**3GPP TSG-SA WG6 Meeting #32 S6-191258**

**Roma, Italy, 8th – 12th July**

Source: MCC

Title: SA6 Meeting 31 Report

Agenda Item: 3

Contact: Bernt Mattsson bernt.mattsson@etsi.org

*Abstract: Meeting report of 3GPP SA6 meeting #31*

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

 **DRAFT Meeting Report
for
TSG SA WG6
meeting: 31**

**Bruges, Belgium, 20/05/2019 to 24/05/2019**

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## 1 Opening of the meeting

### 1.1 Welcome speech

Vasil Aleksiev (Deutsche Telekom) on behalf of EF3 welcomed the delegates to the SA6#31 meeting in Bruges Belgium.

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

The chairman reminded delegates to check-in for the meeting and to wear a meeting badge.

## 2 Agenda and Chairman's notes

**S6-190886 SA6 Meeting 31 Agenda**

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

**Abstract:**

Agenda for the SA6#31 meeting

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

**S6-190888 SA6 Meeting #31 - Agenda with Tdocs allocation after submission deadline**

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

**Abstract:**

The SA6#31 meeting agenda with Tdocs allocation after submission deadline

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

**S6-190889 SA6 Meeting #31 - Agenda with Tdocs allocation at start of the meeting**

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

**Abstract:**

The SA6#31 meeting agenda with Tdocs allocation at the start of the meeting

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

**S6-190890 SA6 Meeting #31 - Chairman's notes at end of the meeting**

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

**Abstract:**

Chairman's notes at end of the SA6#31 meeting

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

## 3 Report from previous meetings

**S6-190887 SA6 Meeting 30 Report**

 *Type: report For: Approval
 Source: MCC*

**Abstract:**

The report of the SA6#30 meeting.

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

## 4 Liaison statements

### 4.1 Incoming LSs

**S6-190891 LS on LI Impacts for LMR-LTE Interworking study**

 *Type: LS in For: Action
 Original outgoing LS: S3i190281, to -, cc -
 Source: SA3-LI*

**Abstract:**

1. Overall Description:

It has come to our attention that work is being undertaken in 3GPP SA6 and ATIS WTSC JLMRLTE on the interworking of P.25 LMR and LTE for Mission Critical use. We would like to identify some lawful interception requirements that should be taken into account as your studies are progressed.

LI requires the CSP to be able to intercept and deliver user communications either decrypted or encrypted with the necessary information to enable LE to perform the decryption.

When a key management service (KMS) is used to provide encryption for security, the CSP shall be able to access and utilize the keys needed to decrypt the interception communications before delivery to Law Enforcement (LE) or deliver the keys and other information needed to decrypt the intercepted communications to LE. According to 3GPP TS 33.107, the PTC server (e.g., MCPTT server) has the ability, through a Point of Interception (POI), to duplicate and deliver intercept product to the Delivery Function (DF) for further delivery to LE. However, the Interworking Function (IWF) being considered by SA6 and WTSC has not been considered from an LI perspective in 3GPP TS 33.107 or 33.108.

SA3-LI would like to inform SA6 and WTSC JLMRLTE groups, in regard to developing solutions for the LMR-LTE interworking study that may impact LI reporting, the following should be taken into account:

• Since published technical reports or specifications developed from this study are not limited to Public Safety, use for commercial applications is possible. Both these uses are subject to LI requirements.

• CSP facilitated end-to-end encryption between the LMR handset and the MCPTT device in the new LMRLTE IWF would not meet regulatory requirements for LI reporting from the IWF POI if the means of decryption is not provided.

2. Actions:

To SA6 group and WTSC JLMRLTE.

ACTION: SA3-LI kindly asks 3GPP SA6 and WTSC JLMRLTE to consider the above requirement when developing the JLMRLTE system.

**Discussion:**

FirstNet introduced the LS available as document S6-190891.

Motorola Solutions was of the view that no action was required with regard to this, as necessary hooks already existed.

BDBOS noted that if any action would be taken in relation to this topic, then the relation to the source making the request for this feature should be tagged accordingly.

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

**S6-190925 LS reply on PCF and NEF discovery for Edge Computing**

 *Type: LS in For: Information
 Original outgoing LS: S2-1904837, to -, cc -
 Source: SA2*

**Abstract:**

1. Overall Description:

SA2 thanks SA5 for their LS on PCF and NEF discovery for Edge Computing (S5-192454 / S2-1903082).

SA5 understanding is that the PCF discovery for EC has already been supported in 5GC. The PCF can be discovered by an authorized AF via BSF (Binding Support Function), and the BSF can be discovered via NRF or the BSF information is configured locally to AF. However, there is no mechanism defined by SA2 for an AF to access the NEF.

SA5 requests SA2 to confirm if SA5 understanding is correct and let SA5 know whether SA2 has a further plan to define the solution to support AF to access the NEF.

SA2 confirms SA5’s understanding about the use of BSF for discovery of the appropriate PCF.

Regarding the solution to support AF access to the NEF, the mechanism is similar to the mechanism for SCS/AS access to the SCEF defined in TS 23.682 i.e. an external AF may determine the IP address(es)/port(s) of the NEF by performing a DNS query using the GPSI (assumed to take the form of an external ID) to identify an individual UE or using the External Group Identifier to identify a group of UEs as described in TS 23.501 Table 5.6.7-1, or by using a locally configured NEF identifier/address. SA2 will update their 5GS specifications to clarify this mechanism in the context of 5GS.

Application Functions considered to be trusted by the operator should rely on the NRF (Network Repository Function) service to access the NEF.

Thus there are mechanisms defined by SA2 for an AF to access the NEF

In addition, SA2 would like to point that when CAPIF (Common API Framework for northbound APIs) is deployed the service API can be Published and Discovered as defined in TS 23.222. SA2 expects that the definition of Edge Computing Service APIs will be further addressed by SA6 as part of their study on Application Architecture for enabling Edge Applications (FS\_EDGEAPP).

2. Actions:

To 3GPP SA WG5:

ACTION: SA2 kindly asks SA5 to take the feedback above into account

**Discussion:**

Samsung introduced the LS available as document S6-190925.

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

**S6-190926 Observations on standards and technical constraints from 3rd MCX remote Plugtests**

 *Type: LS in For: Action
 Original outgoing LS: -, to -, cc -
 Source: ETSI CTI*

**Abstract:**

As a result of the Plugtests event activities some issues in 3GPP Technical Specifications (TSs) and related standards were identified together with practical deployment problems that may demand some clarification or feedback from the related SDOs. We have classified those aspects into the following two categories:

• Observations on 3GPP Standards: Missing, erroneous or ambiguous definition of procedures in 3GPP’s MCS TSs.

