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

 **Meeting Report
for
TSG SA WG5
meeting: 146Bis-e**

**Electronic meeting, Online, 16/01/2023 to 20/01/2023**

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## 1 Opening of the meeting

NOTE: meeting notes of the conference calls and discussions can be found in tdoc [S5‑231007](file:///C%3A%5C%5CUsers%5C%5Ccanosoveri%5C%5COneDrive%20-%20ETSI%20365%5C%5CDocuments%5C%5CSA5%5C%5CSA5_146Bis-e%5C%5Cdocs%5C%5CS5-231007.zip%22%20%5Ct%20%22_blank) (OAM and Plenary) and tdoc [S5‑231138](file:///C%3A%5C%5CUsers%5C%5Ccanosoveri%5C%5COneDrive%20-%20ETSI%20365%5C%5CDocuments%5C%5CSA5%5C%5CSA5_146Bis-e%5C%5Cdocs%5C%5CS5-231138.zip%22%20%5Ct%20%22_blank) (Charging).

## 2 Approval of the agenda

**S5-231000 Agenda**

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

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

## 3 IPR and legal declaration

**S5-231001 IPR and legal declaration**

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

**Decision:** The document was **withdrawn**.

## 4 Meetings and activities reports

### 4.1 Last SA5 meeting report

**S5-231002 Report from last SA5 meeting**

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

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

### 4.2 Inter-organizational reports

## 5 Cross-SWG issues

### 5.1 Administrative issues at SA5 level

### 5.2 Technical issues at SA5 level

### 5.3 Liaison statements at SA5 level

### 5.4 SA5 meeting calendar

## 6 OAM&P

### 6.1 OAM&P Plenary

#### 6.1.1 DPs on cross-WI/SI topics

**S5-231012 3GPP Rel-18 work on EE**

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

**Decision:** The document was **revised to S5-231149**.

**S5-231149 3GPP Rel-18 work on EE**

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

(Replaces S5-231012)

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

**S5-231013 DP on using intent driven approach to support async network slice provisioning**

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

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

**S5-231014 DP on solution for expressing service and slice profile requirements as intent expectations**

 *Type: discussion For: Endorsement
 28.836 v..
 Source: Huawei,Deutsche Telekom*

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

**S5-231015 DP on TS structure proposal for generic NRM Fragment**

 *Type: discussion For: Endorsement
 Source: Huawei*

(Replaces S5-226381)

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

**S5-231019 DP Service Management**

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

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

**S5-231025 DP on Consolidation of alarm related definitions**

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

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

**S5-231030 Discussion paper on predicted alarms**

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

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

**S5-231031 Discussion paper on reference architecture vs clarification of NetworkSlice**

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

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

**S5-231039 DP on naming convention of MnS using CRUD operation with certain NRM**

 *Type: discussion For: Endorsement
 Source: Huawei*

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

**S5-231040 DP on way forward for mulitple data collection mechanisms**

 *Type: discussion For: Endorsement
 Source: Huawei*

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

**S5-231042 Discussion paper on KPI, KQI, QoE**

 *Type: discussion For: Discussion
 Source: Nokia*

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

**S5-231043 Discussion paper on KPI, KQI, QoE**

 *Type: discussion For: Agreement
 Source: Nokia*

**Decision:** The document was **revised to S5-231148**.

**S5-231148 Discussion paper on KPI, KQI, QoE**

 *Type: discussion For: Agreement
 Source: Nokia*

(Replaces S5-231043)

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

**S5-231044 DP on interoperability support using SBMA**

 *Type: discussion For: Approval
 28.925 v..
 Source: HuaWei Technologies Co., Ltd*

(Replaces S5-226509)

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

**S5-231046 Rel-18 WISI analysis proposal**

 *Type: other For: Presentation
 Source: HuaWei Technologies Co., Ltd*

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

**S5-231048 Discussion paper on mechanism to support asynchronous LCM operations**

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

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

**S5-231053 Discussion paper on relation between FS\_NSCE, MSAC, NPN and NSOEU**

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

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

**S5-231080 Discussion paper on Management Aspects of NTN Enhancement**

 *Type: discussion For: Endorsement
 Source: China Unicom, China Academy of Telecommunication Technology*

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

**S5-231081 DP on way forward of 5G KQI SI**

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

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

**S5-231085 DP on way forward of FS\_FSEV**

 *Type: discussion For: Approval
 Source: Huawei Technologies Japan K.K.*

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

**S5-231086 DP on way forward of FS\_DCSA**

 *Type: discussion For: Approval
 Source: Huawei Technologies Japan K.K.*

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

**S5-231087 DP on wayforward of autononous network levels**

 *Type: discussion For: Endorsement
 28.909 v..
 Source: China Mobile, Huawei, AsiaInfo, CATT, ZTE, China Unicom*

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

**S5-231088 DP on ANL relation with other autonomy features**

 *Type: discussion For: Endorsement
 28.910 v..
 Source: China Mobile, Huawei, AsiaInfo, CATT, ZTE, China Unicom*

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

**S5-231102 Discussion paper on intent driven management for network slicing**

 *Type: discussion For: Endorsement
 Source: L.M. Ericsson Limited,Deutsche Telekom*

**Discussion:**

Co-signed by Deutsche Telekom and Telefonica.

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

**S5-231103 Discussion paper on comparison of ordering a service or ordering intent**

 *Type: discussion For: Endorsement
 Source: L.M. Ericsson Limited,Deutsche Telekom*

**Discussion:**

Co-signed by Deutsche Telekom and Telefonica.

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

**S5-231104 Discussion paper on potential solution for network slice intent**

 *Type: discussion For: Endorsement
 Source: L.M. Ericsson Limited,Deutsche Telekom*

**Discussion:**

Co-signed by Deutsche Telekom and Telefonica.

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

**S5-231105 Clarifying multilevel attribute properties**

 *Type: discussion For: Endorsement
 Source: Ericsson Hungary Ltd*

**Decision:** The document was **revised to S5-231150**.

**S5-231150 Clarifying multilevel attribute properties**

 *Type: discussion For: Endorsement
 Source: Ericsson Hungary Ltd*

(Replaces S5-231105)

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

**S5-231106 Stateless Alert in Fault Supervision**

 *Type: discussion For: Endorsement
 Source: Ericsson Hungary Ltd*

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

**S5-231141 DP on Enhancement of Subscriber and Equipment Trace**

 *Type: discussion For: Endorsement
 Source: Ericsson Inc.*

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

#### 6.1.2 Adm. documents

**S5-231003 Post e-meeting email approval status**

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

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

**S5-231004 OAM&P action list**

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

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

**S5-231005 agenda\_with\_Tdocs\_sequence\_proposal\_OAM**

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

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

**S5-231006 OAM Exec Report**

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

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

**S5-231007 OAM Chair notes and conclusions**

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

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

**S5-231017 Using Forge for SA5**

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

**Decision:** The document was **revised to S5-231146**.

**S5-231146 Using Forge for SA5**

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

(Replaces S5-231017)

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

**S5-231018 SA5 Working Procedures**

 *Type: other For: Approval
 Source: Nokia, Nokia Shanghai Bell,Ericsson Hungary Ltd*

**Decision:** The document was **revised to S5-231145**.

**S5-231145 SA5 Working Procedures**

 *Type: other For: Approval
 Source: Nokia, Nokia Shanghai Bell,Ericsson Hungary Ltd*

(Replaces S5-231018)

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

**S5-231020 DP Workload in SA5 OAM**

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

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

**S5-231032 Rel-18&Rel-19 time plan proposal for OAM**

 *Type: discussion For: Endorsement
 Source: SA5 Vice chair (Huawei),SA5 Chair*

(Replaces S5-226377)

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

**S5-231082 Discussion paper on Using Forge-Git as the primary storage for Code**

 *Type: discussion For: Endorsement
 Source: Ericsson Hungary Ltd*

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

**S5-231084 Collection of useful endorsed document and external communication documents**

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

(Replaces S5-226010)

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

**S5-231143 E-meeting process**

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

**Decision:** The document was **revised to S5-231144**.

**S5-231144 E-meeting process**

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

(Replaces S5-231143)

**Decision:** The document was **revised to S5-231147**.

**S5-231147 E-meeting process**

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

(Replaces S5-231144)

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

### 6.2 New OAM&P Work Item proposals

#### 6.2.1 Intelligence and Automation

**S5-231016 New Rel-18 WID on Intent driven Management Service for mobile network phase 2**

 *Type: WID new For: Approval
 Source: Huawei,Ericsson*

**Decision:** The document was **revised to S5-231200**.

**S5-231200 New Rel-18 WID on Intent driven Management Service for mobile network phase 2**

 *Type: WID new For: Agreement
 Source: Huawei,Ericsson*

(Replaces S5-231016)

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

**S5-231022 New WID on intent-driven management for network slicing**

 *Type: WID new For: (not specified)
 Source: Ericsson*

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

**S5-231023 New Rel-18 WID AI/ML management**

 *Type: WID new For: Agreement
 Source: Intel, NEC*

**Decision:** The document was **revised to S5-231199**.

**S5-231199 New Rel-18 WID AI/ML management**

 *Type: WID new For: Agreement
 Source: Intel, NEC*

(Replaces S5-231023)

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

**S5-231029 New WID on measurement data collection to support RAN intelligence**

 *Type: WID new For: Approval
 Source: Intel Korea, Ltd.*

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

**S5-231089 New WID on autonomous network levels phase 2**

 *Type: WID new For: Approval
 Source: China Mobile, Huawei, AsiaInfo, CATT, ZTE, China Unicom*

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

**S5-231090 New Rel-18 WID on Enhancement of the Management Aspects related to NWDAF**

 *Type: WID new For: Approval
 Source: Chinatelecom Cloud*

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

**S5-231140 DP WF for normative specifications development of AI/ML management**

 *Type: discussion For: Endorsement
 28.908 v..
 Source: NEC, Intel*

**Decision:** The document was **revised to S5-231195**.

**S5-231195 DP WF for normative specifications development of AI/ML management**

 *Type: discussion For: Endorsement
 28.908 v..
 Source: NEC, Intel*

(Replaces S5-231140)

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

**S5-231142 DP AIML collaboration with other 3GPP groups**

 *Type: discussion For: Endorsement
 Source: Huawei*

**Decision:** The document was **revised to S5-231196**.

**S5-231196 DP AIML collaboration with other 3GPP groups**

 *Type: discussion For: Endorsement
 Source: Huawei*

(Replaces S5-231142)

