**3GPP TSG-SA WG6 Meeting #34 S6-192006**

**Reno, Nevada, USA, 11th – 15th Nov 2016**

Source: MCC

Title: SA6 Meeting 33 Report

Agenda Item: 3

Contact: Bernt Mattsson bernt.mattsson@etsi.org

*Abstract: Meeting report of 3GPP SA6 meeting #33*

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

 **Meeting Report
for
TSG SA WG6
meeting: 33**

**Sophia Antipolis, France, 02/09/2019 to 06/09/2019**

Report generated on Thursday, 2019-09-12 09:34 Romance Standard Time

Contents:

1 Opening of the meeting 5

1.1 Welcome speech 5

1.2 IPR and antitrust policy reminders 5

1.3 EAR statement 5

1.4 Reminder for check-in at the meeting and for wearing badges 6

2 Agenda and Chairman's notes 6

3 Report from previous meetings 7

4 Liaison statements 7

4.1 Incoming LSs 7

4.2 Outgoing LSs 10

5 Items for early consideration 13

5.1 Working Agreements 13

5.2 Others 13

6 Rel-13 Maintenance 14

7 Rel-14 Maintenance 14

8 Rel-15 Maintenance 14

9 Rel-16 Work Items 14

9.1 eCAPIF - Enhancements for Common API Framework for 3GPP Northbound APIs 14

9.2 enh2MCPTT - Enhanced Mission Critical Push-to-talk architecture phase 2 14

9.3 eMCData2 - Enhancements to Functional architecture and information flows for Mission Critical Data 15

9.4 eMCSMI - Enhanced mission critical system migration and interconnection 21

9.5 eMCCI - Enhanced Mission Critical Communication Interworking with Land Mobile Radio Systems 22

9.6 MBMSAPI\_MCS - MBMS APIs for Mission Critical Services 23

9.7 V2XAPP - Application layer support for V2X services 23

9.8 SEAL - Service Enabler Architecture Layer for Verticals 25

9.9 MONASTERY2 - Application Architecture for the Mobile Communication System for Railways (MONASTERY) 26

10 Rel-17 Work Items 28

10.1 eMONASTERY2 - Enhancements to Application Architecture for the Mobile Communication System for Railways Phase 2 28

10.2 MCIOPS - MC services support on IOPS mode of operation 36

11 Study Items 41

11.1 FS\_MCOver5GS – Study on Mission Critical Services support over 5G System 41

11.2 FS\_enhMCLoc – Study on location enhancements for mission critical services 41

11.3 FS\_FFAPP – Study on application layer support for Factories of the Future in 5G network 45

11.4 FS\_UASAPP – Study on application layer support for Unmanned Aerial System (UAS) 55

11.5 FS\_EDGEAPP – Study on Application Architecture for enabling Edge Applications 58

11.6 FS\_eV2XAPP – Study on Enhancements to application layer support for V2X services 92

11.7 FS\_5GMARCH – Study on support of the 5GMSG Service 97

12 Future work / New WIDs (including related contributions) 102

13 Work Plan review 109

14 Future meetings 109

15 AOB 110

16 Close of the meeting 110

Annex A: List of contribution documents 111

Annex B: List of change requests 121

Annex C: Lists of liaisons 125

C1: Incoming liaison statements 125

C2: Outgoing liaison statements 125

Annex D: List of agreed/approved new and revised Work Items 126

Annex E: List of draft Technical Specifications and Reports 126

Annex F: List of action items 126

Annex G: List of decisions 126

Annex H: List of participants (54) 127

Annex I: List of future meetings 128

Annex B: List of change requests 128

Annex C: Lists of liaisons 128

C1: Incoming liaison statements 128

C2: Outgoing liaison statements 128

Annex D: List of agreed/approved new and revised Work Items 128

Annex E: List of draft Technical Specifications and Reports 128

Annex F: List of action items 128

Annex G: List of decisions 128

Annex H: List of participants 128

Annex I: List of future meetings 128

## 1 Opening of the meeting

### 1.1 Welcome speech

The chairman of SA6, Suresh Chitturi (Samsung), opened the SA6#33 meeting. Bernt Mattsson (MCC) briefly explained the practicalities for coffee breaks and lunch options.

### 1.2 IPR and antitrust policy reminders

**IPR Call Reminder:**

The chairman of the meeting made the following reminders about members’ obligations in relation to IPRs, and asked members to check the latest version of ETSI's policy available on the web server:

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

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

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

- to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Statement and the Licensing declaration forms (<https://www.3gpp.org/about-3gpp/legal-matters> ).

**Antitrust declaration:**

The chairman of the meeting made the following antitrust declaration:

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

### 1.3 EAR statement

**Statement Regarding Engagement with Companies Added to the U.S. Export Administration Regulations (EAR) Entity List in 3GPP Activities** <https://www.3gpp.org/about-3gpp/legal-matters>

**1. Public Information is Not Subject to EAR**

3GPP is an open platform where all contributions (including technology protected or not by patent) made by the different Individual Members under the membership of each respective Organizational Partner are publicly available. Indeed, contributions by all and any Individual Members are uploaded to a public file server when received and then the documents are effectively in the public domain.

In addition, since membership of email distribution lists is open to all, documents and emails distributed by that means are considered to be publicly available.

As a result, information contained in 3GPP contributions, documents, and emails distributed at 3GPP meetings or by 3GPP email distribution lists, because it is made available to the public without restrictions upon its further dissemination, is not subject to the export restrictions of the EAR.

Meeting minutes are maintained for 3GPP meetings. Such meeting minutes for 3GPP meetings are made available to the public without restrictions upon its further dissemination. As a result, information, including conveyed orally, contained in 3GPP meetings is not subject to the export restriction of the EAR.

**2. Non-Public Information**

Non-public information refers to the information not contained or not intended to be contained in 3GPP contributions, documents or emails. Such non-public information may be disclosed during informal meetings, exchanges, discussions or any form of other communication outside the 3GPP meetings and email distribution lists.

For the duration of the Temporary General License (TGL) issued by the Bureau of Industry and Security (BIS) of the US Department of Commerce on May 20, 2019, there are no restrictions on the release of non-public information to companies added to the Entity List on May 16, 2019, to the extent that information is necessary to maintain, service, or support existing handsets, networks or equipment, or "as necessary for development of 5G standards."

**3. Other Information**

Certain encryption software controlled under the International Traffic in Arms Regulations (ITAR), even if publicly available, may still be subject to US export controls other than the EAR.

**4. Conduct of Meetings**

Until further notice, the situation should be considered as "business as usual" during all the meetings called by 3GPP.

**5. Responsibility of Individual Members**

It should be remembered that contributions, meetings, exchanges, discussions or any form of other communication in or outside the 3GPP meetings are of the accountability, integrity and the responsibility of each Individual Member. In addition, Individual Members remain responsible for ensuring that none of their technical contributions include classified encryption software or other information that is subject to US export control under the ITAR or other applicable US export control regulations.

Individual Members with questions regarding the impact of laws and regulations on their participation in 3GPP should contact their companies' legal counsels.

### 1.4 Reminder for check-in at the meeting and for wearing badges

The chairman reminded meeting participants to wear a badge while in the meeting facilities.

## 2 Agenda and Chairman's notes

**S6-191621 SA6 Meeting 33 Agenda**

 *Type: agenda For: Approval
 Source: SA6 Chairman*

**Abstract:**

Agenda for the SA6#33 meeting

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

**S6-191623 SA6 Meeting #33 - Agenda with Tdocs allocation after submission deadline**

 *Type: agenda For: Approval
 Source: SA6 Chairman*

**Abstract:**

The SA6#33 meeting agenda with Tdocs allocation after submission deadline

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

**S6-191624 SA6 Meeting #33 - Agenda with Tdocs allocation at start of the meeting**

 *Type: agenda For: Approval
 Source: SA6 Chairman*

**Abstract:**

The SA6#33 meeting agenda with Tdocs allocation at the start of the meeting

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

**S6-191625 SA6 Meeting #33 - Chairman's notes at end of the meeting**

 *Type: agenda For: Approval
 Source: SA6 Chairman*

**Abstract:**

Chairman's notes at end of the SA6#33 meeting

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

## 3 Report from previous meetings

**S6-191622 SA6 Meeting 32 Report**

 *Type: report For: Approval
 Source: MCC*

**Abstract:**

The report of the SA6#32 meeting.

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

## 4 Liaison statements

### 4.1 Incoming LSs

**S6-191626 Reply to LS on application layer support for V2X services**

 *Type: LS in For: Action
 Original outgoing LS: ITS(19)035030, to SA6, cc -
 Source: ETSI TC ITS*

**Abstract:**

ETSI TC ITS would like to thank 3GPP TSG SA WG6 for the information related to the application layer support for V2X services work.

ETSI TC ITS will provide feedback on 3GPP TS 23.286, 3GPP TS 23.434 and the new study, if any.

Actions:

To 3GPP SA WG6, ETSI TC ITS kindly asks to take this information into account.

**Discussion:**

Huawei introduced the LS available as document S6-191626.

Qualcomm raised a concern that the SA6 LS did not trigger further guidance on the work of SA6 and was hence wondering if the work in SA6 has some value to the industry.

Huawei did not agree with the view of Qualcomm and thought that the indsutry was interested in the work of SA6.

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

**S6-191707 Reply LS on UAS-related terminology and model**

 *Type: LS in For: Action
 Original outgoing LS: S1-192817, to SA6, cc -
 Source: SA1*

**Abstract:**

1. Overall Description:

SA1 thanks SA6 for their LS and the intent to clarify and improve the 3GPP UAS terminology and model description, for better alignment with what is used by the aviation industry.

SA1 has discussed some related proposals and agreed to amend SA1 Rel-16 TS 22.125. As a result, the attached CRs were agreed during SA1#87.

2. Actions:

To SA6

ACTION: SA1 asks SA6 to take the above information into account.

**Discussion:**

Qualcomm introduced the LS available as document S6-191707.

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

**S6-191708 Liaison Statement from SC 29/WG 11 to 3GPP SA 2 and SA 6 on NBMP [SC 29/WG 11 N 18738]**

 *Type: LS in For: Discussion
 Original outgoing LS: 29n18316, to SA2, SA6, cc -
 Source: ISO IEC*

**Abstract:**

To describe, deploy, and control media processing for their content in the network/cloud.

NBMP workflows are composed of multiple media processing tasks that are connected to build a direct

acyclic graph to process incoming media and metadata from a media source and to produce processed

media and metadata streams, which are subsequently published for consumption by media sinks.

The DIS specification brings several quality improvements and clarifications to the different functionalities

of the NBMP standard.

MPEG would like to invite you to consider NBMP for your future work on media processing and to share

your comments and thoughts on this version of the NBMP specification. You are also encouraged to

subscribe to the AHG mailing list at https://lists.aau.at/mailman/listinfo/mpeg-nbmp.

For your information, our future meeting schedule is as follows:

- 128th MPEG meeting on October 07-11, 2019 in Geneva, CH

- 129th MPEG meeting on January 13-17, 2019 in Brussels, BE

References

[1] N18657, “Text of ISO/IEC DIS 23090-8 Network-based Media Processing”

http://wg11.sc29.org/doc\_end\_user/documents/127\_Gothenburg/wg11/w18657.zip

**Discussion:**

Samsung introduced the LS available as document S6-191708.

Qualcomm was of the view that the content was not really in the interest (i.e. scope) of SA6.

It was suggested to prepare a reply LS to thank for the received LS.

**Decision:** The document was **replied to in S6-191795**.

**S6-191794 LS on restricting incoming private calls**

 *Type: LS in For: Action
 Original outgoing LS: C1-195062, to SA6, cc -
 Source: CT1*

**Abstract:**

**1 Overall description**

CT1 discussed the details of implementing solution 1 on restricting incoming private communications. Stage 2 specs (TS 23.379) specify a list of users which can make a private call to the specific user as part the MCPTT user profile data as shown below:

Table A.3-2: MCPTT user profile data (on network)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Reference** | **Parameter description** | **MCPTT UE** | **MCPTT Server** | **Configuration management server** | **MCPTT user database** |
| [R-6.7.3-007a] of 3GPP TS 22.280 [17] | List of user(s) from which private calls can be received |  |  |  |  |
|  | > MCPTT ID | Y | Y | Y | Y |
| 3GPP TS 33.180 [19] | > KMSUri for security domain of MCPTT ID | Y | Y | Y | Y |
| [R-6.7.4-004] of 3GPP TS 22.280 [17] | > Presentation priority relative to other users and groups | Y | Y | Y | Y |
|  | Authorised to receive a private call by users not included in "list of user(s) from which private calls can be received" |  |  |  |  |

Although existing specs successfully restrict which users can make a private call to the specific user, they also make it challenging to support scenarios where the specific user can receive a private call by any user.

CT1 has agreed to resolve the issue by introducing a new parameter (see entry in red) in the users' profile to indicate that a user can receive a private call by anyone and that the list shall be ignored. A similar handling has been applied by stage 2 in the symmetric case of restricting outgoing private calls as shown below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| [R-5.6.5-003] of 3GPP TS 22.179 [2] | Authorised to make a private call to users not included in "list of user(s) who can be called in private call" | Y | Y | Y | Y |

The suggested approach is implemented by the attached agreed CRs.

**2 Actions**

**To SA6**

**ACTION:** CT1 kindly asks SA6 to consider the above information and respond accordingly.

**Discussion:**

Nokia introduced the LS available as document S6-191794.

**Decision:** The document was **replied to in S6-191805**.

**S6-191929 LS on clarifications regarding V2XAPP services**

 *Type: LS in For: discussion
 Original outgoing LS: C3-193621, to -, cc -
 Source: CT3*

**Discussion:**

Intel KK introduced the LS available as document S6-191929.

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

### 4.2 Outgoing LSs

**S6-191630 ReplyLS to ETSI ISG MEC on Study on Application Architecture for enabling Edge Applications**

 *Type: LS out For: Agreement
 to ETSI ISG MEC
 Source: 3GPP TSG-SA WG6*

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

**S6-191735 [DRAFT] Reply LS on 3GPP SA6 Study on Edge Computing**

 *Type: LS out For: Approval
 to ETSI ISG MEC
 Source: SA6*

**Abstract:**

DRAFT LS Out to ETSI ISG MEC, in response to incoming LS in S6-191404

**Discussion:**

Vodafone presented the draft LS available as S6-191735.

**Decision:** The document was **revised to S6-191904**.

**S6-191904 Reply LS on 3GPP SA6 Study on Edge Computing**

 *Type: LS out For: Approval
 to ETSI ISG MEC
 Source: SA6*

(Replaces S6-191735)

**Discussion:**

Vodafone presented the draft LS available as S6-191904.

It was suggested to copy SA, SA2 and SA5.

The only changes are:

 - adding SA, SA2 and SA5 in CC of the LS and

 - slightly reword how we refreence the post SA6#33 version of the TR 23.758.

With the above changes the revised contribution, S6-191953, is considered pre-approved.

**Decision:** The document was **revised to S6-191953**.

**S6-191953 Reply LS on 3GPP SA6 Study on Edge Computing**

 *Type: LS out For: Approval
 to ETSI ISG MEC, cc SA, SA2, SA5
 Source: SA6*

(Replaces S6-191904)

**Discussion:**

The groups to be CC:d were omitted, hence further revised.

The S6-191841 is considered pre-approved.

**Decision:** The document was **revised to S6-191841**.

**S6-191841 Reply LS on 3GPP SA6 Study on Edge Computing**

 *Type: LS out For: Approval
 to ETSI ISG MEC, cc SA, SA2, SA5
 Source: SA6*

(Replaces S6-191953)

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

**S6-191871 [DRAFT] LS on Lifecycle Management to support Edge Computing**

 *Type: other For: discussion
 Source: SA6*

**Discussion:**

Nokia presented the draft LS available as S6-191871.

Qualcomm pointed out that the location of the SA6#35 meeting was now known.

It was suggested to copy SA2.

Some offline discussion required to refine the intent.

**Decision:** The document was **revised to S6-191954**.

**S6-191954 [DRAFT] LS on Lifecycle Management to support Edge Computing**

 *Type: other For: discussion
 Source: SA6*

(Replaces S6-191871)

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

**S6-191933 LS on MC 5MBS**

 *Type: LS out For: discussion
 to SA, RAN, SA2, RAN2, RAN3, cc SA1
 Source: SA6*

**Discussion:**

Motorola Solutions presented the draft LS available as S6-191933.

The chairman suggested rephrase or delete "as part of SA Rel-17 prioritization process".

**Decision:** The document was **revised to S6-191853**.

**S6-191853 LS on aspects of Mission Critical Services over 5MBS**

 *Type: LS out For: discussion
 to SA, RAN, SA2, RAN2, RAN3, cc SA1
 Source: SA6*

(Replaces S6-191933)

**Discussion:**

Motorola Solutions presented the draft LS available as S6-191853.

Some further modifications were proposed.

**Decision:** The document was **revised to S6-191994**.

**S6-191994 LS on aspects of Mission Critical Services over 5MBS**

 *Type: LS out For: discussion
 to SA, RAN, SA2, RAN2, RAN3, cc SA1
 Source: SA6*

(Replaces S6-191853)

**Discussion:**

Motorola Solutions presented the draft LS available as S6-191994.

The only changes are:

 - replacing "generally accepted knowledge" with "subject matter expertise",

 - deleting significant ans

 - deleting "Send any reply to..".

With the above changes the revised contribution, S6-192003, is considered pre-approved.

**Decision:** The document was **revised to S6-192003**.

**S6-192003 LS on aspects of Mission Critical Services over 5MBS**

 *Type: LS out For: discussion
 to SA, RAN, SA2, RAN2, RAN3, cc SA1
 Source: SA6*

(Replaces S6-191994)

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

**S6-191805 Reply LS on restricting incoming private calls**

 *Type: LS out For: Action
 to CT1
 Source: SA6*

**Discussion:**

Motorola Solutions presented the draft LS available as S6-191805.

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

**S6-191795 [DRAFT] Reply LS on on NBMP**

 *Type: LS out For: discussion
 to IEC
 Source: SA6*

**Discussion:**

Samsung Solutions presented the draft LS available as S6-191795.

Some minor changes were suggested e.g. adding "see attached LS", correcting the title adding the attachment.

**Decision:** The document was **revised to S6-191993**.

**S6-191993 LS S6-191708 on NBMP from ISO/IEC JTC 1/SC 29/WG 11**

 *Type: LS out For: discussion
 to ISO/IEC JTC 1/SC 29/WG 11, cc SA4
 Source: SA6*

(Replaces S6-191795)

**Discussion:**

Samsung Solutions presented the draft LS available as S6-191993.

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

Attachments to this outgoing LS: S6-191708

## 5 Items for early consideration

### 5.1 Working Agreements

None

### 5.2 Others

**S6-191753 MCIOPS on a new TS**

 *Type: discussion For: Endorsement
 Source: Ericsson*

**Abstract:**

The Release 17 WID on MC services support on IOPS mode of operation (MCIOPS) was agreed in SA6#31 and approved in SA#84.

As described in the WID MCIOPS (S6-191232/SP-190480), the SA6 objectives include to develop the normative changes on existing technical specifications. However, this contribution is presented to propose addressing the related work on a new technical specification (TS).

**Discussion:**

Ericsson presented the document available as S6-191753.

Qualcomm raised a concern with keeping track on future alignments when dealing with separate TSs.

FirstNet indicated support for the overall proposal.

The meeting endorsed the presented proposals 1 and 2.

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

## 6 Rel-13 Maintenance

None

## 7 Rel-14 Maintenance

None

## 8 Rel-15 Maintenance

None

## 9 Rel-16 Work Items

### 9.1 eCAPIF - Enhancements for Common API Framework for 3GPP Northbound APIs

### 9.2 enh2MCPTT - Enhanced Mission Critical Push-to-talk architecture phase 2

**S6-191632 Removal of temporary regroup procedures**

 *Type: CR For: Agreement
 23.379 v16.3.0 CR-0231 Cat: F (Rel-16)

 Source: FirstNet*

**Abstract:**

In R14 and R15 the procedure ‘Temporary group call - user regroup’ was removed as this procedure cannot create secure communications. Neither this procedure nor the 'Temporary group – broadcast group call' procedure were planned to be developed in stage

**Discussion:**

FirstNet presented the document available as S6-191632.

CATT raised concerns with the proposed CR. They did not think there currently was any security concern. They did not support the proposal e.g. removal of clause 10.6.2.5.3.

Samsung was wondering whether the last version of the spec was used for the presented proposal.

AT&T suggested to also delete the note from table 10.6.2.2.7-1.

TD Tech was not in support of deleting clause 10.6.2.5.3 during the present meeting.

One suggestion was to remove it fromm Rel-16 and bring it back in Rel-17.

FirstNet noted they were just nterested in aligning (in Rel-16) but was not planning in bringing it back in Rel-17.

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

###

### 9.3 eMCData2 - Enhancements to Functional architecture and information flows for Mission Critical Data

**S6-191693 Clarification and corrections to support transmission control**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0179 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

Clarification and corrections to support transmission control

**Discussion:**

AT&T presented the document available as S6-191693.

The Police of Netherlands raised concern with being able to receive messages without being affiliated.

Home Office agreed with the view of the Police of Netherlands.

FirstNet thought the concerns could be solved by rewording the Note.

**Decision:** The document was **revised to S6-191796**.

**S6-191796 Clarification and corrections to support transmission control**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0179 rev 1 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191693)

**Discussion:**

AT&T presented the document available as S6-191796.

**Decision:** The document was **revised to S6-191940**.

**S6-191940 Clarification and corrections to support transmission control**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0179 rev 2 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191796)

**Discussion:**

AT&T presented the document available as S6-191940.

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

**S6-191694 Corrections to the transmission and reception control procedures**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0180 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

Corrections to the transmission and reception control procedures

**Discussion:**

AT&T presented the document available as S6-191694.

Samung was not in favour of completely deleting the Control Indication Type. They also thought that the reworded step 6 in clause 7.6.2.4.2 requires further rewording.

Motorola Solutions pointed out a typo "retrival" (in step 6 in clause 7.6.2.4.2). They also suggested a minor rewording of step 5.

**Decision:** The document was **revised to S6-191797**.

**S6-191797 Corrections to the transmission and reception control procedures**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0180 rev 1 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191694)

**Discussion:**

AT&T presented the document available as S6-191797.

Samsung suggested reverting the deletion "affiliation" in step 5 clause 7.6.2.3.2.

It seemed however this required some offline discussion.

**Decision:** The document was **revised to S6-191941**.

**S6-191941 Corrections to the transmission and reception control procedures**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0180 rev 2 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191797)

**Discussion:**

AT&T presented the document available as S6-191941.

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

**S6-191747 One-to-one SDS Session upgrade to emergency session**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0183 Cat: B (Rel-16)

 Source: Samsung*

**Abstract:**

The contribution proposes adding:

 - new information flows to send upgrade request and response

 - procedure to upgrade one-to-one SDS session to emergency SDS session.

**Discussion:**

Samsung presented the document available as S6-191747.

AT&T suggested rewording reason for change include the actual requirement (one to one).

**Decision:** The document was **revised to S6-191798**.

**S6-191798 One-to-one SDS Session upgrade to emergency session**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0183 rev 1 Cat: B (Rel-16)

 Source: Samsung*

(Replaces S6-191747)

**Discussion:**

Samsung presented the document available as S6-191798.

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

**S6-191748 Group SDS Session upgrade to emergency/imminent-peril session and cancel in-progress emergency/imminent-peril group state**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0184 Cat: B (Rel-16)

 Source: Samsung*

**Abstract:**

The contribution proposes adding:

 - information flows to upgrade group SDS session to emergency or imminent peril

 - Added infomration flows to cancel in-progress emergency group state and in-progress imminent peril group cancel

 - Added procedures for upgrade group SDS communication to group SDS emergency communication

 - Added procedures to cancel in-progress emergency group state.

**Discussion:**

Samsung presented the document available as S6-191748.

AT&T suggested to align the procedure with the one used in 191748.

Motorola Solutions that the cancellation should cancel the state. Furthermore they though that there was no need for an emergency indicator (in the cancellation) and that the Note 2 in clause 7.4.2.10.2 was not needed.

FirstNet was of the view that the Note 2 could stay.

**Decision:** The document was **revised to S6-191799**.

**S6-191799 Group SDS Session upgrade to emergency/imminent-peril session and cancel in-progress emergency/imminent-peril group state**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0184 rev 1 Cat: B (Rel-16)

 Source: Samsung*

(Replaces S6-191748)

**Discussion:**

Samsung presented the document available as S6-191799.

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

**S6-191749 One-to-One Emergency MCData FD**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0185 Cat: B (Rel-16)

 Source: Samsung*

**Discussion:**

Samsung presented the document available as S6-191749.

Motorola Solutions did not agree with the "If emergency indicator is not set in the request, the media storage client verifies that the size…" in clause 7.5.2.2.2. They thought the verificatioon should be done always.

**Decision:** The document was **revised to S6-191855**.

**S6-191855 One-to-One Emergency MCData FD**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0185 rev 1 Cat: B (Rel-16)

 Source: Samsung*

(Replaces S6-191749)

**Discussion:**

Samsung presented the document available as S6-191855.

Motorola Solutions suggested rephrasing the second sentence of step 1 (clause 7.5.2.2.2).

The only change is rewording the second sentence of step 1 (clause 7.5.2.2.2) to read "The media storage client verifies that the size of the file is within the maximum data size for FD for the intended MCData FD request (by checking the group configuration for a group FD request and by checking the service configuration for a one-to-one FD request).".

With the above changes the revised contribution, S6-191975, is considered pre-agreed.

**Decision:** The document was **revised to S6-191975**.

**S6-191975 One-to-One Emergency MCData FD**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0185 rev 2 Cat: B (Rel-16)

 Source: Samsung*

(Replaces S6-191855)

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

**S6-191750 Group emergency MCData FD**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0186 Cat: B (Rel-16)

 Source: Samsung*

**Discussion:**

Samsung presented the document available as S6-191750.

**Decision:** The document was **revised to S6-191856**.

**S6-191856 Group emergency MCData FD**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0186 rev 1 Cat: B (Rel-16)

 Source: Samsung*

(Replaces S6-191750)

**Discussion:**

Samsung presented the document available as S6-191856.

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

**S6-191751 One-to-one FD Session upgrade to emergency session**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0187 Cat: B (Rel-16)

 Source: Samsung*

**Discussion:**

Samsung presented the document available as S6-191751.

AT&T suggested slight reordering of events in the procedure flow.

The Police of Netherlands suggested changing Group to "one-to-one" in the reason to change.

**Decision:** The document was **revised to S6-191857**.

**S6-191857 One-to-one FD Session upgrade to emergency session**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0187 rev 1 Cat: B (Rel-16)

 Source: Samsung*

(Replaces S6-191751)

**Discussion:**

Samsung presented the document available as S6-191857.