• Technical constraints: Related to implementation issues, not covered by the standards, but which need to be faced by MCS vendors in most deployments.

The reader should note that 3GPP TS approved in December 2017 (mostly 14.4.0) were considered for the second and third Plugtests event and some fields may have changed or have been already solved.

The third MCX Plugtests event team wants to thank all the participants in the Plugtests for kindly sharing the following lessons learned. Specific actions towards pushing this feedback to relevant TSGs in 3GPP have already been started at the time of the release of this report.

For the list of observations please refer to the document S6-190926.

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

**S6-191054 LS on ETSI Plugtest standards Issues**

 *Type: LS in For: discussion
 Original outgoing LS: C1-193601, to -, cc -
 Source: CT1*

**Abstract:**

1 . Overall description

CT1 have received reports from ETSI Plugtest 2 and ETSI Plugtest 3 regarding issues they have noted regarding 3GPP mission critical standards. CT1 intends to see that each of these issues is addressed appropriately and has performed a preliminary review of the issue statements to determine which 3GPP working group could take the lead in understanding and resolving each issue.

The table in the annex of this LS provides that preliminary review and indicates which issues could benefit from analysis by SA6 and SA3. CT1 requests SA6 and SA3 to:

 \* 1. examine this table and determine whether you agree with our preliminary determination of the lead 3GPP working group for each issue,

 \* 2. to inform CT1 whether SA6 and SA3 are willing to accept leadership on the issues indicated, and

 \* 3. to provide any additional input on any of these issues regarding leadership or a technical response.

It is the intention of CT1 to gather technical responses for each issue and provide these responses to ETSI Plugtest.

CT1 appreciates the assistance of SA6 and SA3 in helping to resolve these issues and thus to advance the usability of mission critical services.

2. Actions

To SA6 and SA3

ACTION: 3GPP TSG CT WG1 respectfully asks SA6 and SA3 to perform the three actions noted.

**Discussion:**

FirstNet introduced the LS available as document S6-191054.

Motorola Solutions noted that SA6 may want to consider postponing the LS and consider the LS during SA6#32, allowing more time to prepare responses.

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

**S6-191047 NGMN 5G End-to-End Architecture Framework.**

 *Type: LS in For: discussion
 Original outgoing LS: -, to -, cc -
 Source: NGMN Alliance*

**Abstract:**

1. About the NGMN Alliance

The NGMN Alliance is an industry organization of leading world-wide Telecom Operators, Vendors and Research Institutes (see www.ngmn.org) and was founded by international network operators in 2006. Its objective is to ensure that the functionality and performance of next generation mobile network infrastructure, service platforms and devices will meet the requirements of operators and, ultimately, will satisfy end user demand and expectations. The NGMN Alliance will drive and guide the development of all future mobile broadband technology enhancements with a focus on 5G. The targets of these activities are supported by the strong and well-established partnership of worldwide leading operators, vendors, universities, and successful co-operations with other industry organisations.

2. NGMN 5G Work-Programme, Requirements and Architecture

In September 2017 and in February 2018, the first version and the second version of the NGMN End-to-End Architecture Framework was published, building on and developing end-to-end architecture principles from the 2015 5G White Paper, which can support the standardisation and subsequent availability of 5G for 2020 and beyond.

3. Intention of the LS and required actions

NGMN is pleased to inform the recipient of this liaison statement for information sharing on the interim third version (v3.0) of the NGMN 5G End-to-End Architecture Framework that includes requirements together with descriptions and concepts associated with new topics.

The new topics include:

 Autonomic networking

 Distributed Ledger Technology

 Minimization or avoidance of tunnelling

 Network automation

Further enhancement, consideration, and review in the articulation of the related requirements together with updates that include security aspects, URLLC, and network data layer is planned for the final version in September 2019.

This NGMN liaison is intended for information sharing in terms of the new topics that have been introduced in the attached document. Please take this into account in the 5G architecture considerations.

**Discussion:**

The chairman introduced the LS available as document S6-191047.

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

**S6-191055 LS on clarification for usage of MC Service emergency state for MCData service**

 *Type: LS in For: Action
 Original outgoing LS: C1-193738, to -, cc -
 Source: CT1*

**Abstract:**

1 . Overall description

TS 23.282 subclause 7.10 together with TS 23.280 subclause 10.10 only provide for MCData emergency alert initiation and MCData emergency alert cancel procedures (both for on-network and off-network) to MCData users.

These clauses leave unspecified several aspects regarding what should occur after completion of this procedure. For example, in TS 23.280 subclause 10.10.1.2.1, the statement in step 5 of the procedures says, “MC service group calls made to this MC service group by the MC service client 1 will be sent as emergency calls until the emergency state on the MC service client 1 is cancelled.” However, in TS 23.282 there are no procedures for MCData emergency calls of any kind (group or individual). Similarly, in TS 23.280 subclause 10.10.1.2.1, there is the statement “This procedure will place the MC service client in the MC service emergency state if the MC service client is not already in that state.” But in TS 23.282 there is no mention of the emergency state for an MCData client, nor what effect this condition could have on subsequent MCData calls once in this state.

CT1 would like to ask SA6:

Q1. Should the bearers of an MCData session, while the MCData client is in an emergency state, have elevated priority (and/or pre-emption handling)?

Q2. There are no procedures in TS 23.282 that allow for elevated priority in emergency data communications. Should File Distribution (FD) sessions and/or Short Data Service (SDS) sessions somehow be marked as being in an emergency state and/or be enabled for preferential (emergency) treatment by the system for delivery?

Q3. If the answer to Q2 is YES, please provide the SA6 detail procedures to accomplish this through specification.

Q4. If answer to Q2 is NO, please explain the rationale for excluding MCData from emergency handling in TS 23.282, especially in light of the reference to such treatment in TS 23.280 clause 10.10.1.2.1 step 5 from above.

In addition, please provide any other clarifications and/or details for the usage of the emergency state by the MCData client within the MCData service.

2 . Actions

To 3GPP TSG SA WG6

ACTION: 3GPP TSG CT WG1 kindly asks 3GPP TSG SA WG6 group to provide answers and clarifications on the usage of MCData emergency state within the MCData service.