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

#### 6.2.2 Management Architecture and Mechanisms

**S5-231021 New WID on enhance SBMA specifications**

 *Type: WID new For: (not specified)
 Source: Ericsson*

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

**S5-231024 New WID on SBMA enabler enhancements**

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

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

**S5-231026 DP on TS structure for data management / performance management**

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

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

**S5-231027 DP on Restructuring of TS 28.622**

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

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

**S5-231028 DP on TS for common data types**

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

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

**S5-231037 New WID on Management Aspect of 5GLAN**

 *Type: WID new For: Approval
 Source: China Mobile Com. Corporation*

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

**S5-231038 New WID on Management Aspect of 5GLAN**

 *Type: WID new For: Approval
 Source: China Mobile Com. Corporation*

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

**S5-231047 new WID on Enhancement of service based management architecture**

 *Type: WID new For: (not specified)
 Source: HuaWei Technologies Co., Ltd*

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

**S5-231049 Discussion Paper on including EW bound interface into eECM**

 *Type: discussion For: Endorsement
 28.538 v..
 Source: Samsung R&D Institute UK*

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

**S5-231050 Updated WID on enhanced edge computing management**

 *Type: WID revised For: Agreement
 Source: Samsung R&D Institute UK*

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

**S5-231198 Updated Study on enhanced edge computing management**

 *Type: SID revised For: Agreement
 Source: Samsung R&D Institute UK*

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

**S5-231079 New WID on Management Aspects of NTN Enhancement**

 *Type: WID new For: Approval
 Source: China Unicom, China Academy of Telecommunication Technology*

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

**S5-231083 New WID on Management Aspect of 5GLAN**

 *Type: WID new For: Approval
 Source: China Mobile Com. Corporation*

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

**S5-231107 New Rel-18 WID on Management Aspects of URLLC**

 *Type: WID new For: Approval
 Source: China Unicom, Huawei, CATT, China Telecom*

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

**S5-231108 New Rel-18 WID on Management Aspects of 5G Network Sharing Phase2**

 *Type: WID new For: Approval
 Source: China Unicom, Huawei, CATT, China Telecom*

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

**S5-231109 New WID on Management of cloud-native Virtualized Network Functions**

 *Type: WID new For: (not specified)
 Source: China Mobile E-Commerce Co.*

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

**S5-231110 New WID on Management of cloud-native Virtualized Network Functions**

 *Type: WID new For: Approval
 Source: China Mobile E-Commerce Co.*

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

**S5-231137 Updated Rel-18 WID Enhancement of Management of Trace/MDT phase 2**

 *Type: WID revised For: Approval
 Source: Ericsson Inc.*

(Replaces S5-227041)

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

#### 6.2.3 Support of New Services

**S5-231010 Proposed way forward for the Rel-18 work on EE**

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

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

**S5-231011 Revised WID Rel-18 Work Item on 5G energy efficiency phase 2**

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

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

**S5-231041 New SID on management aspects of Digital Twin Network**

 *Type: SID new For: Approval
 Source: China Mobile Com. Corporation*

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

**S5-231045 New WID on network slice management capability exposure**

 *Type: WID new For: Approval
 Source: Alibaba Group*

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

**S5-231051 Proposed way forward for Rel-18 work on NPN**

 *Type: discussion For: Endorsement
 Source: Huawei*

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

**S5-231052 New WID on enhanced management of non-public networks**

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

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

**S5-231091 New Work Item on Network and Service Operations for Energy Utilities**

 *Type: WID new For: Approval
 Source: Samsung, EUTC, EDF, BMWK, Anterix*

**Abstract:**

This work item will provide normative changes corresponding to the conclusions of the Study on Network and Service Operations for Energy Utilities.

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

## 7 Charging

### 7.1 Charging Plenary

**S5-231008 CH agenda and time plan**

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

**Decision:** The document was **revised to S5-231138**.

**S5-231138 CH agenda and time plan**

 *Type: agenda For: -
 Source: WG vice Chair (Matrixx Software)*

(Replaces S5-231008)

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

**S5-231009 Charging exec report**

 *Type: report For: (not specified)
 Source: WG vice Chair (Matrixx Software)*

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

**S5-231036 LS on controlling number of UEs or PDU sessions for NPN**

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

**Decision:** The document was **revised to S5-231253**.

**S5-231253 LS on controlling number of UEs or PDU sessions for NPN**

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

(Replaces S5-231036)

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

### 7.2 New Charging Work Item proposals

### 7.3 Charging Maintenance and Rel-18 small Enhancements

### 7.4 Rel-18 Charging

#### 7.4.1 Charging Aspects of Network Slicing Phase 2

### 7.5 Charging studies

#### 7.5.1 Study on charging aspects for enhancements of Network Slicing Phase 2

**S5-231054 Rel-18 pCR 32.847 Correction on the key issue 7**

 *Type: pCR For: Agreement
 32.847 v1.5.0
 Source: Huawei*

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

**S5-231092 Rel-18 pCR 32.847 Update solution#6.3**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

**Decision:** The document was **revised to S5-231262**.

**S5-231262 Rel-18 pCR 32.847 Update solution#6.3**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

(Replaces S5-231092)

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

**S5-231093 Rel-18 pCR 32.847 Solve Editor's Note in solution#7.2**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

**Decision:** The document was **revised to S5-231256**.

**S5-231256 Rel-18 pCR 32.847 Solve Editor's Note in solution#7.2**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

(Replaces S5-231093)

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

**S5-231094 Rel-18 pCR 32.847 Final conclusion for Key issue#3**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

**Decision:** The document was **revised to S5-231252**.

**S5-231252 Rel-18 pCR 32.847 Final conclusion for Key issue#3**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

(Replaces S5-231094)

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

**S5-231095 Rel-18 pCR 32.847 Add evaluation and conclusion for Key issue#6**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

**Decision:** The document was **revised to S5-231264**.

**S5-231264 Rel-18 pCR 32.847 Add evaluation and conclusion for Key issue#6**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

(Replaces S5-231095)

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

**S5-231096 Rel-18 pCR 32.847 Refinement on evaluation and conclusion for Key issue#7**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

**Decision:** The document was **revised to S5-231257**.

**S5-231257 Rel-18 pCR 32.847 Refinement on evaluation and conclusion for Key issue#7**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

(Replaces S5-231096)

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

**S5-231097 Rel-18 pCR 32.847 Add new Key issue on SBI between UE CHF and Tenant CHF**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

**Decision:** The document was **revised to S5-231261**.

**S5-231261 Rel-18 pCR 32.847 Add new Key issue on SBI between UE CHF and Tenant CHF**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

(Replaces S5-231097)

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

**S5-231098 Rel-18 pCR 32.847 Add a solution for Key issue#x - reuse Nchf\_convergedcharging**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

**Decision:** The document was **revised to S5-231258**.

**S5-231258 Rel-18 pCR 32.847 Add a solution for Key issue#x - reuse Nchf\_convergedcharging**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

(Replaces S5-231098)

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

**S5-231099 Rel-18 pCR 32.847 Add a solution for Key issue#x - new service API**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

**Decision:** The document was **revised to S5-231259**.

**S5-231259 Rel-18 pCR 32.847 Add a solution for Key issue#x - new service API**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

(Replaces S5-231099)

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

**S5-231100 Rel-18 pCR 32.847 Add evaluation and conclusion for Key issue#x**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

**Decision:** The document was **revised to S5-231267**.

**S5-231267 Rel-18 pCR 32.847 Add evaluation and conclusion for Key issue#x**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

(Replaces S5-231100)

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

**S5-231101 Rel-18 pCR 32.847 Add conclusions and recommendations**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

**Decision:** The document was **revised to S5-231265**.

**S5-231265 Rel-18 pCR 32.847 Add conclusions and recommendations**

 *Type: pCR For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

(Replaces S5-231101)

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

**S5-231139 Presentation of TR 32.847 for approval**

 *Type: TS or TR cover For: Approval
 32.847 v1.5.0
 Source: MATRIXX Software*

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

**S5-231245 TR 32.847**

 *Type: draft TR For: Approval
 32.847 v1.6.0
 Source: MATRIXX Software*

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

#### 7.5.2 Study on Nchf charging services phase 2

**S5-231055 Rel-18 pCR 28.826 Correction on the Topic 5.1**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

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

**S5-231056 Rel-18 pCR 28.826 Clarify the solution 1.1**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

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

**S5-231057 Rel-18 pCR 28.826 Add the max size solution**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

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

**S5-231058 Rel-18 pCR 28.826 Common IEs applied in the service charging specifications**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

**Decision:** The document was **revised to S5-231254**.

**S5-231254 Rel-18 pCR 28.826 Common IEs applied in the service charging specifications**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

(Replaces S5-231058)

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

**S5-231059 Rel-18 pCR 28.826 Correction on the key issues in the topic 5.5**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

**Decision:** The document was **revised to S5-231286**.

**S5-231286 Rel-18 pCR 28.826 Correction on the key issues in the topic 5.5**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

(Replaces S5-231059)

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

**S5-231060 Rel-18 pCR 28.826 Add the solution for keeping reporting based on the triggers**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

**Decision:** The document was **revised to S5-231292**.

**S5-231292 Rel-18 pCR 28.826 Add the solution for keeping reporting based on the triggers**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

(Replaces S5-231060)

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

**S5-231061 Rel-18 pCR 28.826 Add the solution for Bitrate charging**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

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

**S5-231062 Rel-18 pCR 28.826 Evaluation and Conclusion for solution 1.3**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

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

**S5-231063 Rel-18 pCR 28.826 Evaluation and Conclusion for threshold**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

**Decision:** The document was **revised to S5-231291**.

**S5-231291 Rel-18 pCR 28.826 Evaluation and Conclusion for threshold**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

(Replaces S5-231063)

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

**S5-231064 Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.3**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

**Decision:** The document was **revised to S5-231290**.

**S5-231290 Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.3**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

(Replaces S5-231064)

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

**S5-231065 Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.4**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

**Decision:** The document was **revised to S5-231289**.

**S5-231289 Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.4**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

(Replaces S5-231065)

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

**S5-231066 Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.5**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

**Decision:** The document was **revised to S5-231288**.

**S5-231288 Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.5**

 *Type: pCR For: Agreement
 28.826 v1.1.0
 Source: Huawei*

(Replaces S5-231066)