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

**S6-191752 Group FD communication upgrade to emergency/imminent-peril communication and cancel in-progress emergency/imminent-peril group state**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0188 Cat: B (Rel-16)

 Source: Samsung*

**Discussion:**

Samsung presented the document available as S6-191752. They noted during the presentation that the some mentions of "upgrade" should have read cancel.

Motorola Solutions pointed out that the step 3 was not needed.

**Decision:** The document was **revised to S6-191858**.

**S6-191858 Group FD communication upgrade to emergency/imminent-peril communication and cancel in-progress emergency/imminent-peril group state**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0188 rev 1 Cat: B (Rel-16)

 Source: Samsung*

(Replaces S6-191752)

**Discussion:**

Samsung presented the document available as S6-191858.

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

**S6-191627 Addtion of Location infomation to SDS and Enhance Status**

 *Type: CR For: Approval
 23.282 v16.3.0 CR-0174 Cat: C (Rel-16)

 Source: HOME OFFICE*

**Abstract:**

Addition of optional location information to the SDS message to allow a Client to optionally send it's current location as part of the SDS or Enhanced Status message

**Discussion:**

Home Office presented the document available as S6-191627.

Huawei was of the view there was no need to add another way for a client to provide the location information to the MC Data server.

The Police of Netherlands also raised some concern for having several ways for providing the same information.

Motorola Solutions noted that the information element was optional so no one has to implement it if they don’t want to.

Qualcomm suggested adding a note clarifying the matter.

Ericsson indicated support for the proposal.

Softil did not understand why there was so strong restistance to the proposal.

Vodafone noted supported for the proposal but supported including a note clarifying, in order to avoid conflict, which information takes precedence.

**Decision:** The document was **revised to S6-191859**.

**S6-191859 Addtion of Location infomation to SDS and Enhance Status**

 *Type: CR For: Approval
 23.282 v16.3.0 CR-0174 rev 1 Cat: C (Rel-16)

 Source: HOME OFFICE*

(Replaces S6-191627)

**Discussion:**

Home Office presented the document available as S6-191859.

Huawei raised a concern with the wording of note 2 in table 7.4.2.1.1-1 in the case if the locations was not present, whether it should be obtained LMS.

The only changes are:

 - checking the ME tick box on the cover page and

 - removing the note 2 from the information tables (removing note, renumbering notes where applicable and removing reference to note 2 if any).

With the above changes the revised contribution, S6-191942, is considered pre-agreed.

**Decision:** The document was **revised to S6-191942**.

**S6-191942 Addtion of Location infomation to SDS and Enhance Status**

 *Type: CR For: Approval
 23.282 v16.3.0 CR-0174 rev 2 Cat: C (Rel-16)

 Source: HOME OFFICE*

(Replaces S6-191859)

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

**S6-191628 Addition of optional message field to Enhanced Status**

 *Type: CR For: Approval
 23.282 v16.3.0 CR-0175 Cat: C (Rel-16)

 Source: HOME OFFICE*

**Abstract:**

The addition of a optional message to the Enhanced Status to allow the sender to add further information to their status update.

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

###

### 9.4 eMCSMI - Enhanced mission critical system migration and interconnection

**S6-191683 Functional model update for interconnection and migration**

 *Type: CR For: Approval
 23.280 v16.3.0 CR-0220 Cat: F (Rel-16)

 Source: Motorola Solutions UK Ltd.*

**Abstract:**

Adds reference points to permit subscription and notification of configuraton between systems

**Discussion:**

Motorola Solutions presented the document available as S6-191683.

**Decision:** The document was **revised to S6-191800**.

**S6-191800 Functional model update for interconnection and migration**

 *Type: CR For: Approval
 23.280 v16.3.0 CR-0220 rev 1 Cat: F (Rel-16)

 Source: Motorola Solutions UK Ltd.*

(Replaces S6-191683)

**Discussion:**

Motorola Solutions presented the document available as S6-191800.

Huawei suggested deleting the reference to SIP-1 in clauses 7.5.2.x and 7.5.2.y.

The only changes are deleting "SIP-1," from clauses 7.5.2.x and 7.5.2.y.

With the above changes the revised contribution, S6-191943, is considered pre-agreed.

**Decision:** The document was **revised to S6-191943**.

**S6-191943 Functional model update for interconnection and migration**

 *Type: CR For: Approval
 23.280 v16.3.0 CR-0220 rev 2 Cat: F (Rel-16)

 Source: Motorola Solutions UK Ltd.*

(Replaces S6-191800)

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

###

### 9.5 eMCCI - Enhanced Mission Critical Communication Interworking with Land Mobile Radio Systems

**S6-191712 Remove 10.5.2.17 Editor's Note**

 *Type: CR For: Agreement
 23.283 v16.3.0 CR-0051 Cat: D (Rel-16)

 Source: L3Harris Technologies*

**Abstract:**

The decision in SA6 #30 (Newport Beach) was to keep all MCPTT-related interworking changes in 23.283 and not put MCPTT changes for interworking into 23.379. This change is consistent with that decision by removing the Editor's Note in 23.283 Section 10.5

**Discussion:**

L3Harris presented the document available as S6-191712.

The only changes are:

 - change category to F,

 - add the following text to the consequences if not approved, “but this is not the case, no changes are needed to 23.379.”

With the above changes the revised contribution, S6-191801, is considered pre-agreed.

**Decision:** The document was **revised to S6-191801**.

**S6-191801 Remove 10.5.2.17 Editor's Note**

 *Type: CR For: Agreement
 23.283 v16.3.0 CR-0051 rev 1 Cat: F (Rel-16)

 Source: L3Harris Technologies*

(Replaces S6-191712)

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

### 9.6 MBMSAPI\_MCS - MBMS APIs for Mission Critical Services

None

### 9.7 V2XAPP - Application layer support for V2X services

**S6-191770 Functionalities with SA2 dependency**

 *Type: CR For: Agreement
 23.286 v16.0.0 CR-0002 rev 3 Cat: F (Rel-16)

 Source: Ericsson, Huawei*

(Replaces S6-191539)

**Abstract:**

Proposal for Functionalities with SA2 dependency

**Discussion:**

Huawei presented the document available as S6-191770.

It was pointed out that the present CR is a revision of a CR agreed in the previous meeting (in S6-191539).

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

**S6-191771 Corrections on notifications for network monitoring procedure**

 *Type: CR For: Agreement
 23.286 v16.0.0 CR-0007 rev 3 Cat: F (Rel-16)

 Source: Huawei, Hisilicon*

(Replaces S6-191572)

**Abstract:**

Proposal for Corrections on notifications for network monitoring procedure

**Discussion:**

Huawei presented the document available as S6-191771.

It was pointed out that the present CR is a revision of a CR agreed in the previous meeting (in S6-191572).

Qualcomm suggested to remove or rephrase the text addition "associated with the network monitoring information" in table 9.7.2.3-1.

**Decision:** The document was **revised to S6-191860**.

**S6-191860 Corrections on notifications for network monitoring procedure**

 *Type: CR For: Agreement
 23.286 v16.0.0 CR-0007 rev 4 Cat: F (Rel-16)

 Source: Huawei, Hisilicon*

(Replaces S6-191771)

**Discussion:**

Huawei presented the document available as S6-191860.

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

**S6-191772 Addition of missing VAE server APIs**

 *Type: CR For: Agreement
 23.286 v16.0.0 CR-0008 Cat: F (Rel-16)

 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for addition of missing VAE server APIs

**Discussion:**

Huawei presented the document available as S6-191772.

Qualcomm noted that the proposal needs to be done in a different way.

**Decision:** The document was **revised to S6-191861**.

**S6-191861 Addition of missing VAE server APIs**

 *Type: CR For: Agreement
 23.286 v16.0.0 CR-0008 rev 1 Cat: F (Rel-16)

 Source: Huawei, Hisilicon*

(Replaces S6-191772)

**Discussion:**

Huawei presented the document available as S6-191861.

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

**S6-191773 Update the configurations information**

 *Type: CR For: Agreement
 23.286 v16.0.0 CR-0009 Cat: F (Rel-16)

 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for update the configurations information.

**Discussion:**

Huawei presented the document available as S6-191773.

Qualcomm was of the view that the "V2X user identity" was not needed in the table C.3-1 or it should be a list of IDs.

Samsung made a remark that the reference to the CM-UU and CM-S reference points should includer the spec number.

**Decision:** The document was **revised to S6-191862**.

**S6-191862 Update the configurations information**

 *Type: CR For: Agreement
 23.286 v16.0.0 CR-0009 rev 1 Cat: F (Rel-16)

 Source: Huawei, Hisilicon*

(Replaces S6-191773)

**Discussion:**

Huawei presented the document available as S6-191862.

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

### 9.8 SEAL - Service Enabler Architecture Layer for Verticals

**S6-191745 Group announcement and join**

 *Type: CR For: Approval
 23.434 v16.0.0 CR-0002 rev 3 Cat: F (Rel-16)

 Source: Ericsson, Samsung*

(Replaces S6-191542)

**Abstract:**

Adding de-register procedure.

**Discussion:**

Samsung presented the document available as S6-191745.

It was pointed out that the present CR is a revision of a CR agreed in the previous meeting (in S6-191542).

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

**S6-191774 Corrections to network resource management procedures**

 *Type: CR For: Agreement
 23.434 v16.0.0 CR-0003 rev 4 Cat: F (Rel-16)

 Source: Huawei, Hisilicon*

(Replaces S6-191573)

**Abstract:**

Proposal for Corrections to network resource management procedures

**Discussion:**

Huawei presented the document available as S6-191774.

It was pointed out that the present CR is a revision of a CR agreed in the previous meeting (in S6-191573).

**Decision:** The document was **revised to S6-191863**.

**S6-191863 Corrections to network resource management procedures**

 *Type: CR For: Agreement
 23.434 v16.0.0 CR-0003 rev 5 Cat: F (Rel-16)

 Source: Huawei, Hisilicon*

(Replaces S6-191774)

**Discussion:**

Huawei presented the document available as S6-191863.

Contributor noted there were still some outstanding issues.

**Decision:** The document was **revised to S6-191944**.

**S6-191944 Corrections to network resource management procedures**

 *Type: CR For: Agreement
 23.434 v16.0.0 CR-0003 rev 6 Cat: F (Rel-16)

 Source: Huawei, Hisilicon*

(Replaces S6-191863)

**Discussion:**

Huawei presented the document available as S6-191944.

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

**S6-191775 Remove EN on bearer type identification**

 *Type: CR For: Agreement
 23.434 v16.0.0 CR-0007 Cat: F (Rel-16)

 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Remove EN on bearer type identification

**Discussion:**

Huawei presented the document available as S6-191775.

Qualcomm did not agree on deleting the editor's note until the S6-191863 (or the revisison thereof).

It was initially decided to leave the disposition open to allow for some further offline discussions.

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

**S6-191776 Remove EN on granularity of decision of NRM server**

 *Type: CR For: Agreement
 23.434 v16.0.0 CR-0008 Cat: F (Rel-16)

 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Remove EN on granularity of decision of NRM server

**Discussion:**

Huawei presented the document available as S6-191776.

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

### 9.9 MONASTERY2 - Application Architecture for the Mobile Communication System for Railways (MONASTERY)

**S6-191674 Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation**

 *Type: CR For: Agreement
 23.281 v16.2.0 CR-0136 Cat: F (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correcting the user profile configuration data in table A.3-2 (on-network).

**Discussion:**

Nokia presented the document available as S6-191674.

**Decision:** The document was **revised to S6-191802**.

**S6-191802 Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation**

 *Type: CR For: Agreement
 23.281 v16.2.0 CR-0136 rev 1 Cat: F (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-191674)

**Discussion:**

Nokia presented the document available as S6-191802.

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

**S6-191675 Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0177 Cat: F (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Correcting the user profile configuration data in table A.3-2 (on-network).

**Discussion:**

Nokia presented the document available as S6-191675.

Similar issues as in S6-191674.

**Decision:** The document was **revised to S6-191803**.

**S6-191803 Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0177 rev 1 Cat: F (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-191675)

**Discussion:**

Nokia presented the document available as S6-191803.

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

**S6-191676 Stage 1 requirement reference correction in the user profile data**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0178 Cat: F (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Replacing a wrong stage 1 reference by the correct one in table A.3-2.

**Discussion:**

Nokia presented the document available as S6-191676.

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

**S6-191677 Making functional alias optional in floor control messages**

 *Type: CR For: Agreement
 23.379 v16.3.0 CR-0235 Cat: F (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

MCPTT ID becomes manadatory and the functional alias optional in floor control messages.

**Discussion:**

Nokia presented the document available as S6-191677.

**Decision:** The document was **revised to S6-191804**.

**S6-191804 Making functional alias optional in floor control messages**

 *Type: CR For: Agreement
 23.379 v16.3.0 CR-0235 rev 1 Cat: F (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-191677)

**Discussion:**

Nokia presented the document available as S6-191804.

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

## 10 Rel-17 Work Items

### 10.1 eMONASTERY2 - Enhancements to Application Architecture for the Mobile Communication System for Railways Phase 2

**S6-191653 functional alias of called party in private call**

 *Type: CR For: Approval
 23.379 v16.3.0 CR-0232 Cat: B (Rel-17)

 Source: TD Tech Ltd*

**Discussion:**

TD Tech presented the document available as S6-191653.

Editorial issues. Combine the new NOTEs?

Offline discussion needed.

**Decision:** The document was **revised to S6-191807**.

**S6-191807 functional alias of called party in private call**

 *Type: CR For: Approval
 23.379 v16.3.0 CR-0232 rev 1 Cat: B (Rel-17)

 Source: TD Tech Ltd*

(Replaces S6-191653)

**Discussion:**

TD Tech presented the document available as S6-191807.

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

**S6-191668 Status of eMONASTERY2**

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

**Abstract:**

The paper shows the CR implementation status for the normative work on MONASTERY2 (Rel-16) and eMONASTERY2 (Rel-17).

**Discussion:**

Nokia presented the document available as S6-191668.

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

**S6-191673 Support of functional aliases as called party address in MCPTT emergency private calls**

 *Type: CR For: Agreement
 23.379 v16.3.0 CR-0225 rev 1 Cat: B (Rel-17)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-191279)

**Abstract:**

Modifying existing MCPTT emergency private call setup procedures and information flows to support the use of a functional alias as target address.

**Discussion:**

Nokia presented the document available as S6-191673.

Offline discussion regarding the NOTEs needed.

**Decision:** The document was **revised to S6-191808**.

**S6-191808 Support of functional aliases as called party address in MCPTT emergency private calls**

 *Type: CR For: Agreement
 23.379 v16.3.0 CR-0225 rev 2 Cat: B (Rel-17)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-191673)

**Discussion:**

Nokia presented the document available as S6-191808.

BDBOS was of the view that emergency calls can't be rejected.

The only change is deleting the last sentence from note 1 in clause 10.7.2.4.1.

With the above change the revised contribution, S6-191846, is considered pre-agreed.

**Decision:** The document was **revised to S6-191846**.

**S6-191846 Support of functional aliases as called party address in MCPTT emergency private calls**

 *Type: CR For: Agreement
 23.379 v16.3.0 CR-0225 rev 3 Cat: B (Rel-17)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-191808)

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

**S6-191678 Add enhancements for interworking of MCData SDS with GSM-R SMS**

 *Type: CR For: Agreement
 23.283 v16.3.0 CR-0050 rev 2 Cat: B (Rel-17)

 Source: Kapsch CarrierCom*

(Replaces S6-191460)

**Discussion:**

Topic for a conference call before SA6#34.

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

**S6-191733 File distribution addressing based on functional alia**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0181 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

**Abstract:**

Adds target user addressing based on functional alias

**Discussion:**

UIC presented the document available as S6-191733.

**Decision:** The document was **revised to S6-191810**.

**S6-191810 File distribution addressing based on functional alia**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0181 rev 1 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191733)

**Discussion:**

Nokia (on behalf onf UIC) presented the document available as S6-191810.

The Police of Netherlands suggested moving the note (after step 5) in clause 7.5.2.4.2 after step 3.

Motorola Solutions preferred some offline discussion on certain details of the procedure.

**Decision:** The document was **revised to S6-191848**.

**S6-191848 File distribution addressing based on functional alia**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0181 rev 2 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191810)

**Discussion:**

Nokia (on behalf onf UIC) presented the document available as S6-191848.

It was pointed out that some notes had to be renumbered.

The only changes are to renumber the notes in clauses 7.5.2.4.3 and 7.5.2.5.2.

With the above changes the revised contribution, S6-191991, is considered pre-agreed.

**Decision:** The document was **revised to S6-191991**.

**S6-191991 File distribution addressing based on functional alia**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0181 rev 3 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191848)

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

**S6-191734 IP connectivity for group communication (unicast)**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0182 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

**Discussion:**

UIC presented the document available as S6-191734.

**Decision:** The document was **revised to S6-191811**.

**S6-191811 IP connectivity for group communication (unicast)**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0182 rev 1 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191734)

**Discussion:**

Nokia (on behalf onf UIC) presented the document available as S6-191811.

The Police of Netherlands suggested modifications to the 1st figure.

**Decision:** The document was **revised to S6-191849**.

**S6-191849 IP connectivity for group communication (unicast)**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0182 rev 2 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191811)

**Discussion:**

Nokia (on behalf onf UIC) presented the document available as S6-191849.

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

**S6-191766 Capability to change remotely the priority of the point-to-point IP connectivity communication**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0189 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

**Discussion:**

UIC presented the document available as S6-191766.

**Decision:** The document was **revised to S6-191812**.

**S6-191812 Capability to change remotely the priority of the point-to-point IP connectivity communication**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0189 rev 1 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191766)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191926**.

**S6-191926 Capability to change remotely the priority of the point-to-point IP connectivity communication**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0189 rev 2 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191812)

**Discussion:**

Nokia (on behalf onf UIC) presented the document available as S6-191926.

Motorola Solutions suggested some rewordings to table 7.14.2.1.7-1.

The Police of Netherlands suggested rewording the note "Necessary adjustments in the relevant transport system are not excluded".

**Decision:** The document was **revised to S6-191850**.

**S6-191850 Capability to change remotely the priority of the point-to-point IP connectivity communication**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0189 rev 3 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191926)

**Discussion:**

Nokia (on behalf onf UIC) presented the document available as S6-191850.

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

**S6-191679 Add enhancements for interworking of MCPTT group calls with GSM-R**

 *Type: CR For: Agreement
 23.283 v16.3.0 CR-0049 rev 1 Cat: B (Rel-17)

 Source: Kapsch CarrierCom*

(Replaces S6-191307)

**Abstract:**

Modifying existing interworking of MCPTT group call procedures and information flows to support the use of a functional alias for originating party.

**Discussion:**

Topic for a conference call before SA6#34.

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

**S6-191680 Add call transfer for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.3.0 CR-0229 rev 4 Cat: B (Rel-17)

 Source: Kapsch CarrierCom*

(Replaces S6-191605)

**Abstract:**

The contribution proposes adding call transfer of MCPTT private calls to support requirements [R-5.6.3-014] and [R-6.7.4-015].

**Discussion:**

Kapsch CarrierCom presented the document available as S6-191680.

Motorola Systems was of the view that lot of material that was previously accurate had now been changed to be non functional e.g. multiple messages with different message contents with different content but same names.

The chairman pointed out some typos like MCCPT.

**Decision:** The document was **revised to S6-191809**.

**S6-191809 Add call transfer for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.3.0 CR-0229 rev 5 Cat: B (Rel-17)

 Source: Kapsch CarrierCom*

(Replaces S6-191680)

**Discussion:**

Kapsch CarrierCom presented the document available as S6-191809.

**Decision:** The document was **revised to S6-191847**.

**S6-191847 Add call transfer for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.3.0 CR-0229 rev 6 Cat: B (Rel-17)

 Source: Kapsch CarrierCom*

(Replaces S6-191809)

**Discussion:**

Kapsch CarrierCom presented the document available as S6-191847.

Motorola Solutions suggested some rewording of Note 1 (taken offline).

The Police of Netherlands pointed out a typo in Note 2.

**Decision:** The document was **revised to S6-191990**.

**S6-191990 Add call transfer for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.3.0 CR-0229 rev 7 Cat: B (Rel-17)

 Source: Kapsch CarrierCom*

(Replaces S6-191847)

**Discussion:**

Kapsch CarrierCom presented the document available as S6-191990.

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

**S6-191758 Application Priority discussion paper**

 *Type: discussion For: Discussion
 23.280 v..
 Source: Union Inter. Chemins de Fer*

**Abstract:**

Application priority context and targets

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

**S6-191763 Application priority and priority levels**

 *Type: CR For: Agreement
 23.280 v16.3.0 CR-0221 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

**Abstract:**

Descriptive text about about application priority

**Discussion:**

UIC presented the document available as S6-191763.

**Decision:** The document was **revised to S6-191806**.

**S6-191806 Application priority and priority levels**

 *Type: CR For: Agreement
 23.280 v16.3.0 CR-0221 rev 1 Cat: B (Rel-17)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191763)

**Discussion:**

Potential topic for a conference call before SA6#34.

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

**S6-191682 Interworking of calling party functional alias**

 *Type: discussion For: Discussion
 Source: Kapsch CarrierCom France S.A.S*

**Discussion:**

Topic for a conference call before SA6#34.

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

**S6-191654 Requested priority in the MCPTT user profile configuration data**

 *Type: CR For: Approval
 23.379 v16.3.0 CR-0233 Cat: B (Rel-17)

 Source: TD Tech Ltd*

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

**S6-191669 Functional alias activated by default for group and private calls**

 *Type: CR For: Agreement
 23.379 v16.3.0 CR-0234 Cat: B (Rel-17)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The user profile configuration data is extended by a new entry called default functional alias.

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

**S6-191670 Functional alias activated by default for group and private calls**

 *Type: CR For: Agreement
 23.281 v16.2.0 CR-0135 Cat: B (Rel-17)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The user profile configuration data is extended by a new entry called default functional alias.

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

**S6-191671 Functional alias activated by default for group and p2p communications**

 *Type: CR For: Agreement
 23.282 v16.3.0 CR-0176 Cat: B (Rel-17)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The user profile configuration data is extended by a new entry called default functional alias.

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

**S6-191672 Procedure for changing the default functional alias**

 *Type: CR For: Agreement
 23.280 v16.3.0 CR-0219 Cat: B (Rel-17)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Adds new informations flows and procedures allowing the user to change the default functional alias.

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

### 10.2 MCIOPS - MC services support on IOPS mode of operation

**S6-191754 MCIOPS TS skeleton**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

**Discussion:**

Ericsson presented the document available as S6-191754.

The only change is to correct the “Source” company name.

**Decision:** The document was **revised to S6-191813**.

**S6-191813 MCIOPS TS skeleton**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

(Replaces S6-191754)

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

**S6-191755 Scope for TS MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

**Discussion:**

Ericsson presented the document available as S6-191755.

**Decision:** The document was **revised to S6-191814**.

**S6-191814 Scope for TS MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

(Replaces S6-191755)

**Discussion:**

Ericsson presented the document available as S6-191814.

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

**S6-191756 References for TS MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

**Discussion:**

Ericsson presented the document available as S6-191756.

The only change is to remove the reference to TS 29.468.

With the above changes the revised contribution, S6-191821, is considered pre-approved.

**Decision:** The document was **revised to S6-191821**.

**S6-191821 References for TS MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

(Replaces S6-191756)

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

**S6-191757 Definitions and abbreviations for TS MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

**Discussion:**

Ericsson presented the document available as S6-191757.

The only changes are:

 - changing “on the IOPS mode” to “in the IOPS mode” and

 - in the abbreviations, changing “IOPS Isolated E-UTRAN Operation for Public Safety” to “IOPS Isolated Operation for Public Safety”.

With the above changes the revised contribution, S6-191815, is considered pre-approved.

**Decision:** The document was **revised to S6-191815**.

**S6-191815 Definitions and abbreviations for TS MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

(Replaces S6-191757)

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

**S6-191759 Discussion on the support of MC sevices on IOPS**

 *Type: discussion For: Endorsement
 Source: Ericsson*

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

**S6-191760 Introduction for TS MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

**Discussion:**

Ericsson presented the document available as S6-191760.

The only change is to remove the last two paragraphs.

With the above changes the revised contribution, S6-191816, is considered pre-approved.

**Decision:** The document was **revised to S6-191816**.

**S6-191816 Introduction for TS MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

(Replaces S6-191760)

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

**S6-191761 Architectural requirements for MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

**Abstract:**

Architectural requirements for the new TS on MC services support on the IOPS mode of operation are described in this contribution.

**Discussion:**

Ericsson presented the document available as S6-191761.

**Decision:** The document was **revised to S6-191817**.

**S6-191817 Architectural requirements for MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

(Replaces S6-191761)

**Discussion:**

Ericsson presented the document available as S6-191817.

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

**S6-191762 Pseudo-CR on Functional model description for MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

**Discussion:**

Ericsson presented the document available as S6-191762.

**Decision:** The document was **revised to S6-191818**.

**S6-191818 Pseudo-CR on Functional model description for MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

(Replaces S6-191762)

**Discussion:**

Ericsson presented the document available as S6-191818.

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

**S6-191764 Functional entities in MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

**Discussion:**

Ericsson presented the document available as S6-191764.

**Decision:** The document was **revised to S6-191819**.

**S6-191819 Functional entities in MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

(Replaces S6-191764)

**Discussion:**

Ericsson presented the document available as S6-191819.

The only changes are:

 - deleting the sentence "Each clause is a description of a functional entity and does not imply a physical entity" under clause 7.4,

 - deleting the last sentence in clause 7.4.1.5 and

 - replacing "MCPPT" with "MCPTT" in clause 7.4.1.5.

With the above changes the revised contribution, S6-191851, is considered pre-agreed.

**Decision:** The document was **revised to S6-191851**.

**S6-191851 Functional entities in MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

(Replaces S6-191819)

**Discussion:**

Ericsson presented the document available as S6-191851.

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

**S6-191765 Reference points in MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

**Discussion:**

Ericsson presented the document available as S6-191820.

**Decision:** The document was **revised to S6-191820**.

**S6-191820 Reference points in MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

(Replaces S6-191765)

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

**S6-191767 Application of functional model for MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

**Discussion:**

Ericsson presented the document available as S6-191767.

**Decision:** The document was **revised to S6-191822**.

**S6-191822 Application of functional model for MCIOPS**

 *Type: draftCR For: Approval
 23.280 v16.3.0
 Source: Ericsson*

(Replaces S6-191767)

**Discussion:**

Ericsson presented the document available as S6-191822.

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

## 11 Study Items

### 11.1 FS\_MCOver5GS – Study on Mission Critical Services support over 5G System

None

### 11.2 FS\_enhMCLoc – Study on location enhancements for mission critical services

**S6-191641 Pseudo-CR on solution sharing location information outside of 3GPP**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

**Discussion:**

BDBOS presented the document available as S6-191641.