**Discussion:**

Samsung introduced the LS available as document S6-191055.

AT&T was of the view that they would need more time to work out the user requirements.

FirstNet suggested taking the action the clarify the requirement.

Motorola Solutions suggested taking on board this work via exception sheet (Rel-16).

The seemed to be general interest to take on board this within Rel-16, even it was at this stage difficult to evaluate the extent of the work e.g. considering also multicast.

It was concluded that the intention of SA6 is to prepare a reply to the LS during SA#32.

The exception sheet will appear as document S6-191106.

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

**S6-191142 LS reply on SCEF support for V2XAPP procedures**

 *Type: LS in For: Action
 Original outgoing LS: S2-1906333, to -, cc -
 Source: SA2*

**Abstract:**

1. Overall Description:

SA2 thanks SA6 for their LS on SCEF support for V2XAPP procedures and would like to reply as follows:

- The exposure of network status reports is already supported by the SCEF via the T8 interface, therefore the existing SCEF/T8 based procedures defined in TS 23.682 and TS 29.122 can be reused.

- The monitoring of QoS by a 3rd party application server is partially supported by the SCEF using a status information message for bearer-level events. The SCEF does not support the real-time monitoring of AS session QoS.

2. Actions:

To SA6 group.

ACTION: SA2 kindly asks SA6 to take the answer into account.

**Discussion:**

Huawei introduced the LS available as document S6-191142.

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

### 4.2 Outgoing LSs

**S6-191035 LS on application layer support for V2X services**

 *Type: LS out For: Approval
 to SAE C-V2X TC, NGMN Alliance V2X Task-Force, 5GAA WG2, ETSI TC ITS
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for LS on application layer support for V2X services

**Discussion:**

Huawei introduced the LS available as document S6-191035.

Qualcomm suggested to be more specific, if SA6 really wants a response.

**Decision:** The document was **revised to S6-191107**.

**S6-191107 LS on application layer support for V2X services**

 *Type: LS out For: Approval
 to SAE C-V2X TC, NGMN Alliance V2X Task-Force, 5GAA WG2, ETSI TC ITS
 Source: Huawei, Hisilicon*

(Replaces S6-191035)

**Discussion:**

Huawei introduced the LS available as document S6-191107.

Ericsson suggested to be more specific with regard to the questions asked. They also noted the ETSI ITS TC should read ETSI TC ITS.

The only changes are:

 - replacing "ETSI ITS TC" with "ETSI TC ITS" and

 - replacing the attachment S6-191104 with S6-191233.

With the above changes the revised contribution, S6-191237, is considered pre-approved.

**Decision:** The document was **revised to S6-191237**.

**S6-191237 LS on application layer support for V2X services**

 *Type: LS out For: Approval
 to 5GAA WG2, ETSI TC ITS, SAE C-V2X TC, NGMN Alliance V2X Task-Force, cc SA
 Source: Huawei, Hisilicon*

(Replaces S6-191107)

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

## 5 Items for early consideration

### 5.1 Working Agreements

None

### 5.2 Others

None

## 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

None

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

**S6-190994 Abbreviations**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0205 Cat: F (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

**Discussion:**

TD Tech presented the document available as S6-190994.

Motorola Solutions was of the view that only the abbreviations that are being use should be listed.

**Decision:** The document was **revised to S6-191048**.

**S6-191048 Abbreviations**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0205 rev 1 Cat: F (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

(Replaces S6-190994)

**Discussion:**

TD Tech presented the document available as S6-191048.

Qualcomm suggested using LMS instead of LOCMS.

Motorola Solutions suggested using IdMS instead of IDMS.

The only changes are to:

 - replace LOCMS with LMS,

 - replace IDMS with IdMS and

 - delete IWF.

With the above changes the revised contribution, S6-191108, is considered pre-agreed.

**Decision:** The document was **revised to S6-191108**.

**S6-191108 Abbreviations**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0205 rev 2 Cat: F (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

(Replaces S6-191048)

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

**S6-190894 Notification of affiliated MCPTT group members not included in the call**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0206 Cat: F (Rel-16)

 Source: The Police of the Netherlands*

**Abstract:**

Clarification of usage of the MCPTT ID list in the Group call notify information flow and in the pre-arranged group call setup procedure.

**Discussion:**

The Police of Netherlands presented the document available as S6-190894.

It was noted that "clauses affected" were missing.

Motorola Solutions raised the question whether this was really covered by a stage 1 requirement.

The Police of Netherlands noted that the actual functionality was introduced through a CR from Nokia agreed in SA6#30.

It was suggested to delete the MCPTT ID list information element all together.

**Decision:** The document was **revised to S6-191049**.

**S6-191049 Notification of affiliated MCPTT group members not included in the call**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0206 rev 1 Cat: F (Rel-16)

 Source: The Police of the Netherlands*

(Replaces S6-190894)

**Discussion:**

The Police of Netherlands presented the document available as S6-191049.

The Police of Netherlands noted they would need to update the summary part (remove end part of the sentence).

The only change is to delete "and in the pre-arranged group call setup procedure" from the summary part on the cover page.

With the above change the revised contribution, S6-191109, is considered pre-agreed.

**Decision:** The document was **revised to S6-191109**.

**S6-191109 Notification of affiliated MCPTT group members not included in the call**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0206 rev 2 Cat: F (Rel-16)

 Source: The Police of the Netherlands*

(Replaces S6-191049)

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

**S6-190924 Change to Location Subscription for notification immediate**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0196 Cat: C (Rel-16)

 Source: HOME OFFICE*

**Abstract:**

UK HO requires immediate report to Control Rooms on receiving location information, i.e. real time.

**Discussion:**

The Home Office presented the document available as S6-190925.

BDBOS suggested to change the CR category.

It was suggested to add where the note is referenced.

Huawei was of the view that part of the details in the note were CT1's responsibility.

It was also suggested to modify an existing element instead of creating a new IE.

**Decision:** The document was **revised to S6-191050**.

**S6-191050 Change to Location Subscription for notification immediate**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0196 rev 1 Cat: B (Rel-16)

 Source: HOME OFFICE*

(Replaces S6-190924)

**Discussion:**

The Home Office presented the document available as S6-191050.

BDBOS suggested not referring to "requirements of the UK Public Safety Organisations" on the cover page.

The chairman pointed out that the clauses affected were missing.

It was noted that the clause 10.9 would need rewording.