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

**S5-231111 Rel-18 pCR 28.826 Correcting use cases and key issues in clause 5.1**

 *Type: pCR For: Approval
 28.826 v1.1.0
 Source: Ericsson LM*

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

**S5-231112 Rel-18 pCR 28.826 Correcting solutions in clause 5.1**

 *Type: pCR For: Approval
 28.826 v1.1.0
 Source: Ericsson LM*

**Decision:** The document was **revised to S5-231251**.

**S5-231251 Rel-18 pCR 28.826 Correcting solutions in clause 5.1**

 *Type: pCR For: Approval
 28.826 v1.1.0
 Source: Ericsson LM*

(Replaces S5-231112)

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

**S5-231113 Rel-18 pCR 28.826 Adding solution for key issue #1l in clause 5.1**

 *Type: pCR For: Approval
 28.826 v1.1.0
 Source: Ericsson LM*

**Decision:** The document was **revised to S5-231276**.

**S5-231276 Rel-18 pCR 28.826 Adding solution for key issue #1l in clause 5.1**

 *Type: pCR For: Approval
 28.826 v1.1.0
 Source: Ericsson LM*

(Replaces S5-231113)

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

**S5-231114 Rel-18 pCR 28.826 Adding solutions to undefined attribute handling in CDR**

 *Type: pCR For: Approval
 28.826 v1.1.0
 Source: Ericsson LM*

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

**S5-231115 Rel-18 pCR 28.826 Adding solution for size of charging information**

 *Type: pCR For: Approval
 28.826 v1.1.0
 Source: Ericsson LM*

**Decision:** The document was **revised to S5-231250**.

**S5-231250 Rel-18 pCR 28.826 Adding solution for size of charging information**

 *Type: pCR For: Approval
 28.826 v1.1.0
 Source: Ericsson LM*

(Replaces S5-231115)

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

**S5-231116 Rel-18 pCR 28.826 Adding use case requested units and quota management indication**

 *Type: pCR For: Approval
 28.826 v1.1.0
 Source: Ericsson LM*

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

**S5-231246 TR 28.826**

 *Type: draft TR For: Approval
 28.826 v1.2.0
 Source: Ericsson*

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

#### 7.5.3 Study on 5G roaming charging architecture for wholesale and retail scenarios

**S5-231067 Rel-18 pCR 28.827 Add new solution on using RCG in LBO charging**

 *Type: pCR For: Agreement
 28.827 v1.5.0
 Source: Huawei*

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

**S5-231068 Rel-18 pCR 28.827 Corrections**

 *Type: pCR For: Agreement
 28.827 v1.5.0
 Source: Huawei*

**Decision:** The document was **revised to S5-231260**.

**S5-231260 Rel-18 pCR 28.827 Corrections**

 *Type: pCR For: Agreement
 28.827 v1.5.0
 Source: Huawei*

(Replaces S5-231068)

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

**S5-231069 Rel-18 pCR 28.827 Evaluation and conclusion of clause 7.1**

 *Type: pCR For: Agreement
 28.827 v1.5.0
 Source: Huawei*

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

**S5-231070 Rel-18 pCR 28.827 Evaluation and conclusion of clause 7.2**

 *Type: pCR For: Agreement
 28.827 v1.5.0
 Source: Huawei*

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

**S5-231117 Rel-18 pCR 28.827 Correcting requirements and key issues in clause 7.1**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231118 Rel-18 pCR 28.827 Adding solution in clause 7.1 for QBC triggers configured in the V-CHF**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231119 Rel-18 pCR 28.827 Correcting covered requirements for solution #1.9**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231120 Rel-18 pCR 28.827 Correcting solution #1.10 in clause 7.1**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

**Decision:** The document was **revised to S5-231271**.

**S5-231271 Rel-18 pCR 28.827 Correcting solution #1.10 in clause 7.1**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

(Replaces S5-231120)

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

**S5-231121 Rel-18 pCR 28.827 Correcting solution #1.11 in clause 7.1**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231122 Rel-18 pCR 28.827 Adding solution in clause 7.1 for PDU session triggers**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231123 Rel-18 pCR 28.827 Adding solution in clause 7.1 for QoS flow session triggers**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231124 Rel-18 pCR 28.827 Adding solution in clause 7.1 for QoS flow triggers**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231125 Rel-18 pCR 28.827 Adding evaluation of solutions for clause 7.1**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231126 Rel-18 pCR 28.827 Correcting solution #2.1 in clause 7.2**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

**Decision:** The document was **revised to S5-231279**.

**S5-231279 Rel-18 pCR 28.827 Correcting solution #2.1 in clause 7.2**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

(Replaces S5-231126)

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

**S5-231127 Rel-18 pCR 28.827 Adding solution in clause 7.2 dual CHF interaction**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231128 Rel-18 pCR 28.827 Correcting solutions in clause 7.2 dual CHF information**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231129 Rel-18 pCR 28.827 Additional evaluation of solutions for clause 7.2**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231130 Rel-18 pCR 28.827 Additional solution key issue #4e in clause 7.4**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231131 Rel-18 pCR 28.827 Additional evaluation of solutions for clause 7.4**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231132 Rel-18 pCR 28.827 Additional solutions for key issue #5d in clause 7.5**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231133 Rel-18 pCR 28.827 Additional solution for key issue #5f in clause 7.5**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231134 Rel-18 pCR 28.827 Adding solution in clause 7.6 for UE usage information reporting**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231135 Rel-18 pCR 28.827 Additional solutions for key issue #5e in clause 7.5**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231136 Rel-18 pCR 28.827 Adding comparison between double or single CHF**

 *Type: pCR For: Approval
 28.827 v1.5.0
 Source: Ericsson LM*

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

**S5-231247 TR 28.827**

 *Type: draft TR For: Approval
 28.827 v1.6.0
 Source: Ericsson*

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

#### 7.5.4 Study on Charging Aspects for Enhanced support of Non-Public Networks

**S5-231033 Rel-18 pCR 28.828 Add evaluation and conclusion for SNPN topic 2**

 *Type: pCR For: Approval
 28.828 v1.1.0
 Source: China Mobile*

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

**S5-231034 Rel-18 pCR 28.828 Update PNI-NPN topic 1 for consistency**

 *Type: pCR For: Approval
 28.828 v1.1.0
 Source: China Mobile*

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

**S5-231035 Rel-18 pCR 28.828 Add Conclusions and recommendations**

 *Type: pCR For: Approval
 28.828 v1.1.0
 Source: China Mobile*

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

**S5-231071 Rel-18 pCR 28.828 Correction on the Topic 1 and Topic 3**

 *Type: pCR For: Agreement
 28.828 v1.1.0
 Source: Huawei*

**Decision:** The document was **revised to S5-231255**.

**S5-231255 Rel-18 pCR 28.828 Correction on the Topic 1 and Topic 3**

 *Type: pCR For: Agreement
 28.828 v1.1.0
 Source: Huawei*

(Replaces S5-231071)

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

**S5-231072 Rel-18 pCR 28.828 Remove the editor's note for Topic 3**

 *Type: pCR For: Agreement
 28.828 v1.1.0
 Source: Huawei*

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

**S5-231073 Rel-18 pCR 28.828 Evaluation and Conclusion for Topic 1**

 *Type: pCR For: Agreement
 28.828 v1.1.0
 Source: Huawei*

**Decision:** The document was **revised to S5-231268**.

**S5-231268 Rel-18 pCR 28.828 Evaluation and Conclusion for Topic 1**

 *Type: pCR For: Agreement
 28.828 v1.1.0
 Source: Huawei*

(Replaces S5-231073)

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

**S5-231074 Rel-18 pCR 28.828 Evaluation and Conclusion for Topic 3**

 *Type: pCR For: Agreement
 28.828 v1.1.0
 Source: Huawei*

**Decision:** The document was **revised to S5-231269**.

**S5-231269 Rel-18 pCR 28.828 Evaluation and Conclusion for Topic 3**

 *Type: pCR For: Agreement
 28.828 v1.1.0
 Source: Huawei*

(Replaces S5-231074)