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

**S6-191642 Pseudo-CR on solution sharing location information on interconnected MC systems - subscription**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

**Abstract:**

This pCR adds part 1 of 5 of the overall solution to 3GPP TR 23.744 and refers to key issue 5: Sharing of location information.

**Discussion:**

BDBOS presented the document available as S6-191642.

**Decision:** The document was **revised to S6-191823**.

**S6-191823 Pseudo-CR on solution sharing location information on interconnected MC systems - subscription**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

(Replaces S6-191642)

**Discussion:**

BDBOS presented the document available as S6-191823.

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

**S6-191643 Pseudo-CR on solution sharing location information on interconnected MC systems - request**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

**Abstract:**

This pCR adds part 2 of 5 of the overall solution to 3GPP TR 23.744 and refers to key issue 5: Sharing of location information.

**Discussion:**

BDBOS presented the document available as S6-191643.

**Decision:** The document was **revised to S6-191824**.

**S6-191824 Pseudo-CR on solution sharing location information on interconnected MC systems - request**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

(Replaces S6-191643)

**Discussion:**

BDBOS presented the document available as S6-191824.

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

**S6-191644 Pseudo-CR on solution sharing location information on interconnected MC systems - authorization**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

**Abstract:**

This pCR adds part 3 of 5 of the overall solution to 3GPP TR 23.744 and refers to key issue 5: Sharing of location information.

**Discussion:**

BDBOS presented the document available as S6-191644.

**Decision:** The document was **revised to S6-191825**.

**S6-191825 Pseudo-CR on solution sharing location information on interconnected MC systems - authorization**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

(Replaces S6-191644)

**Discussion:**

BDBOS presented the document available as S6-191825.

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

**S6-191645 Pseudo-CR on solution sharing location information on interconnected MC systems – cancel subscription**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

**Abstract:**

This pCR adds part 4 of 5 of the overall solution to 3GPP TR 23.744 and refers to key issue 5: Sharing of location information.

**Discussion:**

BDBOS presented the document available as S6-191645.

**Decision:** The document was **revised to S6-191826**.

**S6-191826 Pseudo-CR on solution sharing location information on interconnected MC systems – cancel subscription**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

(Replaces S6-191645)

**Discussion:**

BDBOS presented the document available as S6-191826.

The Police of Netherlands pointed out few instances where "requesting MC service" should read "cancel subscription request".

One2many raised the question whether not an information element should be marked optional as opposed to mandatory, when the note states a condition.

**Decision:** The document was **revised to S6-191976**.

**S6-191976 Pseudo-CR on solution sharing location information on interconnected MC systems – cancel subscription**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

(Replaces S6-191826)

**Discussion:**

BDBOS presented the document available as S6-191976.

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

**S6-191646 Pseudo-CR on solution sharing location information on interconnected MC systems - cancel**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

**Abstract:**

This pCR adds part 5 of 5 of the overall solution to 3GPP TR 23.744 and refers to key issue 5: Sharing of location information.

**Discussion:**

BDBOS presented the document available as S6-191646.

**Decision:** The document was **revised to S6-191827**.

**S6-191827 Pseudo-CR on solution sharing location information on interconnected MC systems – solution evaluation**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

(Replaces S6-191646)

**Discussion:**

BDBOS presented the document available as S6-191827.

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

**S6-191647 Pseudo-CR on use case, key issue and solution for location service on past location information**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

**Abstract:**

This pCR adds use case, key issue and solution, in order to handle not only the latest or current location information and is addressing the following objective:

“… 4. Handling of location sharing or privacy across services; …”.

**Discussion:**

BDBOS presented the document available as S6-191647.

**Decision:** The document was **revised to S6-191828**.

**S6-191828 Pseudo-CR on use case, key issue and solution for location service on past location information**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

(Replaces S6-191647)

**Discussion:**

BDBOS presented the document available as S6-191828.

Motorola Solutions suggested rephrasing the "Indicates the desired time stamp as start time"

The only changes are:

 - rephrasing the last sentence of clause 4.x to read "This dispatcher is able to subscribe for periodic location information as well as to request location information of 48 police officersfo the special task force for the past 24 hours.

 - replacing in table 6.X.2.1-1 "Indicates the desired time stamp as start time" with "Indicates the requested time stamp as start time"

 - replacing in table 6.X.2.1-1 "Indicates the desired time stamp as end time" with "Indicates the requested time stamp as start time"

With the above changes the revised contribution, S6-191977, is considered pre-approved.

**Decision:** The document was **revised to S6-191977**.

**S6-191977 Pseudo-CR on use case, key issue and solution for location service on past location information**

 *Type: pCR For: Approval
 23.744 v1.1.0
 Source: BDBOS*

(Replaces S6-191828)

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

### 11.3 FS\_FFAPP – Study on application layer support for Factories of the Future in 5G network

**S6-191655 reference model**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

**Abstract:**

This contribution proposes reference model for the FF application layer.

**Discussion:**

ZTE presented the document available as S6-191655.

Ericsson made remarks on that the revision marks were missing (hence difficult to see what was proposed) and and that we normally use visio figures.

Qualcomm requested that the acronyms should be spelled out. Furthermore the document should explain what was meant with control and user plane.

Nokia raised concern with the expanding of NEF.

**Decision:** The document was **revised to S6-191911**.

**S6-191911 reference model**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191655)

**Discussion:**

ZTE presented the document available as S6-191911.

It was suggested to replace the figure with an editor's note.

**Decision:** The document was **revised to S6-191854**.

**S6-191854 reference model**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191911)

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

**S6-191660 Application architecture**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

**Abstract:**

This contribution proposes adding an Application architecture for FF application layer.

**Discussion:**

ZTE presented the document available as S6-191660.

Qualcomm raised a concern with figure 7.2-1 and could epsecially not agree including PC5 interface.

Also Ericsson and Nokia raised concern with the proposed architecture.

Huawei noted that the figure looked more like an "SA2 architecture".

Qualcomm also noted that as this is a study this is not a correct starting point and stressed that SA2 has explicitly decided that PC5 cannot be used for IoT.

**Decision:** The document was **revised to S6-191912**.

**S6-191912 Application architecture**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191660)

**Discussion:**

ZTE presented the document available as S6-191912.

**Decision:** The document was **revised to S6-191957**.

**S6-191957 Application architecture**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191912)

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

**S6-191657 Key issue- AGV schedule & navigation**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

**Abstract:**

This contribution proposes adding a Key issue-AGV schedule & navigation for FF application layer.

**Discussion:**

ZTE presented the document available as S6-191657.

Qualcomm was of the view that the proposal could be reduced to the actual two listed key issues on the bottom of the contribution.

Ericsson agreed with Qualcomm and noted that the was not related to the key issues.

Huawei did not support the proposal as is but requested more refined details.

**Decision:** The document was **revised to S6-191913**.

**S6-191913 Key issue- AGV schedule & navigation**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191657)

**Discussion:**

ZTE presented the document available as S6-191913.

**Decision:** The document was **revised to S6-191958**.

**S6-191958 Key issue- AGV schedule & navigation**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191913)

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

**S6-191658 Solution- Transmission application specific information to UE**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

**Abstract:**

The contribution proposes a solution for Transmission application specific information to UE.

**Discussion:**

ZTE presented the document available as S6-191658.

Qualcomm was of the view that proposal was way too generic and it was hence not clear what actual event it is addressing.

A discussion followed and it seemed delegates had different views on the intention with the contribution.

**Decision:** The document was **revised to S6-191914**.

**S6-191914 Solution- AGV application assist information**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191658)

**Discussion:**

ZTE presented the document available as S6-191914.

It was noted that the key issue was not yet clear.

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

**S6-191659 23745-FS\_FFAPP-Solution-Obtain application specific event from UE**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

**Abstract:**

This contribution proposes adding a solution for Obtain application specific event from UE for FF application layer.

**Discussion:**

ZTE presented the document available as S6-191659.

Qualcomm was of the view that there was much overlap with the contribution S6-191658 and could maybe be merged with that contribution.

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

**S6-191661 Key issue- Edge Computing based Industrial application analytics**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

**Abstract:**

This contribution proposes adding Key issue- Edge Computing based Industrial application analytics for FF application layer.

**Discussion:**

ZTE presented the document available as S6-191661.

It was noted some offline discussion was required to understand the intended key issue.

**Decision:** The document was **revised to S6-191915**.

**S6-191915 Key issue- Edge Computing based Industrial application analytics**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191661)

**Discussion:**

ZTE presented the document available as S6-191915.

Huawei was of the view that the key issue title should be reworded to something like Support of industrial application analytics. However also the key issue would need to be modified accordingly.

Sony was of the view that the kye issue was still not clear.

Qualcomm stated they understood the solution, but not the problem.

**Decision:** The document was **revised to S6-191959**.

**S6-191959 Key issue- Edge Computing based Industrial application analytics**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191915)

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

**S6-191662 23745-FS\_FFAPP-Solution-Edge Computing based industrial application analytics**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

**Abstract:**

This contribution proposes adding a solution for Edge Computing based industrial application analytics for FF application layer.

**Discussion:**

ZTE presented the document available as S6-191662.

Qualcomm remarked that some of the assumptions in the contribution is based on the ongoing study and hence premature.

Nokia and Deutsche Telekom shared the concern of Qualcomm.

Qualcomm noted this was more like a solution without a key issue, and hence could not be accepted as is.

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

**S6-191663 23745-FS\_FFAPP-Key issue-NWDAF based Industrial application analytics**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

**Abstract:**

This contribution proposes adding a Key issue- NWDAF based Industrial application analytics for FF application layer.

**Discussion:**

ZTE presented the document available as S6-191663.

Nokia pointed out that the NWDAF had alrady been defined in SA2 and furthermore did not understand the actual key issue proposed.

Qualcomm was of the view there was no open issue as suggested.

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

**S6-191664 23745-FS\_FFAPP-Solution-NWDAF based industrial application analytics**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

**Abstract:**

This contribution proposes adding a solution- NWDAF based industrial application analytics for FF application layer.

**Discussion:**

ZTE presented the document available as S6-191664.

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

**S6-191665 Key issue- Geographic location and positioning information support**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

**Abstract:**

This contribution proposes updating Key issue- Geographic location and positioning information support for FF application layer.

**Discussion:**

ZTE presented the document available as S6-191665.

Huawei raised an issue with the sentence "For limited latency, it is need to support positioning…".

Qualcomm agreed with the view of Huawei and suggested to delete the last sentence of the first paragraph in clause 5.3.

The only changes are:

 - deleting the last sentence of the first paragraph in clause 5.3.

 - replacing second bullet under open issues with "How to support positioning method with ms-level latency requires further study."

 - replacing third bullet to read "What positionin methods are needed to supply absolute and relative positioning for different 5G positioning services requires further study.

With the above changes the revised contribution, S6-191918, is considered pre-approved.

**Decision:** The document was **revised to S6-191918**.

**S6-191918 Key issue- Geographic location and positioning information support**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191665)

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

**S6-191666 Solution- Geographic location and positioning information support**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

**Abstract:**

This contribution proposes adding a solution - Geographic location and positioning information support for FF application layer.

**Discussion:**

ZTE presented the document available as S6-191666.

Qualcomm raised some concerns about the solution doing the opposite of what one wants to solve (i.e. introducing latency).

**Decision:** The document was **revised to S6-191917**.

**S6-191917 Solution- Geographic location and positioning information support**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191666)

**Discussion:**

ZTE presented the document available as S6-191917.

Ericsson suggested adding an editor's note stating "How FFAP application layer utilises SEAL is FFS" and then deleting the suggested solution.

**Decision:** The document was **revised to S6-191960**.

**S6-191960 Solution- Geographic location and positioning information support**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: ZTE Corporation*

(Replaces S6-191917)

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

**S6-191743 Pseudo-CR on FFAPP Scope Update**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Nokia*

**Abstract:**

This contribution is questioning the scope of the FFAPP and provides some modification suggestions.

**Discussion:**

Nokia presented the document available as S6-191743.

Qualcomm and Deutsche Telekom supported the proposal.

Ericsson thought it might make sense to delete whole key issue 1.

ZTE did not support the proposal.

**Decision:** The document was **revised to S6-191919**.

**S6-191919 FFAPP Scope Correction**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Nokia*

(Replaces S6-191743)

**Discussion:**

Nokia presented the document available as S6-191919.

Ericsson raised a concern about the missing key issue.

Qualcomm made a remark that the key issue 1 cannot be left blanc.

**Decision:** The document was **revised to S6-191961**.

**S6-191961 FFAPP Scope Correction**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Nokia*

(Replaces S6-191919)

**Discussion:**

Nokia presented the document available as S6-191961.

Following key issue 1 title was suggested "Use of Network slicing for FFAPP".

InterDigital suggested to include the whole original clause 5.1 and show the changes.

**Decision:** The document was **revised to S6-191995**.

**S6-191995 FFAPP Scope Correction**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Nokia*

(Replaces S6-191961)

**Discussion:**

Nokia presented the document available as S6-191995.

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

**S6-191744 Pseudo-CR on Key Issue on Device Onboarding**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Introduce a new key issue on device onboarding to make sure the factories of the future study does not miss this essential aspect.

**Discussion:**

Nokia presented the document available as S6-191744.

Sony suggested rephrasing the open issues (ate least 1 and 2).

Qualcomm supported the intention of the proposal but suggested deleting the sentence "Still, further improvements on automation may be possible …"

**Decision:** The document was **revised to S6-191920**.

**S6-191920 Pseudo-CR on Key Issue on Device Onboarding**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-191744)

**Discussion:**

Nokia presented the document available as S6-191920.

Deutsche Telekom indicated they did not support the key issue as it was already dealt with in oneM2M as they did not support duplication of work.

Qualcomm noted that SA6 cannot be dependent on work in other organisations.

**Decision:** The document was **revised to S6-191962**.

**S6-191962 Pseudo-CR on Key Issue on Device Onboarding**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-191920)

**Discussion:**

Nokia presented the document available as S6-191962.

Ericsson raised a concern with the proposed editor's note.

The only changes are:

 - deleting the editor's note,

 - replacing Note with NOTE and

 - applying correct style.

With the above changes the revised contribution, S6-191996, is considered pre-approved.

**Decision:** The document was **revised to S6-191996**.

**S6-191996 Pseudo-CR on Key Issue on Device Onboarding**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-191962)

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

**S6-191783 Key issue on enabling FFAPP requirements communications**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Key issue on enabling FFAPP requirements communications

**Discussion:**

Huawei presented the document available as S6-191783.

**Decision:** The document was **revised to S6-191921**.

**S6-191921 Key issue on enabling FFAPP requirements communications**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Huawei, Hisilicon*

(Replaces S6-191783)

**Discussion:**

Huawei presented the document available as S6-191921.

Qualcomm was still confused why SA6 would define something that has been developed in SA2. If it would need modification then it should be done in SA2.

Huawei was of the view a such solutions (non TSN aspects) did not exist in SA2.

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

**S6-191784 Solution to establish communications with FFAPP requirements**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Solution to establish communications with FFAPP requirements

**Discussion:**

Huawei presented the document available as S6-191784.

Qualcomm indicated they were not prepared to agree to the proposed solution as they were not convinced there was a problem to be solved.

It was noted that the focus in the revision should be the actual key issue.

**Decision:** The document was **revised to S6-191922**.

**S6-191922 Solution to establish communications with FFAPP requirements**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Huawei, Hisilicon*

(Replaces S6-191784)

**Discussion:**

Huawei presented the document available as S6-191922.

**Decision:** The document was **revised to S6-191982**.

**S6-191982 Solution to establish communications with FFAPP requirements**

 *Type: pCR For: Approval
 23.745 v0.4.0
 Source: Huawei, Hisilicon*

(Replaces S6-191922)

**Discussion:**

Huawei presented the document available as S6-191982.

Qualcomm was of the view the the key issue was note well enough defined in order to agree a solution.

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

**S6-191656 23745-FS\_FFAPP-Application architecture**

 *Type: pCR For: (not specified)
 23.745 v0.4.0
 Source: ZTE Corporation*

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

### 11.4 FS\_UASAPP – Study on application layer support for Unmanned Aerial System (UAS)

**S6-191789 Update to Definitions and Abbreviations**

 *Type: pCR For: Approval
 23.755 v0.3.0
 Source: Airbus DS SLC*

**Abstract:**

This contribution provides a proposal to upate the Definitions and Abbreviations in TR 23.755 v 0.3.0 according to discussion and decisions in SA1#87.

**Discussion:**

Airbus presented the document available as S6-191789.

InterDigital suggested to clarify the abbreviations somewhere in the body of the document (i.e. outside the reference clause).

Motorola Solutions suggested not using references in the abbreviations clause.

**Decision:** The document was **revised to S6-191934**.

**S6-191934 Update to Definitions**

 *Type: pCR For: Approval
 23.755 v0.3.0
 Source: Airbus DS SLC*

(Replaces S6-191789)

**Discussion:**

Airbus presented the document available as S6-191934.

InterDigital suggested adding a sentence to the UAS Traffic Management (UTM) definition.

The only change is rewording the UAS Traffic Management (UTM) definition to read "A set of functions and services for managing a range of autonomous vehicle operations e.g. authenticating UAV, authorizing UAS services, managing UAS policies, and controlling UAV traffics in the airspace [5]."

With the above changes the revised contribution, S6-191969, is considered pre-approved.

**Decision:** The document was **revised to S6-191969**.

**S6-191969 Update to Definitions**

 *Type: pCR For: Approval
 23.755 v0.3.0
 Source: Airbus DS SLC*

(Replaces S6-191934)

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

**S6-191785 Key issue on UAS group communications**

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

**Abstract:**

Proposal for Key issue on UAS group communications

**Discussion:**

Huawei presented the document available as S6-191785.

Qualcomm pointed out that there was no stage 1 requirement for group communication, hence the key issues will need to be rewritten.

It was also suggested to rename the key issue as Broadcast communications instead of Group communications.

**Decision:** The document was **revised to S6-191935**.

**S6-191935 Key issue on UAS group communications**

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

(Replaces S6-191785)

**Discussion:**

Huawei presented the document available as S6-191935.

It was suggested to reword the pCR title.

Qualcomm did not support the mention of PC5 and Uu connectivity.

The only changes are:

 - rephrase the pCR title to read "Key issue on UAS broadcast communications" and

 - delete (Uu connectivity) and (PC5 connectivity).

With the above changes the revised contribution, S6-191970, is considered pre-approved.

**Decision:** The document was **revised to S6-191970**.

**S6-191970 Key issue on UAS group communications**

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

(Replaces S6-191935)

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

**S6-191786 Key issue on UAV location information**

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

**Abstract:**

The contribution provides a proposal for key issue on UAV location information.

**Discussion:**

Huawei presented the document available as S6-191786.

Nokia suggested clarifying the "How to supplement 3GPP system based location information..".

InterDigital supported the contribution assuming the terminology was made consistent. They also thought it may be helpful to inform SA3 on the trust and security topic.

**Decision:** The document was **revised to S6-191936**.

**S6-191936 Key issue on UAV location information**

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

(Replaces S6-191786)

**Discussion:**

Huawei presented the document available as S6-191936.

InterDigital suggested adding an editor's note on involving SA3.

**Decision:** The document was **revised to S6-191983**.

**S6-191983 Key issue on UAV location information**

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

(Replaces S6-191936)

**Discussion:**

Huawei presented the document available as S6-191983.

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

**S6-191790 Update to UAS Reference Model and Description**

 *Type: pCR For: Approval
 23.755 v0.3.0
 Source: Airbus DS SLC*

**Abstract:**

This contribution provides a proposal to upate the UAS Reference Model in TR 23.755 v 0.3.0 according to discussion and decisions in SA1#87.

**Discussion:**

Huawei presented the document available as S6-191790.

Huawei suggested adding an editor's note stating "The relationship between the USS and UTM is FFS."

Motorola Solutions suggested rephrasing of the last sentence of the second paragraph in clause A.1.

**Decision:** The document was **revised to S6-191937**.

**S6-191937 Update to UAS Reference Model and Description**

 *Type: pCR For: Approval
 23.755 v0.3.0
 Source: Airbus DS SLC*

(Replaces S6-191790)

**Discussion:**

Huawei presented the document available as S6-191937.

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

**S6-191791 Update to Service Requirements Analysis**

 *Type: pCR For: Approval
 23.755 v0.3.0
 Source: Airbus DS SLC*

**Abstract:**

This contribution provides a proposal to upate the UAS Service Requirements Analysis in TR 23.755 v 0.3.0 according to discussion and decisions in SA1#87.

**Discussion:**

Huawei presented the document available as S6-191791.

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

### 11.5 FS\_EDGEAPP – Study on Application Architecture for enabling Edge Applications

**S6-191726 Clarification and correction of Edge Data Network**

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

**Abstract:**

This pCR proposes to replacing “Edge Data Network” with “Edge computing Network”.

**Discussion:**

Huawei presented the document available as S6-191726.

Qualcomm did not see any value in the proposed rephrased definitions and terms and hence did not agree with proposal as a whole.

Also Samsung as well as Intel were unsupportive to the proposal.

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

**S6-191697 Definition Update (Removal of ENs)**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

**Abstract:**

It discusses the one editor note in clause 3.1 definition and proposes to remove the editor's note with a reason.

**Discussion:**

Samsung presented the document available as S6-191697.

Intel indicated support for deleting the editor's not but suggested combing Edge Data Network and Edge Hosting Environment.

Vodafone did not agree with combining the definitions of Edge Data Network and Edge Hosting Environment.

Vodafone noted that it might be posible to merge the definitions of Edge Data Network and Local Data Network.

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

**S6-191685 Discussion on EDGE-5**

 *Type: discussion For: Discussion
 23.758 v..
 Source: Intel K.K.*

**Discussion:**

Intel KK presented the document available as S6-191685.

Samsung raised some concern on the proposal e.g. that the Edge EN Cl connects to both Edge DN1 and Edge DN2.

Vodafone was of the vie that we should first concentrate on studying before specifying.

InterDigital indicated support for the presented concept.

Convida also indicated support for the concept.

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

**S6-191686 New RP - EDGE-5**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Intel K.K.*

**Abstract:**

As described in the discussion on EDGE-5, there is a need for a refernce point between Application Clients and the Edge Enabler Client that is co-located in the UE.

This pCR specifies this RP and adds it to the architecture subclause

**Discussion:**

Intel KK presented the document available as S6-191686.

Qualcomm suggested replacing "supports" with "enables" in "This reference point supports:" in clause 6.4.x.

Samsung suggested expanding the term "Application Client" in clause 6.4.x by using "Application Client(s)".

Qualcomm suggested adding that whether this is in the scope of SA6 is FFS.

InterDigital suggested removing the examples (e.g. ...) in the bullets.

**Decision:** The document was **revised to S6-191864**.

**S6-191864 New RP - EDGE-5**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Intel, AT&T*

(Replaces S6-191686)

**Discussion:**

Intel KK presented the document available as S6-191864.

Qualcomm suggested deleting the third bullet point in clause 6.4.x.

The only changes are:

 - deleting the third bullet point in clause 6.4.x and

 - spelling out EN (Editor's Note)

With the above changes the revised contribution, S6-191945, is considered pre-approved.

**Decision:** The document was **revised to S6-191945**.

**S6-191945 New RP - EDGE-5**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Intel, AT&T*

(Replaces S6-191864)

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

**S6-191696 Architecture Update (Removal of EN in clause 6.2)**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

**Abstract:**

This paper discusses the remaining editor's note in architecture clause 6.2 and proposes the resolutions to solve the editor's notes.

**Discussion:**

Samsung presented the document available as S6-191696.

Huawei did not support deleting both editor's notes.

Qualcomm was of the view that the statement "The interface between Edge Application Server(s) and 3GPP network is outside scope of this document." was too strong.

Intel KK suggested also listing the specifications TS 29.522 and TS 23.222 in the Note 6.

InterDigital suggested clarifying what the line between Edge Application Server(s) and 3GPP network being dotted means.

**Decision:** The document was **revised to S6-191865**.

**S6-191865 Architecture Update (Removal of EN in clause 6.2)**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

(Replaces S6-191696)

**Discussion:**

Samsung presented the document available as S6-191865.

Qualcomm suggested providing a name to the line with no interface name.

The only change is labelling the line between the EAS and 3GPP NW boxes as EDGE-X.

With the above changes the revised contribution, S6-191946, is considered pre-approved.

**Decision:** The document was **revised to S6-191946**.

**S6-191946 Architecture Update (Removal of EN in clause 6.2)**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

(Replaces S6-191865)

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

**S6-191714 Pseudo-CR on edge application architectural requirements on security**

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

**Abstract:**

The contribution addresses architectural requirements on security aspects.

**Discussion:**

CATT presented the document available as S6-191714.

Qualcomm did not see the need to specify the security requirements.

It was suggested to rephrase "SBA 5GC" to read "5GC SBA".

Vodafone suggested using the terminology potential requirements.

InterDigital was of the view that a numbber of the requirements could be placed under the general section as opposed to the security section.

**Decision:** The document was **revised to S6-191866**.

**S6-191866 Pseudo-CR on edge application architectural requirements on security**

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

(Replaces S6-191714)

**Discussion:**

CATT presented the document available as S6-191866.

Qualcomm suggested rewording of the requirement [AR-5.7.2-x].

**Decision:** The document was **revised to S6-191947**.

**S6-191947 Pseudo-CR on edge application architectural requirements on security**

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

(Replaces S6-191866)

**Discussion:**

CATT presented the document available as S6-191947.

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

**S6-191717 Pseudo-CR on clarifications on EDN configuration server**

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

**Abstract:**

The contribution clarifies architectural requirements and the architecture regarding EDN configuration server.

**Discussion:**

CATT presented the document available as S6-191717.

Qualcomm suggested rephrasing the term "identifiable range".

Samsung was of the view that the requirements were not architectural requirements.

It was also suggested to be more specific with the regard to "3GPP operator’s domain" (possibly 3GPP operator’s trust domain).

Qualcomm stated it was simply unrealistic to state "UE to access the Edge Data Network(s) shall not conflict with the PLMN operator’s policies (e.g. URSP) in 3GPP network." i.e. shall not conflict. Instead one should describe how to act in case of a conflict.

**Decision:** The document was **revised to S6-191867**.

**S6-191867 Pseudo-CR on clarifications on EDN configuration server**

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

(Replaces S6-191717)

**Discussion:**

CATT presented the document available as S6-191867.

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

**S6-191636 Update to Key Issue #3 on Edge Application Server enablement on the Edge Hosting Environment**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC*

**Abstract:**

An update to Key Issue #3

**Discussion:**

Convida Wireless presented the document available as S6-191636.

Intel KK made a remark that SA6 has decided to use the term "Application Clients" instead of "Edge Application Clients".

CATT was of the view that the "How the Edge Application Server utilises the capabilities/services.." was out of scope of SA6.

It was noted that the first new open issue could possibly be merged into key issue 5.

