposal on Message Content**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184228**.

**S5-184228 Rel-15 pCR 32.290 Proposal on Message Content**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184040)

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

**S5-184041 Rel-15 pCR 32.290 Proposal on Nchf\_ConvergedCharging\_Notify service operation**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184227**.

**S5-184227 Rel-15 draftCR 32.290 Proposal on Nchf\_ConvergedCharging\_Notify service operation**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184041)

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

**S5-184042 Rel-15 draftCR 32.290 Proposal on SCUR immediate start of service delivery**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

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

**S5-184043 Rel-15 pCR 32.290 Proposal on the Requirement for Converged Charging**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184223**.

**S5-184223 Rel-15 pCR 32.290 Proposal on the Requirement for Converged Charging**

*Type: draftCR For: Agreement  
 32.290 v1.0.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184043)

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

**S5-184044 Rel-15 pCR 32.291 Proposal on Data Model**

*Type: pCR For: Agreement  
 32.291 v0.3.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184296**.

**S5-184296 Rel-15 pCR 32.291 Proposal on Data Model**

*Type: pCR For: Agreement  
 32.291 v0.3.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184044)

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

**S5-184045 Rel-15 pCR 32.291 Proposal on Message Flow of the Service Operation**

*Type: pCR For: Agreement  
 32.291 v0.3.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184294**.

**S5-184294 Rel-15 pCR 32.291 Proposal on Message Flow of the Service Operation**

*Type: pCR For: Agreement  
 32.291 v0.3.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184045)

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

**S5-184046 Rel-15 pCR 32.291 Proposal on Nchf\_ ConvergedCharging Service APIs**

*Type: pCR For: Agreement  
 32.291 v0.3.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184291**.

**S5-184291 Rel-15 pCR 32.291 Proposal on Nchf\_ ConvergedCharging Service APIs**

*Type: pCR For: Agreement  
 32.291 v0.3.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184046)

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

**S5-184047 Rel-15 pCR 32.291 Proposal on Service Definition**

*Type: pCR For: Agreement  
 32.291 v0.3.0  
 Source: Huawei Technologies Co. Ltd.*

**Decision:** The document was **revised to S5-184292**.

**S5-184292 Rel-15 pCR 32.291 Proposal on Service Definition**

*Type: pCR For: Agreement  
 32.291 v0.3.0  
 Source: Huawei Technologies Co. Ltd.*

(Replaces S5-184047)

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

**S5-184125 Rel-15 pCR TS 32.291 Udpate for template alignement**

*Type: pCR For: Approval  
 32.291 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184126 Rel-15 pCR TS 32.291 Use of Feature negociation**

*Type: pCR For: Approval  
 32.291 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184127 Rel-15 draftCR TS 32.290 Update Message Content for usage reporting**

*Type: draftCR For: Endorsement  
 32.290 v15.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-184288**.

**S5-184288 Rel-15 draftCR TS 32.290 Update Message Content for usage reporting**

*Type: draftCR For: Endorsement  
 32.290 v15.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-184127)

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

**S5-184128 Rel-15 draftCR TS 32.290 Update combined scenarios**

*Type: draftCR For: Endorsement  
 32.290 v15.0.0  
 Source: Nokia, Nokia Shanghai Bell*

**Decision:** The document was **revised to S5-184220**.

**S5-184220 Rel-15 draftCR TS 32.290 Update combined scenarios**

*Type: draftCR For: Endorsement  
 32.290 v15.0.0  
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S5-184128)

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

**S5-184138 Discussion paper on service registration and discovery**

*Type: discussion For: Discussion  
 32.255 v..  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184139 Rel-15 pCR TS 32.291 Introduce OpenAPI Annex**

*Type: pCR For: Approval  
 32.291 v0.3.0  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184146 Rel-15 draftCR 32.290 Update of description of flows**

*Type: draftCR For: Approval  
 32.290 v15.0.0  
 Source: Ericsson*

**Decision:** The document was **revised to S5-184221**.

**S5-184221 Rel-15 draftCR 32.290 Update of description of flows**

*Type: draftCR For: Approval  
 32.290 v15.0.0  
 Source: Ericsson*

(Replaces S5-184146)

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

**S5-184147 Rel-15 draftCR 32.290 Update of service description**

*Type: draftCR For: Approval  
 32.290 v15.0.0  
 Source: Ericsson*

**Decision:** The document was **revised to S5-184226**.

**S5-184226 Rel-15 draftCR 32.290 Update of service description**

*Type: draftCR For: Approval  
 32.290 v15.0.0  
 Source: Ericsson*

(Replaces S5-184147)

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

**S5-184148 Rel-15 draftCR 32.290 Adding flow for Notify**

*Type: draftCR For: Approval  
 32.290 v15.0.0  
 Source: Ericsson*

**Decision:** The document was **revised to S5-184224**.

**S5-184224 Rel-15 draftCR 32.290 Adding flow for Notify**

*Type: draftCR For: Approval  
 32.290 v15.0.0  
 Source: Ericsson*

(Replaces S5-184148)

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

**S5-184149 Rel-15 draftCR 32.290 Adding deferred used quota in message content**

*Type: draftCR For: Approval  
 32.290 v15.0.0  
 Source: Ericsson*

**Decision:** The document was **revised to S5-184289**.

**S5-184289 Rel-15 draftCR 32.290 Adding deferred used quota in message content**

*Type: draftCR For: Approval  
 32.290 v15.0.0  
 Source: Ericsson*

(Replaces S5-184149)

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

**S5-184150 Rel-15 pCR 32.291 Update of Service Definition**

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

**Decision:** The document was **revised to S5-184293**.

**S5-184293 Rel-15 pCR 32.291 Update of Service Definition**

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

(Replaces S5-184150)

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

**S5-184151 Rel-15 pCR 32.291 Service API Introduction proposal**

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

**Decision:** The document was **revised to S5-184295**.

**S5-184295 Rel-15 pCR 32.291 Service API Introduction proposal**

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

(Replaces S5-184151)

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

**S5-184152 Rel-15 pCR 32.291 Addition to Usage of HTTP**

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

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

**S5-184290 LS to SA2 Use of NRF framework by CHF for information**

*Type: LS out For: Approval  
 to SA2, cc CT3,CT4  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184298 LS to CT4 on template availability in TS 29.501**

*Type: LS out For: Approval  
 to CT4, cc CT3  
 Source: Nokia, Nokia Shanghai Bell*

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

**S5-184300 Draft TS 32.291**

*Type: draft TS For: Approval  
 32.291 v0.4.0  
 Source: Huawei Technologies Co. Ltd.*

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

## 6 Any Other Business

**S5-184297 Status of email approvals**

*Type: other For: Information  
 Source: WG Vice Chair (ORANGE)*

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

## 7 Closing of the meeting

The vice Chair, Christian Toche, thanked Ericsson for hosting the meeting. After this, the meeting was closed.