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

**S5-231248 TR 28.828**

 *Type: draft TR For: Approval
 28.828 v1.2.0
 Source: China Mobile*

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

#### 7.5.5 Study on Time Sensitive Networking charging

**S5-231075 Rel-18 pCR 28.839 Add Use Case for Enablers for Time Sensitive Communications**

 *Type: pCR For: Agreement
 28.839 v0.3.1
 Source: Huawei*

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

**S5-231076 Rel-18 pCR 28.839 Add Use Case for Exposure of Time Synchronization**

 *Type: pCR For: Agreement
 28.839 v0.3.1
 Source: Huawei*

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

**S5-231077 Rel-18 pCR 28.839 Add Use Case for Time Sensitive Communication**

 *Type: pCR For: Agreement
 28.839 v0.3.1
 Source: Huawei*

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

**S5-231078 Rel-18 pCR 28.839 Add Use Case for TSN 5GS bridge Charging**

 *Type: pCR For: Agreement
 28.839 v0.3.1
 Source: Huawei*

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

**S5-231249 TR 28.839**

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

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

#### 7.5.6 Study on CHF Segmentation

#### 7.5.7 Study on Structure of Charging for Verticals

#### 7.5.8 Study on charging aspects of Satellite in 5GS

## 8 Any Other Business

## 9 Closing of the meeting

## Annex A: Contribution documents and status

### A1: List of TDocs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| S5-231000 | Agenda | WG Chair | approved |  |  |
| S5-231001 | IPR and legal declaration | WG Chair | withdrawn |  |  |
| S5-231002 | Report from last SA5 meeting | MCC | approved |  |  |
| S5-231003 | Post e-meeting email approval status | WG Chair | available |  |  |
| S5-231004 | OAM&P action list | WG Vice Chair (Huawei) | noted |  |  |
| S5-231005 | agenda\_with\_Tdocs\_sequence\_proposal\_OAM | WG Vice Chair (Huawei) | noted |  |  |
| S5-231006 | OAM Exec Report | WG Vice Chair (Huawei) | reserved |  |  |
| S5-231007 | OAM Chair notes and conclusions | WG Chair | available |  |  |
| S5-231008 | CH agenda and time plan | WG vice Chair (Matrixx Software) | revised |  | S5-231138 |
| S5-231009 | Charging exec report | WG vice Chair (Matrixx Software) | noted |  |  |
| S5-231010 | Proposed way forward for the Rel-18 work on EE | Huawei Technologies France | endorsed |  |  |
| S5-231011 | Revised WID Rel-18 Work Item on 5G energy efficiency phase 2 | Huawei Technologies France | endorsed |  |  |
| S5-231012 | 3GPP Rel-18 work on EE | Huawei Technologies France | revised |  | S5-231149 |
| S5-231013 | DP on using intent driven approach to support async network slice provisioning | Huawei  | noted |  |  |
| S5-231014 | DP on solution for expressing service and slice profile requirements as intent expectations | Huawei,Deutsche Telekom | noted |  |  |
| S5-231015 | DP on TS structure proposal for generic NRM Fragment | Huawei | noted | S5-226381 |  |
| S5-231016 | New Rel-18 WID on Intent driven Management Service for mobile network phase 2 | Huawei,Ericsson | revised |  | S5-231200 |
| S5-231017 | Using Forge for SA5 | Nokia, Nokia Shanghai Bell | revised |  | S5-231146 |
| S5-231018 | SA5 Working Procedures | Nokia, Nokia Shanghai Bell,Ericsson Hungary Ltd | revised |  | S5-231145 |
| S5-231019 | DP Service Management | Ericsson | noted |  |  |
| S5-231020 | DP Workload in SA5 OAM | Ericsson | noted |  |  |
| S5-231021 | New WID on enhance SBMA specifications | Ericsson | noted |  |  |
| S5-231022 | New WID on intent-driven management for network slicing | Ericsson | noted |  |  |
| S5-231023 | New Rel-18 WID AI/ML management | Intel, NEC | revised |  | S5-231199 |
| S5-231024 | New WID on SBMA enabler enhancements | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-231025 | DP on Consolidation of alarm related definitions | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-231026 | DP on TS structure for data management / performance management | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-231027 | DP on Restructuring of TS 28.622 | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-231028 | DP on TS for common data types | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-231029 | New WID on measurement data collection to support RAN intelligence  | Intel Korea, Ltd. | noted |  |  |
| S5-231030 | Discussion paper on predicted alarms | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-231031 | Discussion paper on reference architecture vs clarification of NetworkSlice | Nokia, Nokia Shanghai Bell | noted |  |  |
| S5-231032 | Rel-18&Rel-19 time plan proposal for OAM | SA5 Vice chair (Huawei),SA5 Chair | endorsed | S5-226377 |  |
| S5-231033 | Rel-18 pCR 28.828 Add evaluation and conclusion for SNPN topic 2 | China Mobile | approved |  |  |
| S5-231034 | Rel-18 pCR 28.828 Update PNI-NPN topic 1 for consistency | China Mobile | approved |  |  |
| S5-231035 | Rel-18 pCR 28.828 Add Conclusions and recommendations | China Mobile | approved |  |  |
| S5-231036 | LS on controlling number of UEs or PDU sessions for NPN | China Mobile | revised |  | S5-231253 |
| S5-231037 | New WID on Management Aspect of 5GLAN | China Mobile Com. Corporation | withdrawn |  |  |
| S5-231038 | New WID on Management Aspect of 5GLAN | China Mobile Com. Corporation | withdrawn |  |  |
| S5-231039 | DP on naming convention of MnS using CRUD operation with certain NRM | Huawei | noted |  |  |
| S5-231040 |  DP on way forward for mulitple data collection mechanisms | Huawei | noted |  |  |
| S5-231041 | New SID on management aspects of Digital Twin Network | China Mobile Com. Corporation | noted |  |  |
| S5-231042 | Discussion paper on KPI, KQI, QoE | Nokia | withdrawn |  |  |
| S5-231043 | Discussion paper on KPI, KQI, QoE | Nokia | revised |  | S5-231148 |
| S5-231044 | DP on interoperability support using SBMA | HuaWei Technologies Co., Ltd | noted | S5-226509 |  |
| S5-231045 | New WID on network slice management capability exposure | Alibaba Group | noted |  |  |
| S5-231046 | Rel-18 WISI analysis proposal | HuaWei Technologies Co., Ltd | noted |  |  |
| S5-231047 | new WID on Enhancement of service based management architecture | HuaWei Technologies Co., Ltd | noted |  |  |
| S5-231048 | Discussion paper on mechanism to support asynchronous LCM operations | Nokia, Nokia Shanghai Bell, Ericsson | noted |  |  |
| S5-231049 | Discussion Paper on including EW bound interface into eECM | Samsung R&D Institute UK | noted |  |  |
| S5-231050 | Updated WID on enhanced edge computing management | Samsung R&D Institute UK | noted |  | - |
| S5-231051 | Proposed way forward for Rel-18 work on NPN | Huawei | noted |  |  |
| S5-231052 | New WID on enhanced management of non-public networks | Huawei | noted |  |  |
| S5-231053 | Discussion paper on relation between FS\_NSCE, MSAC, NPN and NSOEU | Huawei | noted |  |  |
| S5-231054 | Rel-18 pCR 32.847 Correction on the key issue 7 | Huawei | noted |  |  |
| S5-231055 | Rel-18 pCR 28.826 Correction on the Topic 5.1 | Huawei | merged |  | S5-231251 |
| S5-231056 | Rel-18 pCR 28.826 Clarify the solution 1.1 | Huawei | noted |  |  |
| S5-231057 | Rel-18 pCR 28.826 Add the max size solution | Huawei | approved |  |  |
| S5-231058 | Rel-18 pCR 28.826 Common IEs applied in the service charging specifications | Huawei | revised |  | S5-231254 |
| S5-231059 | Rel-18 pCR 28.826 Correction on the key issues in the topic 5.5 | Huawei | revised |  | S5-231286 |
| S5-231060 | Rel-18 pCR 28.826 Add the solution for keeping reporting based on the triggers | Huawei | revised |  | S5-231292 |
| S5-231061 | Rel-18 pCR 28.826 Add the solution for Bitrate charging | Huawei | noted |  |  |
| S5-231062 | Rel-18 pCR 28.826 Evaluation and Conclusion for solution 1.3 | Huawei | noted |  |  |
| S5-231063 | Rel-18 pCR 28.826 Evaluation and Conclusion for threshold | Huawei | revised |  | S5-231291 |
| S5-231064 | Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.3 | Huawei | revised |  | S5-231290 |
| S5-231065 | Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.4 | Huawei | revised |  | S5-231289 |
| S5-231066 | Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.5 | Huawei | revised |  | S5-231288 |
| S5-231067 | Rel-18 pCR 28.827 Add new solution on using RCG in LBO charging | Huawei | noted |  |  |
| S5-231068 | Rel-18 pCR 28.827 Corrections | Huawei | revised |  | S5-231260 |
| S5-231069 | Rel-18 pCR 28.827 Evaluation and conclusion of clause 7.1 | Huawei | noted |  |  |
| S5-231070 | Rel-18 pCR 28.827 Evaluation and conclusion of clause 7.2 | Huawei | noted |  |  |
| S5-231071 | Rel-18 pCR 28.828 Correction on the Topic 1 and Topic 3 | Huawei | revised |  | S5-231255 |
| S5-231072 | Rel-18 pCR 28.828 Remove the editor's note for Topic 3 | Huawei | merged |  | S5-231255 |
| S5-231073 | Rel-18 pCR 28.828 Evaluation and Conclusion for Topic 1 | Huawei | revised |  | S5-231268 |
| S5-231074 | Rel-18 pCR 28.828 Evaluation and Conclusion for Topic 3 | Huawei | revised |  | S5-231269 |
| S5-231075 | Rel-18 pCR 28.839 Add Use Case for Enablers for Time Sensitive Communications | Huawei | noted |  |  |
| S5-231076 | Rel-18 pCR 28.839 Add Use Case for Exposure of Time Synchronization | Huawei | approved |  |  |
| S5-231077 | Rel-18 pCR 28.839 Add Use Case for Time Sensitive Communication | Huawei | noted |  |  |
| S5-231078 | Rel-18 pCR 28.839 Add Use Case for TSN 5GS bridge Charging | Huawei | noted |  |  |
| S5-231079 | New WID on Management Aspects of NTN Enhancement | China Unicom, China Academy of Telecommunication Technology | noted |  |  |
| S5-231080 | Discussion paper on Management Aspects of NTN Enhancement | China Unicom, China Academy of Telecommunication Technology | noted |  |  |
| S5-231081 | DP on way forward of 5G KQI SI | Huawei  | noted |  |  |
| S5-231082 | Discussion paper on Using Forge-Git as the primary storage for Code | Ericsson Hungary Ltd | endorsed |  |  |
| S5-231083 | New WID on Management Aspect of 5GLAN | China Mobile Com. Corporation | noted |  |  |
| S5-231084 | Collection of useful endorsed document and external communication documents | WG Vice Chair (Huawei) | noted | S5-226010 |  |
| S5-231085 | DP on way forward of FS\_FSEV | Huawei Technologies Japan K.K. | noted |  |  |
| S5-231086 | DP on way forward of FS\_DCSA | Huawei Technologies Japan K.K. | noted |  |  |
| S5-231087 | DP on wayforward of autononous network levels | China Mobile, Huawei, AsiaInfo, CATT, ZTE, China Unicom | noted |  |  |
| S5-231088 | DP on ANL relation with other autonomy features | China Mobile, Huawei, AsiaInfo, CATT, ZTE, China Unicom | noted |  |  |
| S5-231089 | New WID on autonomous network levels phase 2 | China Mobile, Huawei, AsiaInfo, CATT, ZTE, China Unicom | noted |  |  |
| S5-231090 | New Rel-18 WID on Enhancement of the Management Aspects related to NWDAF | Chinatelecom Cloud | noted |  |  |