**Decision:** The document was **revised to S6-191868**.

**S6-191868 Update to Key Issue #5 on Edge Application Server enablement on the Edge Hosting Environment**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC*

(Replaces S6-191636)

**Discussion:**

Convida Wireless presented the document available as S6-191868.

Qualcomm suggested deleting the "via Edge Enabler Clients(s)" in clause 4.5.

The only changes are delteing the two occurences of "via Edge Enabler Client(s)" in clause 4.5.

With the above changes the revised contribution, S6-191948, is considered pre-approved.

**Decision:** The document was **revised to S6-191948**.

**S6-191948 Update to Key Issue #5 on Edge Application Server enablement on the Edge Hosting Environment**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC*

(Replaces S6-191868)

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

**S6-191718 Pseudo-CR on key issue 3 addition**

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

**Abstract:**

This contribution addresses the key issue of service differentiation in edge application server enablement.

**Discussion:**

CATT presented the document available as S6-191718.

Qualcomm reqested some clarification on what was meant with the term "Edge Computing feature".

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

**S6-191695 Pseudo-CR on key issue and solution for QoS Management for 5G Edge Network**

 *Type: pCR For: Approval
 23.758 v0.2.0
 Source: Alibaba Group*

(Replaces S6-191331)

**Abstract:**

This contribution proposes a key issue and solution on QoS management for Edge Application related aspects for Edge Computing study.

**Discussion:**

Revised prior to initial presentation.

**Decision:** The document was **revised to S6-191793**.

**S6-191793 Pseudo-CR on key issue and solution for QoS Management for 5G Edge Network**

 *Type: pCR For: Approval
 23.758 v0.2.0
 Source: Alibaba Group, Vodafone Group*

(Replaces S6-191695)

**Discussion:**

Vodafone presented the document available as S6-191793.

Qualcomm was of the view that the proposed procedure (Figure X.1.1-1) seemed to bring nothing new compared to the SA2 defined procedure. They also suggested to claify the first open issue. E.g. whether the "Edge Application" (in the first open issue bullet) referred to the server or client.

**Decision:** The document was **revised to S6-191869**.

**S6-191869 Pseudo-CR on Key Issue and Solution for QoS Management for 5G Edge Network**

 *Type: pCR For: Approval
 23.758 v0.2.0
 Source: Alibaba Group, Vodafone Group*

(Replaces S6-191793)

**Discussion:**

Vodafone presented the document available as S6-191869.

Samsung suggested deleting "its application identifier and application type " from the pre-condition.

The only changes are:

 - rewording the solution title to read "QoS Management for 5G Edge Network"

 - deleting "its application identifier and application type " from the first pre-condition.

With the above changes the revised contribution, S6-191972, is considered pre-approved.

**Decision:** The document was **revised to S6-191972**.

**S6-191972 Pseudo-CR on Key Issue and Solution for QoS Management for 5G Edge Network**

 *Type: pCR For: Approval
 23.758 v0.2.0
 Source: Alibaba Group, Vodafone Group*

(Replaces S6-191869)

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

**S6-191732 Pseudo-CR on addition of Key Issues on edge application lifecycle management**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Nokia Germany*

**Abstract:**

This document provides a zext proposal to TR 23.758 to add a new key issue on edge application lifecycle management.

**Discussion:**

Nokia presented the document available as S6-191732.

Samsung was in general supporteive of the key issue but suggested the scope should be further expanded. They also suggested adding a note stating the solution should be specified within SA5.

It was suggested clarifying further the key issue.

It was suggested to send an LS to SA5 on the matter. The LS will appear as S6-191871.

**Decision:** The document was **revised to S6-191870**.

**S6-191870 Pseudo-CR on addition of Key Issues on edge application lifecycle management**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Nokia Germany*

(Replaces S6-191732)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191916**.

**S6-191916 Pseudo-CR on addition of Key Issues on lifecycle management**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Nokia, Nokia Shanghai Bell, Samsung*

(Replaces S6-191870)

**Discussion:**

Nokia presented the document available as S6-191916.

Qualcomm raised the question whether the whether the key issue was restricted to MNO.

The only changes are:

 - adding an editor's note "Whether this key issue is restricted to MNO is FFS." and

 - fix editorial errors.

With the above changes the revised contribution, S6-191949, is considered pre-approved.

**Decision:** The document was **revised to S6-191949**.

**S6-191949 Pseudo-CR on addition of Key Issues on lifecycle management**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Nokia, Nokia Shanghai Bell, Samsung*

(Replaces S6-191916)

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

**S6-191687 Pseudo-CR on New Key issue: Identities**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Intel K.K.*

**Abstract:**

In last meeting it was agreed that it would be useful to organize the collection of Identifiers that are used for the EDGEAPP study under one key issue.

This new key issue defines the need for that collection

**Discussion:**

Intel KK presented the document available as S6-191687.

Huawei raised some doubts whether there is a need for location identity.

Samsung suggested reducing the text "When a Application Client switches from one Edge Application Server instance to another one, its context needs to be mirrored. In order to do so, the identity of that context needs to be specified."

InterDigital was of the view that most of what was proposed was already covered by other key issues.

Qualcomm was of the view that key issue needs to be clarified/rephrased.

**Decision:** The document was **revised to S6-191872**.

**S6-191872 Pseudo-CR on New Key issue: Identities**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Intel K.K.*

(Replaces S6-191687)

**Discussion:**

Intel KK presented the document available as S6-191872.

TD Tech raised the question whether server category can be considered an Id and suggested removing it.

InterDigital did not consider this as an key issue.

Clarification was requested on "registered on the Edge Enabler Server" (in the second x.1 clause).

**Decision:** The document was **revised to S6-191973**.

**S6-191973 Pseudo-CR on New Key issue: Identities**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Intel K.K.*

(Replaces S6-191872)

**Discussion:**

Intel KK presented the document available as S6-191973.

It was suggested to add new sentences in clauses X.4 and X.6.

The only changes are:

 - remonving editor's note

 - adding the following sentence in clause X.4 "For example, all Edge WhatsApp servers will share the same Edge Application Server ID."

 - adding the following sentence in clause X.6 "For example, all YouTube clients will share the same Application Client ID."

 - rename the names of the commercial apps to generic names e.g. ABCGame, XYZVideo.

With the above changes the revised contribution, S6-191997, is considered pre-approved.

**Decision:** The document was **revised to S6-191997**.

**S6-191997 Pseudo-CR on New Key issue: Identities**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Intel K.K.*

(Replaces S6-191973)

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

**S6-191688 Solution for key issue – Identities**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Intel K.K.*

**Abstract:**

This solution defines several identifiers for usage in the EDGEAPP study.

**Discussion:**

Intel KK presented the document available as S6-191688.

InterDigital was of the view that it was too early to discuss the solution before the actual problem is clear.

There was a discussion on whether the Application ID was the right term.

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

**S6-191684 Discussion on Partially Deployed Edge-DN support**

 *Type: discussion For: Discussion
 23.758 v..
 Source: Intel K.K.*

**Abstract:**

When instances of Edge Application Servers are deployed in all Edge DNs, a UE can rely on the serving Edge DN to have Edge Application Servers for all its Application Clients.

However, there could be cases in which instances of Edge Application Servers are deployed only in a subset of the Edge DNs. In this case, a UE might need to connect to several Edge DNs in order to locate Edge Application Servers for all its Application Clients.

The present document discusses the above case.

**Discussion:**

Intel KK presented the document available as S6-191684.

A lengthy discussion followed. It was e.g. noted that various deployment models should be considered as the proposed model seemed rather static. Also deflaulting to a clowd or not needs to be considered and e.g. whether geographically dependent.

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

**S6-191635 Key Issue #3 Solution on Application Server Enablement**

 *Type: pCR For: Agreement
 23.758 v0.3.0
 Source: Convida Wireless LLC*

**Abstract:**

This paper presents a solution to enable an Edge Application Server to register/de-register to/from an Edge Enabler Server. When registering, the Edge Application Server provides service profile/availability information to the Edge Enabler Server.

The paper also presents a solution to enable an Edge Application Server to subscribe and receive notifications from an Edge Enabler Server

**Discussion:**

Convida presented the document available as S6-191635.

Samsung pointed out few potential issues e.g. the last word in the first sentence of clause 7.x.2.1 the Edge Application Server should probably read Edge Enabler server.

Huawei suggested adding a note stating that the types of events server by the edge enabler server were for further study.

Qualcomm suggested adding an editor's note on some security concerns.

**Decision:** The document was **revised to S6-191873**.

**S6-191873 Key Issue #3 Solution on Application Server Enablement**

 *Type: pCR For: Agreement
 23.758 v0.3.0
 Source: Convida Wireless LLC, Vodafone (?), Nokia (?), Samsung, Huawei (?)*

(Replaces S6-191635)

**Discussion:**

Convida presented the document available as S6-191873.

Qualcomm was not content with using the term KPIs.

Huawei suggested changing an editor's note addressing also the usage.

Also the co-signing companies were confirmed.

The only changes are:

 - replacing "KPIs" with "range of KPIs in table 7.x.1-1

 - replacing in the 3rd editor's note "definition" with "definition and usage".

With the above changes the revised contribution, S6-191951, is considered pre-approved.

**Decision:** The document was **revised to S6-191951**.

**S6-191951 Key Issue #3 Solution on Application Server Enablement**

 *Type: pCR For: Agreement
 23.758 v0.3.0
 Source: Convida Wireless LLC, Samsung, Vodafone, Nokia, Huawei*

(Replaces S6-191873)

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

**S6-191691 Pseudo-CR on solution to Key Issues 3**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Vodafone, Nokia*

**Abstract:**

This document provides a Text Proposal to TR 23.758 on a solution to Key Issues 3 based on the ETSI ISG MEC specicifications, as indicated in the LS from MEC (S6-191404).

**Discussion:**

Vodafone presented the document available as S6-191691.

Qualcomm made a remark that the proposal should consider both the cases where an ETSI MEC solution has been implemented and where one has not been implemented.

Samsung was of the view that many of the interactions in figure 7.x.1.1-1 can be covered by pre-conditions (being within the framework of SA5).

Huawei made a remark that the first procedure was not needed as there was no role for the Edge enabler server.

It was noted that part of the registration proposal can be merged into S6-191873.

**Decision:** The document was **revised to S6-191874**.

**S6-191874 Pseudo-CR on solution to Key Issues 3**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: VODAFONE Group Plc*

(Replaces S6-191691)

**Discussion:**

Revised prior to presentation

**Decision:** The document was **revised to S6-191939**.

**S6-191939 Pseudo-CR on solution to Key Issues 3**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: VODAFONE Group Plc*

(Replaces S6-191874)

**Discussion:**

Vodafone presented the document available as S6-191939.

Huawei was not content with the clause A.2.2.x title.

The only change is adding a editor's note above figure A.2.2.x-1 stating "The exact mapping of the functionalities is FFS".

With the above changes the revised contribution, S6-191952, is considered pre-approved.

**Decision:** The document was **revised to S6-191952**.

**S6-191952 Pseudo-CR on solution to Key Issues 3**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: VODAFONE Group Plc*

(Replaces S6-191939)

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

**S6-191710 Solution for Edge Application Server’s enablement on an Edge Enabler Server**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

**Abstract:**

This pCR proposes a solution to key issue #3 for Edge Application Server’s enablement on an Edge Enabler Server, providing Edge Application Server Registration and De-Registration procedures.

**Discussion:**

Vodafone presented the document available as S6-191710.

Huawei was of the view that the steps 1, 2 and 3 could be merged, furthermore the step 4 could become a separate procedure.

Qualcomm made a remark that that the step 4 in fact could happen as a first step.

It was noted that part of the proposal could be merged into S6-191873 (revised to S6-191951).

**Decision:** The document was **revised to S6-191875**.

**S6-191875 Solution for Edge Application Server’s enablement on an Edge Enabler Server**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

(Replaces S6-191710)

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

**S6-191778 Solution for Edge application registration**

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

**Abstract:**

Proposal for Solution for Edge application registration

**Discussion:**

Huawei presented the document available as S6-191778.

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

**S6-191690 Pseudo-CR on updates to Key Issues 1 and 2**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Vodafone, Nokia*

**Abstract:**

This document provides a Text Proposal to TR 23.758 to update the key issues 1 and 2 based on the LS from ETSI MEC ISG (S6-191404).

**Discussion:**

Vodafone presented the document available as S6-191690.

Qualcomm suggested to clarify the sentence "From the point of view of a typical cloud application..". Furthermore there was the question where the KPIs come from.

**Decision:** The document was **revised to S6-191876**.

**S6-191876 Pseudo-CR on updates to Key Issues 1 and 2**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Vodafone, Nokia*

(Replaces S6-191690)

**Discussion:**

Vodafone presented the document available as S6-191876.

Samsung pointed out that "What is critical is whether the Edge Application Client is .." should read "What is critical is whether the Application Client is " i.e without the Edge.

**Decision:** The document was **revised to S6-191974**.

**S6-191974 Pseudo-CR on updates to Key Issues 1 and 2**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Vodafone, Nokia*

(Replaces S6-191876)

**Discussion:**

Vodafone presented the document available as S6-191974.

The only changes are;

 - removing changes over changes,

 - changing "Editor's note" to "Editor's Note" and

 - changing "Note" to "NOTE".

With the above changes the revised contribution, S6-191998, is considered pre-approved.

**Decision:** The document was **revised to S6-191998**.

**S6-191998 Pseudo-CR on updates to Key Issues 1 and 2**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Vodafone, Nokia*

(Replaces S6-191974)

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

**S6-191639 Update to Solution #2 on Provisioning of Edge Data Network Configuratio**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC, Sony*

**Abstract:**

Solution #2 describes how the initial provisioning server (i.e. Edge Data Network Configuration Server) provisions information for the UE to connect to the Edge Data Networks and Edge Enabler Servers.

This document proposes to update solution #2 so that the Edge Enabler Client can provide its requirements or preferences in the initial provisioning request and the Edge Data Network Configuration Server can filter its response based on the requirements or preferences.

**Discussion:**

Convida presented the document available as S6-191639.

Huawei was of the view that some further processes were missing showing how all this information is handled.

Vodafone indicated their support for the proposal.

**Decision:** The document was **revised to S6-191877**.

**S6-191877 Update to Solution #2 on Provisioning of Edge Data Network Configuratio**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC, Sony*

(Replaces S6-191639)

**Discussion:**

Convida presented the document available as S6-191877.

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

**S6-191713 Update of solution 2 Provisioning of Edge Data Network configuration**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Sony*

**Abstract:**

USolution #2 describes how the initial provisioning server (i.e. Edge Data Netwrok Configuration Server) provisions information for the UE to connect to the Edge Data Networks and Edge Enabler Servers.

This document proposes to update solution #2 so that the Edge Enabler Client can provide its connectivity information or preferences in the initial provisioning request and the Edge Data Network Configuration Server can filter its response based on the requirements or preferences.

**Discussion:**

Sony presented the document available as S6-191713.

Qualcomm noted that the proposal would seem to assume the case of one Edge Data Network only, which migght not be a realistic case. Also what about roaming.

Samsung suggested noting that the non 3GPP access would be connected to the 5G core.

**Decision:** The document was **revised to S6-191878**.

**S6-191878 Update of solution 2 Provisioning of Edge Data Network configuration**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Sony*

(Replaces S6-191713)

**Discussion:**

Sony presented the document available as S6-191878.

Samsung suggested moving the note into the table.

**Decision:** The document was **revised to S6-191955**.

**S6-191955 Update of solution 2 Provisioning of Edge Data Network configuration**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Sony*

(Replaces S6-191878)

**Discussion:**

Sony presented the document available as S6-191955.

The only change is replacing in table 7.2.1.1-1 "formultiple" with "for multiple".

With the above changes the revised contribution, S6-191984, is considered pre-approved.

**Decision:** The document was **revised to S6-191984**.

**S6-191984 Update of solution 2 Provisioning of Edge Data Network configuration**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Sony*

(Replaces S6-191955)

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

**S6-191716 Pseudo-CR on clarifications to EDN configuration provisioning**

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

**Abstract:**

The contribution clarifies EDN configuration provisioning to avoid potential conflicts with 5G network.

**Discussion:**

CATT presented the document available as S6-191716.

Convida did not think the Note 1 can be agreed to at this point. They also did not see a need for a UE identifier (in the response).

Qualcomm did not support deleting the editor's note at this stage.

**Decision:** The document was **revised to S6-191879**.

**S6-191879 Pseudo-CR on clarifications to EDN configuration provisioning**

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

(Replaces S6-191716)

**Discussion:**

CATT presented the document available as S6-191879.

Samsung suggested rewording of the second pre-condition.

The only change is rewording the first sentence of the second pre-condition to read "The Edge Enabler Client has been authenticated to enable communication with the Edge Data Network Configuration Server."

With the above changes the revised contribution, S6-191950, is considered pre-approved.

**Decision:** The document was **revised to S6-191950**.

**S6-191950 Pseudo-CR on clarifications to EDN configuration provisioning**

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

(Replaces S6-191879)

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

**S6-191727 Update solution #2 with PCF providing EDN connection info**

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

**Abstract:**

This pCR proposes to update solution #2 Provisioning of Edge Data Network configuration with using URSP to configure the EDN connection info.

**Discussion:**

Huawei presented the document available as S6-191727.

Convida did not agree with the proposed evaluation i.e. the claimed conflict.

Qualcomm as well as Motorola Mobility agreed with Convida.

**Decision:** The document was **revised to S6-191880**.

**S6-191880 Update solution #2 with PCF providing EDN connection info**

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

(Replaces S6-191727)

**Discussion:**

Huawei presented the document available as S6-191880.

Samsung suggested adding a note in table 7.2.1.1-2 stating "If URLSP is deployed in 5GC and used by MNO, EDN information is provided". They further suggested removing the text below table 7.2.1.1-2.

Convida piinted out that the doc number in the header was wrong.

**Decision:** The document was **revised to S6-191985**.

**S6-191985 Update solution #2 with PCF providing EDN connection info**

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

(Replaces S6-191880)

**Discussion:**

Huawei presented the document available as S6-191885.

It was pointe out that the notes should be renumbered.

The rapporteur will correct this when implementing the pCR.

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

**S6-191698 Solution 2 update**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

**Abstract:**

It discusses the editor's notes in solution #2 (clause 7.2) and proposes to resolve them.

**Discussion:**

Samsung presented the document available as S6-191727.

Qualcomm was of the view that the term subscription identifier could be confusing and suggested just using the term identifier. They also noted that the paper seems to draw conclusions while the study is still ongoing.

InterDigital suggested still keeping the editor's note in clause 7.2.1.1.

**Decision:** The document was **revised to S6-191881**.

**S6-191881 Solution 2 update**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

(Replaces S6-191698)

**Discussion:**

Samsung presented the document available as S6-191881.

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

**S6-191638 Update to Solution #1 on Edge Application Server Discovery**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC*

**Abstract:**

Solution #1 describes how “The discovery request may contain query filters to retrieve information about a particular Edge Application Server or a category of Edge Application Servers, for e.g. gaming applications”.

This document proposes two updates to solution #1.

1. The description of the query filter is updated so that the query filter can also be based on desired level of permissions, features, and location.

2. The discovery request is updated so that it can include the identity of Application Client(s) that might attempt to access the discovered Edge Application Server(s).

The Edge Enabler Server can use this information to further filter its discovery response, thus the Edge Enabler Client will only discover the Edge Application Servers that can provide it with the desired level of service.

**Discussion:**

Convida presented the document available as S6-191638.

CATT suggested further clarification on mentioned access permissions like trial, gold-class.

Huawei suggested adding some further clarification in the introduction about access permissions.

**Decision:** The document was **revised to S6-191882**.

**S6-191882 Update to Solution #1 on Edge Application Server Discovery**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC*

(Replaces S6-191638)

**Discussion:**

Convida presented the document available as S6-191882.

Samsung suggested rephrasing "..the Edge Enabler Server is able to provide the desired level of .." in step 3.

**Decision:** The document was **revised to S6-191986**.

**S6-191986 Update to Solution #1 on Edge Application Server Discovery**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC*

(Replaces S6-191882)

**Discussion:**

Convida presented the document available as S6-191986.

Samsung pointed out that in step 3 "..Edge Enabler Server.." should read "..Edge Application Server..".

The only change is to replace in step 3 I clause 7.1.1 "..Edge Enabler Server.." with "..Edge Application Server..".

With the above change the revised contribution, S6-191999, is considered pre-approved.

**Decision:** The document was **revised to S6-191999**.

**S6-191999 Update to Solution #1 on Edge Application Server Discovery**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC*

(Replaces S6-191986)

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

**S6-191736 Pseudo-CR on Solution Evaluation – Solution #1**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

**Abstract:**

The contribution proposes a solution evaluation for the solution #1 (Edge Application Server Discovery)

**Discussion:**

Samsung presented the document available as S6-191736.

Qualcomm suggested further details to the evaluation.

**Decision:** The document was **revised to S6-191883**.

**S6-191883 Pseudo-CR on Solution Evaluation – Solution #1**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

(Replaces S6-191736)

**Discussion:**

Samsung presented the document available as S6-191883.

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

**S6-191692 Pseudo-CR on solution to Key Issues 4 and 8**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Vodafone, Nokia*

**Abstract:**

This document provides a Text Proposal to TR 23.758 on a solution to Key Issues 4 and 8 based on the ETSI ISG MEC specifications, as indicated in the LS from MEC (S6-191404).

**Discussion:**

Vodafone presented the document available as S6-191692.

Huawei was of the view that the last paragraph of clause 7.x.1 would need some rewriting.

Samsung suggested clarifying how the 3GPP network is part of the procedure (figure 7.x.1.1-1).

Qualcomm suggested moving the informative ETSI MEC related information to an annex. They also suggested adding an FFS note on how a possible EDN selection conflict is handled.

**Decision:** The document was **revised to S6-191884**.

**S6-191884 Pseudo-CR on solution to Key Issues 4 and 8**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Vodafone, Nokia*

(Replaces S6-191692)

**Discussion:**

Vodafone presented the document available as S6-191884.

The only changes are:

 - replacing all occurences of application ID with application client ID and

 - removing changes on changes.

With the above changes the revised contribution, S6-191987, is considered pre-approved.

**Decision:** The document was **revised to S6-191987**.

**S6-191987 Pseudo-CR on solution to Key Issues 4 and 8**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Vodafone, Nokia*

(Replaces S6-191884)

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

**S6-191723 Pseudo-CR on Solution to Edge Application Server discover and update**

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

**Abstract:**

This pCR proposes to introduce a new solution to Key Issue 4: Edge Application Server discovery. This solution reuses the DNS mechanism by enabling the UE to include the UE in the DNS query.

**Discussion:**

Huawei presented the document available as S6-191723.

Qualcomm requested a note stating it is FFS whether the IETF protocol needs to be updated.

**Decision:** The document was **revised to S6-191885**.

**S6-191885 Pseudo-CR on Solution to Edge Application Server discover and update**

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

(Replaces S6-191723)

**Discussion:**

Huawei presented the document available as S6-191885.

Samsung suggested removing the step 3 in figure 7.x.1-1.

**Decision:** The document was **revised to S6-191956**.

**S6-191956 Pseudo-CR on Solution to Edge Application Server discover and update**

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

(Replaces S6-191885)

**Discussion:**

Huawei presented the document available as S6-191956.

Samsung made a number of comments and did not agree with the solution evaluation. They noted they would appreciate a discussion paepr explaining the solution concept.

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

**S6-191725 Edge Application Server Discovery based on DNS**

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

**Abstract:**

This contributon addresses the key issue#4: Edge Application Server Discovery as specified in subclause 4.4 and describes how to discover Edge Application Server reusing the mechanism of Domain Name System (DNS) without additional impacts on UE.

**Discussion:**

Huawei presented the document available as S6-191725.

Samsung was of the view that the procedure would be better handeld in SA2 as it, by looking at the flow, did not concern any "SA6 entities".

Motorola Mobility was also of the view that the proposal should be discussed within SA2.

Qualcomm suggested at least rewording the proposal to simply refer to required SA2 procedures asking e.g. to provide the UE location.

It was also suggested merging suitable parts (if any) of the contribution into S6-191885, but finally decided to revise the contribution.

**Decision:** The document was **revised to S6-191886**.

**S6-191886 Edge Application Server Discovery based on DNS**

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

(Replaces S6-191725)

**Discussion:**

Huawei presented the document available as S6-191886.

Samsung was of the view that the contribution still included requirements for SA2 (defined processes).

Qualcomm suggested taking the contribution to SA2 as they have the key to solving the issue.

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

**S6-191737 Solution Evaluation - Solution #4**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

**Abstract:**

This contribution provides evaluation of solution #4 and resolves the following EN:

"Edtior's Note: It is FFS how to determine UE Identifier which should be addressed by other solutions."

**Discussion:**

Samsung presented the document available as S6-191737.

The only change is to replace the last paragraph of clause 6.4.2 with

The last paragraph in 7.4.2

This solution provides the location of the UEs to the Edge Application servers that correspond to key issue #5.

With the above change the revised contribution, S6-191887, is considered pre-approved.

**Decision:** The document was **revised to S6-191887**.

**S6-191887 Solution Evaluation - Solution #4**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

(Replaces S6-191737)

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

**S6-191738 Solution Evaluation - Solution #5**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

**Abstract:**

This contribution provides evaluation of solution #5 and documents dependency on other working groups as part of the solution evaluation.

**Discussion:**

Samsung presented the document available as S6-191738.

Intel KK suggested slight rewording of the editor's note.

It was suggested to rephrase the last paragraph of clause 7.5.2.

**Decision:** The document was **revised to S6-191888**.

**S6-191888 Solution Evaluation - Solution #5**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

(Replaces S6-191738)

**Discussion:**

Samsung presented the document available as S6-191888.

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

**S6-191781 Solution for User plane management event API**

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

**Abstract:**

This contribution proposes a solution for user plane management event API.

**Discussion:**

Huawei presented the document available as S6-191781.

Intel KK suggested to clarify the case where the UE is moving to a new location i.e unsubscription.

**Decision:** The document was **revised to S6-191889**.

**S6-191889 Solution for User plane management event API**

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

(Replaces S6-191781)

**Discussion:**

Huawei presented the document available as S6-191889.

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

**S6-191746 Pseudo-CR on EES supporting centralized CAPIF**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

**Abstract:**

This contribution provides proposal to resolve below editor's note with an alternative proposal for solution to key issue#5 using centralized CAPIF mechanism.

"Editor's note: Solution to support multiple edge data networks can utilize a centralized CAPIF core function of the PLMN operator is FFS."

Also for addressing the EN about obtaining UE identifier, the specification already has a solution which has been specified in solution 5 and the proposal to refer the already existing solution.

"Editor's note: When using CAPIF, whether and how edge application servers obtain UE identifiers is FFS".

**Discussion:**

Samsung presented the document available as S6-191746.

Huawei pointed out that the EDGE-3 (CAPIF-1e) and EDGE-3 (CAPIF-1) should be removed from the figure 7.10.3.-1 and from the description.