## Annex A: List of contribution documents

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| S5-184000 | Agenda | WG Chairman | approved |  |  |
| S5-184001 | IPR and legal declaration | WG Chairman | noted |  |  |
| S5-184002 | Time Plan for OAM&P | WG Vice Chair (Huawei) | revised |  | S5-184230 |
| S5-184003 | OAM&P SWG action list | WG Vice Chair (Huawei) | noted |  |  |
| S5-184004 | Minutes of OAM&P SWG plenary | WG Vice Chair (Huawei) | noted |  |  |
| S5-184005 | Minutes of Management and orchestration of 5G networks and network slicing | Rapporteur (Ericsson) | noted |  |  |
| S5-184006 | Minutes of Provisioning of 5G networks and network slicing | Rapporteur (Huawei) | noted |  |  |
| S5-184007 | Minutes of Network Resource Model (NRM) for 5G networks and network slicing | Rapporteur (Nokia) | noted |  |  |
| S5-184008 | Minutes of Fault Supervision for 5G networks and network slicing | Rapporteur (ZTE) | revised |  | S5-184371 |
| S5-184009 | Minutes of Assurance data and Performance Management for 5G networks and network slicing | Rapporteur (Intel) | noted |  |  |
| S5-184010 | Minutes of Management of 5G Trace management | Rapporteur(Nokia) | withdrawn |  |  |
| S5-184011 | Minutes of Management and virtualization aspects of 5G networks | Rapporteur Intel) | revised |  | S5-184373 |
| S5-184012 | Minutes for REST Solution Sets | Rapporteur(Nokia) | noted |  |  |
| S5-184013 | CH Agenda and Time Plan | CH SWG Chair | approved |  |  |
| S5-184014 | Revision of SA5#119 OAM&P SWG Exec Report | Huawei Technologies France | noted |  |  |
| S5-184015 | Discussion paper on value of secondary RAT type | China Mobile | noted |  |  |
| S5-184016 | pCR 32.291 Update the category of charging attributes | China Mobile | approved |  |  |
| S5-184017 | pCR 32.255 Update the category of charging information | China Mobile | approved |  |  |
| S5-184018 | pCR draft TS 28541 implement Endorsement S5-183625 | Ericsson Inc. | revised |  | S5-184254 |
| S5-184019 | pCR draft TS 28540 use of one model Requirement | Ericsson Inc. | revised |  | S5-184255 |
| S5-184020 | pCR draft TS 28540 add Requirement | Ericsson Inc. | revised |  | S5-184024 |
| S5-184021 | pCR draft TS 28541 gNB cell state handling | Ericsson Inc. | revised |  | S5-184256 |
| S5-184022 | pCR draft TS 28541 merge model of gNB with en-gNB | Ericsson Inc. | revised |  | S5-184253 |
| S5-184023 | pCR draft TS 28541 BWP config | Ericsson Inc. | revised |  | S5-184257 |
| S5-184024 | pCR draft TS 28540 add Requirement | Ericsson Inc. | noted | S5-184020 | - |
| S5-184025 | Rel-15 pCR 32.255 Correction on the mesage flow for PDU Session establishment | Huawei Technologies Co. Ltd. | revised |  | S5-184209 |
| S5-184026 | Discussion Paper on the Trigger Configuration | Huawei Technologies Co. Ltd. | noted |  |  |
| S5-184027 | Discussion Paper on Usage Reporting | Huawei Technologies Co. Ltd. | noted |  |  |
| S5-184028 | Rel-15 pCR 32.255 Proposal for the Charging Session | Huawei Technologies Co. Ltd. | revised |  | S5-184206 |
| S5-184029 | Rel-15 pCR 32.255 Proposal on PCC Rules for Converged Charging | Huawei Technologies Co. Ltd. | revised |  | S5-184202 |
| S5-184030 | Rel-15 pCR 32.255 Proposal on the Centralized or Decentralized unit determination and Centralized rating scenarios | Huawei Technologies Co. Ltd. | withdrawn |  |  |
| S5-184031 | Rel-15 pCR 32.255 Proposal on the Chargeable Events | Huawei Technologies Co. Ltd. | approved |  |  |
| S5-184032 | Rel-15 pCR 32.255 Proposal on the Message Content | Huawei Technologies Co. Ltd. | revised |  | S5-184205 |
| S5-184033 | Rel-15 pCR 32.255 Proposal on the Roaming Requirement | Huawei Technologies Co. Ltd. | revised |  | S5-184210 |
| S5-184034 | Rel-15 pCR 32.255 Proposal on the Trigger Configuration | Huawei Technologies Co. Ltd. | revised |  | S5-184199 |
| S5-184035 | Rel-15 pCR 32.255 Proposal on the Triggers | Huawei Technologies Co. Ltd. | revised |  | S5-184198 |
| S5-184036 | Rel-15 pCR 32.290 Correction on the Converged Charging Scenarios | Huawei Technologies Co. Ltd. | revised |  | S5-184219 |
| S5-184037 | Discussion Paper on Immediate start of service delivery | Huawei Technologies Co. Ltd. | noted |  |  |
| S5-184038 | Rel-15 pCR 32.290 Proposal on Charging Service Operation | Huawei Technologies Co. Ltd. | revised |  | S5-184225 |
| S5-184039 | Rel-15 pCR 32.290 Proposal on CTF in 5G Charging | Huawei Technologies Co. Ltd. | revised |  | S5-184222 |
| S5-184040 | Rel-15 pCR 32.290 Proposal on Message Content | Huawei Technologies Co. Ltd. | revised |  | S5-184228 |
| S5-184041 | Rel-15 pCR 32.290 Proposal on Nchf\_ConvergedCharging\_Notify service operation | Huawei Technologies Co. Ltd. | revised |  | S5-184227 |
| S5-184042 | Rel-15 draftCR 32.290 Proposal on SCUR immediate start of service delivery | Huawei Technologies Co. Ltd. | noted |  |  |
| S5-184043 | Rel-15 pCR 32.290 Proposal on the Requirement for Converged Charging | Huawei Technologies Co. Ltd. | revised |  | S5-184223 |
| S5-184044 | Rel-15 pCR 32.291 Proposal on Data Model | Huawei Technologies Co. Ltd. | revised |  | S5-184296 |
| S5-184045 | Rel-15 pCR 32.291 Proposal on Message Flow of the Service Operation | Huawei Technologies Co. Ltd. | revised |  | S5-184294 |
| S5-184046 | Rel-15 pCR 32.291 Proposal on Nchf\_ ConvergedCharging Service APIs | Huawei Technologies Co. Ltd. | revised |  | S5-184291 |
| S5-184047 | Rel-15 pCR 32.291 Proposal on Service Definition | Huawei Technologies Co. Ltd. | revised |  | S5-184292 |
| S5-184048 | pCR 28.540 Merge current 5GNRM specifications into one single specification | Nokia, Nokia Shanghai Bell | revised |  | S5-184326 |
| S5-184049 | pCR TS 28.541 Update the attribute’s properties' setting | Nokia, Nokia Shanghai Bell | approved |  |  |
| S5-184050 | pCR TS 28.543 Update the attribute’s properties' setting | Nokia, Nokia Shanghai Bell | approved |  |  |
| S5-184051 | pCR TS 28.543 Update NRF and NSSF transport view diagram with interfaces for international roaming | Nokia, Nokia Shanghai Bell | revised |  | S5-184261 |
| S5-184052 | pCR TS 28.541 Add JSON-based SS definitions for gNB modeling | Nokia, Nokia Shanghai Bell | approved |  |  |
| S5-184053 | pCR TS 28.541 Add XML-based SS definitions for gNB modeling | Nokia, Nokia Shanghai Bell | approved |  |  |
| S5-184054 | pCR TS 28.543 Add XML-based SS definitions for 5GC modeling | Nokia, Nokia Shanghai Bell | approved |  |  |
| S5-184055 | Draft CR 28.659 Update E-UTRAN SS definitions to support EN-DC management | Nokia, Nokia Shanghai Bell | withdrawn |  |  |
| S5-184056 | Draft CR 28.657 Add requirement to support ng-eNB management | Nokia, Nokia Shanghai Bell | withdrawn |  |  |
| S5-184057 | Draft CR 28.658 Update E-UTRAN IS definitions to support ng-eNB management | Nokia, Nokia Shanghai Bell | withdrawn |  |  |
| S5-184058 | Draft CR 28.709 Update EPC SS definitions to support management of EN-DC and 5G interworking | Nokia, Nokia Shanghai Bell | withdrawn |  |  |
| S5-184059 | Revised WID Network Resource Model (NRM) for 5G networks and network slicing | Nokia, Nokia Shanghai Bell | revised |  | S5-184328 |
| S5-184060 | Proposal of TDoc discussion sequence for agenda item 4.2.3 | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-184061 | Discussion paper re-organization of 5G management specifications | Huawei | revised |  | S5-184271 |
| S5-184062 | pCR 28.530 Rapporteur clean-up proposal on editor notes | Huawei | revised |  | S5-184231 |
| S5-184063 | pCR 28.530 Rapporteur clean-up proposal on alignment of SBMA | Huawei | revised |  | S5-184232 |
| S5-184064 | pCR 28.530 Add UC for network management data analysis | Huawei | revised |  | S5-184237 |
| S5-184065 | pCR 28.533 Add MS overview | Huawei | noted |  |  |
| S5-184066 | pCR 28.533 Re-organize the deployment model sections | Huawei | approved |  |  |
| S5-184067 | pCR 28.533 Add deployment model for management service and ONAP federation | Huawei | noted |  |  |
| S5-184068 | pCR 28.533 Add deployment model for management of network and network slice | Huawei | revised |  | S5-184319 |
| S5-184069 | pCR 28.533 Solutions for management of 5G network and network slicing | Huawei | revised |  | S5-184236 |
| S5-184070 | pCR 28.533 Add overview of PM measurements | Huawei | noted |  |  |
| S5-184071 | pCR 28.533 add DAMF deployment scenario | Huawei | revised |  | S5-184314 |