**Decision:** The document was **revised to S6-191110**.

**S6-191110 Change to Location Subscription for notification immediate**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0196 rev 2 Cat: B (Rel-16)

 Source: HOME OFFICE*

(Replaces S6-191050)

**Discussion:**

The Home Office presented the document available as S6-191110.

The only change is to reinstate the accidentally deleted figure 10.9.3.X-1.

With the above changes the revised contribution, S6-191211, is considered pre-agreed.

**Decision:** The document was **revised to S6-191211**.

**S6-191211 Change to Location Subscription for notification immediate**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0196 rev 3 Cat: B (Rel-16)

 Source: HOME OFFICE*

(Replaces S6-191110)

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

**S6-190927 Addition of name of Groups to Group Configuration data for organising UE**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0197 Cat: C (Rel-16)

 Source: HOME OFFICE*

**Abstract:**

For UK HO the users have a large number of Groups, around 100 per UE and therefore it is necessary to break them up into folders. Hence the addition of a name of Groups.

**Discussion:**

The Home Office presented the document available as S6-190927.

FirstNet did not support including this feature in the specification even if they had some sympathy for the proposal.

Huawei agreed with the view of FirstNet.

Harris indicated they were not supportive of including this in the specification.

The Police of Netherlands was of the view that this functionality should be covered one way or another in a standardised way, like proposed here or in another way.

FirstNet noted that this was just a very first step of the complete solution required.

Sepura indicated support for the view of the Police of Netherlands.

Motorola Solutions suggested to produce a discussion paper to find an appropriate way forward.

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

**S6-190896 Affiliation clarifications**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0191 Cat: F (Rel-16)

 Source: Motorola Solutions*

**Abstract:**

Clarification of affiliation persistence.

**Discussion:**

Motorola Solutions presented the document available as S6-190896.

Samsung noted they had some suggestions for rewording but would give these offline.

The Police of Netherlands also suggested some rewordings e.g. deleting "However" and making some statements more explicit by using the form "..shall..".

Also, some cover page issues were pointed out.

**Decision:** The document was **revised to S6-191051**.

**S6-191051 Affiliation clarifications**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0191 rev 1 Cat: F (Rel-16)

 Source: Motorola Solutions*

(Replaces S6-190896)

**Discussion:**

Motorola Solutions presented the document available as S6-191051.

Huawei was of the view that the UE should remain affiliated unless explicitly de-affiliation.

The Police of Netherlands was of the firm view that the UE should be de-affiliated at log off.

FirstNet noted that it is fundamental MC communication that if the UE is logged off (or comparable use case) that it will become de-affiliated.

**Decision:** The document was **revised to S6-191111**.

**S6-191111 Affiliation clarifications**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0191 rev 2 Cat: F (Rel-16)

 Source: Motorola Solutions*

(Replaces S6-191051)

**Discussion:**

Motorola Solutions presented the document available as S6-191111.

Huawei indicated they did not support the proposal and suggested postponing the contribution.

Hytera indicated it was essential to get this feature into the specification.

Airbus supported the position of Hytera.

Following editor's notes were considered during the discussion as a way forward.

EN:The interaction of logoff and de-affiliation when moving to off-network case is FFS.

EN:The consideration for revoking affiliations of multiple devices on the MC service is FFS

EN:The MCPTT server may track logoff state independent of affiliation is FFS

The only changes are to add the below editor's notes after the last paragraph:

EN:The interaction of logoff and de-affiliation when moving to off-network case is FFS.

EN:The consideration for revoking affiliations of multiple devices on the MC service is FFS

EN:The MCPTT server may track logoff state independent of affiliation is FFS

With the above changes the revised contribution, S6-191228, is considered pre-agreed.

**Decision:** The document was **revised to S6-191228**.

**S6-191228 Affiliation clarifications**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0191 rev 3 Cat: F (Rel-16)

 Source: Motorola Solutions*

(Replaces S6-191111)

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

**S6-190897 Preconfigured regroup information in dynamic data**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0192 Cat: C (Rel-16)

 Source: Motorola Solutions*

**Abstract:**

Adds preconfigured regroup status to MCPTT server dynamic data

**Discussion:**

Motorola Solutions presented the document available as S6-190897.

TD Tech was of the view that the proposed first element description was in conflict with the actual group regroup procedure, and was of the opinion that the group identity did not need to be defined as dynamic data.

Huawei was of the view that the detailed configuration details were not needed here, furthermore also the second element could be simplified.

FirstNet was of the view that the server needs the proposed information and hence indicated support for the proposal.

**Decision:** The document was **revised to S6-191052**.

**S6-191052 Preconfigured regroup information in dynamic data**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0192 rev 1 Cat: C (Rel-16)

 Source: Motorola Solutions*

(Replaces S6-190897)

**Discussion:**

Motorola Solutions presented the document available as S6-191052.

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

**S6-190905 Preconfigured regroup usage**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0207 Cat: F (Rel-16)

 Source: Motorola Solutions*

**Abstract:**

Clarifies use of preconfigured group in regrouping

**Discussion:**

Motorola Solutions presented the document available as S6-190905.

Huawei noted that the "The MCPTT group ID of the temporary regroup group is provided by the MCPTT server..'' was incorrect.

Motorola Solutions agreed that this needs to be corrected.

TD Tech noted that the use of (temporary) regroup group was now unclear and furthermore did not understand why the notes are proposed to be deleted.

FirstNet pointed out that Regroup group ID may be just a label.

**Decision:** The document was **revised to S6-191053**.

**S6-191053 Preconfigured regroup usage**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0207 rev 1 Cat: F (Rel-16)

 Source: Motorola Solutions*

(Replaces S6-190905)

**Discussion:**

Motorola Solutions presented the document available as S6-191053.

TD Tech was of the view that the note 2 stating "The configuration may alternatively be taken from any MCPTT group which is used for group communication." was to generic.

Huawei suggested deleting the note 2.

FirstNet suggested rewording of the note 2.

**Decision:** The document was **revised to S6-191112**.

**S6-191112 Preconfigured regroup usage**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0207 rev 2 Cat: F (Rel-16)

 Source: Motorola Solutions*

(Replaces S6-191053)

**Discussion:**

Motorola Solutions presented the document available as S6-191112.

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

**S6-190995 Clarification on group regroup rules**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0206 Cat: F (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

**Abstract:**

This contribution clarifies and completes the rules for group regroup.

**Discussion:**

TD Tech presented the document available as S6-190995.