**Decision:** The document was **revised to S6-191890**.

**S6-191890 Pseudo-CR on EES supporting centralized CAPIF**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

(Replaces S6-191746)

**Discussion:**

Samsung presented the document available as S6-191890.

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

**S6-191777 Solution for Edge application service APIs publish and discovery**

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

**Abstract:**

Proposal for Solution for Edge application service APIs publish and discovery.

**Discussion:**

Huawei presented the document available as S6-191777.

Samsung made a remark that Edge Application should be changed to Edge Application server. They also were fine with representing CAPIF core function within EDNCS but its usage should be limited to service APIs of the SCEF and NEF. They also suggested including CAPIF-5 since on-boarding is mentioned in the solution.

**Decision:** The document was **revised to S6-191891**.

**S6-191891 Solution for Edge application service APIs publish and discovery**

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

(Replaces S6-191777)

**Discussion:**

Huawei presented the document available as S6-191891.

Samsung suggested slight modification to the figure.

**Decision:** The document was **revised to S6-191837**.

**S6-191837 Solution for Edge application service APIs publish and discovery**

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

(Replaces S6-191891)

**Discussion:**

Huawei presented the document available as S6-191837.

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

**S6-191715 Pseudo-CR on issues regarding to authentication and authorization**

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

**Abstract:**

This contribution addresses issues regarding to authentication and authorization.

**Discussion:**

CATT presented the document available as S6-191715.

Convida supported the proposal but noted there may need for a communication with SA2.

Samsung was of the view the last editor's note in clause 6.2 was not needed.

There was a discussion on whether the editor's note "It’s FFS whether the Authentication/Authorization Function is within the 3GPP operator’s trust domain." should be turned into a refular note.

**Decision:** The document was **revised to S6-191892**.

**S6-191892 Pseudo-CR on issues regarding to authentication and authorization**

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

(Replaces S6-191715)

**Discussion:**

CATT presented the document available as S6-191892.

InterDigital suggested rewording the last editor's note before step 2 along the lines of "The solution of Authentication/Authorization between UE and 3GPP CN is FFS."

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

**S6-191699 Solution 6 Update**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

**Abstract:**

The present contribution discusses the editor's notes in the solution #6 (clause 7.6) and proposes to resolve the following editor's notes:

 - Editor's Note: It is FFS how to retrieve an application profile from the UDM is the scope of SA2.

 - Editor's Note: The detailed contents of application profile information is FFS.

**Discussion:**

Samsung presented the document available as S6-191699.

Convida noted that the contribution states the UE has a user profile which in their view was incorrect.

It was suggested to remove the second paragraph of clause 7.6.2.

It was suggest to refine the step 5 of the procedure.

**Decision:** The document was **revised to S6-191893**.

**S6-191893 Solution 6 Update**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

(Replaces S6-191699)

**Discussion:**

Samsung presented the document available as S6-191893.

The only change is reverting the deletion of the editor's note in clause 7.6.1 (Editor's Note: It is FFS what is the authorized application profiles.).

With the above changes the revised contribution, S6-191988, is considered pre-approved.

**Decision:** The document was **revised to S6-191988**.

**S6-191988 Solution 6 Update**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

(Replaces S6-191893)

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

**S6-191739 Pseudo-CR on Solution Evaluation – Solution #7**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

**Abstract:**

This contribution provides an evaluation of the solution #7.

Also, it converts the following EN on converging this solution with solution for discovery into a NOTE in the solution evaluation.

"Editor's Note: This procedure and the procedure for discovery of Edge Application Servers may be converged into a single procedure during normative work".

**Discussion:**

Samsung presented the document available as S6-191739.

Qualcomm requested the sentence "This is the only solution to key issue #10 and will be considered for the normative phase." in the evaluation to be rephrased.

InterDigital suggested to provide some pros and cons in the evaluation.

**Decision:** The document was **revised to S6-191894**.

**S6-191894 Pseudo-CR on Solution Evaluation – Solution #7**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

(Replaces S6-191739)

**Discussion:**

Samsung presented the document available as S6-191894.

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

**S6-191637 Update to Solution #8 on Registering Edge Enabler Client on Edge Enabler Server**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC*

**Abstract:**

Solution #8 describes how the Edge Enabler Client uses the configuration information and security credentials to register to the Edge Enabler Server.

This document proposes to update solution #8 so that the Edge Enabler Client can optionally provide its operating profile in the registration request. The operating profile indicates to the Edge Enabler Server how the Edge Enabler Client expects to use the services of the Edge Enabler Server. The Edge Enabler Server may then register the Edge Enabler Client if it can provide the services.

**Discussion:**

Convida presented the document available as S6-191637.

A typo was pointed out "intendeds".

It was also discussed whether a reference to the QoS levels should be included.

**Decision:** The document was **revised to S6-191895**.

**S6-191895 Update to Solution #8 on Registering Edge Enabler Client on Edge Enabler Server**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC, Samsung*

(Replaces S6-191637)

**Discussion:**

Convida presented the document available as S6-191895.

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

**S6-191740 Validity of registration information across EES**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

**Discussion:**

Samsung presented the document available as S6-191740.

Convida was fo the view that some of the changes were more related to key issue#2. They also suggested this proposal could be merged into S6-191895.

Also some terminology changes were suggested.

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

**S6-191709 Solution #9 update about application context relocation**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

**Abstract:**

This pCR is proposed to revise the solution #9 about the application context relocation. In the solution #9, the Source Edge Application Server triggers application context relocation; however, it is more desirable for the Source Edge Enabler Server to in

**Discussion:**

Samsung presented the document available as S6-191709.

Qualcomm suggested clarifying how the step 2 is triggered. They also suggested mofying the step 11 to show a successful transfer acknowledgement in the opposite direction i.e. from the target entity.

Intel indicated they had some comments they would provide offline.

**Decision:** The document was **revised to S6-191896**.

**S6-191896 New solution to KI#9 about application context relocation**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

(Replaces S6-191709)

**Discussion:**

Samsung presented the document available as S6-191896.

Huawei pointed out that all the text should be revision marked.

**Decision:** The document was **revised to S6-191838**.

**S6-191838 New solution to KI#9 about application context relocation**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

(Replaces S6-191896)

**Discussion:**

Samsung presented the document available as S6-191838.

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

**S6-191779 Solution for Edge enabler server registration**

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

**Abstract:**

Proposal for Solution for Edge enabler server registration.

**Discussion:**

Huawei presented the document available as S6-191779.

It was noted that this solution will require a new refernce point in the architecture.

Qualcomm raised some concerns in relation to the sentence "The Edge Application Servers available on the Edge Hosting Environment needs to register the edge application information on the edge data network."

**Decision:** The document was **revised to S6-191897**.

**S6-191897 Solution for Edge enabler server registration**

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

(Replaces S6-191779)

**Discussion:**

Huawei presented the document available as S6-191897.

Samsung suggested deleting the "(e.g. edge application URI (FQDN), Edge application server IP address, status, Edge Enabler Server IP address)" from step 2 in clause 7.y.1. They also suggested rephrasing the solution evaluation stating "This solution satisfies the key issue#9.."

**Decision:** The document was **revised to S6-191839**.

**S6-191839 Solution for Edge enabler server registration**

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

(Replaces S6-191897)

**Discussion:**

Huawei presented the document available as S6-191839.

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

**S6-191782 Solution for Fetch target Edge AS API**

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

**Abstract:**

Proposal for Solution for Fetch target Edge AS API.

**Discussion:**

Huawei presented the document available as S6-191782.

**Decision:** The document was **revised to S6-191898**.

**S6-191898 Solution for Fetch target Edge AS API**

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

(Replaces S6-191782)

**Discussion:**

Huawei presented the document available as S6-191898.

**Decision:** The document was **revised to S6-191840**.

**S6-191840 Solution for Fetch target Edge AS API**

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

(Replaces S6-191898)

**Discussion:**

Huawei presented the document available as S6-191840.

Samsung suggested deleting DNAI.

**Decision:** The document was **revised to S6-191992**.

**S6-191992 Solution for Fetch target Edge AS API**

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

(Replaces S6-191840)

**Discussion:**

Huawei presented the document available as S6-191992.

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

**S6-191780 Update to solution 9**

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

**Abstract:**

Proposal for Update to solution 9.

**Discussion:**

Huawei presented the document available as S6-191780.

Qualcomm requested to further clarify the exact deployment scenario.

**Decision:** The document was **revised to S6-191899**.

**S6-191899 Update to solution 9**

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

(Replaces S6-191780)

**Discussion:**

Huawei presented the document available as S6-191899.

Qualcomm was of the view that their initial comments (related to step 3) had not been addressed. They also suggested deleting the editor's note on MPTCP.

Samsung suggested removing the DNS references as it was not needed anymore.

**Decision:** The document was **revised to S6-191842**.

**S6-191842 Update to solution 9**

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

(Replaces S6-191899)

**Discussion:**

Huawei presented the document available as S6-191842.

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

**S6-191640 Key Issue #9 Solution on Preserving Service Continuity**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC*

**Abstract:**

Key Issue #9 is on Preserving Service Continuity.

Solution #9 assumes that the Edge Application Server can decide when the UE’s application context needs to be relocated. This assumption is valid in many, but not all cases.

This paper presents a solution where the UE (e.g. an Application Client) decides that the UE’s application context needs to be relocated.

**Discussion:**

Convida presented the document available as S6-191640.

Motorola Mobility was of the view that steps 1 and 2 were not necessary, and could hence be shown as optional.

**Decision:** The document was **revised to S6-191900**.

**S6-191900 Key Issue #9 Solution on Preserving Service Continuity**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Convida Wireless LLC, Samsung*

(Replaces S6-191640)

**Discussion:**

Convida presented the document available as S6-191900.

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

**S6-191700 New solution for application context relocation**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

**Abstract:**

This pCR proposes a new solution for application context relocation.

**Discussion:**

Samsung presented the document available as S6-191700.

Qualcomm made a number of comments e.g. that there was a conditional process in the flow while the pre-condition stated the information was mandatory.

There was also some discussion whether the first procedure was needed, given it was similar to the one in S6-191900.

**Decision:** The document was **revised to S6-191901**.

**S6-191901 New solution for application context relocation**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

(Replaces S6-191700)

**Discussion:**

Samsung presented the document available as S6-191901.

It was pointed out that the contribution had changes on changes.

Qualcomm suggested a note between steps 12 and 13 along the lines:

The Source EDGE application server may pause its transmission to the application client during the application context transfer, after context transfer completion the target EDGE application server serves the application client.

Intel KK however raised concernt with the above proposes note.

**Decision:** The document was **revised to S6-191843**.

**S6-191843 New solution for application context relocation**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung*

(Replaces S6-191901)

**Discussion:**

Samsung presented the document available as S6-191843.

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

**S6-191689 Solution for preserving service continuity**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Intel K.K.*

**Abstract:**

This pCR proposes a solution for the key issue about preserving service continuity in Edge DN environments.

Parts of this proposed solution can also be used as solutions for other key issues.

**Discussion:**

Intel KK presented the document available as S6-191689.

InterDigital made a remark the term Power on has a very specific meaning and it might not be what is intended here.

Qualcomm made several comments e.g. that in step "responds with addresses" should just refer to information not addresses. They will also provide some comments offline.

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

**S6-191724 Pseudo-CR on Update deployment scenarios with applicable conditions**

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

**Abstract:**

This pCR proposes to update clause 8 deployment scenarios with applicable conditions.

**Discussion:**

Huawei presented the document available as S6-191724.

**Decision:** The document was **revised to S6-191902**.

**S6-191902 Pseudo-CR on Update deployment scenarios with applicable conditions**

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

(Replaces S6-191724)

**Discussion:**

Huawei presented the document available as S6-191902.

Samsung was of the view that the first sentence of the note in clause 8.2 was not always true.

Qualcomm suggested simply to the delete the first sentence.

There was also a suggestion to replace the notes in clauses 8.2 and 8.3 with "The service continuity may not be preserved when the capplication server that is serving the application client changes from cloud to the Edge Data Networks."

Finally the above wording was nt agreed to.

**Decision:** The document was **revised to S6-191844**.

**S6-191844 Pseudo-CR on Update deployment scenarios with applicable conditions**

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

(Replaces S6-191902)

**Discussion:**

Huawei presented the document available as S6-191844.

Qualcomm raised a concern with the second sentence of the notes stating "..may fail to satisfy the application requirements" while also the opposite might be correct. They hence suggested to reduce the notes to the first sentence only.

**Decision:** The document was **revised to S6-192000**.

**S6-192000 Pseudo-CR on Update deployment scenarios with applicable conditions**

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

(Replaces S6-191844)

**Discussion:**

Huawei presented the document available as S6-192000.

Discussion continued on the proposed wording of the notes.

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

**S6-191741 Overall Evaluations**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

**Abstract:**

This contribution provides text for overall evaluations of the architecture, key issues and the solutions.

**Discussion:**

Samsung presented the document available as S6-191741.

**Decision:** The document was **revised to S6-191903**.

**S6-191903 Overall Evaluations**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

(Replaces S6-191741)

**Discussion:**

Samsung presented the document available as S6-191903.

The only change is replacing the term "revisited" with "updated".

With the above changes the revised contribution, S6-191845, is considered pre-approved.

**Decision:** The document was **revised to S6-191845**.

**S6-191845 Overall Evaluations**

 *Type: pCR For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

(Replaces S6-191903)

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

**S6-191742 Coversheet\_TR 23.758 Presentation to TSG**

 *Type: TS or TR cover For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

**Discussion:**

Samsung presented the document available as S6-191742.

The only change is updating the number of key issues.

With the above changes the revised contribution, S6-192004, is considered pre-approved.

**Decision:** The document was **revised to S6-192004**.

**S6-192004 Coversheet\_TR 23.758 Presentation to TSG**

 *Type: TS or TR cover For: Approval
 23.758 v0.3.0
 Source: Samsung Electronics*

(Replaces S6-191742)

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

### 11.6 FS\_eV2XAPP – Study on Enhancements to application layer support for V2X services

**S6-191719 pCR new key issue on supporting tele-operated driving**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

**Abstract:**

New key issue for studying supporting functions for tele-operated driving.

**Discussion:**

Ericsson presented the document available as S6-191719.

**Decision:** The document was **revised to S6-191905**.

**S6-191905 pCR new key issue on supporting tele-operated driving**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

(Replaces S6-191719)

**Discussion:**

Ericsson presented the document available as S6-191905.

Qualcomm did not agree with the wording of the topic requiring further study in particular is being session oriented. They hence suggested to revert to the previous version of the proposal.

The only changes are:

 - deleting the last sentence of the first paragraph of clause 5.x

 - rephrase the bullet in clause 5.x to read "supporting functions are required at the VAE layer to enable tele-operated driving between the V2X application server and one or more V2X UEs."

With the above changes the revised contribution, S6-191963, is considered pre-approved.

**Decision:** The document was **revised to S6-191963**.

**S6-191963 pCR new key issue on supporting tele-operated driving**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

(Replaces S6-191905)

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

**S6-191720 pCR new key issue V2X message distribution over Uu**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

**Abstract:**

New key issue on V2X message distribution over Uu reference point

**Discussion:**

Ericsson presented the document available as S6-191720.

**Decision:** The document was **revised to S6-191906**.

**S6-191906 pCR new key issue V2X message distribution over Uu**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

(Replaces S6-191720)

**Discussion:**

Ericsson presented the document available as S6-191906.

There was a suggestion to replace function with entity in "..VAE server as one function.."

Huawei suggested giving examples on the intended control functions.

**Decision:** The document was **revised to S6-191964**.

**S6-191964 pCR new key issue V2X message distribution over Uu**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

(Replaces S6-191906)

**Discussion:**

Ericsson presented the document available as S6-191964.

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

**S6-191788 Proposal for key issue on multi-PLMN coordination**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

This contribution proposes a new key issue on multi-PLMN coordination by application layer.

**Discussion:**

Huawei presented the document available as S6-191788.

Ericsson made a number of comments e.g. whether both of the two proposed architectures should be considered.

**Decision:** The document was **revised to S6-191907**.

**S6-191907 Proposal for key issue on multi-PLMN coordination**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191788)

**Discussion:**

Huawei presented the document available as S6-191907.

It was suggested to delete the first sentence of the 1st paragraph and the references.

Qualcomm suggested deleting "for the aforementioned multi-PLMN scenarios as concluded in [x]".

**Decision:** The document was **revised to S6-191965**.

**S6-191965 Proposal for key issue on multi-PLMN coordination**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191907)

**Discussion:**

Huawei presented the document available as S6-191965.

There was some discussion on rewording the second sentence of the first pargraph of clause x.x.

Qualcomm suggested removing the words "efficiently" and "efficent".

The only changes are:

 - replace second sentence of the first pargraph of clause x.x. "Basic safety critical services or advanced driving assistance applications as platooning are some examples of V2X services that may be in multiple PLMN environments." and

 - removing the terms "efficiently" and "efficent".

With the above changes the revised contribution, S6-192001, is considered pre-approved.

**Decision:** The document was **revised to S6-192001**.

**S6-192001 Proposal for key issue on multi-PLMN coordination**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191965)

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

**S6-191721 pCR architecture requirements**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

**Abstract:**

This contribution proposes a new requirement for V2X message distribution from V2X application server to V2X UE.

**Discussion:**

Ericsson presented the document available as S6-191721.

Samsung was of the view that this requirement was already covered. However if it is decided to include the requirement then it should be split into two (geographic area and service information).

Huawei suggested a CR into rel-16.

Qualcomm was of the view that there was no new functionality proposed here.

**Decision:** The document was **revised to S6-191908**.

**S6-191908 pCR architecture requirements**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

(Replaces S6-191721)

**Discussion:**

Ericsson presented the document available as S6-191908.

Qualcomm requested an editor's note on the proposed requirement.

The only change is adding and editor's note in clause 6.x.2 stating"The requirement is FFS and based on the evaluation of the related key issue #x "Support for Tele-operated driving"."

With the above changes the revised contribution, S6-191966, is considered pre-approved.

**Decision:** The document was **revised to S6-191966**.

**S6-191966 pCR architecture requirements**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

(Replaces S6-191908)

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

**S6-191722 pCR solution for supporting tele-operated driving**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

**Abstract:**

This contribution proposes a new solution for key issue #X for supporting tele-operated driving at the VAE layer.

**Discussion:**

Ericsson presented the document available as S6-191722.

Qualcomm was of the view that this proposal was simply a case of message distribution.

It was decided to discuss further offline.

**Decision:** The document was **revised to S6-191909**.

**S6-191909 pCR solution for supporting tele-operated driving**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

(Replaces S6-191722)

**Discussion:**

Ericsson presented the document available as S6-191909.

Qualcomm did not support the proposal based on various reasons e.g. the requirement not being backed by SA1 requirements.

**Decision:** The document was **revised to S6-191967**.

**S6-191967 pCR solution for supporting tele-operated driving**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

(Replaces S6-191909)

**Discussion:**

Ericsson presented the document available as S6-191967.

Qualcomm raised a concern with the proposal.

The only change is to add an editor's note in clause 7.x.1.1 reading "EN: This solution is FFS and dependent on the complete understanding of the related key issue and the adoption of the derived requirements."

With the above changes the revised contribution, S6-192002, is considered pre-approved.

**Decision:** The document was **revised to S6-192002**.

**S6-192002 pCR solution for supporting tele-operated driving**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Ericsson France S.A.S*

(Replaces S6-191967)

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

**S6-191787 Proposal for solution to key issue on Uu QoS monitoring and control**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for solution to key issue on Uu QoS monitoring and control

**Discussion:**

Huawei presented the document available as S6-191787.

Qualcomm was of the view that the solution did not match the requirement i.e. the QoS monitoring was not the actual requirement.

**Decision:** The document was **revised to S6-191910**.

**S6-191910 Proposal for solution to key issue on Uu QoS monitoring and control**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191787)

**Discussion:**

Huawei presented the document available as S6-191910.

Qualcomm suggested making the step 7 consistent in the figure and description.

**Decision:** The document was **revised to S6-191968**.

**S6-191968 Proposal for solution to key issue on Uu QoS monitoring and control**

 *Type: pCR For: Approval
 23.764 v0.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191910)

**Discussion:**

Huawei presented the document available as S6-191968.

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

### 11.7 FS\_5GMARCH – Study on support of the 5GMSG Service

**S6-191629 Payload size of 2048 octets in Broadcast**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: one2many B.V.*

**Abstract:**

Proposal for Solution X

**Discussion:**

one2many presented the document available as S6-191629.

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

**S6-191633 Removal of Requirement**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: one2many B.V.*

**Abstract:**

Removal of requirement that cannot be fulfilled

**Discussion:**

one2many presented the document available as S6-191633.

**Decision:** The document was **revised to S6-191829**.

**S6-191829 Removal of Requirement**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: one2many B.V.*

(Replaces S6-191633)

**Discussion:**

one2many presented the document available as S6-191829.

Some style issues were pointed out. This will be corrected by the rapporteur.

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

**S6-191634 Pseudo-CR on MSGin5G Architecture Considerations**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: one2many B.V.*

**Abstract:**

The figures that illustrate the MSGin5G scenarios need to be mapped onto the 5G architecture. This contribution analyses some options.

The conbtribution is allocated to Annex A because the skeleton has not foreseen in architecture considerations for the MSGin5G message service. A diiferent allocation could be decided upon.

**Discussion:**

one2many presented the document available as S6-191634.

**Decision:** The document was **revised to S6-191836**.

**S6-191836 Pseudo-CR on MSGin5G Architecture Considerations**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: one2many B.V.*

(Replaces S6-191634)

**Discussion:**

one2many presented the document available as S6-191836.

It was pointed out the figure should be updated.

**Decision:** The document was **revised to S6-191989**.

**S6-191989 Pseudo-CR on MSGin5G Architecture Considerations**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: one2many B.V.*

(Replaces S6-191836)

**Discussion:**

one2many presented the document available as S6-191989.

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

**S6-191681 Pseudo-CR on Two Key Issues**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: one2many B.V.*

**Abstract:**

Two key issues are provided for message transfer from a UE towards the MSGin5G Server and for the role of the MSGin5G Gateway in message delivery towards UE D.

**Discussion:**

one2many presented the document available as S6-191681.

**Decision:** The document was **revised to S6-191835**.

**S6-191835 Pseudo-CR on Two Key Issues**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: one2many B.V.*

(Replaces S6-191681)

**Discussion:**

one2many presented the document available as S6-191835.

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

**S6-191701 pCR FS\_5GMARCH identifier of the UE**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Mobile Com. Corporation*

**Discussion:**

China Mobile presented the document available as S6-191701.

**Decision:** The document was **revised to S6-191832**.

**S6-191832 pCR FS\_5GMARCH identifier of the UE**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Mobile Com. Corporation*

(Replaces S6-191701)

**Discussion:**

China Mobile presented the document available as S6-191832.

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

**S6-191702 pCR FS\_5GMARCH network triggering the UE**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Mobile Com. Corporation*

**Discussion:**

China Mobile presented the document available as S6-191702.

**Decision:** The document was **revised to S6-191833**.

**S6-191833 pCR FS\_5GMARCH network triggering the UE**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Mobile Com. Corporation*

(Replaces S6-191702)

**Discussion:**

China Mobile presented the document available as S6-191833.

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

**S6-191703 pCR FS\_5GMARCH group message**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Mobile Com. Corporation*

**Discussion:**

China Mobile presented the document available as S6-191703.

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

**S6-191704 pCR FS\_5GMARCH group management**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Mobile Com. Corporation*

**Discussion:**

China Mobile presented the document available as S6-191704.

**Decision:** The document was **revised to S6-191834**.

**S6-191834 pCR FS\_5GMARCH group management**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Mobile Com. Corporation*

(Replaces S6-191704)

**Discussion:**

China Mobile presented the document available as S6-191834.

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

**S6-191705 Pseudo-CR on FS\_5GMARCH broadcast message scenarios**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Unicom*

**Discussion:**

China Unicom presented the document available as S6-191705.

**Decision:** The document was **revised to S6-191830**.

**S6-191830 Pseudo-CR on FS\_5GMARCH broadcast message scenarios**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Unicom*

(Replaces S6-191705)

**Discussion:**

China Unicom presented the document available as S6-191830.

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

**S6-191706 Pseudo-CR on FS\_5GMARCH group message scenarios**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Unicom*

**Discussion:**

China Unicom presented the document available as S6-191706.

**Decision:** The document was **revised to S6-191831**.

**S6-191831 Pseudo-CR on FS\_5GMARCH group message scenarios**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Unicom*

(Replaces S6-191706)

**Discussion:**

China Unicom presented the document available as S6-191831.

Samsung pointed out an error in the figure.

The only change is to modify the dotted line in figure 4.4.x-1, so that the dotted line goes through the "5G system" box.

With the above changes the revised contribution, S6-191971, is considered pre-approved.

**Decision:** The document was **revised to S6-191971**.

**S6-191971 Pseudo-CR on FS\_5GMARCH group message scenarios**

 *Type: pCR For: Approval
 23.700-24 v0.1.0
 Source: China Unicom*

(Replaces S6-191831)

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

## 12 Future work / New WIDs (including related contributions)

**S6-191649 Scope and References sections for TR 23.xxx (SID FS\_MC5MBS)**

 *Type: other For: Agreement
 Source: AT&T*

**Abstract:**

This pCR contributes text for TR 23.xxx as part of the study on Mission Critical services over 5G multicast-broadcast system (FS\_MC5MBS). Consistent with the SID’s objectives (see S6-191619), the contribution proposes studying new/enhanced capabilities to ultimately be covered in SA6 specifications and identifying required support that SA6 can ask RAN and SA2 groups to include in the 5G system.

The pCR provides text for the Scope and References sections.

**Discussion:**

AT&T presented the document available as S6-191649.

Ericsson did not think it was necessary to bring the TR 23.780 into the scope of the document.

Motorola Solutions agreed with the view of Ericsson.

Huawei also was fo the view there was no need to refer to the TR 23.780 in the scope.

Qualcomm also suggested rempving stage 3 specifications from the references.

**Decision:** The document was **revised to S6-191927**.

**S6-191927 Scope section for TR 23.xxx (SID FS\_MC5MBS)**

 *Type: other For: Agreement
 Source: AT&T*

(Replaces S6-191649)

**Discussion:**

AT&T presented the document available as S6-191927.

The only change is correcting the document number in the header of the document.

With the above changes the revised contribution, S6-191979, is considered pre-approved.

**Decision:** The document was **revised to S6-191979**.

**S6-191979 Scope section for TR 23.xxx (SID FS\_MC5MBS)**

 *Type: other For: Agreement
 Source: AT&T*

(Replaces S6-191927)

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

**S6-191650 New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Enabling of unicast-multicast switching**

 *Type: other For: Agreement
 Source: AT&T*

**Abstract:**

Adds key issue "Enabling of informed unicast-multicast switching", to study in TR 23.xxx "Study on enhanced Mission Critical services over 5G multicast-broadcast system" (FS\_MC5MBS).