| S5-231091 | New Work Item on Network and Service Operations for Energy Utilities | Samsung, EUTC, EDF, BMWK, Anterix | noted |  |  |
| S5-231092 | Rel-18 pCR 32.847 Update solution#6.3 | MATRIXX Software | revised |  | S5-231262 |
| S5-231093 | Rel-18 pCR 32.847 Solve Editor's Note in solution#7.2 | MATRIXX Software | revised |  | S5-231256 |
| S5-231094 | Rel-18 pCR 32.847 Final conclusion for Key issue#3 | MATRIXX Software | revised |  | S5-231252 |
| S5-231095 | Rel-18 pCR 32.847 Add evaluation and conclusion for Key issue#6 | MATRIXX Software | revised |  | S5-231264 |
| S5-231096 | Rel-18 pCR 32.847 Refinement on evaluation and conclusion for Key issue#7 | MATRIXX Software | revised |  | S5-231257 |
| S5-231097 | Rel-18 pCR 32.847 Add new Key issue on SBI between UE CHF and Tenant CHF | MATRIXX Software | revised |  | S5-231261 |
| S5-231098 | Rel-18 pCR 32.847 Add a solution for Key issue#x - reuse Nchf\_convergedcharging | MATRIXX Software | revised |  | S5-231258 |
| S5-231099 | Rel-18 pCR 32.847 Add a solution for Key issue#x - new service API | MATRIXX Software | revised |  | S5-231259 |
| S5-231100 | Rel-18 pCR 32.847 Add evaluation and conclusion for Key issue#x | MATRIXX Software | revised |  | S5-231267 |
| S5-231101 | Rel-18 pCR 32.847 Add conclusions and recommendations | MATRIXX Software | revised |  | S5-231265 |
| S5-231102 | Discussion paper on intent driven management for network slicing | L.M. Ericsson Limited,Deutsche Telekom | noted |  |  |
| S5-231103 | Discussion paper on comparison of ordering a service or ordering intent | L.M. Ericsson Limited,Deutsche Telekom | noted |  |  |
| S5-231104 |  Discussion paper on potential solution for network slice intent | L.M. Ericsson Limited,Deutsche Telekom | noted |  |  |
| S5-231105 | Clarifying multilevel attribute properties | Ericsson Hungary Ltd | revised |  | S5-231150 |
| S5-231106 | Stateless Alert in Fault Supervision | Ericsson Hungary Ltd | noted |  |  |
| S5-231107 | New Rel-18 WID on Management Aspects of URLLC | China Unicom, Huawei, CATT, China Telecom | noted |  |  |
| S5-231108 | New Rel-18 WID on Management Aspects of 5G Network Sharing Phase2 | China Unicom, Huawei, CATT, China Telecom | noted |  |  |
| S5-231109 | New WID on Management of cloud-native Virtualized Network Functions | China Mobile E-Commerce Co. | withdrawn |  |  |
| S5-231110 | New WID on Management of cloud-native Virtualized Network Functions | China Mobile E-Commerce Co. | noted |  |  |
| S5-231111 | Rel-18 pCR 28.826 Correcting use cases and key issues in clause 5.1 | Ericsson LM | noted |  |  |
| S5-231112 | Rel-18 pCR 28.826 Correcting solutions in clause 5.1 | Ericsson LM | revised |  | S5-231251 |
| S5-231113 | Rel-18 pCR 28.826 Adding solution for key issue #1l in clause 5.1 | Ericsson LM | revised |  | S5-231276 |
| S5-231114 | Rel-18 pCR 28.826 Adding solutions to undefined attribute handling in CDR | Ericsson LM | noted |  |  |
| S5-231115 | Rel-18 pCR 28.826 Adding solution for size of charging information | Ericsson LM | revised |  | S5-231250 |
| S5-231116 | Rel-18 pCR 28.826 Adding use case requested units and quota management indication | Ericsson LM | noted |  |  |
| S5-231117 | Rel-18 pCR 28.827 Correcting requirements and key issues in clause 7.1 | Ericsson LM | noted |  |  |
| S5-231118 | Rel-18 pCR 28.827 Adding solution in clause 7.1 for QBC triggers configured in the V-CHF | Ericsson LM | noted |  |  |
| S5-231119 | Rel-18 pCR 28.827 Correcting covered requirements for solution #1.9 | Ericsson LM | approved |  |  |
| S5-231120 | Rel-18 pCR 28.827 Correcting solution #1.10 in clause 7.1 | Ericsson LM | revised |  | S5-231271 |
| S5-231121 | Rel-18 pCR 28.827 Correcting solution #1.11 in clause 7.1 | Ericsson LM | noted |  |  |
| S5-231122 | Rel-18 pCR 28.827 Adding solution in clause 7.1 for PDU session triggers | Ericsson LM | noted |  |  |
| S5-231123 | Rel-18 pCR 28.827 Adding solution in clause 7.1 for QoS flow session triggers | Ericsson LM | noted |  |  |
| S5-231124 | Rel-18 pCR 28.827 Adding solution in clause 7.1 for QoS flow triggers | Ericsson LM | noted |  |  |
| S5-231125 | Rel-18 pCR 28.827 Adding evaluation of solutions for clause 7.1 | Ericsson LM | noted |  |  |
| S5-231126 | Rel-18 pCR 28.827 Correcting solution #2.1 in clause 7.2 | Ericsson LM | revised |  | S5-231279 |
| S5-231127 | Rel-18 pCR 28.827 Adding solution in clause 7.2 dual CHF interaction | Ericsson LM | noted |  |  |
| S5-231128 | Rel-18 pCR 28.827 Correcting solutions in clause 7.2 dual CHF information | Ericsson LM | noted |  |  |
| S5-231129 | Rel-18 pCR 28.827 Additional evaluation of solutions for clause 7.2 | Ericsson LM | noted |  |  |
| S5-231130 | Rel-18 pCR 28.827 Additional solution key issue #4e in clause 7.4 | Ericsson LM | noted |  |  |
| S5-231131 | Rel-18 pCR 28.827 Additional evaluation of solutions for clause 7.4 | Ericsson LM | noted |  |  |
| S5-231132 | Rel-18 pCR 28.827 Additional solutions for key issue #5d in clause 7.5 | Ericsson LM | noted |  |  |
| S5-231133 | Rel-18 pCR 28.827 Additional solution for key issue #5f in clause 7.5 | Ericsson LM | noted |  |  |
| S5-231134 | Rel-18 pCR 28.827 Adding solution in clause 7.6 for UE usage information reporting | Ericsson LM | noted |  |  |
| S5-231135 | Rel-18 pCR 28.827 Additional solutions for key issue #5e in clause 7.5 | Ericsson LM | noted |  |  |
| S5-231136 | Rel-18 pCR 28.827 Adding comparison between double or single CHF | Ericsson LM | noted |  |  |
| S5-231137 | Updated Rel-18 WID Enhancement of Management of Trace/MDT phase 2 | Ericsson Inc. | noted | S5-227041 |  |
| S5-231138 | CH agenda and time plan | WG vice Chair (Matrixx Software) | approved | S5-231008 |  |
| S5-231139 | Presentation of TR 32.847 for approval  | MATRIXX Software | noted |  |  |
| S5-231140 | DP WF for normative specifications development of AI/ML management | NEC, Intel | revised |  | S5-231195 |
| S5-231141 | DP on Enhancement of Subscriber and Equipment Trace | Ericsson Inc. | noted |  |  |
| S5-231142 | DP AIML collaboration with other 3GPP groups | Huawei | revised |  | S5-231196 |
| S5-231143 | E-meeting process | WG chair | revised |  | S5-231144 |
| S5-231144 | E-meeting process | WG chair | revised | S5-231143 | S5-231147 |
| S5-231145 | SA5 Working Procedures | Nokia, Nokia Shanghai Bell,Ericsson Hungary Ltd | approved | S5-231018 | - |
| S5-231146 | Using Forge for SA5 | Nokia, Nokia Shanghai Bell | noted | S5-231017 | - |
| S5-231147 | E-meeting process | WG chair | noted | S5-231144 | - |
| S5-231148 | Discussion paper on KPI, KQI, QoE | Nokia | endorsed | S5-231043 | - |
| S5-231149 | 3GPP Rel-18 work on EE | Huawei Technologies France | endorsed | S5-231012 | - |
| S5-231150 | Clarifying multilevel attribute properties | Ericsson Hungary Ltd | endorsed | S5-231105 | - |
| S5-231195 | DP WF for normative specifications development of AI/ML management | NEC, Intel | endorsed | S5-231140 | - |
| S5-231196 | DP AIML collaboration with other 3GPP groups | Huawei | endorsed | S5-231142 | - |
| S5-231198 | Updated Study on enhanced edge computing management | Samsung R&D Institute UK | agreed | - | - |
| S5-231199 | New Rel-18 WID AI/ML management | Intel, NEC | agreed | S5-231023 | - |
| S5-231200 | New Rel-18 WID on Intent driven Management Service for mobile network phase 2 | Huawei,Ericsson | agreed | S5-231016 | - |
| S5-231245 | TR 32.847 | MATRIXX Software | approved | - | - |
| S5-231246 | TR 28.826 | Ericsson | approved | - | - |
| S5-231247 | TR 28.827 | Ericsson | approved | - | - |
| S5-231248 | TR 28.828 | China Mobile | approved | - | - |
| S5-231249 | TR 28.839 | Huawei | approved | - | - |
| S5-231250 | Rel-18 pCR 28.826 Adding solution for size of charging information | Ericsson LM | approved | S5-231115 | - |
| S5-231251 | Rel-18 pCR 28.826 Correcting solutions in clause 5.1 | Ericsson LM | approved | S5-231112 | - |
| S5-231252 | Rel-18 pCR 32.847 Final conclusion for Key issue#3 | MATRIXX Software | approved | S5-231094 | - |
| S5-231253 | LS on controlling number of UEs or PDU sessions for NPN | China Mobile | approved | S5-231036 | - |
| S5-231254 | Rel-18 pCR 28.826 Common IEs applied in the service charging specifications | Huawei | approved | S5-231058 | - |
| S5-231255 | Rel-18 pCR 28.828 Correction on the Topic 1 and Topic 3 | Huawei | approved | S5-231071 | - |
| S5-231256 | Rel-18 pCR 32.847 Solve Editor's Note in solution#7.2 | MATRIXX Software | approved | S5-231093 | - |
| S5-231257 | Rel-18 pCR 32.847 Refinement on evaluation and conclusion for Key issue#7 | MATRIXX Software | approved | S5-231096 | - |
| S5-231258 | Rel-18 pCR 32.847 Add a solution for Key issue#x - reuse Nchf\_convergedcharging | MATRIXX Software | approved | S5-231098 | - |
| S5-231259 | Rel-18 pCR 32.847 Add a solution for Key issue#x - new service API | MATRIXX Software | approved | S5-231099 | - |
| S5-231260 | Rel-18 pCR 28.827 Corrections | Huawei | approved | S5-231068 | - |
| S5-231261 | Rel-18 pCR 32.847 Add new Key issue on SBI between UE CHF and Tenant CHF | MATRIXX Software | approved | S5-231097 | - |
| S5-231262 | Rel-18 pCR 32.847 Update solution#6.3 | MATRIXX Software | approved | S5-231092 | - |
| S5-231264 | Rel-18 pCR 32.847 Add evaluation and conclusion for Key issue#6 | MATRIXX Software | approved | S5-231095 | - |
| S5-231265 | Rel-18 pCR 32.847 Add conclusions and recommendations | MATRIXX Software | approved | S5-231101 | - |
| S5-231267 | Rel-18 pCR 32.847 Add evaluation and conclusion for Key issue#x | MATRIXX Software | approved | S5-231100 | - |
| S5-231268 | Rel-18 pCR 28.828 Evaluation and Conclusion for Topic 1 | Huawei | approved | S5-231073 | - |
| S5-231269 | Rel-18 pCR 28.828 Evaluation and Conclusion for Topic 3 | Huawei | approved | S5-231074 | - |
| S5-231271 | Rel-18 pCR 28.827 Correcting solution #1.10 in clause 7.1 | Ericsson LM | approved | S5-231120 | - |
| S5-231276 | Rel-18 pCR 28.826 Adding solution for key issue #1l in clause 5.1 | Ericsson LM | approved | S5-231113 | - |
| S5-231279 | Rel-18 pCR 28.827 Correcting solution #2.1 in clause 7.2 | Ericsson LM | approved | S5-231126 | - |
| S5-231286 | Rel-18 pCR 28.826 Correction on the key issues in the topic 5.5 | Huawei | approved | S5-231059 | - |
| S5-231288 | Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.5 | Huawei | approved | S5-231066 | - |
| S5-231289 | Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.4 | Huawei | approved | S5-231065 | - |
| S5-231290 | Rel-18 pCR 28.826 Evaluation and Conclusion for Topic 5.3 | Huawei | approved | S5-231064 | - |
| S5-231291 | Rel-18 pCR 28.826 Evaluation and Conclusion for threshold | Huawei | approved | S5-231063 | - |
| S5-231292 | Rel-18 pCR 28.826 Add the solution for keeping reporting based on the triggers | Huawei | approved | S5-231060 | - |