Motorola Solutions noted that with the deletion of the common text one loses the notion of between MC systems and this should be covered somehow e.g. in the title, also they also thought the first bullet was correct and should also be covered somewhere.

**Decision:** The document was **revised to S6-191056**.

**S6-191056 Clarification on group regroup rules**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0206 rev 1 Cat: F (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

(Replaces S6-190995)

**Discussion:**

TD Tech presented the document available as S6-191056.

Motorola Solutions was of the view that the last bullet is incorrect and should be deleted.

**Decision:** The document was **revised to S6-191113**.

**S6-191113 Clarification on group regroup rules**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0206 rev 2 Cat: F (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

(Replaces S6-191056)

**Discussion:**

TD Tech presented the document available as S6-191113.

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

**S6-190996 Enhancements on preconfigured group regroup**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0222 Cat: C (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

**Abstract:**

This contribution proposes enhancements for preconfigured group regroup procedures.

**Discussion:**

TD Tech presented the document available as S6-190996.

Motorola Solutions was of the view that the 1st reason for change was incorrect, and did not consider the proposed changes were correct (like e.g. moving step 1 as a pre-condition or the modification of step 2 (previously step 3). They further thought the involving the GMS as proposed complicated the procedure as e.g. step 8 in figure 10.6.2.9.2.1-1 may potentially cause a huge number of messages. Because of these reasons they did not support the proposal.

Samsung did not think the step 3a in figure 10.6.2.9.2.1-1 was required.

**Decision:** The document was **revised to S6-191057**.

**S6-191057 Enhancements on preconfigured group regroup**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0222 rev 1 Cat: C (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

(Replaces S6-190996)

**Discussion:**

TD Tech presented the document available as S6-191057.

Motorola Solutions did not think moving step 1 as a pre-condition was helpful. Furthermore, they did not agree with step 9 (clause 10.6.2.9.2.1) as this would notify also the clients. They further noted they did not agree with the 3 provided reasons for change.

It was also noted that there may be a dependency with the CR#0200 [TS23.280] in document S6-191059.

**Decision:** The document was **revised to S6-191114**.

**S6-191114 Enhancements on preconfigured group regroup**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0222 rev 2 Cat: C (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

(Replaces S6-191057)

**Discussion:**

TD Tech presented the document available as S6-191114.

Motorola Solutions indicated they did not support the proposed notes.

Furthermore, they pointed out that the notes are informative and cannot include "shall". They however thought the proposed pre-condition could be agreed after some rewording.

FirsNet and Harris also raised concern with the proposed notes.

**Decision:** The document was **revised to S6-191238**.

**S6-191238 Enhancements on preconfigured group regroup**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0222 rev 3 Cat: C (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

(Replaces S6-191114)

**Discussion:**

TD Tech presented the document available as S6-191238.

The only changes are to replace preconditions where it says “MCPTT server has subscribed the group regroup information from the GMS for groups involved in this preconfigured regrouping operation” with “In order to be aware whether the group is regrouped, the MCPTT server is subscribed to the group configuration information in GMS.” i.e. subclauses 10.6.2.9.2.1 and 10.6.2.9.3.1.

With the above changes the revised contribution, S6-191253, is considered pre-agreed.

**Decision:** The document was **revised to S6-191253**.

**S6-191253 Enhancements on preconfigured group regroup**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0222 rev 4 Cat: C (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

(Replaces S6-191238)

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

**S6-190947 User regroup using group creation and using preconfigured group**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0220 Cat: B (Rel-16)

 Source: FirstNet, The Police of the Netherlands, AT&T, UIC, UK HO, Kapsch CarrierCom, Motorola Solutions, Harris*

**Abstract:**

The procedure in section 10.6.2.10 needs clarification to make it clear that the group creation procedure for user regroup can be used for both two-way (non-broadcast) and one-way (broadcast) communication. In addition, a procedure for user regrouping us

**Discussion:**

FirstNet presented the document available as S6-190947.

TD Tech did not think it was necessary to expand the preconfigured regroup group to preconfigured group regroup group, and hence did not support the proposal.

BDBOS indicated they were willing to support the proposal but pointed out it was not necessary to number the notes as there was only one note.

Huawei was of the view that another procedure was needed for one way transmit group call.

Samsung suggested adding clarification on "It is recommended that the regroup group ID is not a group with a defined configuration in the GMS." and moving the note 2 beneath the step 4.

The Police of Netherlands made a remark that the word "temporary" should be deleted from "..for one or more temporary regroup groups..".

**Decision:** The document was **revised to S6-191058**.

**S6-191058 User regroup using group creation and using preconfigured group**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0220 rev 1 Cat: B (Rel-16)

 Source: FirstNet, The Police of the Netherlands, AT&T, UIC, UK HO, Kapsch CarrierCom, Motorola Solutions, Harris, Sepura, BDBOS*

(Replaces S6-190947)

**Discussion:**

FirstNet presented the document available as S6-191058.

Huawei raised a concern with regard to two-way communication.

There was a discussion whether it should be mentioned that the created group can be used for two-way communication.

TD Tech requested to delete "where large numbers of MCPTT users need to be regrouped as quickly as possible" from the reason for change on the cover page.

**Decision:** The document was **revised to S6-191169**.

**S6-191169 User regroup using group creation and using preconfigured group**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0220 rev 2 Cat: B (Rel-16)

 Source: FirstNet, The Police of the Netherlands, AT&T, UIC, UK HO, Kapsch CarrierCom, Motorola Solutions, Harris, Sepura, BDBOS*

(Replaces S6-191058)

**Discussion:**

FirstNet presented the document available as S6-191169.

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

**S6-190969 Discussion on group regroup using preconfigured regroup group at GMS**

 *Type: discussion For: Discussion
 Source: Huawei, Hisilicon*

**Abstract:**

The contribution discusses Group regroup at GMS using preconfigured regroup group.

**Discussion:**

Huawei presented the document available as S6-190969.

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

**S6-190970 Group regroup at GMS using preconfigured regroup group**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0200 Cat: B (Rel-16)

 Source: Huawei, Hisilicon*

**Abstract:**

Introduction of new procedures on regroup group between group management client and group management server using preconfigured regroup.

**Discussion:**

Huawei presented the document available as S6-190970.

Motorola Solutions did not just believe this solution would work given the architectural constraints we have e.g. with working with a group document.

FirstNet agreed with the view of Motorola Solutions and was of the opinion that especially steps 6 and 7 risks creating a timing window issue (timing between user notification and the regroup notification).