**Discussion:**

AT&T presented the document available as S6-191650.

One2many did not see how the second bullet in clause 5.1.1 was related to multicast.

Samsung was of the view that the proposal seemed to go too much in to a specific detail.

Qualcomm was of the view that there much detailed solution included that was not related to the key issue. They also suggested replacing in the title the word informed with optimal.

Motorola Solutions thought the title would read better with the word informed and that the use of optimal would result in a different key issue.

**Decision:** The document was **revised to S6-191928**.

**S6-191928 New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Enabling of unicast-multicast switching**

 *Type: other For: Agreement
 Source: AT&T*

(Replaces S6-191650)

**Discussion:**

AT&T presented the document available as S6-191928.

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

**S6-191651 New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Resource efficient group call mode**

 *Type: other For: Agreement
 Source: AT&T*

**Abstract:**

Adds key issue "Resource efficient group call mode", to study in TR 23.xxx "Study on enhanced Mission Critical services over 5G multicast-broadcast system" (FS\_MC5MBS).

**Discussion:**

AT&T presented the document available as S6-191651.

Ericsson was of the view that lot of the text in 5.2.1 constituted a solution and should be removed.

Qualcomm agreed with the view that the text until the paragraph starting with "Currently, with the.." should be deleted.

**Decision:** The document was **revised to S6-191930**.

**S6-191930 New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Resource efficient group call mode**

 *Type: other For: Agreement
 Source: AT&T*

(Replaces S6-191651)

**Discussion:**

AT&T presented the document available as S6-191930.

Qualcomm pointed out that "an unnecessary" should read "and unnecessary".

The Police of Netherlands suggested specifying "for the uplink" i.e.

"..allocating unicast bearers for the uplink may be wasteful and unnecessary."

It was also suggested replace call model with traffic model.

**Decision:** The document was **revised to S6-191980**.

**S6-191980 New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Resource efficient group call mode**

 *Type: other For: Agreement
 Source: AT&T*

(Replaces S6-191930)

**Discussion:**

AT&T presented the document available as S6-191980.

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

**S6-191652 New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Large number of UEs**

 *Type: other For: Agreement
 Source: AT&T*

**Abstract:**

Adds key issue "Large number of UEs", to study in TR 23.xxx "Study on enhanced Mission Critical services over 5G multicast-broadcast system" (FS\_MC5MBS).

**Discussion:**

AT&T presented the document available as S6-191652.

Qualcomm suggested to provide with the MC expertise on the actual traffic pattern required and remove solution related material.

**Decision:** The document was **revised to S6-191931**.

**S6-191931 New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Large number of UEs**

 *Type: other For: Agreement
 Source: AT&T*

(Replaces S6-191652)

**Discussion:**

AT&T presented the document available as S6-191931.

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

**S6-191728 Discussion on key aspects in MCX over 5G multicast broadcast**

 *Type: discussion For: Approval
 Source: Huawei, Hisilicon*

**Abstract:**

This contribution gives a presentation covering follwing topics:

 - Consideration of reusing unicast mechanism for 5G MBS,

 - Service performance and service continuity in 5G MBS and

 - MC service directly over 5G MBS.

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191792**.

**S6-191792 Discussion on key aspects in MCX over 5G multicast broadcast**

 *Type: discussion For: Approval
 Source: Huawei, Hisilicon*

(Replaces S6-191728)

**Discussion:**

Huawei presented the document available as S6-191792.

Motorola Systems were of the view that slides 3 and 4 were contradictory to slide 5.

One2many made a remark that SA6 should not tell SA2 how to do their job but tell them what services/features SA6 requires.

Nokia indicated they did not agree with the two last bullets on page 4.

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

**S6-191729 Key issue on consideration of reusing unicast mechanism for 5G MBS**

 *Type: other For: Approval
 Source: Huawei, Hisilicon*

**Abstract:**

This pCR is proposed to introduce a key issue on consideration of reusing unicast mechanism for 5G MBS.

**Discussion:**

Huawei presented the document available as S6-191729.

Motorola Solutions did not think that the key issue was a technical key issue but an bussiness feasibility issue.

Qualcomm pointed out that there was nothing like 4G MBMS or 5G MBMS so the terminology would need to be corrected (e.g. LTE MBMS).

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

**S6-191730 Pseudo-CR on Key issue on MC service directly over 5G MBS**

 *Type: other For: Approval
 Source: Huawei, Hisilicon*

**Abstract:**

This pCR proposes to introduce a key issue on MC service directly over 5G MBS.

**Discussion:**

Huawei presented the document available as S6-191730.

Samsung pointed out that there seemed to be an overlap with the S6-191651.

Ericsson suggested to be more specific about what was the key issue and gap.

AT&T indicated they were happy with the suggestion to merge the present contribution with S6-191651 (revised to S6-191930).

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

**S6-191731 Key issue on Service performance and service continuity in 5G MBS**

 *Type: other For: Approval
 Source: Huawei, Hisilicon*

**Abstract:**

This pCR is proposed to introduce a key issue on service performance and service continuity in 5G MBS.

**Discussion:**

Huawei presented the document available as S6-191731.

Samsung suggested to change the title to functional requirement or similar. They also indicated ther seemed to be an overlap with document S6-191650.

One2many did not support the last bullet in clause 7.y.1.

Motorola Solutions raised concern with all 3 bullets in clause 7.y.1.

The Police of Netherlands suggested to include the latency requirement.

Finally it was decided to merge the present contribution with S6-191932.

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

**S6-191648 Proposed initial technical requirements for RAN and SA2 in support of MBMS/5G for MC**

 *Type: discussion For: Agreement
 Source: AT&T*

**Abstract:**

Identifies some technical requirements for RAN and SA2 in support of mission critical features over MBMS/5G, to be considered by those groups when the 5G system is designed. The pCR proposes text for a LS to be sent in time for the SA#85 and RAN#85 (mid September 2019) to inform those groups and to ask them to provide the requested capabilities.

**Discussion:**

AT&T presented the document available as S6-191648.

After a lengthy discussion it was decided to turn the 3 bullets points into architectural requirements (for 5MBS) and inform relevant groups about the current deficiencies (possible target groups could be e.g. SA, SA2, RAN).

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

**S6-191631 Discussion on generalization of preconfigured regrouping procedures**

 *Type: discussion For: Discussion
 23.280 v..
 Source: FirstNet*

**Abstract:**

This document provides more discussion and potential draft procedures for generalizing most of the preconfigured regroup procedures by moving them from 23.279 to 23.280.

**Discussion:**

FirstNet presented the document available as S6-191631.

Motorola Solutions raised concern and did not support the proposed generalization of preconfigured regroup procedures, in particular making any changes to TS 23.379.

BDBOS and The Police of Netherlands indicated their support fro proposal.

Motorola Solutions was of the view that if going ahead this should be part of a larger work item.

After a lenghty discussion the proposal way forward in the contribution was endorsed (for Rel-17 onwards).

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

**S6-191768 Revised WID MCIOPS**

 *Type: WID revised For: Agreement
 Source: Ericsson*

**Abstract:**

Revised WID on MC services support on IOPS mode of operation.

**Discussion:**

Ericsson presented the document available as S6-191768.

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

**S6-191769 Study on supporting application of Railway Smart Station Services**

 *Type: SID new For: Approval
 Source: Hansung University, LG Uplus*

**Abstract:**

The railway community is considering the railway smart station services for the railway station operations and customers. Many railway companies are planning to adapt the smart station service s and some companies have launched their smart station projec

**Discussion:**

Hansung University presented the document available as S6-191769.

Nokia pointed out that TS22.281 was mentioned twice.

Motorola Solutions raised a concern about where the requirements would come from.

Qualcomm pointed out that referring to non normative should be avoided at all cost, while referring to the bullet stating "Business and performance supporting applications currently included in TR22.889".

**Decision:** The document was **revised to S6-191938**.

**S6-191938 Study on supporting application of Railway Smart Station Services**

 *Type: SID new For: Approval
 Source: Hansung University, LG Uplus*

(Replaces S6-191769)

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

**S6-191932 General Requirements section for TR 23.xxx (SID FS\_MC5MBS)**

 *Type: pCR For: discussion
 Source: AT&T*

**Abstract:**

This pCR contributes text for TR 23.xxx as part of the study on Mission Critical services over 5G multicast-broadcast system (FS\_MC5MBS). The pCR provides text for the General Requirement section.

**Discussion:**

AT&T presented the document available as S6-191932.

Huawei suggested including a reference for the public safety KPIs.

TD Tech raised the question whether " Seamless handover without packet loss for sessions.." meant zero packet loss.

**Decision:** The document was **revised to S6-191852**.

**S6-191852 General Requirements section for TR 23.xxx (SID FS\_MC5MBS)**

 *Type: pCR For: discussion
 Source: AT&T*

(Replaces S6-191932)

**Discussion:**

AT&T presented the document available as S6-191852.

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

**S6-191923 Discussion enhMCLOc**

 *Type: discussion For: discussion
 Source: Motorola*

**Abstract:**

A revision is needed for the SID on Study on location enhancements for mission critical services (SP-190067). Although good progress has been made (the study was sent for information in June) additional time is needed to further develop solutions for the key issues before sending TR 23.744 for approval.

Many solutions continue to be added to the TR. Some refinement of existing key issues and solutions is still occurring.

**Discussion:**

AT&T presented the document available as S6-191923.

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

**S6-191924 Revised SID on location enhancements for mission critical services**

 *Type: SID revised For: discussion
 Source: Motorola*

**Abstract:**

Study on location enhancements for mission critical services.

**Discussion:**

Motorola Solutions presented the document available as S6-191924.

There was a discussion on feasible completion date.

It was decided to delay the completion date to March 2020.

The only change is changing the "For approval at TSG#" date to SA #87 (Mar 2020).

With the above changes the revised contribution, S6-191978, is considered pre-agreed.

**Decision:** The document was **revised to S6-191978**.

**S6-191978 Revised SID on location enhancements for mission critical services**

 *Type: SID revised For: discussion
 Source: Motorola*

(Replaces S6-191924)

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

**S6-191667 Revised SID Study on application layer support for Factories of the Future in 5G network**

 *Type: SID revised For: Agreement
 Source: ZTE Corporation*

**Abstract:**

Study on application layer support for Factories of the Future in 5G network

**Discussion:**

Motorola Solutions presented the document available as S6-191667.

Airbus indicated they wished to be listed as supporting the WID.

The only changes are:

 - adding Airbus as supporting company,

 - inserting the TR number 23.745 and

 - including plenary document header.

With the above changes the revised contribution, S6-191981, is considered pre-agreed.

**Decision:** The document was **revised to S6-191981**.

**S6-191981 Revised SID Study on application layer support for Factories of the Future in 5G network**

 *Type: SID revised For: Agreement
 Source: ZTE Corporation*

(Replaces S6-191667)

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

## 13 Work Plan review

**S6-191925 Work Plan review at SA6#33**

 *Type: other For: discussion
 Source: Qualcomm*

**Discussion:**

The chairman presented the current SA6 work plan available as S6-191925.

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

## 14 Future meetings

**S6-191711 SA6 future meetings 2020-2021**

 *Type: discussion For: Endorsement
 Source: SA6 Chairman*

**Abstract:**

This input provides discussion material, and a proposal for SA6 meeting calendar for year 2021, and as well as a new adhoc meeting in the year 2020.

**Discussion:**

The chairman presented the document available as S6-191711.

Motorola Solutions made remark that they wished SA6 meetings not to coincide with CT meetings, or if they do that they would meet at the same location.

Home Office was in favour of having SA6 meeting coincide (co-located) with CT meetings.