### A2: Tdoc decision timing

|  |  |  |
| --- | --- | --- |
| Document | Date/time UTC | Decision |
| S5-231000 | 23/01/2023 11:02:44 | approved |
| S5-231001 | 23/01/2023 11:00:56 | withdrawn |
| S5-231002 | 23/01/2023 11:01:24 | approved |
| S5-231004 | 23/01/2023 09:59:10 | noted |
| S5-231005 | 23/01/2023 09:59:17 | noted |
| S5-231008 | 20/01/2023 13:09:24 | revised |
| S5-231009 | 23/01/2023 11:01:33 | noted |
| S5-231010 | 23/01/2023 10:07:53 | available |
| S5-231011 | 23/01/2023 10:07:59 | available |
| S5-231012 | 23/01/2023 09:37:11 | revised |
| S5-231013 | 23/01/2023 09:23:43 | noted |
| S5-231014 | 23/01/2023 09:23:45 | noted |
| S5-231015 | 23/01/2023 09:33:24 | noted |
| S5-231016 | 23/01/2023 10:00:34 | revised |
| S5-231017 | 23/01/2023 09:22:49 | revised |
| S5-231018 | 20/01/2023 13:27:48 | revised |
| S5-231019 | 23/01/2023 09:33:49 | noted |
| S5-231020 | 23/01/2023 09:59:31 | noted |
| S5-231021 | 23/01/2023 10:02:32 | noted |
| S5-231022 | 23/01/2023 10:00:51 | noted |
| S5-231023 | 23/01/2023 10:01:03 | revised |
| S5-231024 | 23/01/2023 10:05:06 | noted |
| S5-231025 | 23/01/2023 09:34:55 | noted |
| S5-231026 | 23/01/2023 09:34:45 | noted |
| S5-231027 | 23/01/2023 09:33:32 | noted |
| S5-231028 | 23/01/2023 09:33:38 | noted |
| S5-231029 | 23/01/2023 10:02:06 | noted |
| S5-231030 | 23/01/2023 09:34:58 | noted |
| S5-231031 | 23/01/2023 09:33:15 | noted |
| S5-231032 | 23/01/2023 09:59:35 | available |
| S5-231033 | 20/01/2023 13:23:42 | approved |
| S5-231034 | 20/01/2023 13:23:43 | approved |
| S5-231035 | 20/01/2023 13:23:45 | approved |
| S5-231036 | 20/01/2023 13:09:57 | revised |
| S5-231039 | 23/01/2023 09:37:29 | noted |
| S5-231040 | 23/01/2023 09:34:33 | noted |
| S5-231041 | 23/01/2023 10:08:36 | noted |
| S5-231042 | 23/01/2023 10:59:21 | withdrawn |
| S5-231043 | 23/01/2023 09:34:11 | revised |
| S5-231044 | 23/01/2023 09:37:35 | noted |
| S5-231045 | 23/01/2023 10:09:02 | noted |
| S5-231046 | 23/01/2023 09:39:38 | noted |
| S5-231047 | 23/01/2023 10:02:41 | noted |
| S5-231048 | 23/01/2023 09:23:36 | noted |
| S5-231049 | 23/01/2023 10:02:47 | noted |
| S5-231050 | 23/01/2023 10:02:52 | noted |
| S5-231050 | 23/01/2023 10:03:38 | revised |
| S5-231050 | 23/01/2023 10:03:51 | noted |
| S5-231051 | 23/01/2023 10:09:11 | noted |
| S5-231052 | 23/01/2023 10:09:14 | noted |
| S5-231053 | 23/01/2023 09:39:59 | noted |
| S5-231054 | 20/01/2023 13:11:37 | noted |
| S5-231055 | 20/01/2023 13:15:57 | available |
| S5-231056 | 20/01/2023 13:16:06 | noted |
| S5-231057 | 20/01/2023 13:16:11 | approved |
| S5-231058 | 20/01/2023 13:16:20 | revised |
| S5-231059 | 20/01/2023 13:16:33 | revised |
| S5-231060 | 20/01/2023 13:16:43 | revised |
| S5-231061 | 20/01/2023 13:16:54 | noted |
| S5-231062 | 20/01/2023 13:16:55 | noted |
| S5-231063 | 20/01/2023 13:17:10 | revised |
| S5-231064 | 20/01/2023 13:17:20 | revised |
| S5-231065 | 20/01/2023 13:17:28 | revised |
| S5-231066 | 20/01/2023 13:17:36 | revised |
| S5-231067 | 20/01/2023 13:19:51 | noted |
| S5-231068 | 20/01/2023 13:20:05 | revised |
| S5-231069 | 20/01/2023 13:20:11 | noted |
| S5-231070 | 20/01/2023 13:20:12 | noted |
| S5-231071 | 20/01/2023 13:22:48 | revised |
| S5-231072 | 20/01/2023 13:23:12 | available |
| S5-231073 | 20/01/2023 13:23:21 | revised |
| S5-231074 | 20/01/2023 13:23:29 | revised |
| S5-231075 | 20/01/2023 13:24:49 | noted |
| S5-231076 | 20/01/2023 13:24:51 | approved |
| S5-231077 | 20/01/2023 13:24:54 | noted |
| S5-231078 | 20/01/2023 13:24:54 | noted |
| S5-231079 | 23/01/2023 10:04:57 | noted |
| S5-231080 | 23/01/2023 10:04:49 | noted |
| S5-231081 | 23/01/2023 09:34:23 | noted |
| S5-231082 | 23/01/2023 09:05:13 | available |
| S5-231083 | 23/01/2023 10:05:13 | noted |
| S5-231084 | 23/01/2023 09:59:44 | noted |
| S5-231085 | 23/01/2023 09:35:11 | noted |
| S5-231086 | 23/01/2023 09:40:06 | noted |
| S5-231087 | 23/01/2023 09:40:10 | noted |
| S5-231088 | 23/01/2023 09:40:16 | noted |
| S5-231089 | 23/01/2023 10:02:13 | noted |
| S5-231090 | 23/01/2023 10:02:22 | noted |
| S5-231091 | 23/01/2023 10:09:18 | noted |
| S5-231092 | 20/01/2023 13:11:52 | revised |
| S5-231093 | 20/01/2023 13:12:03 | revised |
| S5-231094 | 20/01/2023 13:12:12 | revised |
| S5-231095 | 20/01/2023 13:12:25 | revised |
| S5-231096 | 20/01/2023 13:12:34 | revised |
| S5-231097 | 20/01/2023 13:12:43 | revised |
| S5-231098 | 20/01/2023 13:12:51 | revised |
| S5-231099 | 20/01/2023 13:13:01 | revised |
| S5-231100 | 20/01/2023 13:13:15 | revised |
| S5-231101 | 20/01/2023 13:13:26 | revised |
| S5-231102 | 23/01/2023 09:23:54 | noted |
| S5-231103 | 23/01/2023 09:23:59 | noted |
| S5-231104 | 23/01/2023 09:24:02 | noted |
| S5-231105 | 23/01/2023 09:40:31 | revised |
| S5-231106 | 23/01/2023 09:35:23 | noted |
| S5-231107 | 23/01/2023 10:05:19 | noted |
| S5-231108 | 23/01/2023 10:05:24 | noted |
| S5-231110 | 23/01/2023 10:05:29 | noted |
| S5-231111 | 20/01/2023 13:17:48 | noted |
| S5-231112 | 20/01/2023 13:17:56 | revised |
| S5-231113 | 20/01/2023 13:18:12 | revised |
| S5-231114 | 20/01/2023 13:18:16 | noted |
| S5-231115 | 20/01/2023 13:18:29 | revised |
| S5-231116 | 20/01/2023 13:18:33 | noted |
| S5-231117 | 20/01/2023 13:20:14 | noted |
| S5-231118 | 20/01/2023 13:20:20 | noted |
| S5-231119 | 20/01/2023 13:20:24 | approved |
| S5-231120 | 20/01/2023 13:20:31 | revised |
| S5-231121 | 20/01/2023 13:20:36 | noted |
| S5-231122 | 20/01/2023 13:20:39 | noted |
| S5-231123 | 20/01/2023 13:20:44 | noted |
| S5-231124 | 20/01/2023 13:20:45 | noted |
| S5-231125 | 20/01/2023 13:20:49 | noted |
| S5-231126 | 20/01/2023 13:20:58 | revised |
| S5-231127 | 20/01/2023 13:21:02 | noted |
| S5-231128 | 20/01/2023 13:21:08 | noted |
| S5-231129 | 20/01/2023 13:21:09 | noted |
| S5-231130 | 20/01/2023 13:21:09 | noted |
| S5-231131 | 20/01/2023 13:21:12 | noted |
| S5-231132 | 20/01/2023 13:21:17 | noted |
| S5-231133 | 20/01/2023 13:21:18 | noted |
| S5-231134 | 20/01/2023 13:21:19 | noted |
| S5-231135 | 20/01/2023 13:21:22 | noted |
| S5-231136 | 20/01/2023 13:21:25 | noted |
| S5-231137 | 23/01/2023 10:07:45 | noted |
| S5-231138 | 20/01/2023 13:09:26 | approved |
| S5-231139 | 20/01/2023 13:13:51 | noted |
| S5-231140 | 23/01/2023 10:01:24 | revised |
| S5-231141 | 23/01/2023 09:58:58 | noted |
| S5-231142 | 23/01/2023 10:01:50 | revised |
| S5-231143 | 13/01/2023 13:40:35 | revised |
| S5-231144 | 23/01/2023 09:23:10 | revised |
| S5-231145 | 20/01/2023 13:27:49 | approved |
| S5-231146 | 23/01/2023 09:22:50 | noted |
| S5-231147 | 23/01/2023 09:23:19 | noted |
| S5-231148 | 23/01/2023 09:34:13 | reserved |
| S5-231149 | 23/01/2023 09:37:17 | reserved |
| S5-231150 | 23/01/2023 09:40:35 | reserved |
| S5-231195 | 23/01/2023 10:01:31 | reserved |
| S5-231196 | 23/01/2023 10:01:54 | reserved |
| S5-231198 | 23/01/2023 10:04:29 | agreed |
| S5-231199 | 23/01/2023 10:01:07 | agreed |
| S5-231200 | 23/01/2023 10:00:38 | agreed |
| S5-231245 | 20/01/2023 13:14:43 | reserved |
| S5-231245 | 24/01/2023 15:06:31 | approved |
| S5-231246 | 20/01/2023 13:19:19 | reserved |
| S5-231246 | 24/01/2023 15:06:36 | approved |
| S5-231247 | 20/01/2023 13:22:15 | reserved |
| S5-231247 | 24/01/2023 15:06:42 | approved |
| S5-231248 | 20/01/2023 13:24:22 | reserved |
| S5-231248 | 25/01/2023 15:50:50 | approved |
| S5-231249 | 20/01/2023 13:25:54 | reserved |
| S5-231249 | 25/01/2023 15:50:55 | approved |
| S5-231250 | 20/01/2023 13:18:30 | approved |
| S5-231251 | 20/01/2023 13:17:57 | approved |
| S5-231252 | 20/01/2023 13:12:13 | approved |
| S5-231253 | 20/01/2023 13:09:59 | approved |
| S5-231254 | 20/01/2023 13:16:21 | approved |
| S5-231255 | 20/01/2023 13:22:49 | approved |
| S5-231256 | 20/01/2023 13:12:04 | approved |
| S5-231257 | 20/01/2023 13:12:35 | approved |
| S5-231258 | 20/01/2023 13:12:53 | approved |
| S5-231259 | 20/01/2023 13:13:02 | approved |
| S5-231260 | 20/01/2023 13:20:06 | approved |
| S5-231261 | 20/01/2023 13:12:44 | approved |
| S5-231262 | 20/01/2023 13:11:55 | approved |
| S5-231264 | 20/01/2023 13:12:26 | approved |
| S5-231265 | 20/01/2023 13:13:26 | approved |
| S5-231267 | 20/01/2023 13:13:16 | approved |
| S5-231268 | 20/01/2023 13:23:23 | approved |
| S5-231269 | 20/01/2023 13:23:30 | approved |
| S5-231271 | 20/01/2023 13:20:32 | approved |
| S5-231276 | 20/01/2023 13:18:13 | approved |
| S5-231279 | 20/01/2023 13:20:58 | approved |
| S5-231286 | 20/01/2023 13:16:34 | approved |
| S5-231288 | 20/01/2023 13:17:37 | approved |
| S5-231289 | 20/01/2023 13:17:29 | approved |
| S5-231290 | 20/01/2023 13:17:21 | approved |
| S5-231291 | 20/01/2023 13:17:12 | approved |
| S5-231292 | 20/01/2023 13:16:44 | approved |