| S5-184072 | pCR 28.533 Exposure governance precondition | Huawei | revised |  | S5-184316 |
| S5-184073 | pCR 28.533 Exposure governance clarification | Huawei | revised |  | S5-184317 |
| S5-184074 | pCR 28.533 Operator network management systems cooperation | Huawei | noted |  |  |
| S5-184075 | pCR 28.533 Management service unique identifier | Huawei | revised |  | S5-184315 |
| S5-184076 | pCR 28.531 Rapporteur clean-up proposal | Huawei | revised |  | S5-184239 |
| S5-184077 | pCR 28.532 Rapporteur clean-up proposal | Huawei | approved |  |  |
| S5-184078 | pCR 28.531 Remove some editor's notes | Huawei | approved |  |  |
| S5-184079 | pCR 28.532 Update on network slice information model | Huawei | revised |  | S5-184287 |
| S5-184080 | pCR 28.532 Clean-up network slice related procedures | Huawei | revised |  | S5-184242 |
| S5-184081 | pCR 28.532 Clean-up network slice subnet and NF related procedures | Huawei | revised |  | S5-184243 |
| S5-184082 | pCR 28.532 Add RESTful solution for createMOI operation | Huawei | revised |  | S5-184244 |
| S5-184083 | pCR 28.532 Add RESTful solution for getMOIAttributes operation | Huawei | revised |  | S5-184245 |
| S5-184084 | pCR 28.532 Add RESTful solution for modifyMOIAttributes operation | Huawei | revised |  | S5-184246 |
| S5-184085 | pCR 28.532 Add RESTful solution for deleteMOI operation | Huawei | revised |  | S5-184247 |
| S5-184086 | pCR 28.532 Update on the information model parameter perfReq | Huawei | revised |  | S5-184248 |
| S5-184087 | pCR 28.550 Global alignment of management service names | Intel Corporation (UK) Ltd | revised |  | S5-184323 |
| S5-184088 | pCR 28.550 Update UC and requirements on management data analytics | Intel Corporation (UK) Ltd | revised |  | S5-184276 |
| S5-184089 | pCR 28.551 Add component types for measurement job management services | Intel Corporation (UK) Ltd | revised |  | S5-184279 |
| S5-184090 | pCR 28.551 Add component types for performance data file reporting services | Intel Corporation (UK) Ltd | revised |  | S5-184280 |
| S5-184091 | pCR 28.551 Add component types for performance data streaming services | Intel Corporation (UK) Ltd | noted |  |  |
| S5-184092 | Discussion paper on KPI collection and reporting | Intel Corporation (UK) Ltd | revised |  | S5-184278 |
| S5-184093 | Discussion paper on management service naming | Intel Corporation (UK) Ltd | noted |  | - |
| S5-184094 | 28533 Discussion paper on management of non-slice-specific aspects of the network or subnetwork | Intel Corporation (UK) Ltd | noted |  |  |
| S5-184095 | pCR 28.543 Add eEP\_RP IOC and update existing EP\_RP(s) | Huawei | revised |  | S5-184260 |
| S5-184096 | pCR 28.546 Procedures for subscribeAlarmNotify R4 | Huawei | revised |  | S5-184274 |
| S5-184097 | pCR 28.546 VR alarm correlation R4 | Huawei | revised |  | S5-184275 |
| S5-184098 | pCR 28.546 Update FS management services | Huawei | revised |  | S5-184270 |
| S5-184099 | pCR 28.545 Update FS management services | Huawei | noted |  | - |
| S5-184100 | pCR 28.552 modification of Average delay DL air-interface | Huawei | approved |  |  |
| S5-184101 | pCR 28.551 Add procedures for Network Slice Subnet Data Analytics | Huawei | revised |  | S5-184334 |
| S5-184102 | pCR 28.550 Add UC and requirement for management analytics KPIs for networks | Huawei | revised |  | S5-184277 |
| S5-184103 | pCR 28.533 Update functional management architecture to include MDAF | Intel Corporation (UK) Ltd | revised |  | S5-184320 |
| S5-184104 | pCR 28.532 Add component types for provisioning service for sub-networks | Intel Corporation (UK) Ltd | revised |  | S5-184249 |
| S5-184105 | TS 28.510 scope extension | Intel K.K. | withdrawn |  |  |
| S5-184106 | TS 28.511 scope extension | Intel K.K. | withdrawn |  |  |
| S5-184107 | TS 28.525 scope extension | Intel K.K. | withdrawn |  |  |
| S5-184108 | TS 28.526 scope extension | Intel K.K. | withdrawn |  |  |
| S5-184109 | NRM enhancement to support NFV | Intel K.K. | withdrawn |  |  |
| S5-184110 | pCR 28.500 add the relationship between NE and PNF | Intel K.K. | revised |  | S5-184308 |
| S5-184111 | pCR 28.500 add Relation between 5G management and NFV-MA | Intel K.K. | noted |  | - |
| S5-184112 | Rel-15 pCR TS 32.255 Update Triggers description | Nokia, Nokia Shanghai Bell | revised |  | S5-184200 |
| S5-184113 | Rel-15 pCR TS 32.255 Update CDR generation description | Nokia, Nokia Shanghai Bell | revised |  | S5-184215 |
| S5-184114 | Rel-15 pCR TS 32.255 Introduce Charging characteristics | Nokia, Nokia Shanghai Bell | revised |  | S5-184216 |
| S5-184115 | Discussion paper on usage reporting | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-184116 | Rel-15 pCR TS 32.255 Update Message description for usage | Nokia, Nokia Shanghai Bell | merged |  | S5-184205 |
| S5-184117 | Rel-15 pCR TS 32.255 Update PDU session flows | Nokia, Nokia Shanghai Bell | merged |  | S5-184209 |
| S5-184118 | Rel-15 pCR TS 32.255 Introduce non-3GPP access | Nokia, Nokia Shanghai Bell | revised |  | S5-184214 |
| S5-184119 | Add high-level use case of network slice capacity management | ETRI | revised |  | S5-184233 |
| S5-184120 | pCR 28.531 Add use case and requirements for capacity planning of network slice management capability | ETRI | revised |  | S5-184250 |
| S5-184121 | Add a procedure of network slice capacity management | ETRI | revised |  | S5-184251 |
| S5-184122 | Add high-level use case of network slice capacity management | ETRI | withdrawn | S5-184119 |  |
| S5-184123 | Rel-15 pCR TS 32.255 Update CDR description for usage | Nokia, Nokia Shanghai Bell | revised |  | S5-184217 |
| S5-184124 | Rel-15 pCR TS 32.255 Edithelp Clean-up | Nokia, Nokia Shanghai Bell | approved |  |  |
| S5-184125 | Rel-15 pCR TS 32.291 Udpate for template alignement | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-184126 | Rel-15 pCR TS 32.291 Use of Feature negociation | Nokia, Nokia Shanghai Bell | approved |  |  |
| S5-184127 | Rel-15 draftCR TS 32.290 Update Message Content for usage reporting | Nokia, Nokia Shanghai Bell | revised |  | S5-184288 |
| S5-184128 | Rel-15 draftCR TS 32.290 Update combined scenarios | Nokia, Nokia Shanghai Bell | revised |  | S5-184220 |
| S5-184129 | pCR 28.545 add use cases about notify changed alarm | ZTE, China Mobile | revised |  | S5-184267 |
| S5-184130 | pCR 28.545 add use cases about notify cleared alarm | ZTE, China Mobile | revised |  | S5-184268 |
| S5-184131 | pCR 28.545 add use cases about notify acknowledgement state change | ZTE, China Mobile | revised |  | S5-184269 |
| S5-184132 | pCR 28.545 add service names | ZTE, China Mobile | revised |  | S5-184265 |
| S5-184133 | pCR 28.545 Change the service names in the use cases and requirements | ZTE, China Mobile | revised |  | S5-184266 |
| S5-184134 | pCR 28.546 update the service names | ZTE, China Mobile | merged |  | S5-184354 |
| S5-184135 | pCR 28.546 Remove annex and duplicated reference | ZTE, China Mobile | approved |  |  |
| S5-184136 | pCR 28.546 skeleton of stage3 | ZTE, China Mobile | noted |  |  |
| S5-184137 | pCR 28.546 Add RESTful Solution of subscribe operation | ZTE, China Mobile | revised |  | S5-184331 |
| S5-184138 | Discussion paper on service registration and discovery | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-184139 | Rel-15 pCR TS 32.291 Introduce OpenAPI Annex | Nokia, Nokia Shanghai Bell | approved |  |  |
| S5-184140 | Rel-15 pCR TS 32.255 Introduce Network sharing (MOCN). | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-184141 | Rel-15 pCR 32.255 Proposal on requirement clarifications | Ericsson | revised |  | S5-184208 |
| S5-184142 | Rel-15 pCR 32.255 Roaming handling clarification | Ericsson | revised |  | S5-184211 |
| S5-184143 | Rel-15 pCR 32.255 Change to table format for trigger conditions | Ericsson | revised |  | S5-184201 |
| S5-184144 | Rel-15 pCR 32.255 New flow for PDU session modification | Ericsson | revised |  | S5-184213 |
| S5-184145 | Rel-15 pCR 32.255 Addition of rating output in CDR | Ericsson | revised |  | S5-184218 |
| S5-184146 | Rel-15 draftCR 32.290 Update of description of flows | Ericsson | revised |  | S5-184221 |
| S5-184147 | Rel-15 draftCR 32.290 Update of service description | Ericsson | revised |  | S5-184226 |
| S5-184148 | Rel-15 draftCR 32.290 Adding flow for Notify | Ericsson | revised |  | S5-184224 |