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

## 15 AOB

## 16 Close of the meeting

Report prepared by: MCC

## Annex A: List of contribution documents

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| S6-191621 | SA6 Meeting 33 Agenda | SA6 Chairman | noted |  |  |
| S6-191622 | SA6 Meeting 32 Report | MCC | approved |  |  |
| S6-191623 | SA6 Meeting #33 - Agenda with Tdocs allocation after submission deadline | SA6 Chairman | approved |  |  |
| S6-191624 | SA6 Meeting #33 - Agenda with Tdocs allocation at start of the meeting | SA6 Chairman | approved |  |  |
| S6-191625 | SA6 Meeting #33 - Chairman's notes at end of the meeting | SA6 Chairman | noted |  |  |
| S6-191626 | Reply to LS on application layer support for V2X services | ETSI TC ITS | noted |  |  |
| S6-191627 | Addtion of Location infomation to SDS and Enhance Status | HOME OFFICE | revised |  | S6-191859 |
| S6-191628 | Addition of optional message field to Enhanced Status | HOME OFFICE | withdrawn |  |  |
| S6-191629 | Payload size of 2048 octets in Broadcast | one2many B.V. | approved |  |  |
| S6-191630 | ReplyLS to ETSI ISG MEC on Study on Application Architecture for enabling Edge Applications | 3GPP TSG-SA WG6 | noted |  |  |
| S6-191631 | Discussion on generalization of preconfigured regrouping procedures | FirstNet | noted |  |  |
| S6-191632 | Removal of temporary regroup procedures | FirstNet | postponed |  |  |
| S6-191633 | Removal of Requirement | one2many B.V. | revised |  | S6-191829 |
| S6-191634 | Pseudo-CR on MSGin5G Architecture Considerations | one2many B.V. | revised |  | S6-191836 |
| S6-191635 | Key Issue #3 Solution on Application Server Enablement | Convida Wireless LLC | revised |  | S6-191873 |
| S6-191636 | Update to Key Issue #3 on Edge Application Server enablement on the Edge Hosting Environment | Convida Wireless LLC | revised |  | S6-191868 |
| S6-191637 | Update to Solution #8 on Registering Edge Enabler Client on Edge Enabler Server | Convida Wireless LLC | revised |  | S6-191895 |
| S6-191638 | Update to Solution #1 on Edge Application Server Discovery | Convida Wireless LLC | revised |  | S6-191882 |
| S6-191639 | Update to Solution #2 on Provisioning of Edge Data Network Configuratio | Convida Wireless LLC, Sony | revised |  | S6-191877 |
| S6-191640 | Key Issue #9 Solution on Preserving Service Continuity | Convida Wireless LLC | revised |  | S6-191900 |
| S6-191641 | Pseudo-CR on solution sharing location information outside of 3GPP | BDBOS | not pursued |  |  |
| S6-191642 | Pseudo-CR on solution sharing location information on interconnected MC systems - subscription | BDBOS | revised |  | S6-191823 |
| S6-191643 | Pseudo-CR on solution sharing location information on interconnected MC systems - request | BDBOS | revised |  | S6-191824 |
| S6-191644 | Pseudo-CR on solution sharing location information on interconnected MC systems - authorization | BDBOS | revised |  | S6-191825 |
| S6-191645 | Pseudo-CR on solution sharing location information on interconnected MC systems – cancel subscription | BDBOS | revised |  | S6-191826 |
| S6-191646 | Pseudo-CR on solution sharing location information on interconnected MC systems - cancel | BDBOS | revised |  | S6-191827 |
| S6-191647 | Pseudo-CR on use case, key issue and solution for location service on past location information | BDBOS | revised |  | S6-191828 |
| S6-191648 | Proposed initial technical requirements for RAN and SA2 in support of MBMS/5G for MC  | AT&T | noted |  |  |
| S6-191649 | Scope and References sections for TR 23.xxx (SID FS\_MC5MBS) | AT&T | revised |  | S6-191927 |
| S6-191650 | New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Enabling of unicast-multicast switching  | AT&T | revised |  | S6-191928 |
| S6-191651 | New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Resource efficient group call mode  | AT&T | revised |  | S6-191930 |
| S6-191652 | New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Large number of UEs  | AT&T | revised |  | S6-191931 |
| S6-191653 | functional alias of called party in private call | TD Tech Ltd | revised |  | S6-191807 |
| S6-191654 | Requested priority in the MCPTT user profile configuration data | TD Tech Ltd | postponed |  |  |
| S6-191655 | reference model | ZTE Corporation | revised |  | S6-191911 |
| S6-191656 | 23745-FS\_FFAPP-Application architecture | ZTE Corporation | withdrawn |  |  |
| S6-191657 | Key issue- AGV schedule & navigation | ZTE Corporation | revised |  | S6-191913 |
| S6-191658 | Solution- Transmission application specific information to UE | ZTE Corporation | revised |  | S6-191914 |
| S6-191659 | 23745-FS\_FFAPP-Solution-Obtain application specific event from UE | ZTE Corporation | merged |  | S6-191914 |
| S6-191660 | Application architecture | ZTE Corporation | revised |  | S6-191912 |
| S6-191661 | Key issue- Edge Computing based Industrial application analytics | ZTE Corporation | revised |  | S6-191915 |
| S6-191662 | 23745-FS\_FFAPP-Solution-Edge Computing based industrial application analytics | ZTE Corporation | postponed |  |  |
| S6-191663 | 23745-FS\_FFAPP-Key issue-NWDAF based Industrial application analytics | ZTE Corporation | noted |  |  |
| S6-191664 | 23745-FS\_FFAPP-Solution-NWDAF based industrial application analytics | ZTE Corporation | noted |  |  |
| S6-191665 | Key issue- Geographic location and positioning information support | ZTE Corporation | revised |  | S6-191918 |
| S6-191666 | Solution- Geographic location and positioning information support | ZTE Corporation | revised |  | S6-191917 |
| S6-191667 | Revised SID Study on application layer support for Factories of the Future in 5G network | ZTE Corporation | revised |  | S6-191981 |
| S6-191668 | Status of eMONASTERY2 | Nokia, Nokia Shanghai Bell | noted |  |  |
| S6-191669 | Functional alias activated by default for group and private calls | Nokia, Nokia Shanghai Bell | postponed |  |  |
| S6-191670 | Functional alias activated by default for group and private calls | Nokia, Nokia Shanghai Bell | postponed |  |  |
| S6-191671 | Functional alias activated by default for group and p2p communications | Nokia, Nokia Shanghai Bell | postponed |  |  |
| S6-191672 | Procedure for changing the default functional alias | Nokia, Nokia Shanghai Bell | postponed |  |  |
| S6-191673 | Support of functional aliases as called party address in MCPTT emergency private calls | Nokia, Nokia Shanghai Bell | revised | S6-191279 | S6-191808 |
| S6-191674 | Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation | Nokia, Nokia Shanghai Bell | revised |  | S6-191802 |
| S6-191675 | Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation | Nokia, Nokia Shanghai Bell | revised |  | S6-191803 |
| S6-191676 | Stage 1 requirement reference correction in the user profile data | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S6-191677 | Making functional alias optional in floor control messages | Nokia, Nokia Shanghai Bell | revised |  | S6-191804 |
| S6-191678 | Add enhancements for interworking of MCData SDS with GSM-R SMS | Kapsch CarrierCom | postponed | S6-191460 |  |
| S6-191679 | Add enhancements for interworking of MCPTT group calls with GSM-R | Kapsch CarrierCom | postponed | S6-191307 |  |
| S6-191680 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | revised | S6-191605 | S6-191809 |
| S6-191681 | Pseudo-CR on Two Key Issues | one2many B.V. | revised |  | S6-191835 |
| S6-191682 | Interworking of calling party functional alias | Kapsch CarrierCom France S.A.S | noted |  |  |
| S6-191683 | Functional model update for interconnection and migration | Motorola Solutions UK Ltd. | revised |  | S6-191800 |
| S6-191684 | Discussion on Partially Deployed Edge-DN support | Intel K.K. | noted |  |  |
| S6-191685 | Discussion on EDGE-5 | Intel K.K. | noted |  |  |
| S6-191686 | New RP - EDGE-5 | Intel K.K. | revised |  | S6-191864 |
| S6-191687 | Pseudo-CR on New Key issue: Identities | Intel K.K. | revised |  | S6-191872 |
| S6-191688 | Solution for key issue – Identities | Intel K.K. | merged |  | S6-191872 |
| S6-191689 | Solution for preserving service continuity | Intel K.K. | postponed |  |  |
| S6-191690 | Pseudo-CR on updates to Key Issues 1 and 2 | Vodafone, Nokia | revised |  | S6-191876 |
| S6-191691 | Pseudo-CR on solution to Key Issues 3 | Vodafone, Nokia | revised |  | S6-191874 |
| S6-191692 | Pseudo-CR on solution to Key Issues 4 and 8 | Vodafone, Nokia | revised |  | S6-191884 |
| S6-191693 | Clarification and corrections to support transmission control | AT&T GNS Belgium SPRL | revised |  | S6-191796 |
| S6-191694 | Corrections to the transmission and reception control procedures | AT&T GNS Belgium SPRL | revised |  | S6-191797 |
| S6-191695 | Pseudo-CR on key issue and solution for QoS Management for 5G Edge Network | Alibaba Group | revised | S6-191331 | S6-191793 |
| S6-191696 | Architecture Update (Removal of EN in clause 6.2) | Samsung | revised |  | S6-191865 |
| S6-191697 | Definition Update (Removal of ENs) | Samsung | approved |  |  |
| S6-191698 | Solution 2 update  | Samsung  | revised |  | S6-191881 |
| S6-191699 | Solution 6 Update | Samsung | revised |  | S6-191893 |
| S6-191700 | New solution for application context relocation | Samsung | revised |  | S6-191901 |
| S6-191701 | pCR FS\_5GMARCH identifier of the UE | China Mobile Com. Corporation | revised |  | S6-191832 |
| S6-191702 | pCR FS\_5GMARCH network triggering the UE | China Mobile Com. Corporation | revised |  | S6-191833 |
| S6-191703 | pCR FS\_5GMARCH group message | China Mobile Com. Corporation | approved |  |  |
| S6-191704 | pCR FS\_5GMARCH group management | China Mobile Com. Corporation | revised |  | S6-191834 |
| S6-191705 | Pseudo-CR on FS\_5GMARCH broadcast message scenarios | China Unicom | revised |  | S6-191830 |
| S6-191706 | Pseudo-CR on FS\_5GMARCH group message scenarios | China Unicom | revised |  | S6-191831 |
| S6-191707 | Reply LS on UAS-related terminology and model | SA1 | noted |  |  |
| S6-191708 | Liaison Statement from SC 29/WG 11 to 3GPP SA 2 and SA 6 on NBMP [SC 29/WG 11 N 18738] | ISO IEC | replied to |  |  |
| S6-191709 | Solution #9 update about application context relocation | Samsung | revised |  | S6-191896 |
| S6-191710 | Solution for Edge Application Server’s enablement on an Edge Enabler Server | Samsung | revised |  | S6-191875 |
| S6-191711 | SA6 future meetings 2020-2021 | SA6 Chairman | noted |  |  |
| S6-191712 | Remove 10.5.2.17 Editor's Note | L3Harris Technologies | revised |  | S6-191801 |
| S6-191713 | Update of solution 2 Provisioning of Edge Data Network configuration | Sony | revised |  | S6-191878 |
| S6-191714 | Pseudo-CR on edge application architectural requirements on security | CATT | revised |  | S6-191866 |
| S6-191715 | Pseudo-CR on issues regarding to authentication and authorization | CATT | revised |  | S6-191892 |
| S6-191716 | Pseudo-CR on clarifications to EDN configuration provisioning | CATT | revised |  | S6-191879 |
| S6-191717 | Pseudo-CR on clarifications on EDN configuration server | CATT | revised |  | S6-191867 |
| S6-191718 | Pseudo-CR on key issue 3 addition | CATT | noted |  |  |
| S6-191719 | pCR new key issue on supporting tele-operated driving | Ericsson France S.A.S | revised |  | S6-191905 |
| S6-191720 | pCR new key issue V2X message distribution over Uu | Ericsson France S.A.S | revised |  | S6-191906 |
| S6-191721 | pCR architecture requirements | Ericsson France S.A.S | revised |  | S6-191908 |
| S6-191722 | pCR solution for supporting tele-operated driving | Ericsson France S.A.S | revised |  | S6-191909 |
| S6-191723 | Pseudo-CR on Solution to Edge Application Server discover and update | Huawei, Hisilicon | revised |  | S6-191885 |
| S6-191724 | Pseudo-CR on Update deployment scenarios with applicable conditions | Huawei, Hisilicon | revised |  | S6-191902 |
| S6-191725 | Edge Application Server Discovery based on DNS | Huawei, Hisilicon | revised |  | S6-191886 |
| S6-191726 | Clarification and correction of Edge Data Network | Huawei, Hisilicon | noted |  |  |
| S6-191727 | Update solution #2 with PCF providing EDN connection info | Huawei, Hisilicon | revised |  | S6-191880 |
| S6-191728 | Discussion on key aspects in MCX over 5G multicast broadcast | Huawei, Hisilicon | revised |  | S6-191792 |
| S6-191729 | Key issue on consideration of reusing unicast mechanism for 5G MBS | Huawei, Hisilicon | noted |  |  |
| S6-191730 | Pseudo-CR on Key issue on MC service directly over 5G MBS | Huawei, Hisilicon | merged |  | S6-191930 |
| S6-191731 | Key issue on Service performance and service continuity in 5G MBS | Huawei, Hisilicon | merged |  | S6-191932 |
| S6-191732 | Pseudo-CR on addition of Key Issues on edge application lifecycle management | Nokia Germany | revised |  | S6-191870 |
| S6-191733 | File distribution addressing based on functional alia | Union Inter. Chemins de Fer | revised |  | S6-191810 |
| S6-191734 | IP connectivity for group communication (unicast) | Union Inter. Chemins de Fer | revised |  | S6-191811 |
| S6-191735 | [DRAFT] Reply LS on 3GPP SA6 Study on Edge Computing | SA6 | revised |  | S6-191904 |
| S6-191736 | Pseudo-CR on Solution Evaluation – Solution #1 | Samsung Electronics | revised |  | S6-191883 |
| S6-191737 | Solution Evaluation - Solution #4 | Samsung Electronics | revised |  | S6-191887 |
| S6-191738 | Solution Evaluation - Solution #5 | Samsung Electronics | revised |  | S6-191888 |
| S6-191739 | Pseudo-CR on Solution Evaluation – Solution #7 | Samsung Electronics | revised |  | S6-191894 |
| S6-191740 | Validity of registration information across EES | Samsung Electronics | merged |  | S6-191895 |
| S6-191741 | Overall Evaluations | Samsung Electronics | revised |  | S6-191903 |
| S6-191742 | Coversheet\_TR 23.758 Presentation to TSG | Samsung Electronics | revised |  | S6-192004 |
| S6-191743 | Pseudo-CR on FFAPP Scope Update  | Nokia | revised |  | S6-191919 |
| S6-191744 | Pseudo-CR on Key Issue on Device Onboarding | Nokia, Nokia Shanghai Bell | revised |  | S6-191920 |
| S6-191745 | Group announcement and join | Ericsson, Samsung | agreed | S6-191542 |  |
| S6-191746 | Pseudo-CR on EES supporting centralized CAPIF | Samsung | revised |  | S6-191890 |
| S6-191747 | One-to-one SDS Session upgrade to emergency session | Samsung | revised |  | S6-191798 |
| S6-191748 | Group SDS Session upgrade to emergency/imminent-peril session and cancel in-progress emergency/imminent-peril group state | Samsung | revised |  | S6-191799 |
| S6-191749 | One-to-One Emergency MCData FD | Samsung | revised |  | S6-191855 |
| S6-191750 | Group emergency MCData FD | Samsung | revised |  | S6-191856 |
| S6-191751 | One-to-one FD Session upgrade to emergency session | Samsung | revised |  | S6-191857 |
| S6-191752 | Group FD communication upgrade to emergency/imminent-peril communication and cancel in-progress emergency/imminent-peril group state | Samsung | revised |  | S6-191858 |
| S6-191753 | MCIOPS on a new TS | Ericsson | noted |  |  |
| S6-191754 | MCIOPS TS skeleton | Ericsson | revised |  | S6-191813 |
| S6-191755 | Scope for TS MCIOPS | Ericsson | revised |  | S6-191814 |
| S6-191756 | References for TS MCIOPS | Ericsson | revised |  | S6-191821 |
| S6-191757 | Definitions and abbreviations for TS MCIOPS | Ericsson | revised |  | S6-191815 |
| S6-191758 | Application Priority discussion paper | Union Inter. Chemins de Fer | noted |  |  |
| S6-191759 | Discussion on the support of MC sevices on IOPS | Ericsson | noted |  |  |
| S6-191760 | Introduction for TS MCIOPS | Ericsson | revised |  | S6-191816 |
| S6-191761 | Architectural requirements for MCIOPS | Ericsson | revised |  | S6-191817 |
| S6-191762 | Pseudo-CR on Functional model description for MCIOPS | Ericsson | revised |  | S6-191818 |
| S6-191763 | Application priority and priority levels | Union Inter. Chemins de Fer | revised |  | S6-191806 |
| S6-191764 | Functional entities in MCIOPS | Ericsson | revised |  | S6-191819 |
| S6-191765 | Reference points in MCIOPS | Ericsson | revised |  | S6-191820 |
| S6-191766 | Capability to change remotely the priority of the point-to-point IP connectivity communication | Union Inter. Chemins de Fer | revised |  | S6-191812 |
| S6-191767 | Application of functional model for MCIOPS | Ericsson | revised |  | S6-191822 |
| S6-191768 | Revised WID MCIOPS | Ericsson | agreed |  |  |
| S6-191769 | Study on supporting application of Railway Smart Station Services | Hansung University, LG Uplus | revised |  | S6-191938 |
| S6-191770 | Functionalities with SA2 dependency | Ericsson, Huawei | agreed | S6-191539 |  |
| S6-191771 | Corrections on notifications for network monitoring procedure | Huawei, Hisilicon | revised | S6-191572 | S6-191860 |
| S6-191772 | Addition of missing VAE server APIs | Huawei, Hisilicon | revised |  | S6-191861 |
| S6-191773 | Update the configurations information | Huawei, Hisilicon | revised |  | S6-191862 |
| S6-191774 | Corrections to network resource management procedures | Huawei, Hisilicon | revised | S6-191573 | S6-191863 |
| S6-191775 | Remove EN on bearer type identification | Huawei, Hisilicon | agreed |  |  |
| S6-191776 | Remove EN on granularity of decision of NRM server | Huawei, Hisilicon | agreed |  |  |
| S6-191777 | Solution for Edge application service APIs publish and discovery | Huawei, Hisilicon | revised |  | S6-191891 |
| S6-191778 | Solution for Edge application registration | Huawei, Hisilicon | merged |  | S6-191873 |
| S6-191779 | Solution for Edge enabler server registration | Huawei, Hisilicon | revised |  | S6-191897 |
| S6-191780 | Update to solution 9 | Huawei, Hisilicon | revised |  | S6-191899 |
| S6-191781 | Solution for User plane management event API | Huawei, Hisilicon | revised |  | S6-191889 |
| S6-191782 | Solution for Fetch target Edge AS API | Huawei, Hisilicon | revised |  | S6-191898 |
| S6-191783 | Key issue on enabling FFAPP requirements communications | Huawei, Hisilicon | revised |  | S6-191921 |
| S6-191784 | Solution to establish communications with FFAPP requirements | Huawei, Hisilicon | revised |  | S6-191922 |
| S6-191785 | Key issue on UAS group communications | Huawei, Hisilicon | revised |  | S6-191935 |
| S6-191786 | Key issue on UAV location information | Huawei, Hisilicon | revised |  | S6-191936 |
| S6-191787 | Proposal for solution to key issue on Uu QoS monitoring and control | Huawei, Hisilicon | revised |  | S6-191910 |
| S6-191788 | Proposal for key issue on multi-PLMN coordination | Huawei, Hisilicon | revised |  | S6-191907 |
| S6-191789 | Update to Definitions and Abbreviations | Airbus DS SLC | revised |  | S6-191934 |
| S6-191790 | Update to UAS Reference Model and Description | Airbus DS SLC | revised |  | S6-191937 |
| S6-191791 | Update to Service Requirements Analysis | Airbus DS SLC | approved |  |  |
| S6-191792 | Discussion on key aspects in MCX over 5G multicast broadcast | Huawei, Hisilicon | noted | S6-191728 |  |
| S6-191793 | Pseudo-CR on key issue and solution for QoS Management for 5G Edge Network | Alibaba Group, Vodafone Group | revised | S6-191695 | S6-191869 |
| S6-191794 | LS on restricting incoming private calls | CT1 | replied to |  | - |
| S6-191795 | [DRAFT] Reply LS on on NBMP | SA6 | revised | - | S6-191993 |
| S6-191796 | Clarification and corrections to support transmission control | AT&T GNS Belgium SPRL | revised | S6-191693 | S6-191940 |
| S6-191797 | Corrections to the transmission and reception control procedures | AT&T GNS Belgium SPRL | revised | S6-191694 | S6-191941 |
| S6-191798 | One-to-one SDS Session upgrade to emergency session | Samsung | agreed | S6-191747 | - |
| S6-191799 | Group SDS Session upgrade to emergency/imminent-peril session and cancel in-progress emergency/imminent-peril group state | Samsung | agreed | S6-191748 | - |
| S6-191800 | Functional model update for interconnection and migration | Motorola Solutions UK Ltd. | revised | S6-191683 | S6-191943 |
| S6-191801 | Remove 10.5.2.17 Editor's Note | L3Harris Technologies | agreed | S6-191712 | - |
| S6-191802 | Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation | Nokia, Nokia Shanghai Bell | agreed | S6-191674 | - |
| S6-191803 | Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation | Nokia, Nokia Shanghai Bell | agreed | S6-191675 | - |
| S6-191804 | Making functional alias optional in floor control messages | Nokia, Nokia Shanghai Bell | agreed | S6-191677 | - |
| S6-191805 | Reply LS on restricting incoming private calls | SA6 | approved | - | - |
| S6-191806 | Application priority and priority levels | Union Inter. Chemins de Fer | postponed | S6-191763 | - |
| S6-191807 | functional alias of called party in private call | TD Tech Ltd | agreed | S6-191653 | - |
| S6-191808 | Support of functional aliases as called party address in MCPTT emergency private calls | Nokia, Nokia Shanghai Bell | revised | S6-191673 | S6-191846 |
| S6-191809 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | revised | S6-191680 | S6-191847 |
| S6-191810 | File distribution addressing based on functional alia | Union Inter. Chemins de Fer | revised | S6-191733 | S6-191848 |
| S6-191811 | IP connectivity for group communication (unicast) | Union Inter. Chemins de Fer | revised | S6-191734 | S6-191849 |
| S6-191812 | Capability to change remotely the priority of the point-to-point IP connectivity communication | Union Inter. Chemins de Fer | revised | S6-191766 | S6-191926 |
| S6-191813 | MCIOPS TS skeleton | Ericsson | approved | S6-191754 | - |
| S6-191814 | Scope for TS MCIOPS | Ericsson | approved | S6-191755 | - |
| S6-191815 | Definitions and abbreviations for TS MCIOPS | Ericsson | approved | S6-191757 | - |
| S6-191816 | Introduction for TS MCIOPS | Ericsson | approved | S6-191760 | - |
| S6-191817 | Architectural requirements for MCIOPS | Ericsson | approved | S6-191761 | - |
| S6-191818 | Pseudo-CR on Functional model description for MCIOPS | Ericsson | approved | S6-191762 | - |
| S6-191819 | Functional entities in MCIOPS | Ericsson | revised | S6-191764 | S6-191851 |
| S6-191820 | Reference points in MCIOPS | Ericsson | approved | S6-191765 | - |
| S6-191821 | References for TS MCIOPS | Ericsson | approved | S6-191756 | - |
| S6-191822 | Application of functional model for MCIOPS | Ericsson | approved | S6-191767 | - |
| S6-191823 | Pseudo-CR on solution sharing location information on interconnected MC systems - subscription | BDBOS | approved | S6-191642 | - |
| S6-191824 | Pseudo-CR on solution sharing location information on interconnected MC systems - request | BDBOS | approved | S6-191643 | - |
| S6-191825 | Pseudo-CR on solution sharing location information on interconnected MC systems - authorization | BDBOS | approved | S6-191644 | - |
| S6-191826 | Pseudo-CR on solution sharing location information on interconnected MC systems – cancel subscription | BDBOS | revised | S6-191645 | S6-191976 |
| S6-191827 | Pseudo-CR on solution sharing location information on interconnected MC systems – solution evaluation | BDBOS | approved | S6-191646 | - |
| S6-191828 | Pseudo-CR on use case, key issue and solution for location service on past location information | BDBOS | revised | S6-191647 | S6-191977 |
| S6-191829 | Removal of Requirement | one2many B.V. | approved | S6-191633 | - |
| S6-191830 | Pseudo-CR on FS\_5GMARCH broadcast message scenarios | China Unicom | approved | S6-191705 | - |
| S6-191831 | Pseudo-CR on FS\_5GMARCH group message scenarios | China Unicom | revised | S6-191706 | S6-191971 |
| S6-191832 | pCR FS\_5GMARCH identifier of the UE | China Mobile Com. Corporation | approved | S6-191701 | - |
| S6-191833 | pCR FS\_5GMARCH network triggering the UE | China Mobile Com. Corporation | approved | S6-191702 | - |
| S6-191834 | pCR FS\_5GMARCH group management | China Mobile Com. Corporation | approved | S6-191704 | - |
| S6-191835 | Pseudo-CR on Two Key Issues | one2many B.V. | approved | S6-191681 | - |
| S6-191836 | Pseudo-CR on MSGin5G Architecture Considerations | one2many B.V. | revised | S6-191634 | S6-191989 |
| S6-191837 | Solution for Edge application service APIs publish and discovery | Huawei, Hisilicon | approved | S6-191891 | - |
| S6-191838 | New solution to KI#9 about application context relocation | Samsung | approved | S6-191896 | - |
| S6-191839 | Solution for Edge enabler server registration | Huawei, Hisilicon | approved | S6-191897 | - |
| S6-191840 | Solution for Fetch target Edge AS API | Huawei, Hisilicon | revised | S6-191898 | S6-191992 |
| S6-191841 | Reply LS on 3GPP SA6 Study on Edge Computing | SA6 | approved | S6-191953 | - |
| S6-191842 | Update to solution 9 | Huawei, Hisilicon | approved | S6-191899 | - |
| S6-191843 | New solution for application context relocation | Samsung | approved | S6-191901 | - |
| S6-191844 | Pseudo-CR on Update deployment scenarios with applicable conditions | Huawei, Hisilicon | revised | S6-191902 | S6-192000 |
| S6-191845 | Overall Evaluations | Samsung Electronics | approved | S6-191903 | - |
| S6-191846 | Support of functional aliases as called party address in MCPTT emergency private calls | Nokia, Nokia Shanghai Bell | agreed | S6-191808 | - |
| S6-191847 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | revised | S6-191809 | S6-191990 |
| S6-191848 | File distribution addressing based on functional alia | Union Inter. Chemins de Fer | revised | S6-191810 | S6-191991 |
| S6-191849 | IP connectivity for group communication (unicast) | Union Inter. Chemins de Fer | agreed | S6-191811 | - |
| S6-191850 | Capability to change remotely the priority of the point-to-point IP connectivity communication | Union Inter. Chemins de Fer | agreed | S6-191926 | - |
| S6-191851 | Functional entities in MCIOPS | Ericsson | approved | S6-191819 | - |
| S6-191852 | General Requirements section for TR 23.xxx (SID FS\_MC5MBS) | AT&T | approved | S6-191932 | - |
| S6-191853 | LS on aspects of Mission Critical Services over 5MBS | SA6 | revised | S6-191933 | S6-191994 |
| S6-191854 | reference model | ZTE Corporation | withdrawn | S6-191911 | - |
| S6-191855 | One-to-One Emergency MCData FD | Samsung | revised | S6-191749 | S6-191975 |
| S6-191856 | Group emergency MCData FD | Samsung | agreed | S6-191750 | - |
| S6-191857 | One-to-one FD Session upgrade to emergency session | Samsung | agreed | S6-191751 | - |
| S6-191858 | Group FD communication upgrade to emergency/imminent-peril communication and cancel in-progress emergency/imminent-peril group state | Samsung | agreed | S6-191752 | - |
| S6-191859 | Addtion of Location infomation to SDS and Enhance Status | HOME OFFICE | revised | S6-191627 | S6-191942 |
| S6-191860 | Corrections on notifications for network monitoring procedure | Huawei, Hisilicon | agreed | S6-191771 | - |
| S6-191861 | Addition of missing VAE server APIs | Huawei, Hisilicon | agreed | S6-191772 | - |
| S6-191862 | Update the configurations information | Huawei, Hisilicon | agreed | S6-191773 | - |
| S6-191863 | Corrections to network resource management procedures | Huawei, Hisilicon | revised | S6-191774 | S6-191944 |
| S6-191864 | New RP - EDGE-5 | Intel, AT&T | revised | S6-191686 | S6-191945 |
| S6-191865 | Architecture Update (Removal of EN in clause 6.2) | Samsung | revised | S6-191696 | S6-191946 |
| S6-191866 | Pseudo-CR on edge application architectural requirements on security | CATT | revised | S6-191714 | S6-191947 |
| S6-191867 | Pseudo-CR on clarifications on EDN configuration server | CATT | approved | S6-191717 | - |
| S6-191868 | Update to Key Issue #5 on Edge Application Server enablement on the Edge Hosting Environment | Convida Wireless LLC | revised | S6-191636 | S6-191948 |
| S6-191869 | Pseudo-CR on Key Issue and Solution for QoS Management for 5G Edge Network | Alibaba Group, Vodafone Group | revised | S6-191793 | S6-191972 |
| S6-191870 | Pseudo-CR on addition of Key Issues on edge application lifecycle management | Nokia Germany | revised | S6-191732 | S6-191916 |
| S6-191871 | [DRAFT] LS on Lifecycle Management to support Edge Computing | SA6 | revised | - | S6-191954 |
| S6-191872 | Pseudo-CR on New Key issue: Identities | Intel K.K. | revised | S6-191687 | S6-191973 |
| S6-191873 | Key Issue #3 Solution on Application Server Enablement | Convida Wireless LLC, Vodafone (?), Nokia (?), Samsung, Huawei (?) | revised | S6-191635 | S6-191951 |
| S6-191874 | Pseudo-CR on solution to Key Issues 3 | VODAFONE Group Plc | revised | S6-191691 | S6-191939 |
| S6-191875 | Solution for Edge Application Server’s enablement on an Edge Enabler Server | Samsung | merged | S6-191710 | S6-191951 |
| S6-191876 | Pseudo-CR on updates to Key Issues 1 and 2 | Vodafone, Nokia | revised | S6-191690 | S6-191974 |
| S6-191877 | Update to Solution #2 on Provisioning of Edge Data Network Configuratio | Convida Wireless LLC, Sony | approved | S6-191639 | - |
| S6-191878 | Update of solution 2 Provisioning of Edge Data Network configuration | Sony | revised | S6-191713 | S6-191955 |
| S6-191879 | Pseudo-CR on clarifications to EDN configuration provisioning | CATT | revised | S6-191716 | S6-191950 |
| S6-191880 | Update solution #2 with PCF providing EDN connection info | Huawei, Hisilicon | revised | S6-191727 | S6-191985 |
| S6-191881 | Solution 2 update  | Samsung  | approved | S6-191698 | - |
| S6-191882 | Update to Solution #1 on Edge Application Server Discovery | Convida Wireless LLC | revised | S6-191638 | S6-191986 |
| S6-191883 | Pseudo-CR on Solution Evaluation – Solution #1 | Samsung Electronics | approved | S6-191736 | - |
| S6-191884 | Pseudo-CR on solution to Key Issues 4 and 8 | Vodafone, Nokia | revised | S6-191692 | S6-191987 |
| S6-191885 | Pseudo-CR on Solution to Edge Application Server discover and update | Huawei, Hisilicon | revised | S6-191723 | S6-191956 |
| S6-191886 | Edge Application Server Discovery based on DNS | Huawei, Hisilicon | noted | S6-191725 | - |
| S6-191887 | Solution Evaluation - Solution #4 | Samsung Electronics | approved | S6-191737 | - |
| S6-191888 | Solution Evaluation - Solution #5 | Samsung Electronics | approved | S6-191738 | - |
| S6-191889 | Solution for User plane management event API | Huawei, Hisilicon | approved | S6-191781 | - |
| S6-191890 | Pseudo-CR on EES supporting centralized CAPIF | Samsung | approved | S6-191746 | - |
| S6-191891 | Solution for Edge application service APIs publish and discovery | Huawei, Hisilicon | revised | S6-191777 | S6-191837 |
| S6-191892 | Pseudo-CR on issues regarding to authentication and authorization | CATT | approved | S6-191715 | - |
| S6-191893 | Solution 6 Update | Samsung | revised | S6-191699 | S6-191988 |
| S6-191894 | Pseudo-CR on Solution Evaluation – Solution #7 | Samsung Electronics | approved | S6-191739 | - |
| S6-191895 | Update to Solution #8 on Registering Edge Enabler Client on Edge Enabler Server | Convida Wireless LLC, Samsung | approved | S6-191637 | - |
| S6-191896 | New solution to KI#9 about application context relocation | Samsung | revised | S6-191709 | S6-191838 |
| S6-191897 | Solution for Edge enabler server registration | Huawei, Hisilicon | revised | S6-191779 | S6-191839 |
| S6-191898 | Solution for Fetch target Edge AS API | Huawei, Hisilicon | revised | S6-191782 | S6-191840 |
| S6-191899 | Update to solution 9 | Huawei, Hisilicon | revised | S6-191780 | S6-191842 |
| S6-191900 | Key Issue #9 Solution on Preserving Service Continuity | Convida Wireless LLC, Samsung | approved | S6-191640 | - |
| S6-191901 | New solution for application context relocation | Samsung | revised | S6-191700 | S6-191843 |
| S6-191902 | Pseudo-CR on Update deployment scenarios with applicable conditions | Huawei, Hisilicon | revised | S6-191724 | S6-191844 |
| S6-191903 | Overall Evaluations | Samsung Electronics | revised | S6-191741 | S6-191845 |
| S6-191904 | Reply LS on 3GPP SA6 Study on Edge Computing | SA6 | revised | S6-191735 | S6-191953 |
| S6-191905 | pCR new key issue on supporting tele-operated driving | Ericsson France S.A.S | revised | S6-191719 | S6-191963 |
| S6-191906 | pCR new key issue V2X message distribution over Uu | Ericsson France S.A.S | revised | S6-191720 | S6-191964 |
| S6-191907 | Proposal for key issue on multi-PLMN coordination | Huawei, Hisilicon | revised | S6-191788 | S6-191965 |
| S6-191908 | pCR architecture requirements | Ericsson France S.A.S | revised | S6-191721 | S6-191966 |
| S6-191909 | pCR solution for supporting tele-operated driving | Ericsson France S.A.S | revised | S6-191722 | S6-191967 |
| S6-191910 | Proposal for solution to key issue on Uu QoS monitoring and control | Huawei, Hisilicon | revised | S6-191787 | S6-191968 |
| S6-191911 | reference model | ZTE Corporation | revised | S6-191655 | S6-191854 |
| S6-191912 | Application architecture | ZTE Corporation | revised | S6-191660 | S6-191957 |
| S6-191913 | Key issue- AGV schedule & navigation | ZTE Corporation | revised | S6-191657 | S6-191958 |
| S6-191914 | Solution- AGV application assist information | ZTE Corporation | noted | S6-191658 | - |
| S6-191915 | Key issue- Edge Computing based Industrial application analytics | ZTE Corporation | revised | S6-191661 | S6-191959 |
| S6-191916 | Pseudo-CR on addition of Key Issues on lifecycle management | Nokia, Nokia Shanghai Bell, Samsung | revised | S6-191870 | S6-191949 |
| S6-191917 | Solution- Geographic location and positioning information support | ZTE Corporation | revised | S6-191666 | S6-191960 |
| S6-191918 | Key issue- Geographic location and positioning information support | ZTE Corporation | approved | S6-191665 | - |
| S6-191919 | FFAPP Scope Correction | Nokia | revised | S6-191743 | S6-191961 |
| S6-191920 | Pseudo-CR on Key Issue on Device Onboarding | Nokia, Nokia Shanghai Bell | revised | S6-191744 | S6-191962 |
| S6-191921 | Key issue on enabling FFAPP requirements communications | Huawei, Hisilicon | approved | S6-191783 | - |
| S6-191922 | Solution to establish communications with FFAPP requirements | Huawei, Hisilicon | revised | S6-191784 | S6-191982 |
| S6-191923 | Discussion enhMCLOc | Motorola | noted | - | - |
| S6-191924 | Revised SID on location enhancements for mission critical services | Motorola | revised | - | S6-191978 |
| S6-191925 | Work Plan review at SA6#33 | Qualcomm | noted | - | - |
| S6-191926 | Capability to change remotely the priority of the point-to-point IP connectivity communication | Union Inter. Chemins de Fer | revised | S6-191812 | S6-191850 |
| S6-191927 | Scope section for TR 23.xxx (SID FS\_MC5MBS) | AT&T | revised | S6-191649 | S6-191979 |
| S6-191928 | New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Enabling of unicast-multicast switching | AT&T | approved | S6-191650 | - |
| S6-191929 | LS on clarifications regarding V2XAPP services | CT3 | postponed | - | - |
| S6-191930 | New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Resource efficient group call mode | AT&T | revised | S6-191651 | S6-191980 |
| S6-191931 | New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Large number of UEs | AT&T | approved | S6-191652 | - |
| S6-191932 | General Requirements section for TR 23.xxx (SID FS\_MC5MBS) | AT&T | revised | - | S6-191852 |
| S6-191933 | LS on MC 5MBS | SA6 | revised | - | S6-191853 |
| S6-191934 | Update to Definitions | Airbus DS SLC | revised | S6-191789 | S6-191969 |
| S6-191935 | Key issue on UAS group communications | Huawei, Hisilicon | revised | S6-191785 | S6-191970 |
| S6-191936 | Key issue on UAV location information | Huawei, Hisilicon | revised | S6-191786 | S6-191983 |
| S6-191937 | Update to UAS Reference Model and Description | Airbus DS SLC | approved | S6-191790 | - |
| S6-191938 | Study on supporting application of Railway Smart Station Services | Hansung University, LG Uplus | postponed | S6-191769 | - |
| S6-191939 | Pseudo-CR on solution to Key Issues 3 | VODAFONE Group Plc | revised | S6-191874 | S6-191952 |
| S6-191940 | Clarification and corrections to support transmission control | AT&T GNS Belgium SPRL | agreed | S6-191796 | - |
| S6-191941 | Corrections to the transmission and reception control procedures | AT&T GNS Belgium SPRL | agreed | S6-191797 | - |
| S6-191942 | Addtion of Location infomation to SDS and Enhance Status | HOME OFFICE | agreed | S6-191859 | - |
| S6-191943 | Functional model update for interconnection and migration | Motorola Solutions UK Ltd. | agreed | S6-191800 | - |
| S6-191944 | Corrections to network resource management procedures | Huawei, Hisilicon | agreed | S6-191863 | - |
| S6-191945 | New RP - EDGE-5 | Intel, AT&T | approved | S6-191864 | - |
| S6-191946 | Architecture Update (Removal of EN in clause 6.2) | Samsung | approved | S6-191865 | - |
| S6-191947 | Pseudo-CR on edge application architectural requirements on security | CATT | approved | S6-191866 | - |
| S6-191948 | Update to Key Issue #5 on Edge Application Server enablement on the Edge Hosting Environment | Convida Wireless LLC | approved | S6-191868 | - |
| S6-191949 | Pseudo-CR on addition of Key Issues on lifecycle management | Nokia, Nokia Shanghai Bell, Samsung | approved | S6-191916 | - |
| S6-191950 | Pseudo-CR on clarifications to EDN configuration provisioning | CATT | approved | S6-191879 | - |
| S6-191951 | Key Issue #3 Solution on Application Server Enablement | Convida Wireless LLC, Samsung, Vodafone, Nokia, Huawei | approved | S6-191873 | - |
| S6-191952 | Pseudo-CR on solution to Key Issues 3 | VODAFONE Group Plc | approved | S6-191939 | - |
| S6-191953 | Reply LS on 3GPP SA6 Study on Edge Computing | SA6 | revised | S6-191904 | S6-191841 |
| S6-191954 | [DRAFT] LS on Lifecycle Management to support Edge Computing | SA6 | postponed | S6-191871 | - |
| S6-191955 | Update of solution 2 Provisioning of Edge Data Network configuration | Sony | revised | S6-191878 | S6-191984 |
| S6-191956 | Pseudo-CR on Solution to Edge Application Server discover and update | Huawei, Hisilicon | postponed | S6-191885 | - |
| S6-191957 | Application architecture | ZTE Corporation | withdrawn | S6-191912 | - |
| S6-191958 | Key issue- AGV schedule & navigation | ZTE Corporation | withdrawn | S6-191913 | - |
| S6-191959 | Key issue- Edge Computing based Industrial application analytics | ZTE Corporation | withdrawn | S6-191915 | - |
| S6-191960 | Solution- Geographic location and positioning information support | ZTE Corporation | withdrawn | S6-191917 | - |
| S6-191961 | FFAPP Scope Correction | Nokia | revised | S6-191919 | S6-191995 |
| S6-191962 | Pseudo-CR on Key Issue on Device Onboarding | Nokia, Nokia Shanghai Bell | revised | S6-191920 | S6-191996 |
| S6-191963 | pCR new key issue on supporting tele-operated driving | Ericsson France S.A.S | approved | S6-191905 | - |
| S6-191964 | pCR new key issue V2X message distribution over Uu | Ericsson France S.A.S | approved | S6-191906 | - |
| S6-191965 | Proposal for key issue on multi-PLMN coordination | Huawei, Hisilicon | revised | S6-191907 | S6-192001 |
| S6-191966 | pCR architecture requirements | Ericsson France S.A.S | approved | S6-191908 | - |
| S6-191967 | pCR solution for supporting tele-operated driving | Ericsson France S.A.S | revised | S6-191909 | S6-192002 |
| S6-191968 | Proposal for solution to key issue on Uu QoS monitoring and control | Huawei, Hisilicon | approved | S6-191910 | - |
| S6-191969 | Update to Definitions | Airbus DS SLC | approved | S6-191934 | - |
| S6-191970 | Key issue on UAS group communications | Huawei, Hisilicon | approved | S6-191935 | - |
| S6-191971 | Pseudo-CR on FS\_5GMARCH group message scenarios | China Unicom | approved | S6-191831 | - |
| S6-191972 | Pseudo-CR on Key Issue and Solution for QoS Management for 5G Edge Network | Alibaba Group, Vodafone Group | approved | S6-191869 | - |
| S6-191973 | Pseudo-CR on New Key issue: Identities | Intel K.K. | revised | S6-191872 | S6-191997 |
| S6-191974 | Pseudo-CR on updates to Key Issues 1 and 2 | Vodafone, Nokia | revised | S6-191876 | S6-191998 |
| S6-191975 | One-to-One Emergency MCData FD | Samsung | agreed | S6-191855 | - |
| S6-191976 | Pseudo-CR on solution sharing location information on interconnected MC systems – cancel subscription | BDBOS | approved | S6-191826 | - |
| S6-191977 | Pseudo-CR on use case, key issue and solution for location service on past location information | BDBOS | approved | S6-191828 | - |
| S6-191978 | Revised SID on location enhancements for mission critical services | Motorola | agreed | S6-191924 | - |
| S6-191979 | Scope section for TR 23.xxx (SID FS\_MC5MBS) | AT&T | approved | S6-191927 | - |
| S6-191980 | New Key Issue for TR 23.xxx (SID FS\_MC5MBS): Resource efficient group call mode | AT&T | approved | S6-191930 | - |
| S6-191981 | Revised SID Study on application layer support for Factories of the Future in 5G network | ZTE Corporation | agreed | S6-191667 | - |
| S6-191982 | Solution to establish communications with FFAPP requirements | Huawei, Hisilicon | postponed | S6-191922 | - |
| S6-191983 | Key issue on UAV location information | Huawei, Hisilicon | approved | S6-191936 | - |
| S6-191984 | Update of solution 2 Provisioning of Edge Data Network configuration | Sony | approved | S6-191955 | - |
| S6-191985 | Update solution #2 with PCF providing EDN connection info | Huawei, Hisilicon | approved | S6-191880 | - |
| S6-191986 | Update to Solution #1 on Edge Application Server Discovery | Convida Wireless LLC | revised | S6-191882 | S6-191999 |
| S6-191987 | Pseudo-CR on solution to Key Issues 4 and 8 | Vodafone, Nokia | approved | S6-191884 | - |
| S6-191988 | Solution 6 Update | Samsung | approved | S6-191893 | - |
| S6-191989 | Pseudo-CR on MSGin5G Architecture Considerations | one2many B.V. | approved | S6-191836 | - |
| S6-191990 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | agreed | S6-191847 | - |
| S6-191991 | File distribution addressing based on functional alia | Union Inter. Chemins de Fer | agreed | S6-191848 | - |
| S6-191992 | Solution for Fetch target Edge AS API | Huawei, Hisilicon | approved | S6-191840 | - |
| S6-191993 | LS S6-191708 on NBMP from ISO/IEC JTC 1/SC 29/WG 11 | SA6 | approved | S6-191795 | - |
| S6-191994 | LS on aspects of Mission Critical Services over 5MBS | SA6 | revised | S6-191853 | S6-192003 |
| S6-191995 | FFAPP Scope Correction | Nokia | approved | S6-191961 | - |
| S6-191996 | Pseudo-CR on Key Issue on Device Onboarding | Nokia, Nokia Shanghai Bell | approved | S6-191962 | - |
| S6-191997 | Pseudo-CR on New Key issue: Identities | Intel K.K. | approved | S6-191973 | - |
| S6-191998 | Pseudo-CR on updates to Key Issues 1 and 2 | Vodafone, Nokia | approved | S6-191974 | - |
| S6-191999 | Update to Solution #1 on Edge Application Server Discovery | Convida Wireless LLC | approved | S6-191986 | - |
| S6-192000 | Pseudo-CR on Update deployment scenarios with applicable conditions | Huawei, Hisilicon | noted | S6-191844 | - |
| S6-192001 | Proposal for key issue on multi-PLMN coordination | Huawei, Hisilicon | approved | S6-191965 | - |
| S6-192002 | pCR solution for supporting tele-operated driving | Ericsson France S.A.S | approved | S6-191967 | - |
| S6-192003 | LS on aspects of Mission Critical Services over 5MBS | SA6 | approved | S6-191994 | - |
| S6-192004 | Coversheet\_TR 23.758 Presentation to TSG | Samsung Electronics | approved | S6-191742 | - |