TD Tech did not see there was any timing risk as communication between servers is very efficient.

Huawei also was of the view that there would be no timing issue, as a dynamic group document would be created after step 5.

Motorola Solutions was concerned that the creation of such group document was not mentioned and that we were running out of time when it comes to defining details of procedures (before release freeze).

Home Office pointed out that when the MC service server receives the Group regroup notification about the Regroup going on it will need to retrieve the group document as it is the first time it will learn about the regroup.

The Police of Netherlands welcomed the improvements to the procedure but suggested moving the step 10 further up i.e. earlier in the procedure (possibly after step 5).

**Decision:** The document was **revised to S6-191059**.

**S6-191059 Group regroup at GMS using preconfigured regroup group**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0200 rev 1 Cat: B (Rel-16)

 Source: Huawei, Hisilicon*

(Replaces S6-190970)

**Discussion:**

Huawei presented the document available as S6-191059.

Motorola Solutions did not see a need for a third regroup procedure.

The Police of Netherlands suggested moving step 10 up in the procedure.

**Decision:** The document was **revised to S6-191171**.

**S6-191171 Group regroup at GMS using preconfigured regroup group**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0200 rev 2 Cat: B (Rel-16)

 Source: Huawei, Hisilicon*

(Replaces S6-191059)

**Discussion:**

Huawei presented the document available as S6-191171.

FirstNet made the remark that the proposal seemed to be a step in the right directions but raised concern with bringing a proposal with so extensive amount of new material at the last day. They were hence not in favour of agreeing the proposal at this moment.

Motorola Solutions voiced similar concerns to FirstNet. They in particular raised concern with table A.4-4.

Also, Airbus and Harris voiced concern with including the proposal in Rel-16.

The Police of Netherlands noted that this proposal seemed to be going in the right direction but was to late be appropriately considered to be included in the Rel-16.

TD Tech was of the view the solutions did not bring extensive changes.

The chairman made a remark that there seemed to be general interest in pursuing the proposal further.

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

**S6-190898 Preconfigured regroup usage**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0193 Cat: F (Rel-16)

 Source: Motorola Solutions*

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

**S6-190908 MCX service servers should be defined in a user profile**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0194 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

MCX service servers should be defined in a user profile

**Discussion:**

AT&T presented the document available as S6-190908.

Motorola Solutions raised a concern with some of the deletions like e.g. the ">> KMSUri for security domain managed by KMS" and they also had some concern with the added "> default Group management server".

**Decision:** The document was **revised to S6-191064**.

**S6-191064 Remove the duplicated Key Management Server URI definiton**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0194 rev 1 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-190908)

**Discussion:**

AT&T presented the document available as S6-191064.

The only change is to use the work item codes enh2MCPTT.

With the above change the revised contribution, S6-191175, is considered pre-agreed.

**Decision:** The document was **revised to S6-191175**.

**S6-191175 Remove the duplicated Key Management Server URI definiton**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0194 rev 2 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191064)

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

**S6-190909 MCX service servers should be defined in a user profile**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0208 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

MCX service servers should be defined in a user profile

**Discussion:**

AT&T presented the document available as S6-190909.

The Police of Netherlands found it strange to try to introduce a solution for multiple ID management servers defined in a service specific specification.

Motorola Solutions agreed with the Police of Netherlands and noted the various servers cannot be defined as proposed here as the UE needs this information already earlier in order to retrieve the user profile in the first place. They therefore did not support the solution proposed.

BDBOS indicated support for the proposed solution.

**Decision:** The document was **revised to S6-191065**.

**S6-191065 Remove the duplicated MCPTT server URI in UE configuration table**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0208 rev 1 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-190909)

**Discussion:**

AT&T presented the document available as S6-191065.

The only change is to use the work item codes enh2MCPTT.

With the above change the revised contribution, S6-191176, is considered pre-agreed.

**Decision:** The document was **revised to S6-191176**.

**S6-191176 Remove the duplicated MCPTT server URI in UE configuration table**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0208 rev 2 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191065)

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

**S6-190910 MCX service servers should be defined in a user profile**

 *Type: CR For: Agreement
 23.281 v16.1.0 CR-0129 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

MCX service servers should be defined in a user profile

**Discussion:**

Revised prior to presentation as a result of the discussion on S6-190909.

**Decision:** The document was **revised to S6-191066**.

**S6-191066 Remove the duplicated MCVideo server URI in UE configuration table**

 *Type: CR For: Agreement
 23.281 v16.1.0 CR-0129 rev 1 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-190910)

**Discussion:**

AT&T presented the document available as S6-191066.

The only change is to use the work item code enh2MCPTT.

With the above change the revised contribution, S6-191177, is considered pre-agreed.

**Decision:** The document was **revised to S6-191177**.

**S6-191177 Remove the duplicated MCVideo server URI in UE configuration table**

 *Type: CR For: Agreement
 23.281 v16.1.0 CR-0129 rev 2 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191066)

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

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

**S6-190916 Resolutions of some Editor's Notes**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0154 Cat: D (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

Resolutions of some Editor's Notes

**Discussion:**

AT&T presented the document available as S6-190916.

It was suggested to change the CR category to "F".

**Decision:** The document was **revised to S6-191060**.

**S6-191060 Resolutions of some Editor's Notes**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0154 rev 1 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-190916)

**Discussion:**

AT&T presented the document available as S6-191060.

The only changes are to:

 - update clauses affected

 - change the note in clauses 7.7.2.2.3 and 7.7.2.3.3 to read "The backward compatibility handling of this procedure is outside the scope of the present specification."

With the above changes the revised contribution, S6-191173, is considered pre-agreed.

**Decision:** The document was **revised to S6-191173**.

**S6-191173 Resolutions of some Editor's Notes**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0154 rev 2 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191060)

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

**S6-190907 Remove the procedure in 7.5.2.9 File removal using HTTP by MCData server**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0151 Cat: C (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

Remove the procedure in 7.5.2.9 File removal using HTTP by MCData server

**Discussion:**

AT&T presented the document available as S6-190907.

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

**S6-191039 Handling editor’s notes in CR 0150 for 3GPP TS 23.282**

 *Type: discussion For: Discussion
 Source: Expway*

**Abstract:**

This paper discusses the editor’s notes within the agreed CR 0150 for 3GPP TS 23.282 (TDoc S6-190884 from SA6#30) and introduces a revision for this CR.