| S5-184149 | Rel-15 draftCR 32.290 Adding deferred used quota in message content | Ericsson | revised |  | S5-184289 |
| S5-184150 | Rel-15 pCR 32.291 Update of Service Definition | Ericsson | revised |  | S5-184293 |
| S5-184151 | Rel-15 pCR 32.291 Service API Introduction proposal | Ericsson | revised |  | S5-184295 |
| S5-184152 | Rel-15 pCR 32.291 Addition to Usage of HTTP | Ericsson | approved |  |  |
| S5-184153 | pCR 28.552 Add measurement for UE Context Rel initiated by CU and revise the associated UC | China Mobile E-Commerce Co. | revised |  | S5-184281 |
| S5-184154 | pCR 28.552 Add measurement on the processor usage of virtualized gNB-CU | China Mobile E-Commerce Co. | noted |  |  |
| S5-184155 | pCR 28.554 Add a new use case of registration success rate | China Mobile E-Commerce Co. | revised |  | S5-184284 |
| S5-184156 | pCR 28.554 Add a KPI definition of registration success rate | China Mobile E-Commerce Co. | revised |  | S5-184285 |
| S5-184157 | pCR 32.158 Clarify resource URI structure | Nokia Germany | revised |  | S5-184310 |
| S5-184158 | pCR 32.158 Clarify design pattern for reading a resource | Nokia Germany | approved |  |  |
| S5-184159 | pCR 32.158 Clarify design pattern for updating a resource | Nokia Germany | revised |  | S5-184311 |
| S5-184160 | pCR 32.158 Add design pattern for partially updating a resource | Nokia Germany | revised |  | S5-184312 |
| S5-184161 | pCR 32.158 Add resource representation formats | Nokia Germany | revised |  | S5-184313 |
| S5-184162 | pCR 28.546 Add stage 3 definitions | Nokia Germany | revised |  | S5-184235 |
| S5-184163 | pCR 28.553 PDU session measurements clarifications | Ericsson GmbH, Eurolab | approved |  |  |
| S5-184164 | pCR 28.554 PDU session KPI and UC update | Ericsson GmbH, Eurolab | approved |  |  |
| S5-184165 | pCR 28.552 Add Use Case and Measurements related to UE throughput | Ericsson GmbH, Eurolab | revised |  | S5-184335 |
| S5-184166 | pCR 28.552 Add Use Case and Measurements related to Unrestricted Volume | Ericsson GmbH, Eurolab | revised |  | S5-184336 |
| S5-184167 | pCR 28.554 Add KPI and UC related to UE throughput in RAN | Ericsson GmbH, Eurolab | revised |  | S5-184340 |
| S5-184168 | Discussion paper on relation between 3GPP NRMs and ETSI ISG NFV entities | Intel K.K. | noted |  |  |
| S5-184169 | LS on L2 measurement specification for NR in R15 | Ericsson GmbH, Eurolab | revised |  | S5-184337 |
| S5-184170 | Discussion paper on restructuring of TS 28.552 clause 5 | Ericsson GmbH, Eurolab | endorsed |  |  |
| S5-184171 | pCR 28.552 Add measurements related to non-split scenario | Ericsson GmbH, Eurolab | withdrawn |  |  |
| S5-184172 | pCR 28.531 Minor update | Ericsson Limited | approved |  |  |
| S5-184173 | pCR 28.533 Update title | Ericsson Limited | revised |  | S5-184322 |
| S5-184174 | pCR 28.532 State handling of NSI | Ericsson Limited | revised |  | S5-184325 |
| S5-184175 | Update TS 32.101 to include management services description | Ericsson Limited | noted |  | - |
| S5-184176 | Update the scope of TS 32.103 | Ericsson Limited | endorsed |  |  |
| S5-184177 | Discussion paper on Management reference model | Ericsson Limited | revised |  | S5-184341 |
| S5-184178 | Rel-15 DraftCR 28.659 Update E-UTRAN SS definitions to support EN-DC management | Nokia, Nokia Shanghai Bell | approved |  |  |
| S5-184179 | Rel-15 DraftCR 28.657 Add requirement to support ng-eNB management | Nokia, Nokia Shanghai Bell | revised |  | S5-184262 |
| S5-184180 | Rel-15 DraftCR 28.658 Update E-UTRAN IS definitions to support ng-eNB management | Nokia, Nokia Shanghai Bell | revised |  | S5-184263 |
| S5-184181 | Rel-15 DraftCR 28.709 Update EPC SS definitions to support management of EN-DC and 5G interworking | Nokia, Nokia Shanghai Bell | approved |  |  |
| S5-184182 | LS from BBF to SA5 on Cooperation on Network Slicing | BBF | noted |  |  |
| S5-184183 | LS from IETF to SA5 on IETF work related to the management and orchestration of network slicing | IETF | replied to |  |  |
| S5-184184 | LS from ITU-T SG15 to SA5 on transport network management to support 3GPP 5G (reply to 3GPP TSG SA5 – ols12-182369) | ITU-T SG15 | noted |  |  |
| S5-184185 | LS from CT3 to SA5 on Addition of AVP code definitions | C3-183701 | withdrawn |  |  |
| S5-184186 | LS from CT3 cc SA5 on clarification for spending limit control functionality | C3-183783 | noted |  |  |
| S5-184187 | LS from GSMA to SA5 on Publication of new paper on network slicing and future plans | GSMA NEST | withdrawn |  |  |
| S5-184188 | Reply LS from RAN2 to SA5 on Bluetooth/WLAN measurement collection in MDT | R2-1808793 | postponed |  |  |
| S5-184189 | Reply LS from RAN2 to SA5 on adding measurements on average number of total active UEs | R2-1809158 | withdrawn |  |  |
| S5-184190 | LS from RAN2 cc SA5 on RAN2 progress on ANR | R2-1809226 | noted |  |  |
| S5-184191 | Reply LS from RAN3 cc SA5 on adding new service type in QMC reporting | R3-183320 | withdrawn |  |  |
| S5-184192 | LS from SA2 cc SA5 on QoS Prediction | S2-185846 | withdrawn |  |  |
| S5-184193 | LS from SA2 cc SA5 on 5G GUTI and EPS Interworking | S2-186176 | withdrawn |  |  |
| S5-184194 | Resubmitted LS from SA4 to SA5 on Attributes for QoE measurement collection | S4-180240 | withdrawn |  |  |
| S5-184195 | Sequence proposal for management and orchestration of 5G networks and network slicing agenda point 4.2.1 | Ericsson Limited | revised |  | S5-184238 |
| S5-184196 | Tdoc discussion sequence for WI on Assurance data and PM for 5G networks and network slicing | Intel Corporation (UK) Ltd | withdrawn |  |  |
| S5-184197 | Discussion paper on reduction of number of TS for 5G management | Ericsson Limited | merged |  | S5-184271 |
| S5-184198 | Rel-15 pCR 32.255 Proposal on the Triggers | Huawei Technologies Co. Ltd. | approved | S5-184035 | - |
| S5-184199 | Rel-15 pCR 32.255 Proposal on the Trigger Configuration | Huawei Technologies Co. Ltd.,Nokia, Nokia Shanghai Bell | approved | S5-184034 | - |
| S5-184200 | Rel-15 pCR TS 32.255 Update Triggers description | Nokia, Nokia Shanghai Bell | approved | S5-184112 | - |
| S5-184201 | Rel-15 pCR 32.255 Change to table format for trigger conditions | Ericsson,Huawei Technologies Co. Ltd., Nokia, Nokia Shanghai Bell | approved | S5-184143 | - |
| S5-184202 | Rel-15 pCR 32.255 Proposal on PCC Rules for Converged Charging | Huawei Technologies Co. Ltd. | approved | S5-184029 | - |
| S5-184203 | Rel-15 draftCR 32.290 ConvergedCharging service definition update | Openet | approved | - | - |
| S5-184204 | LS to SA2 Introduction of a new charging method for PCC Rule. | Huawei Technologies Co. Ltd. | approved | - | - |
| S5-184205 | Rel-15 pCR 32.255 Proposal on the Message Content | Huawei Technologies Co. Ltd.,Nokia, Nokia Shanghai Bell | approved | S5-184032 | - |
| S5-184206 | Rel-15 pCR 32.255 Proposal for the Charging Session | Huawei Technologies Co. Ltd. | approved | S5-184028 | - |
| S5-184207 | Rel-15 draftCR 32.290 Charging Session definition | Huawei Technologies Co. Ltd. | approved | - | - |
| S5-184208 | Rel-15 pCR 32.255 Proposal on requirement clarifications | Ericsson | approved | S5-184141 | - |
| S5-184209 | Rel-15 pCR 32.255 Correction on the mesage flow for PDU Session establishment | Huawei Technologies Co. Ltd.,Nokia, Nokia Shanghai Bell | approved | S5-184025 | - |
| S5-184210 | Rel-15 pCR 32.255 Proposal on the Roaming Requirement | Huawei Technologies Co. Ltd. | approved | S5-184033 | - |
| S5-184211 | Rel-15 pCR 32.255 Roaming handling clarification | Ericsson | approved | S5-184142 | - |
| S5-184212 | Rel-15 draftCR 32.290 Introduce container concept | Nokia, Nokia Shanghai Bell | approved | - | - |
| S5-184213 | Rel-15 pCR 32.255 New flow for PDU session modification | Ericsson | approved | S5-184144 | - |
| S5-184214 | Rel-15 pCR TS 32.255 Introduce non-3GPP access | Nokia, Nokia Shanghai Bell | approved | S5-184118 | - |
| S5-184215 | Rel-15 pCR TS 32.255 Update CDR generation description | Nokia, Nokia Shanghai Bell | approved | S5-184113 | - |
| S5-184216 | Rel-15 pCR TS 32.255 Introduce Charging characteristics | Nokia, Nokia Shanghai Bell | approved | S5-184114 | - |
| S5-184217 | Rel-15 pCR TS 32.255 Update CDR description for usage | Nokia, Nokia Shanghai Bell | approved | S5-184123 | - |
| S5-184218 | Rel-15 pCR 32.255 Addition of rating output in CDR | Ericsson | approved | S5-184145 | - |