## Annex B: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| S5-231253 | LS on controlling number of UEs or PDU sessions for NPN | SA2 | - | - |

## Annex C: List of agreed/approved new and revised Work Items

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | Source | new/revised |
| S5-231198 | Updated Study on enhanced edge computing management | Samsung R&D Institute UK | SID revised |
| S5-231199 | New Rel-18 WID AI/ML management | Intel, NEC | WID new |
| S5-231200 | New Rel-18 WID on Intent driven Management Service for mobile network phase 2 | Huawei,Ericsson | WID new |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Spec | vers | Doc title |
| S5-231245 | 32.847 | 1.6.0 | TR 32.847 |
| S5-231246 | 28.826 | 1.2.0 | TR 28.826 |
| S5-231247 | 28.827 | 1.6.0 | TR 28.827 |
| S5-231248 | 28.828 | 1.2.0 | TR 28.828 |
| S5-231249 | 28.839 | 0.4.0 | TR 28.839 |

## Annex E: List of participants

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TITLE | Family Name | Given Name | Employer Organization | Organization Represented |
| Dr. | Al-kanani | Hassan | NEC Europe Ltd | NEC Corporation |
| Mr. | Andrianov | Anatoly | Nokia Germany | Nokia |
| Mr. | Audebert | Vincent | EDF Recherche et Développement | EDF Recherche et Développement |
| Mrs. | Ayani | Zhulia | Ericsson LM | Ericsson India Private Limited |
| Miss | Braham | Hajer | Nokia Germany | Nokia France |
| Mr. | Cano Soveri | Mirko | ETSI | ETSI |
| Miss | cao | guangjing | China Mobile Com. Corporation | China Mobile E-Commerce Co. |
| Mr. | Cao | Longyu | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies R&D UK |
| Dr. | Cao | Xi | China Mobile Com. Corporation | China Mobile International Ltd |
| Dr. | Cetinkaya | Egemen | Verizon UK Ltd | Verizon Denmark |
| Dr. | Chen | Ai | China Mobile Com. Corporation | China Mobile (Hangzhou) Inf. |
| Ms. | Chen | Lijuan | ZTE Corporation | ShenZhen Zhongxing Shitong |
| Miss | CHEN | SHAN | Huawei Tech.(UK) Co.. Ltd | HiSilicon Technologies Co. Ltd |
| Miss | Chen | Xiumin | China Telecommunications | China Telecommunications |
| Mr. | Chou | Joey | Intel Corporation (UK) Ltd | Intel Korea, Ltd. |
| Dr. | CORNILY | Jean-Michel | Huawei Technologies France | Huawei Technologies France |
| Mr. | Das | Pranab | Verizon Business Group | Verizon UK Ltd |
| Dr. | Dong | Hao | ZTE Corporation | ZTE Photonics |
| Mr. | Elmdahl | Per | Ericsson France S.A.S | Ericsson France S.A.S |
| Mr. | Fernandes | Clifton | Nokia UK | Nokia Corporation |
| Mr. | Gautam | Deepanshu | Samsung R&D Institute UK | Samsung R&D Institute India |
| Mr. | Glozman | Borislav | Amdocs Software Systems Ltd | Amdocs Software Systems Ltd |
| Mrs. | Godoy | Gabriela | SDI Squared | SDI Squared |
| Dr. | Goerge | Jürgen | Nokia Germany | Nokia Germany |
| Ms. | Gong | Ruby | Beijing Xiaomi Mobile Software | Xiaomi EV Technology |
| Mr. | Görmer | Gerald | MATRIXX Software | MATRIXX Software |
| Mr. | Groenendijk | Jan | Ericsson LM | L.M. Ericsson Limited |
| Mr. | Guo | Yi | Intel Corporation (UK) Ltd | Intel Belgium SA/NV |
| Ms. | Gupta | Monika | Amdocs Software Systems Ltd | Amdocs Software Systems Ltd |
| Mr. | Gupta | Varini | Samsung R&D Institute India | Samsung Electronics France SA |
| Mr. | Guttman | Erik | Samsung R&D Institute UK | Samsung Electronics GmbH |
| Dr. | Han | Jaemin | Intel Technology India Pvt Ltd | Intel Romania |
| Ms. | Hao | Hongxia | Huawei Technologies France | HiSilicon Technologies Co. Ltd |
| Mr. | Harper | Colby | Pivotal Commware | Pivotal Commware |
| Mr. | HASHMI | DANISH EHSAN | Samsung R&D Institute India | Samsung Electronics Polska |
| Mr. | Hassett | Brendan | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies Sweden AB |
| Mr. | Hatanaka | Yoshitaka | NTT DOCOMO INC. | NTT DOCOMO INC. |
| Miss | Huang | Xietian | HUAWEI Technologies Japan K.K. | HUAWEI Technologies Japan K.K. |
| Mr. | Jerbi | Walid | Deutsche Telekom AG | T-Mobile Austria GmbH |
| Mr. | Jesske | Roland | Deutsche Telekom AG | T-Mobile Polska S.A. |
| Mr. | Ju | Manchang | ZTE Corporation | Sanechips |
| Mr. | Kaushik | Ashutosh | Samsung R&D Institute UK | BEIJING SAMSUNG TELECOM R&D |
| Miss | Kedalagudde | Meghashree D | Intel Deutschland GmbH | Intel Corporation SAS |
| Mr. | Klotz | Michael | Deutsche Telekom AG | Deutsche Telekom AG |
| Mr. | Kolekar | Abhijeet | Intel Corporation (UK) Ltd | Intel |
| Mr. | Kono | Tomoki | NTT DOCOMO INC. | NTT DOCOMO INC. |
| Mr. | Kucukikiz | Tuncay | Turk Telekomunikasyon A.S. | Turk Telekomunikasyon A.S. |
| Mr. | Kumar | Lalith | Samsung R&D Institute India | SAMSUNG R&D INSTITUTE JAPAN |
| Mr. | Lengyel | Balazs | Ericsson Hungary Ltd | Ericsson Hungary Ltd |
| Ms. | Li | Chenyi | China Unicom | Unicompay |
| Mr. | Li | Gang | Nanjing Ericsson Panda Com Ltd | Nanjing Ericsson Panda Com Ltd |
| Mr. | Li | Shitao | Huawei Tech.(UK) Co.. Ltd | HUAWEI TECH. GmbH |
| Miss | li | weiyuan | China Mobile Com. Corporation | China Mobile Group Device Co. |
| Mr. | Li | Xiangning | China Telecommunications | China Telecommunications |
| Dr. | Li | Zhen | China Telecommunications | China Telecommunications |
| Mr. | Li | Zhendong | Nubia Technology Co.,Ltd | ZTE Wistron Telecom AB |
| Mr. | Li | Zhijun | ZTE Corporation | ZTE Corporation |
| Dr. | Liang | Haoran | Xiaomi Communications | Xiaomi Communications |
| Miss | Liang | Shuang | Nubia Technology Co.,Ltd | ZONSON |
| Mr. | LIU | Jianning(Carry) | Beijing Xiaomi Software Tech | Beijing Xiaomi Software Tech |
| Mr. | Luetzenkirchen | Thomas | Intel Deutschland GmbH | Intel Deutschland GmbH |
| Mr. | Ma | Ruitao | China Unicom | CUG |
| Mr. | MAO | Yuxin | Beijing Xiaomi Mobile Software | Xiaomi Technology |
| Miss | Martinez Tarradell | Marta | Intel | Intel Corporation Italia SpA |
| Mr. | McDonnell | Eoin | Ericsson LM | Ericsson Telecomunicazioni SpA |
| Mr. | Mo | Zhiwei | China Telecommunications | China Telecommunications |