## Annex B: List of change requests

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Spec | CR | Rev | Rel | Cat | WI | Decision |
| S6-191672 | Procedure for changing the default functional alias | Nokia, Nokia Shanghai Bell | 23.280 | 0219 | - | Rel-17 | B | eMONASTERY2 | postponed |
| S6-191683 | Functional model update for interconnection and migration | Motorola Solutions UK Ltd. | 23.280 | 0220 | - | Rel-16 | F | eMCSMI | revised |
| S6-191800 | Functional model update for interconnection and migration | Motorola Solutions UK Ltd. | 23.280 | 0220 | 1 | Rel-16 | F | eMCSMI | revised |
| S6-191943 | Functional model update for interconnection and migration | Motorola Solutions UK Ltd. | 23.280 | 0220 | 2 | Rel-16 | F | eMCSMI | agreed |
| S6-191763 | Application priority and priority levels | Union Inter. Chemins de Fer | 23.280 | 0221 | - | Rel-17 | B | eMONASTERY2 | revised |
| S6-191806 | Application priority and priority levels | Union Inter. Chemins de Fer | 23.280 | 0221 | 1 | Rel-17 | B | eMONASTERY2 | postponed |
| S6-191670 | Functional alias activated by default for group and private calls | Nokia, Nokia Shanghai Bell | 23.281 | 0135 | - | Rel-17 | B | eMONASTERY2 | postponed |
| S6-191674 | Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation | Nokia, Nokia Shanghai Bell | 23.281 | 0136 | - | Rel-16 | F | MONASTERY2 | revised |
| S6-191802 | Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation | Nokia, Nokia Shanghai Bell | 23.281 | 0136 | 1 | Rel-16 | F | MONASTERY2 | agreed |
| S6-191627 | Addtion of Location infomation to SDS and Enhance Status | HOME OFFICE | 23.282 | 0174 | - | Rel-16 | C | eMCData2 | revised |
| S6-191859 | Addtion of Location infomation to SDS and Enhance Status | HOME OFFICE | 23.282 | 0174 | 1 | Rel-16 | C | eMCData2 | revised |
| S6-191942 | Addtion of Location infomation to SDS and Enhance Status | HOME OFFICE | 23.282 | 0174 | 2 | Rel-16 | C | eMCData2 | agreed |
| S6-191628 | Addition of optional message field to Enhanced Status | HOME OFFICE | 23.282 | 0175 | - | Rel-16 | C | eMCData2 | withdrawn |
| S6-191671 | Functional alias activated by default for group and p2p communications | Nokia, Nokia Shanghai Bell | 23.282 | 0176 | - | Rel-17 | B | eMONASTERY2 | postponed |
| S6-191675 | Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation | Nokia, Nokia Shanghai Bell | 23.282 | 0177 | - | Rel-16 | F | MONASTERY2 | revised |
| S6-191803 | Fixing the user profile configuration data for criteria triggered functional alias activation and de-activation | Nokia, Nokia Shanghai Bell | 23.282 | 0177 | 1 | Rel-16 | F | MONASTERY2 | agreed |
| S6-191676 | Stage 1 requirement reference correction in the user profile data | Nokia, Nokia Shanghai Bell | 23.282 | 0178 | - | Rel-16 | F | MONASTERY2 | agreed |
| S6-191693 | Clarification and corrections to support transmission control | AT&T GNS Belgium SPRL | 23.282 | 0179 | - | Rel-16 | F | eMCData2 | revised |
| S6-191796 | Clarification and corrections to support transmission control | AT&T GNS Belgium SPRL | 23.282 | 0179 | 1 | Rel-16 | F | eMCData2 | revised |
| S6-191940 | Clarification and corrections to support transmission control | AT&T GNS Belgium SPRL | 23.282 | 0179 | 2 | Rel-16 | F | eMCData2 | agreed |
| S6-191694 | Corrections to the transmission and reception control procedures | AT&T GNS Belgium SPRL | 23.282 | 0180 | - | Rel-16 | F | eMCData2 | revised |
| S6-191797 | Corrections to the transmission and reception control procedures | AT&T GNS Belgium SPRL | 23.282 | 0180 | 1 | Rel-16 | F | eMCData2 | revised |
| S6-191941 | Corrections to the transmission and reception control procedures | AT&T GNS Belgium SPRL | 23.282 | 0180 | 2 | Rel-16 | F | eMCData2 | agreed |
| S6-191733 | File distribution addressing based on functional alia | Union Inter. Chemins de Fer | 23.282 | 0181 | - | Rel-17 | B | eMONASTERY2 | revised |
| S6-191810 | File distribution addressing based on functional alia | Union Inter. Chemins de Fer | 23.282 | 0181 | 1 | Rel-17 | B | eMONASTERY2 | revised |
| S6-191848 | File distribution addressing based on functional alia | Union Inter. Chemins de Fer | 23.282 | 0181 | 2 | Rel-17 | B | eMONASTERY2 | revised |
| S6-191991 | File distribution addressing based on functional alia | Union Inter. Chemins de Fer | 23.282 | 0181 | 3 | Rel-17 | B | eMONASTERY2 | agreed |
| S6-191734 | IP connectivity for group communication (unicast) | Union Inter. Chemins de Fer | 23.282 | 0182 | - | Rel-17 | B | eMONASTERY2 | revised |
| S6-191811 | IP connectivity for group communication (unicast) | Union Inter. Chemins de Fer | 23.282 | 0182 | 1 | Rel-17 | B | eMONASTERY2 | revised |
| S6-191849 | IP connectivity for group communication (unicast) | Union Inter. Chemins de Fer | 23.282 | 0182 | 2 | Rel-17 | B | eMONASTERY2 | agreed |
| S6-191747 | One-to-one SDS Session upgrade to emergency session | Samsung | 23.282 | 0183 | - | Rel-16 | B | eMCData2 | revised |
| S6-191798 | One-to-one SDS Session upgrade to emergency session | Samsung | 23.282 | 0183 | 1 | Rel-16 | B | eMCData2 | agreed |
| S6-191748 | Group SDS Session upgrade to emergency/imminent-peril session and cancel in-progress emergency/imminent-peril group state | Samsung | 23.282 | 0184 | - | Rel-16 | B | eMCData2 | revised |
| S6-191799 | Group SDS Session upgrade to emergency/imminent-peril session and cancel in-progress emergency/imminent-peril group state | Samsung | 23.282 | 0184 | 1 | Rel-16 | B | eMCData2 | agreed |
| S6-191749 | One-to-One Emergency MCData FD | Samsung | 23.282 | 0185 | - | Rel-16 | B | eMCData2 | revised |
| S6-191855 | One-to-One Emergency MCData FD | Samsung | 23.282 | 0185 | 1 | Rel-16 | B | eMCData2 | revised |
| S6-191975 | One-to-One Emergency MCData FD | Samsung | 23.282 | 0185 | 2 | Rel-16 | B | eMCData2 | agreed |
| S6-191750 | Group emergency MCData FD | Samsung | 23.282 | 0186 | - | Rel-16 | B | eMCData2 | revised |
| S6-191856 | Group emergency MCData FD | Samsung | 23.282 | 0186 | 1 | Rel-16 | B | eMCData2 | agreed |
| S6-191751 | One-to-one FD Session upgrade to emergency session | Samsung | 23.282 | 0187 | - | Rel-16 | B | eMCData2 | revised |
| S6-191857 | One-to-one FD Session upgrade to emergency session | Samsung | 23.282 | 0187 | 1 | Rel-16 | B | eMCData2 | agreed |
| S6-191752 | Group FD communication upgrade to emergency/imminent-peril communication and cancel in-progress emergency/imminent-peril group state | Samsung | 23.282 | 0188 | - | Rel-16 | B | eMCData2 | revised |
| S6-191858 | Group FD communication upgrade to emergency/imminent-peril communication and cancel in-progress emergency/imminent-peril group state | Samsung | 23.282 | 0188 | 1 | Rel-16 | B | eMCData2 | agreed |
| S6-191766 | Capability to change remotely the priority of the point-to-point IP connectivity communication | Union Inter. Chemins de Fer | 23.282 | 0189 | - | Rel-17 | B | eMONASTERY2 | revised |
| S6-191812 | Capability to change remotely the priority of the point-to-point IP connectivity communication | Union Inter. Chemins de Fer | 23.282 | 0189 | 1 | Rel-17 | B | eMONASTERY2 | revised |
| S6-191926 | Capability to change remotely the priority of the point-to-point IP connectivity communication | Union Inter. Chemins de Fer | 23.282 | 0189 | 2 | Rel-17 | B | eMONASTERY2 | revised |
| S6-191850 | Capability to change remotely the priority of the point-to-point IP connectivity communication | Union Inter. Chemins de Fer | 23.282 | 0189 | 3 | Rel-17 | B | eMONASTERY2 | agreed |
| S6-191679 | Add enhancements for interworking of MCPTT group calls with GSM-R | Kapsch CarrierCom | 23.283 | 0049 | 1 | Rel-17 | B | eMONASTERY2 | postponed |
| S6-191678 | Add enhancements for interworking of MCData SDS with GSM-R SMS | Kapsch CarrierCom | 23.283 | 0050 | 2 | Rel-17 | B | eMONASTERY2 | postponed |
| S6-191712 | Remove 10.5.2.17 Editor's Note | L3Harris Technologies | 23.283 | 0051 | - | Rel-16 | D | eMCCI | revised |
| S6-191801 | Remove 10.5.2.17 Editor's Note | L3Harris Technologies | 23.283 | 0051 | 1 | Rel-16 | F | eMCCI | agreed |
| S6-191770 | Functionalities with SA2 dependency | Ericsson, Huawei | 23.286 | 0002 | 3 | Rel-16 | F | V2XAPP | agreed |
| S6-191771 | Corrections on notifications for network monitoring procedure | Huawei, Hisilicon | 23.286 | 0007 | 3 | Rel-16 | F | V2XAPP | revised |
| S6-191860 | Corrections on notifications for network monitoring procedure | Huawei, Hisilicon | 23.286 | 0007 | 4 | Rel-16 | F | V2XAPP | agreed |
| S6-191772 | Addition of missing VAE server APIs | Huawei, Hisilicon | 23.286 | 0008 | - | Rel-16 | F | V2XAPP | revised |
| S6-191861 | Addition of missing VAE server APIs | Huawei, Hisilicon | 23.286 | 0008 | 1 | Rel-16 | F | V2XAPP | agreed |
| S6-191773 | Update the configurations information | Huawei, Hisilicon | 23.286 | 0009 | - | Rel-16 | F | V2XAPP | revised |
| S6-191862 | Update the configurations information | Huawei, Hisilicon | 23.286 | 0009 | 1 | Rel-16 | F | V2XAPP | agreed |
| S6-191673 | Support of functional aliases as called party address in MCPTT emergency private calls | Nokia, Nokia Shanghai Bell | 23.379 | 0225 | 1 | Rel-17 | B | eMONASTERY2 | revised |
| S6-191808 | Support of functional aliases as called party address in MCPTT emergency private calls | Nokia, Nokia Shanghai Bell | 23.379 | 0225 | 2 | Rel-17 | B | eMONASTERY2 | revised |
| S6-191846 | Support of functional aliases as called party address in MCPTT emergency private calls | Nokia, Nokia Shanghai Bell | 23.379 | 0225 | 3 | Rel-17 | B | eMONASTERY2 | agreed |
| S6-191680 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0229 | 4 | Rel-17 | B | eMONASTERY2 | revised |
| S6-191809 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0229 | 5 | Rel-17 | B | eMONASTERY2 | revised |
| S6-191847 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0229 | 6 | Rel-17 | B | eMONASTERY2 | revised |
| S6-191990 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0229 | 7 | Rel-17 | B | eMONASTERY2 | agreed |
| S6-191632 | Removal of temporary regroup procedures | FirstNet | 23.379 | 0231 | - | Rel-16 | F | enh2MCPTT | postponed |
| S6-191653 | functional alias of called party in private call | TD Tech Ltd | 23.379 | 0232 | - | Rel-17 | B | eMONASTERY2 | revised |
| S6-191807 | functional alias of called party in private call | TD Tech Ltd | 23.379 | 0232 | 1 | Rel-17 | B | eMONASTERY2 | agreed |
| S6-191654 | Requested priority in the MCPTT user profile configuration data | TD Tech Ltd | 23.379 | 0233 | - | Rel-17 | B | eMONASTERY2 | postponed |
| S6-191669 | Functional alias activated by default for group and private calls | Nokia, Nokia Shanghai Bell | 23.379 | 0234 | - | Rel-17 | B | eMONASTERY2 | postponed |
| S6-191677 | Making functional alias optional in floor control messages | Nokia, Nokia Shanghai Bell | 23.379 | 0235 | - | Rel-16 | F | MONASTERY2 | revised |
| S6-191804 | Making functional alias optional in floor control messages | Nokia, Nokia Shanghai Bell | 23.379 | 0235 | 1 | Rel-16 | F | MONASTERY2 | agreed |
| S6-191745 | Group announcement and join | Ericsson, Samsung | 23.434 | 0002 | 3 | Rel-16 | F | SEAL | agreed |
| S6-191774 | Corrections to network resource management procedures | Huawei, Hisilicon | 23.434 | 0003 | 4 | Rel-16 | F | SEAL | revised |
| S6-191863 | Corrections to network resource management procedures | Huawei, Hisilicon | 23.434 | 0003 | 5 | Rel-16 | F | SEAL | revised |
| S6-191944 | Corrections to network resource management procedures | Huawei, Hisilicon | 23.434 | 0003 | 6 | Rel-16 | F | SEAL | agreed |
| S6-191775 | Remove EN on bearer type identification | Huawei, Hisilicon | 23.434 | 0007 | - | Rel-16 | F | SEAL | agreed |
| S6-191776 | Remove EN on granularity of decision of NRM server | Huawei, Hisilicon | 23.434 | 0008 | - | Rel-16 | F | SEAL | agreed |

## Annex C: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Original | Title | From | Decision | Reply TDoc |
| S6-191626 | ITS(19)035030 | Reply to LS on application layer support for V2X services | ETSI TC ITS | noted | (none) |
| S6-191707 | S1-192817 | Reply LS on UAS-related terminology and model | SA1 | noted | (none) |
| S6-191708 | 29n18316 | Liaison Statement from SC 29/WG 11 to 3GPP SA 2 and SA 6 on NBMP [SC 29/WG 11 N 18738] | ISO IEC | replied to | S6-191993 |
| S6-191794 | C1-195062 | LS on restricting incoming private calls | CT1 | replied to | S6-191805 |
| S6-191929 | C3-193621 | LS on clarifications regarding V2XAPP services | CT3 | postponed | (none) |

### C2: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| S6-191805 | Reply LS on restricting incoming private calls | CT1 | - | S6-191794 |
| S6-191841 | Reply LS on 3GPP SA6 Study on Edge Computing | ETSI ISG MEC | SA, SA2, SA5 | S6-191404 |
| S6-191993 | LS S6-191708 on NBMP from ISO/IEC JTC 1/SC 29/WG 11 | ISO/IEC JTC 1/SC 29/WG 11 | SA4 | S6-191708 |
| S6-192003 | LS on aspects of Mission Critical Services over 5MBS | SA, RAN, SA2, RAN2, RAN3 | SA1 | - |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | Source | new/revised |
| S6-191978 | Revised SID on location enhancements for mission critical services | Motorola | SID revised |
| S6-191981 | Revised SID Study on application layer support for Factories of the Future in 5G network | ZTE Corporation | SID revised |
| S6-191768 | Revised WID MCIOPS | Ericsson | WID revised |

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

n/a

## Annex F: List of action items

n/a

## Annex G: List of decisions

n/a

## Annex H: List of participants (54)

|  |  |  |
| --- | --- | --- |
| Name | Representing | **Status (OP**) |
| Ai, Ming | CATT | 3GPPMEMBER (ETSI) |
| Aleksiev, Vasil | Deutsche Telekom AG | 3GPPMEMBER (ETSI) |
| Alnås, Svante | Sony Mobile Communications | 3GPPMEMBER (ARIB) |
| Amogh, Niranth | Huawei Technologies Sweden AB | 3GPPMEMBER (ETSI) |
| Arora, Saurav | ETSI | 3GPPORG\_REP (ETSI) |
| Artero Gallardo, Guillaume | SYSOCO | 3GPPMEMBER (ETSI) |
| Beicht, | Kapsch CarrierCom France S.A.S | 3GPPMEMBER (ETSI) |
| Chater-Lea, David | Motorola Solutions UK Ltd. | 3GPPMEMBER (ETSI) |
| Chen, Ying | TD Tech Ltd | 3GPPMEMBER (CCSA) |
| Chitturi, Suresh | Samsung Electronics Iberia SA | 3GPPMEMBER (ETSI) |
| El Essaili, Ali | Ericsson France S.A.S | 3GPPMEMBER (ETSI) |
| Elloumi, Omar | Nokia Corporation | 3GPPMEMBER (ETSI) |
| Faccin, | QUALCOMM Europe Inc. - Italy | 3GPPMEMBER (ETSI) |
| Featherstone, Walter | Samsung R&D Institute UK | 3GPPMEMBER (ETSI) |
| Ge, Cuili | Huawei Device Co., Ltd | 3GPPMEMBER (CCSA) |
| Gupta, Nishant | Samsung Electronics Nordic AB | 3GPPMEMBER (ETSI) |
| Han, Andrew Min-gyu | Hansung University | 3GPPMEMBER (TTA) |
| Han, Zhiqiang | ZTE Corporation | 3GPPMEMBER (ETSI) |
| Janky, William | FirstNet | 3GPPMEMBER (ATIS) |
| Jiao, Jerry | ZTE Trunking Technology Corp. | 3GPPMEMBER (CCSA) |
| Kilgour, Kit | Hytera Communications Corp. | 3GPPMEMBER (CCSA) |
| Kim, Hyesung | Samsung Electronics France SA | 3GPPMEMBER (ETSI) |
| Lazara, | Motorola Solutions Poland | 3GPPMEMBER (ETSI) |
| Lee, Jicheol | Samsung Electronics Polska | 3GPPMEMBER (ETSI) |
| Levine, | Softil Ltd | 3GPPMEMBER (ETSI) |
| Libunao, Gerardo | Verizon UK Ltd | 3GPPMEMBER (ETSI) |
| Lin, Lin | China Unicom | 3GPPMEMBER (CCSA) |
| Liu, Yue | China Mobile Com. Corporation | 3GPPMEMBER (CCSA) |
| Mattsson, Bernt | ETSI | 3GPPORG\_REP (ETSI) |
| Meena, Rajmohan | Department of Telecom | 3GPPMEMBER (TSDSI) |
| Merrick, Robert | HOME OFFICE | 3GPPMEMBER (ETSI) |
| Monrad, | InterDigital, Europe, Ltd. | 3GPPMEMBER (ETSI) |
| Moses, Danny | Intel K.K. | 3GPPMEMBER (ARIB) |
| Neal, Adrian | Vodafone Telekomünikasyon A.S. | 3GPPMEMBER (ETSI) |
| Oettl, | Nokia Germany | 3GPPMEMBER (ETSI) |
| Oprescu, Val | AT&T | 3GPPMEMBER (ATIS) |
| Pateromichelakis, Emmanouil | Huawei Technologies R&D UK | 3GPPMEMBER (ETSI) |
| Pattan, | Samsung Electronics GmbH | 3GPPMEMBER (ETSI) |
| Roy, Vijay Kumar | TSDSI | 3GPPORG\_REP (TSDSI) |
| Rurainsky, Juergen | BDBOS | 3GPPMEMBER (ETSI) |
| Salkintzis, Apostolis | Motorola Mobility UK Ltd. | 3GPPMEMBER (ETSI) |
| Samdanis, Konstantinos | Nokia | 3GPPMEMBER (ATIS) |
| Sanders, Peter | one2many B.V. | 3GPPMEMBER (ETSI) |
| Shao, Weixiang | ZTE Corporation | 3GPPMEMBER (ETSI) |
| Shih, Jerry | AT&T GNS Belgium SPRL | 3GPPMEMBER (ETSI) |
| Solano, | Ericsson GmbH, Eurolab | 3GPPMEMBER (ETSI) |
| Soloway, Alan | Qualcomm UK Ltd | 3GPPMEMBER (ETSI) |
| Starsinic, Michael | Convida Wireless | 3GPPMEMBER (ETSI) |
| Verweij, Kees | The Police of the Netherlands | 3GPPMEMBER (ETSI) |
| Vialen, Jukka | Airbus DS SLC | 3GPPMEMBER (ETSI) |
| Wells, Derek | L3Harris Technologies | 3GPPMEMBER (ATIS) |
| Wendler, Ingo | Union Inter. Chemins de Fer | 3GPPMEMBER (ETSI) |
| Yang, Yanmei | HUAWEI Technologies Japan K.K. | 3GPPMEMBER (ARIB) |
| Zhang, Ling | CATT | 3GPPMEMBER (CCSA) |

## Annex I: List of future meetings

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Title** | **Start date** | **End date (OP)** | **Town** | **Country** | **Reference** |
| 3GPPSA6#34 | 11/11/2019 09:00:00 | 15/11/2019 17:30:00 | Reno, Nevada | US | S6-34 |
| 3GPPSA6#35 | 13/01/2020 09:00:00 | 17/01/2020 17:30:00 | Hyderabad | IN | S6-35 |
| 3GPPSA6#36 | 24/01/2020 09:00:00 | 28/02/2020 17:30:00 | Christchurch | NZ | S6-36 |
| 3GPPSA6#37 | 11/05/2020 09:00:00 | 15/05/2020 17:30:00 | Dubrovnik | HR | S6-37 |
| 3GPPSA6#38 | 06/07/2020 09:00:00 | 10/07/2020 17:30:00 | Espoo | FI | S6-38 |
| 3GPPSA6#39 | 24/08/2020 09:00:00 | 28/08/2020 17:30:00 | Wroclaw | PL | S6-39 |
| 3GPPSA6#40 | 16/11/2020 09:00:00 | 20/11/2020 17:30:00 | TBD | NA | S6-40 |