| S5-184219 | Rel-15 draftCR 32.290 Correction on the Converged Charging Scenarios | Huawei Technologies Co. Ltd. | approved | S5-184036 | - |
| S5-184220 | Rel-15 draftCR TS 32.290 Update combined scenarios | Nokia, Nokia Shanghai Bell | approved | S5-184128 | - |
| S5-184221 | Rel-15 draftCR 32.290 Update of description of flows | Ericsson | approved | S5-184146 | - |
| S5-184222 | Rel-15 draftCR 32.290 Proposal on CTF in 5G Charging | Huawei Technologies Co. Ltd. | approved | S5-184039 | - |
| S5-184223 | Rel-15 pCR 32.290 Proposal on the Requirement for Converged Charging | Huawei Technologies Co. Ltd. | approved | S5-184043 | - |
| S5-184224 | Rel-15 draftCR 32.290 Adding flow for Notify | Ericsson | approved | S5-184148 | - |
| S5-184225 | Rel-15 draftCR 32.290 Proposal on Charging Service Operation | Huawei Technologies Co. Ltd. | approved | S5-184038 | - |
| S5-184226 | Rel-15 draftCR 32.290 Update of service description | Ericsson | approved | S5-184147 | - |
| S5-184227 | Rel-15 draftCR 32.290 Proposal on Nchf\_ConvergedCharging\_Notify service operation | Huawei Technologies Co. Ltd. | approved | S5-184041 | - |
| S5-184228 | Rel-15 pCR 32.290 Proposal on Message Content | Huawei Technologies Co. Ltd. | approved | S5-184040 | - |
| S5-184229 | Discussion Sequence Proposal for 4.2.4 | ZTE | noted | - | - |
| S5-184230 | Time Plan for OAM&P | WG Vice Chair (Huawei) | noted | S5-184002 | - |
| S5-184231 | pCR 28.530 Rapporteur clean-up proposal on editor notes | Huawei | approved | S5-184062 | - |
| S5-184232 | pCR 28.530 Rapporteur clean-up proposal on alignment of SBMA | Huawei | approved | S5-184063 | - |
| S5-184233 | Add high-level use case of network slice capacity management | ETRI | revised | S5-184119 | S5-184367 |
| S5-184234 | OAM executive report | WG Vice Chair (Huawei) | approved | - | - |
| S5-184235 | pCR 28.546 Add stage 3 definitions | Nokia Germany | revised | S5-184162 | S5-184333 |
| S5-184236 | pCR 28.533 Solutions for management of 5G network and network slicing | Huawei | approved | S5-184069 | - |
| S5-184237 | pCR 28.530 Add UC for network management data analysis | Huawei | revised | S5-184064 | S5-184343 |
| S5-184238 | Sequence proposal for management and orchestration of 5G networks and network slicing agenda point 4.2.1 | Ericsson Limited | noted | S5-184195 | - |
| S5-184239 | pCR 28.531 Rapporteur clean-up proposal | Huawei | approved | S5-184076 | - |
| S5-184240 | Draft TS 28.532 | Huawei | approved | - | - |
| S5-184241 | Draft TS 28.531 | Huawei | approved | - | - |
| S5-184242 | pCR 28.532 Clean-up network slice related procedures | Huawei | approved | S5-184080 | - |
| S5-184243 | pCR 28.532 Clean-up network slice subnet and NF related procedures | Huawei | approved | S5-184081 | - |
| S5-184244 | pCR 28.532 Add RESTful solution for createMOI operation | Huawei | revised | S5-184082 | S5-184359 |
| S5-184245 | pCR 28.532 Add RESTful solution for getMOIAttributes operation | Huawei | revised | S5-184083 | S5-184347 |
| S5-184246 | pCR 28.532 Add RESTful solution for modifyMOIAttributes operation | Huawei | revised | S5-184084 | S5-184348 |
| S5-184247 | pCR 28.532 Add RESTful solution for deleteMOI operation | Huawei | revised | S5-184085 | S5-184349 |
| S5-184248 | pCR 28.532 Update on the information model parameter perfReq | Huawei | revised | S5-184086 | S5-184350 |
| S5-184249 | pCR 28.532 Add component types for provisioning service for sub-networks | Intel Corporation (UK) Ltd | revised | S5-184104 | S5-184351 |
| S5-184250 | pCR 28.531 Add use case and requirements for capacity planning of network slice management capability | ETRI | revised | S5-184120 | S5-184352 |
| S5-184251 | Add a procedure of network slice capacity management | ETRI | approved | S5-184121 | - |
| S5-184252 | pCR draft TS 28540 add Requirement | Ericsson Inc. | withdrawn | - | - |
| S5-184253 | pCR draft TS 28541 merge model of gNB with en-gNB | Ericsson Inc. | approved | S5-184022 | - |
| S5-184254 | pCR draft TS 28541 implement Endorsement S5-183625 | Ericsson Inc. | approved | S5-184018 | - |
| S5-184255 | pCR draft TS 28541 use of one model Requirement | Ericsson Inc. | approved | S5-184019 | - |
| S5-184256 | pCR draft TS 28541 gNB cell state handling | Ericsson Inc. | revised | S5-184021 | S5-184353 |
| S5-184257 | pCR draft TS 28541 BWP config | Ericsson Inc. | approved | S5-184023 | - |
| S5-184258 | Draft TS 28.541 | Nokia | approved | - | - |
| S5-184259 | Draft TS 28.543 | Nokia | withdrawn | - | - |
| S5-184260 | pCR 28.543 Add eEP\_RP IOC and update existing EP\_RP(s) | Huawei | approved | S5-184095 | - |
| S5-184261 | pCR TS 28.543 Update NRF and NSSF transport view diagram with interfaces for international roaming | Nokia, Nokia Shanghai Bell | approved | S5-184051 | - |
| S5-184262 | Rel-15 DraftCR 28.657 Add requirement to support ng-eNB management | Nokia, Nokia Shanghai Bell | approved | S5-184179 | - |
| S5-184263 | Rel-15 DraftCR 28.658 Update E-UTRAN IS definitions to support ng-eNB management | Nokia, Nokia Shanghai Bell | approved | S5-184180 | - |
| S5-184264 | pCR 28.545 Update FS management services | Huawei | withdrawn | - | - |
| S5-184265 | pCR 28.545 add service names | ZTE, China Mobile | approved | S5-184132 | - |
| S5-184266 | pCR 28.545 Change the service names in the use cases and requirements | ZTE, China Mobile | approved | S5-184133 | - |
| S5-184267 | pCR 28.545 add use cases about notify changed alarm | ZTE, China Mobile | approved | S5-184129 | - |
| S5-184268 | pCR 28.545 add use cases about notify cleared alarm | ZTE, China Mobile | approved | S5-184130 | - |
| S5-184269 | pCR 28.545 add use cases about notify acknowledgement state change | ZTE, China Mobile | approved | S5-184131 | - |
| S5-184270 | pCR 28.546 Update FS management services | Huawei | revised | S5-184098 | S5-184354 |
| S5-184271 | Discussion paper re-organization of 5G management specifications | Huawei,Ericsson | revised | S5-184061 | S5-184365 |
| S5-184272 | Reply to: LS from IETF to SA5 on IETF work related to the management and orchestration of network slicing | Huawei | approved | - | - |
| S5-184273 | pCR 28.546 update the service names | ZTE, China Mobile | withdrawn | - | - |
| S5-184274 | pCR 28.546 Procedures for subscribeAlarmNotify R4 | Huawei | revised | S5-184096 | S5-184357 |
| S5-184275 | pCR 28.546 VR alarm correlation R4 | Huawei | revised | S5-184097 | S5-184358 |
| S5-184276 | pCR 28.550 Update UC and requirements on management data analytics | Intel Corporation (UK) Ltd | noted | S5-184088 | - |
| S5-184277 | pCR 28.550 Add UC and requirement for management analytics KPIs for networks | Huawei | approved | S5-184102 | - |
| S5-184278 | Discussion paper on KPI collection and reporting | Intel Corporation (UK) Ltd | noted | S5-184092 | - |
| S5-184279 | pCR 28.551 Add component types for measurement job management services | Intel Corporation (UK) Ltd | revised | S5-184089 | S5-184361 |
| S5-184280 | pCR 28.551 Add component types for performance data file reporting services | Intel Corporation (UK) Ltd | revised | S5-184090 | S5-184362 |
| S5-184281 | pCR 28.552 Add measurement for UE Context Rel initiated by CU and revise the associated UC | China Mobile E-Commerce Co. | revised | S5-184153 | S5-184363 |
| S5-184282 | Draft TS 28.552 | Intel | approved | - | - |
| S5-184283 | Draft TS 28.553 | Intel | approved | - | - |
| S5-184284 | pCR 28.554 Add a new use case of registration success rate | China Mobile E-Commerce Co. | approved | S5-184155 | - |
| S5-184285 | pCR 28.554 Add a KPI definition of registration success rate | China Mobile E-Commerce Co. | approved | S5-184156 | - |
| S5-184286 | Draft CR rel-15 28.622 Update EP-RP IOC definition to support 5G NRM | Huawei | withdrawn | - | - |
| S5-184287 | pCR 28.532 Update on network slice information model | Huawei | revised | S5-184079 | S5-184346 |
| S5-184288 | Rel-15 draftCR TS 32.290 Update Message Content for usage reporting | Nokia, Nokia Shanghai Bell | approved | S5-184127 | - |
| S5-184289 | Rel-15 draftCR 32.290 Adding deferred used quota in message content | Ericsson | approved | S5-184149 | - |
| S5-184290 | LS to SA2 Use of NRF framework by CHF for information | Nokia, Nokia Shanghai Bell | approved | - | - |
| S5-184291 | Rel-15 pCR 32.291 Proposal on Nchf\_ ConvergedCharging Service APIs | Huawei Technologies Co. Ltd. | approved | S5-184046 | - |