**Discussion:**

Expway presented the document available as S6-191039.

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

**S6-191040 MCData File Distribution using the MBMS download delivery method**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0150 rev 4 Cat: B (Rel-16)

 Source: Expway*

(Replaces S6-190884)

**Abstract:**

Revised CR to deal with 3 editor's notes (see S6-191039)

**Discussion:**

Expway presented the document available as S6-191040.

A rather long discussion followed on the process in clause 7.3.x.3.1.2.

Bull suggested to complete the sentence "The MCData-6 reference point also the xMB-C…".

**Decision:** The document was **revised to S6-191061**.

**S6-191061 MCData File Distribution using the MBMS download delivery method**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0150 rev 5 Cat: B (Rel-16)

 Source: Expway*

(Replaces S6-191040)

**Discussion:**

Expway presented the document available as S6-191061.

TD Tech was of the view that the first paragraph under figure 5.x-1 should be shortened as this is covered by the procedure. Furthermore, they did not agree with referring to an API in the last paragraph of 5.x.

**Decision:** The document was **revised to S6-191174**.

**S6-191174 MCData File Distribution using the MBMS download delivery method**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0150 rev 6 Cat: B (Rel-16)

 Source: Expway*

(Replaces S6-191061)

**Discussion:**

Expway presented the document available as S6-191174.

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

**S6-191045 MCData SD distribution using the MBMS download delivery method**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0160 Cat: B (Rel-16)

 Source: Sepura PLC*

**Abstract:**

xMB has already been extended to allow the use of the MBMS download delivery method for MCData file distribution over MBMS. FD and SDS have a significant commonality in implementation. This CR extends the functionality approved in CR 150 to deliver SDS

**Discussion:**

Sepura presented the document available as S6-191045.

TD Tech raised concern about using MBMS for sending SDS.

AT&T also did not feel confident with the SDS over MBMS solution proposal.

**Decision:** The document was **revised to S6-191062**.

**S6-191062 MCData SD distribution using the MBMS download delivery method**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0160 rev 1 Cat: B (Rel-16)

 Source: Sepura PLC*

(Replaces S6-191045)

**Discussion:**

Sepura presented the document available as S6-191062.

Motorola Solutions indicated they did not see a need for incorporating this proposal in the spec. at least at this late stage.

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

**S6-191044 OMA NMS RESTful API Reuse over MCData-7 and MCData-8 Interfaces**

 *Type: discussion For: Discussion
 Source: AT&T GNS Belgium SPRL*

**Abstract:**

The purpose of this input contribution is twofold:

 - To inform CT1 and SA6 of an existing OMA Network Message Store (NMS) RESTful API specification which pretty much fulfils what 23.282 has defined for interfacing with MCData Message Store over MCData-7 & MCData-8 Reference Points

eMCData2 (CP-190199) includes the definition for MCData-7 & MCData-8 interfaces

 - And also, in general, to determine what is the best option in taking advantage of the already defined OMA RESTful APIs within 3GPP’s Service Based Architecture (SBA).

**Discussion:**

AT&T presented the document available as S6-191044.

It was pointed out that there was no envisaged ownership issue as the reuse is expected to be done via referencing.

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

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

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

**S6-190975 23.283 location with implicit floor request**

 *Type: CR For: Agreement
 23.283 v16.2.0 CR-0033 Cat: C (Rel-16)

 Source: Harris Corporation*

**Abstract:**

Add location to implicit floor request for interworking

**Discussion:**

Harris presented the document available as S6-190975.

The Police of Netherlands pointed out some duplication of text.

**Decision:** The document was **revised to S6-191063**.

**S6-191063 23.283 location with implicit floor request**

 *Type: CR For: Agreement
 23.283 v16.2.0 CR-0033 rev 1 Cat: C (Rel-16)

 Source: Harris Corporation*

(Replaces S6-190975)

**Discussion:**

Harris presented the document available as S6-191063.

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

**S6-190976 23.283 support for interworking in MC systems**

 *Type: CR For: Agreement
 23.283 v16.2.0 CR-0034 Cat: C (Rel-16)

 Source: Harris Corporation*

**Abstract:**

Add normative index to 23.282 that provides interworking support for private call parameters, security message and analogue FM

**Discussion:**

Harris presented the document available as S6-190976.

The Police of Netherlands did not understand the reason for adding the Annex as proposed. Motorola Solutions and Airbus raised the same question.

It was decided to discuss further offline.

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

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

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

**S6-190948 pCR architectural requirements**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Ericsson GmbH, Eurolab*

**Abstract:**

This contribution proposes a pCR to architecture requirements to include VAE capabilities support for uplink V2X message distribution.

**Discussion:**

Ericsson presented the document available as S6-190948.

Huawei suggested rewording "..from the V2X UE to the V2X application." as "from the V2X UE to the V2X application server."

Also, some additional clarification was requested.

**Decision:** The document was **revised to S6-191126**.

**S6-191126 pCR architectural requirements**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Ericsson GmbH, Eurolab*

(Replaces S6-190948)

**Discussion:**

Ericsson presented the document available as S6-191126.

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

**S6-191028 Description for VAE layer functional entities**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Description for VAE layer functional entities

**Discussion:**

Huawei presented the document available as S6-191028.

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

**S6-191020 Clarification on Vc reference point**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

This contribution provides a proposal for clarification on Vc reference point.

**Discussion:**

Huawei presented the document available as S6-191020.

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

**S6-191021 Clarification on VAE-E reference point**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

This contribution provides a proposal for clarification on VAE-E reference point.

**Discussion:**

Huawei presented the document available as S6-191021.

Qualcomm indicated they were fine with deletion of the editor's note, but did not agree with the translation to normative work.

Ericsson suggested adding further deployment models.

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

**S6-191029 Alignment of V2X application layer identities with SEAL identities**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Alignment of V2X application layer identities with SEAL identities

**Discussion:**

Huawei presented the document available as S6-191029.

It was suggested to rephrase the sentence "The V2X UE ID is mapped to the StationID as specified in ETSI TS 102 894-2 [15]."

**Decision:** The document was **revised to S6-191129**.

**S6-191129 Alignment of V2X application layer identities with SEAL identities**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191029)

**Discussion:**

Huawei presented the document available as S6-191129.

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

**S6-191022 Clarification on V2X UE ID**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Clarification on V2X UE ID

**Discussion:**

Huawei presented the document available as S6-191022.