| Dr. | Mwanje | Stephen | Nokia | Nokia Belgium |
| Mr. | NAKAMURA | Kazuo | NICT | NICT |
| Dr. | Nakimuli | Winnie | Nokia France | Nokia Japan |
| Ms. | Niu | Yuxia | China Telecom Corporation Ltd. | Chinatelecom Cloud |
| Mr. | Norton | Mark | U.S. Department of Defense | U.S. Department of Defense |
| Dr. | Palat | Sudeep | Intel Corporation (UK) Ltd | Intel Corporation (UK) Ltd |
| Dr. | Park | Jungshin | Samsung Electronics Co., Ltd | Samsung Electronics Co., Ltd |
| Mr. | Petersen | Robert | Ericsson LM | Ericsson Japan K.K. |
| Dr. | Pollakowski | Olaf | Nokia Germany | Nokia Italy |
| Mr. | Pothera Kalloor | Sreekumar | Nokia Solutions & Networks (I) | Nokia Denmark |
| Mr. | Potter | Benjamin | AT&T GNS Belgium SPRL | AT&T GNS Belgium SPRL |
| Mr. | Pozo | Sergio | VODAFONE Group Plc | VODAFONE Group Plc |
| Mr. | Probasco | Scott | Nokia | Nokia Poland |
| Ms. | Rajendran | Rohini | Samsung R&D Institute India | Samsung Electronics Iberia SA |
| Mr. | Ramamoorthy | Arunprasath | Samsung R&D Institute India | Samsung Electronics Romania |
| Mr. | Ren | Chi | China Unicom | CITC |
| Mr. | Rodrigues | Joao | Nokia | Nokia UK |
| Ms. | Romaguera | Cristina | VODAFONE Group Plc | Vodafone GmbH |
| Mr. | Ronco | Enrico | TELECOM ITALIA S.p.A. | TELECOM ITALIA S.p.A. |
| Mrs. | Rosa Bolzek | Cintia | Ericsson LM | Ericsson India Private Limited |
| Mr. | Ruan | Bangqiu | ZTE Corporation | ZXNE |
| Ms. | Sabater | Susana | VODAFONE Group Plc | Vodafone Italia SpA |
| Dr. | Sadeghi | Bahar | Microsoft Europe SARL | Microsoft Europe SARL |
| Mr. | Schumacher | Gregory | Peraton Labs | Peraton Labs |
| Mr. | Scott | Mark | Ericsson LM | Ericsson Inc. |
| Mr. | Shah | Sapan | Samsung R&D Institute India | Samsung Electronics Nordic AB |
| Dr. | Shailendra | Samar | Intel Technology India Pvt Ltd | Intel Technology India Pvt Ltd |
| Mr. | Shan | Changhong | Intel Corporation (UK) Ltd | Intel China Ltd. |
| Miss | shang | zhengyi | Beijing Xiaomi Mobile Software | Beijing Xiaomi Mobile Software |
| Mrs. | Shi | xiaoli | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Tech.(UK) Co.. Ltd |
| Mr. | Shi | Xiaoyan | Intel | Intel Ireland |
| Mr. | Shu | Min | CATT | CATT |
| Miss | Song | Xiaojia | China Mobile Research Inst. | China Mobile Com. Corporation |
| Mr. | Soylu | Cemil | Turk Telekomunikasyon A.S. | Turk Telekomunikasyon A.S. |
| Mr. | Srinivasan | Suresh | Intel | Intel K.K. |
| Miss | Srinivasaraju | Srilakshmi | Nokia Corporation | Nokia Hungary |
| Mr. | Stojanovski | Saso | Intel Deutschland GmbH | Intel Finland Oy |
| Mr. | Subramanya | Tejas | Nokia Germany | Nokia Korea |
| Mr. | Sun | Mingrui | China Unicom | China Unicom |
| Mr. | Sun | Sean | Nokia Shanghai Bell | Nokia Shanghai Bell |
| Mr. | Swaminathan | Sivaramakrishnan | Nokia Germany | Nokia Solutions & Networks (I) |
| Miss | Tian | Zhuoyuan | HUAWEI TECHNOLOGIES Co. Ltd. | HUAWEI TECHNOLOGIES Co. Ltd. |
| Mr. | Törnkvist | Robert | Ericsson LM | Ericsson España S.A. |
| Mr. | Tovinger | Thomas | Ericsson LM | Ericsson LM |
| Ms. | Wang | Junfeng | Ericsson LM | Oy LM Ericsson AB |
| Ms. | Wang | Man | HuaWei Technologies Co., Ltd | HUAWEI TECHNOLOGIES Co. Ltd. |
| Miss | Wang | Menghan | ZTE Corporation | Nubia Technology Co.,Ltd |
| Dr. | Wang | Zhaoning | China Unicom | China Unicom |
| Ms. | WEI | QUN | China Unicom | BTPDI |
| Ms. | WU | Jinhua | Beijing Xiaomi Mobile Software | Beijing Xiaomi Mobile Software |
| Mr. | Xie | Baoguo | ZTE Corporation | Nubia Technology Co.,Ltd |
| Mr. | Xing | TianQi | China Unicom | CU Digital Technology |
| Mr. | XING | XIAOCHENG | HUAWEI TECHNOLOGIES Co. Ltd. | HUAWEI TECHNOLOGIES Co. Ltd. |
| Mr. | Xu | Ruiyue | Huawei Tech.(UK) Co.. Ltd | Huawei Device Co., Ltd |
| Miss | Yan | Xiaojian | ZTE Corporation | CALTTA |
| Dr. | Yao | Ge | China Unicom | VSENS |
| Mr. | Yao | Yizhi | Intel Corporation (UK) Ltd | Intel Technology Poland SP Zoo |
| Ms. | Yi | Haofan | BJTU | BJTU |
| Mr. | Yun | Andy | TELUS | TELUS |
| Mr. | Zadeh | Bagher | Ericsson LM | Ericsson Limited |
| Mr. | Zhang | Jian | HUAWEI TECHNOLOGIES Co. Ltd. | Huawei Technologies Japan K.K. |
| Mr. | Zhang | Kai | Huawei Tech.(UK) Co.. Ltd | Huawei Telecommunication India |
| Ms. | Zhang | Ling | Siemens AG | Siemens AG |
| Miss | ZHAO | HUAN | China Unicom | Unicom Broadband Online |
| Dr. | Zhao | Shuai | Intel | Intel Sweden AB |
| Mr. | Zhao | Song | China Telecom Corporation Ltd. | China Telecom Corporation Ltd. |
| Miss | Zhao | Xian | Huawei Technologies France | Huawei Telecommunication India |
| Miss | Zhou | Xingyue | ZTE Corporation | ZTE Corporation. |
| Mr. | Zhu | Chunhui | Beijing Xiaomi Mobile Software | Beijing Xiaomi Electronics |
| Mr. | Zhu | Jinguo | ZTE Corporation. | ZTE FRANCE SASU |
| Mr. | Zhu | Lei | Huawei Tech.(UK) Co.. Ltd | Huawei Technologies (Korea) |
| Mr. | Zhu | Yichen | ZTE Corporation. | ZTE Korea Limited |
| Ms. | Zou | Lan | Huawei Tech.(UK) Co.. Ltd | HuaWei Technologies Co., Ltd |

## Annex I: List of future meetings

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Title | Start date | End date (OP) | Town | Country | Reference |
| SA5#147 | 2023-02-27 | 2023-03-03 | Athens | GR | S5-147 |
| SA5#148e | 2023-04-17 | 2023-04-21 | Online |  | S5-148e |
| SA5#149 | 2023-05-22 | 2023-05-26 | Berlin | Germany | S5-149 |
| SA5#150 | 2023-08-21 | 2023-08-25 | Gothemburg | Sweden | S5-150 |
| SA5#151 | 2023-10-09 | 2023-10-13 | TBD | TBD | S5-151 |
| SA5#152 | 2023-11-13 | 2023-11-17 | Chicago | US | S5-152 |
| SA5#153 | 2024-01-29 | 2024-02-02 | TBD |  | S5-153 |
| SA5#154 | 2024-04-15 | 2024-04-19 | CHI | CN | S5-154 |
| SA5#155 | 2024-05-27 | 2024-05-31 | Korea | KR | S5-155 |
| SA5#156 | 2024-08-19 | 2024-08-23 | EU | EU | S5-156 |
| SA5#157 | 2024-10-14 | 2024-10-18 | India | IN | S5-157 |
| SA5#158 | 2024-11-18 | 2024-11-22 | US TBC | US | S5-158 |