| S5-184292 | Rel-15 pCR 32.291 Proposal on Service Definition | Huawei Technologies Co. Ltd. | approved | S5-184047 | - |
| S5-184293 | Rel-15 pCR 32.291 Update of Service Definition | Ericsson | approved | S5-184150 | - |
| S5-184294 | Rel-15 pCR 32.291 Proposal on Message Flow of the Service Operation | Huawei Technologies Co. Ltd. | approved | S5-184045 | - |
| S5-184295 | Rel-15 pCR 32.291 Service API Introduction proposal | Ericsson | approved | S5-184151 | - |
| S5-184296 | Rel-15 pCR 32.291 Proposal on Data Model | Huawei Technologies Co. Ltd. | noted | S5-184044 | - |
| S5-184297 | Status of email approvals | WG Vice Chair (ORANGE) | available | - | - |
| S5-184298 | LS to CT4 on template availability in TS 29.501 | Nokia, Nokia Shanghai Bell | approved | - | - |
| S5-184299 | Draft TS 32.255 | Nokia, Nokia Shanghai Bell | approved | - | - |
| S5-184300 | Draft TS 32.291 | Huawei Technologies Co. Ltd. | approved | - | - |
| S5-184301 | CH Executive Report | CH SWG Chair | available | - | - |
| S5-184302 | Draft TS 28.540 | Nokia | approved | - | - |
| S5-184308 | DraftCR 28.500 add the relationship between NE and PNF | Intel K.K. | noted | S5-184110 | - |
| S5-184309 | pCR 28.500 add Relation between 5G management and NFV-MA | Intel K.K. | withdrawn | - | - |
| S5-184310 | pCR 32.158 Clarify resource URI structure | Nokia Germany | noted | S5-184157 | - |
| S5-184311 | pCR 32.158 Clarify design pattern for updating a resource | Nokia Germany | approved | S5-184159 | - |
| S5-184312 | pCR 32.158 Add design pattern for partially updating a resource | Nokia Germany | approved | S5-184160 | - |
| S5-184313 | pCR 32.158 Add resource representation formats | Nokia Germany | approved | S5-184161 | - |
| S5-184314 | pCR 28.533 add DAMF deployment scenario | Huawei | revised | S5-184071 | S5-184344 |
| S5-184315 | pCR 28.533 Management service unique identifier | Huawei | revised | S5-184075 | S5-184366 |
| S5-184316 | pCR 28.533 Exposure governance precondition | Huawei | approved | S5-184072 | - |
| S5-184317 | pCR 28.533 Exposure governance clarification | Huawei | approved | S5-184073 | - |
| S5-184318 | Draft TS 28.533 | Ericsson | approved | - | - |
| S5-184319 | pCR 28.533 Add deployment model for management of network and network slice | Huawei | approved | S5-184068 | - |
| S5-184320 | pCR 28.533 Update functional management architecture to include MDAF | Intel Corporation (UK) Ltd | revised | S5-184103 | S5-184345 |
| S5-184321 | Update TS 32.101 to include management services description | Ericsson Limited | withdrawn | - | - |
| S5-184322 | pCR 28.533 Update title | Ericsson Limited | approved | S5-184173 | - |
| S5-184323 | pCR 28.550 Global alignment of management service names | Intel Corporation (UK) Ltd | approved | S5-184087 | - |
| S5-184324 | pCR 28.541 | Ericsson | withdrawn | - | - |
| S5-184325 | pCR 28.532 State handling of NSI | Ericsson Limited | approved | S5-184174 | - |
| S5-184326 | pCR 28.540 Merge current 5GNRM specifications into one single specification | Nokia, Nokia Shanghai Bell | approved | S5-184048 | - |
| S5-184327 | pCR 28.541 Merge current 5GNRM Stage 2&3 specifications into one single specification | Nokia | revised | - | S5-184356 |
| S5-184328 | Revised WID Network Resource Model (NRM) for 5G networks and network slicing | Nokia, Nokia Shanghai Bell | revised | S5-184059 | S5-184355 |
| S5-184329 | Merge of 28531 and 28532 | Huawei | noted | - | - |
| S5-184330 | New generic management service spec | Huawei | endorsed | - | - |
| S5-184331 | pCR 28.546 Add RESTful Solution of subscribe operation | ZTE, China Mobile | approved | S5-184137 | - |
| S5-184332 | Draft TS 28.546 | Nokia | approved | - | - |
| S5-184333 | pCR 28.546 Add stage 3 definitions | Nokia Germany | approved | S5-184235 | - |
| S5-184334 | pCR 28.551 Add procedures for Network Slice Subnet Data Analytics | Huawei | noted | S5-184101 | - |
| S5-184335 | pCR 28.552 Add Use Case and Measurements related to UE throughput | Ericsson GmbH, Eurolab | approved | S5-184165 | - |
| S5-184336 | pCR 28.552 Add Use Case and Measurements related to Unrestricted Volume | Ericsson GmbH, Eurolab | approved | S5-184166 | - |
| S5-184337 | LS on L2 measurement specification for NR in R15 | Ericsson GmbH, Eurolab | approved | S5-184169 | - |
| S5-184338 | Draft TS 28.545 | ZTE | approved | - | - |
| S5-184339 | Draft TS 28.554 | China Mobile | approved | - | - |
| S5-184340 | pCR 28.554 Add KPI and UC related to UE throughput in RAN | Ericsson GmbH, Eurolab | approved | S5-184167 | - |
| S5-184341 | Discussion paper on Management reference model | Ericsson Limited | endorsed | S5-184177 | - |
| S5-184342 | Draft TS 28.530 | Huawei | approved | - | - |
| S5-184343 | pCR 28.530 Add UC for network management data analysis | Huawei | approved | S5-184237 | - |
| S5-184344 | pCR 28.533 add DAMF deployment scenario | Huawei | approved | S5-184314 | - |
| S5-184345 | pCR 28.533 Update functional management architecture to include MDAF | Intel Corporation (UK) Ltd | approved | S5-184320 | - |
| S5-184346 | pCR 28.532 Update on network slice information model | Huawei | approved | S5-184287 | - |
| S5-184347 | pCR 28.532 Add RESTful solution for getMOIAttributes operation | Huawei | approved | S5-184245 | - |
| S5-184348 | pCR 28.532 Add RESTful solution for modifyMOIAttributes operation | Huawei | approved | S5-184246 | - |
| S5-184349 | pCR 28.532 Add RESTful solution for deleteMOI operation | Huawei | approved | S5-184247 | - |
| S5-184350 | pCR 28.532 Update on the information model parameter perfReq | Huawei | revised | S5-184248 | S5-184368 |
| S5-184351 | pCR 28.532 Add component types for provisioning service for sub-networks | Intel Corporation (UK) Ltd | revised | S5-184249 | S5-184369 |
| S5-184352 | pCR 28.531 Add use case and requirements for capacity planning of network slice management capability | ETRI | approved | S5-184250 | - |
| S5-184353 | pCR draft TS 28541 gNB cell state handling | Ericsson Inc. | approved | S5-184256 | - |
| S5-184354 | pCR 28.546 Update FS management services | Huawei,ZTE | approved | S5-184270 | - |
| S5-184355 | Revised WID Network Resource Model (NRM) for 5G networks and network slicing | Nokia, Nokia Shanghai Bell | agreed | S5-184328 | - |
| S5-184356 | pCR 28.541 Merge current 5GNRM Stage 2&3 specifications into one single specification | Nokia | approved | S5-184327 | - |
| S5-184357 | pCR 28.546 Procedures for subscribeAlarmNotify R4 | Huawei | revised | S5-184274 | S5-184370 |
| S5-184358 | pCR 28.546 VR alarm correlation R4 | Huawei | approved | S5-184275 | - |
| S5-184359 | pCR 28.532 Add RESTful solution for createMOI operation | Huawei | approved | S5-184244 | - |
| S5-184360 | Draft TS 28.550 | Intel | approved | - | - |
| S5-184361 | pCR 28.551 Add component types for measurement job management services | Intel Corporation (UK) Ltd | approved | S5-184279 | - |
| S5-184362 | pCR 28.551 Add component types for performance data file reporting services | Intel Corporation (UK) Ltd | approved | S5-184280 | - |
| S5-184363 | pCR 28.552 Add measurement for UE Context Rel initiated by CU and revise the associated UC | China Mobile E-Commerce Co. | approved | S5-184281 | - |
| S5-184364 | Draft TS 32.158 | Nokia | approved | - | - |
| S5-184365 | Discussion paper re-organization of 5G management specifications | Huawei,Ericsson | endorsed | S5-184271 | - |
| S5-184366 | pCR 28.533 Management service unique identifier | Huawei | revised | S5-184315 | S5-184374 |
| S5-184367 | Add high-level use case of network slice capacity management | ETRI | approved | S5-184233 | - |
| S5-184368 | pCR 28.532 Update on the information model parameter perfReq | Huawei | approved | S5-184350 | - |
| S5-184369 | pCR 28.532 Add component types for provisioning service for sub-networks | Intel Corporation (UK) Ltd | approved | S5-184351 | - |
| S5-184370 | pCR 28.546 Procedures for subscribeAlarmNotify R4 | Huawei | noted | S5-184357 | - |
| S5-184371 | Minutes of Fault Supervision for 5G networks and network slicing | Rapporteur (ZTE) | noted | S5-184008 | - |
| S5-184372 | Draft TS 28.551 | Intel | approved | - | - |
| S5-184373 | Minutes of Management and virtualization aspects of 5G networks | Rapporteur Intel) | noted | S5-184011 | - |
| S5-184374 | pCR 28.533 Management service unique identifier | Huawei | approved | S5-184366 | - |

## Annex B: List of change requests

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Spec | CR | Rev | Rel | Cat | WI | Decision |
| S5-184105 | TS 28.510 scope extension | Intel K.K. | 28.510 | 0004 | - | Rel-15 | B | NETSLICE-MNFV5G | withdrawn |
| S5-184106 | TS 28.511 scope extension | Intel K.K. | 28.511 | 0003 | - | Rel-15 | B | NETSLICE-MNFV5G | withdrawn |
| S5-184107 | TS 28.525 scope extension | Intel K.K. | 28.525 | 0018 | - | Rel-15 | B | NETSLICE-MNFV5G | withdrawn |
| S5-184108 | TS 28.526 scope extension | Intel K.K. | 28.526 | 0011 | - | Rel-15 | B | NETSLICE-MNFV5G | withdrawn |
| S5-184109 | NRM enhancement to support NFV | Intel K.K. | 28.622 | 0025 | - | Rel-15 | B | NETSLICE-MNFV5G | withdrawn |
| S5-184056 | Draft CR 28.657 Add requirement to support ng-eNB management | Nokia, Nokia Shanghai Bell | 28.657 | 0007 | - | Rel-15 | B | NETSLICE-5GNRM | withdrawn |
| S5-184057 | Draft CR 28.658 Update E-UTRAN IS definitions to support ng-eNB management | Nokia, Nokia Shanghai Bell | 28.658 | 0027 | - | Rel-15 | B | NETSLICE-5GNRM | withdrawn |
| S5-184055 | Draft CR 28.659 Update E-UTRAN SS definitions to support EN-DC management | Nokia, Nokia Shanghai Bell | 28.659 | 0023 | - | Rel-15 | B | NETSLICE-5GNRM | withdrawn |
| S5-184058 | Draft CR 28.709 Update EPC SS definitions to support management of EN-DC and 5G interworking | Nokia, Nokia Shanghai Bell | 28.709 | 0009 | - | Rel-15 | B | NETSLICE-5GNRM | withdrawn |

## Annex C: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Original | Title | From | Decision | Reply in |
| S5-184182 |  | LS from BBF to SA5 on Cooperation on Network Slicing | BBF | noted |  |
| S5-184183 |  | LS from IETF to SA5 on IETF work related to the management and orchestration of network slicing | IETF | replied to | S5-184272 |
| S5-184184 |  | LS from ITU-T SG15 to SA5 on transport network management to support 3GPP 5G (reply to 3GPP TSG SA5 – ols12-182369) | ITU-T SG15 | noted |  |
| S5-184185 |  | LS from CT3 to SA5 on Addition of AVP code definitions | C3-183701 | withdrawn |  |
| S5-184186 |  | LS from CT3 cc SA5 on clarification for spending limit control functionality | C3-183783 | noted |  |
| S5-184187 |  | LS from GSMA to SA5 on Publication of new paper on network slicing and future plans | GSMA NEST | withdrawn |  |
| S5-184188 |  | Reply LS from RAN2 to SA5 on Bluetooth/WLAN measurement collection in MDT | R2-1808793 | postponed |  |
| S5-184189 |  | Reply LS from RAN2 to SA5 on adding measurements on average number of total active UEs | R2-1809158 | withdrawn |  |
| S5-184190 |  | LS from RAN2 cc SA5 on RAN2 progress on ANR | R2-1809226 | noted |  |
| S5-184191 |  | Reply LS from RAN3 cc SA5 on adding new service type in QMC reporting | R3-183320 | withdrawn |  |
| S5-184192 |  | LS from SA2 cc SA5 on QoS Prediction | S2-185846 | withdrawn |  |
| S5-184193 |  | LS from SA2 cc SA5 on 5G GUTI and EPS Interworking | S2-186176 | withdrawn |  |
| S5-184194 |  | Resubmitted LS from SA4 to SA5 on Attributes for QoE measurement collection | S4-180240 | withdrawn |  |

### C2: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| S5-184204 | LS to SA2 Introduction of a new charging method for PCC Rule. | SA2 | CT3 |  |
| S5-184272 | Reply to: LS from IETF to SA5 on IETF work related to the management and orchestration of network slicing | IETF | - | S5-184183 |
| S5-184290 | LS to SA2 Use of NRF framework by CHF for information | SA2 | CT3,CT4 |  |
| S5-184298 | LS to CT4 on template availability in TS 29.501 | CT4 | CT3 |  |
| S5-184337 | LS on L2 measurement specification for NR in R15 | 3GPP RAN2, 3GPP RAN3 | 3GPP RAN1 | - |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | Source | new/revised |
| S5-184355 | Revised WID Network Resource Model (NRM) for 5G networks and network slicing | Nokia, Nokia Shanghai Bell | WID revised |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Spec | vers | Doc title |
| S5-184240 | 28.532 | 1.1.0 | Draft TS 28.532 |
| S5-184241 | 28.531 | 1.1.0 | Draft TS 28.531 |
| S5-184258 | - | 1.1.0 | Draft TS 28.541 |
| S5-184259 | 28.543 | 1.1.0 | Draft TS 28.543 |
| S5-184282 | 28.552 | 0.4.0 | Draft TS 28.552 |
| S5-184283 | 28.553 | 0.4.0 | Draft TS 28.553 |
| S5-184299 | 32.255 | 1.1.0 | Draft TS 32.255 |
| S5-184300 | 32.291 | 0.4.0 | Draft TS 32.291 |
| S5-184302 | 28.540 | 1.1.0 | Draft TS 28.540 |
| S5-184318 | 28.533 | 0.4.0 | Draft TS 28.533 |
| S5-184332 | 28.546 | 0.3.0 | Draft TS 28.546 |
| S5-184338 | 28.545 | 0.4.0 | Draft TS 28.545 |
| S5-184339 | 28.554 | 1.1.0 | Draft TS 28.554 |
| S5-184342 | 28.530 | 1.1.0 | Draft TS 28.530 |
| S5-184360 | 28.550 | 1.1.0 | Draft TS 28.550 |
| S5-184364 | 32.158 | 1.1.0 | Draft TS 32.158 |
| S5-184372 | 28.551 | 0.3.0 | Draft TS 28.551 |

## Annex F: List of participants

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TITLE | Family Name | Given Name | Employer Organization | Organization Represented | Organization Represented Category Code |
| Dr. | Al-kanani | Hassan | NEC Europe Ltd | NEC Corporation | ETSI |
| Mr. | Andrianov | Anatoly | Nokia Germany | Nokia | ATIS |
| Mrs. | Ayani | Zhulia | Ericsson LM | Ericsson Japan K.K. | ARIB |
| Mr. | Cano Soveri | Mirko | ETSI | ETSI | ETSI |
| Ms. | Chen | Ai | China Mobile US Research Cente | China Mobile M2M Company Ltd. | CCSA |
| Mr. | Chou | Joey | Intel Corporation (UK) Ltd | Intel K.K. | ARIB |
| Mr. | Groenendijk | Jan | Ericsson LM | Ericsson Limited | ETSI |
| Mr. | Jan | Onnegren | Ericsson LM | Ericsson GmbH, Eurolab | ETSI |
| Mr. | Jesske | Roland | Deutsche Telekom AG | Deutsche Telekom AG | ETSI |
| Mr. | Klotz | Michael | Deutsche Telekom AG | Deutsche Telekom AG | ETSI |
| Mr. | Li | Gang | Nanjing Ericsson Panda Com Ltd | Nanjing Ericsson Panda Com Ltd | CCSA |
| Mr. | Libunao | Gerardo | Verizon UK Ltd | Verizon UK Ltd | ETSI |
| Mr. | Petersen | Robert | Ericsson LM | Ericsson-LG Co., LTD | TTA |
| Miss | Sabater | Susana | Vodafone Group Plc | Vodafone GmbH | ETSI |
| Mr. | Törnkvist | Robert | Ericsson LM | Ericsson France S.A.S | ETSI |
| Mr. | Tovinger | Thomas | Ericsson LM | Ericsson LM | ETSI |
| Mr. | Tse | Edwin | Ericsson LM | Ericsson Inc. | ATIS |
| Mr. | WANG | Weixing | Nokia Corporation | Nokia Solutions & Networks (I) | TSDSI |
| Mr. | Zhang | Kai | Huawei Tech.(UK) Co., Ltd | Huawei Tech.(UK) Co., Ltd | ETSI |
| Mr. | Zhu | Lei | Huawei Tech.(UK) Co., Ltd | Huawei Telecommunication India | TSDSI |
| Mr. | Zhu | Weihong | ZTE Corporation | ZTE Corporation | ETSI |

## Annex G: List of future meetings

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Title | Start date | End date (OP) | Town | Country | Reference |
| SA5#120 | 20/08/2018 09:00:00 | 24/08/2018 17:30:00 | Belgrade | RS | S5-120 |
| SA5#121 | 08/10/2018 09:00:00 | 12/10/2018 17:30:00 | Kochi | IN | S5-121 |
| Workshop on submission towards IMT-2020 | 24/10/2018 13:00:00 | 25/10/2018 17:00:00 | Brussels | BE | S5-ah-34069 |
| SA5#122 | 12/11/2018 09:00:00 | 16/11/2018 17:30:00 | US | US | S5-122 |
| SA5#123 | 21/01/2019 09:00:00 | 25/01/2019 17:30:00 | US | US | S5-123 |
| SA5#124 | 25/02/2019 09:00:00 | 01/03/2019 17:30:00 | Taipei | TW | S5-124 |
| SA5#125 | 08/04/2019 09:00:00 | 12/04/2019 17:30:00 | US | US | S5-125 |
| SA5#126 | 13/05/2019 09:00:00 | 17/05/2019 17:30:00 | Sophia Antipolis | FR | S5-126 |
| SA5-Ad Hoc Possibility TBC | 24/06/2019 09:00:00 | 28/06/2019 17:30:00 | Sapporo | JP | S5-ah-40151 |
| SA5#127 | 19/08/2019 09:00:00 | 23/08/2019 17:30:00 | Bruges | BE | S5-127 |
| SA5-Ad Hoc TBC | 21/10/2019 09:00:00 | 25/10/2019 17:30:00 | TBD |  | S5-ah-40152 |
| SA5-OAM Ad Hoc | 21/10/2019 09:00:00 | 25/10/2019 17:30:00 | Sophia Antipolis | FR | S5-ah-34467 |
| SA5#128 | 18/11/2019 09:00:00 | 22/11/2019 17:30:00 | China | CN | S5-128 |