Qualcomm suggested replacing "..to the StationID.." with something along the lines of "..to an V2X application specific UE ID. Due to privacy reasons, the V2X UE ID may be changed with StationID."

It was also suggested to delete the proposed sentence "If the StationID is changed due to operational considerations, the mapped V2X UE ID is also changed."

**Decision:** The document was **revised to S6-191130**.

**S6-191130 Clarification on V2X UE ID**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191022)

**Discussion:**

Huawei presented the document available as S6-191130.

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

**S6-191023 Clarification on V2X service and V2X application**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Clarification on V2X service and V2X application

**Discussion:**

Huawei presented the document available as S6-191023.

Some proposed changes will be discussed offline.

**Decision:** The document was **revised to S6-191131**.

**S6-191131 Clarification on V2X service and V2X application**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191023)

**Discussion:**

Huawei presented the document available as S6-191131.

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

**S6-191024 Description for GEO ID**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Description for GEO ID

**Discussion:**

Huawei presented the document available as S6-191024.

Qualcomm suggested replacing "..supports different definitions.." with "..supports different representations..".

The only changes are to:

 - replace "..supports different definitions.." with "..supports different representations.." and

 - delete "cell identifiers,".

With the above changes the revised contribution, S6-191132, is considered pre-approved.

**Decision:** The document was **revised to S6-191132**.

**S6-191132 Description for GEO ID**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191024)

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

**S6-191032 Alignment of NRM service and editorial correction for referencing SEAL**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

This contribution provides a proposal for alignment of NRM service and editorial correction for referencing SEAL.

**Discussion:**

Huawei presented the document available as S6-191032.

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

**S6-191030 Structure of configuration data**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

This contribution provides a proposal for structure of configuration data.

**Discussion:**

Huawei presented the document available as S6-191030.

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

**S6-191025 Correction to application level location tracking procedure**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

This contribution provides a proposal for correction to application level location tracking procedure.

**Discussion:**

Huawei presented the document available as S6-191025.

It was suggested to make the steps 4, 5 and 6 optional.

The only changes are removing the note and making the steps 4, 5 and 6 optional (i.e. dotted in the figure).

With the above changes the revised contribution, S6-191133, is considered pre-approved.

**Decision:** The document was **revised to S6-191133**.

**S6-191133 Correction to application level location tracking procedure**

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

(Replaces S6-191025)

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

**S6-190950 pCR resolve EN unsubscription step**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Ericsson GmbH, Eurolab*

**Abstract:**

The application level location tracking in clause 9.3 includes an EN that it is FFS if an unsubscription step is required.

**Discussion:**

Ericsson presented the document available as S6-190950.

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

**S6-190951 pCR resolve EN geographical identifiers**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Ericsson GmbH, Eurolab*

**Abstract:**

It is proposed to replace the corresponding EN in Section 9.3.3.2 by a NOTE as per the present contribution.

**Discussion:**

Ericsson presented the document available as S6-190951.

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

**S6-191026 Information flows for V2X message distribution**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Information flows for V2X message distribution

**Discussion:**

Huawei presented the document available as S6-191026.

It was decided to merge the present contribution with S6-190949, further revised to S6-191134.

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

**S6-190949 pCR resolve EN information flows V2X message distribution**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Ericsson GmbH, Eurolab*

**Abstract:**

Adding information flows to V2X message distribution.

**Discussion:**

Ericsson presented the document available as S6-190949.

Philips suggested specifying the V2X UE ID as destination ID in the V2X UE ID description in table 9.4.2.1-1.

**Decision:** The document was **revised to S6-191134**.

**S6-191134 pCR resolve EN information flows V2X message distribution**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Ericsson GmbH, Eurolab, Huawei, Hisilicon*

(Replaces S6-190949)

**Discussion:**

Ericsson presented the document available as S6-191134.

The only change is to rephrase the step 5 (clause 9.4.3.2) to read "The VAE client provides a V2X message reception report to the VAE server if indicated in the V2X message."

With the above change the revised contribution, S6-191194, is considered pre-approved.

**Decision:** The document was **revised to S6-191194**.

**S6-191194 pCR resolve EN information flows V2X message distribution**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Ericsson GmbH, Eurolab, Huawei, Hisilicon*

(Replaces S6-191134)

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

**S6-191027 Resolving procedures requiring coordination with SA2**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

This contribution provides a proposal for resolving procedures requiring coordination with SA2.

**Discussion:**

Huawei presented the document available as S6-191027.

During the initial discussion it was noted that an LS from SA2 should reach SA6 shortly it was decided to revise the contribution anticipating the SA2 LS.

**Decision:** The document was **revised to S6-191135**.

**S6-191135 Resolving procedures requiring coordination with SA2**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191027)

**Discussion:**

Huawei presented the document available as S6-191135.

Qualcomm was not in favour in moving the tables to the normative part at this stage.

Motorola Solutions agreed with the view of Qualcomm.

**Decision:** The document was **revised to S6-191195**.

**S6-191195 Resolving procedures requiring coordination with SA2**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191135)

**Discussion:**

Huawei presented the document available as S6-191195.

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

**S6-190952 pCR V2X group communication over LTE Uu**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Ericsson GmbH, Eurolab*

**Abstract:**

Procedure V2X group communication over LTE Uu

**Discussion:**

Ericsson presented the document available as S6-190952.

Huawei suggested moving the text of 9.x.4 into the clause V2X message distribution. They also thought the 9.x.3 was superfluous as corresponding text already existed.

It was also suggested to move part of the proposal to SEAL. This will appear in document S6-191136.

**Decision:** The document was **revised to S6-191136**.

**S6-191136 V2X group communication over LTE Uu**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Ericsson GmbH, Eurolab*

(Replaces S6-190952)

**Discussion:**

Ericsson presented the document available as S6-191136.

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

**S6-190953 pCR procedure uplink V2X message delivery**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Ericsson GmbH, Eurolab*

**Abstract:**

The contribution proposes to specify the procedure for uplink V2X message delivery from the V2X UE to the V2X AS.

**Discussion:**

Ericsson presented the document available as S6-190953.

Qualcomm made the remark that it was new for a UE to communicate to two servers, hence the step 2 should be clarified whether it is feasible with current architecture.

It was also suggested to make the V2X service ID mandatory.

Also, the GEO ID requires some further offline discussion.

**Decision:** The document was **revised to S6-191138**.

**S6-191138 pCR procedure uplink V2X message delivery**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Ericsson GmbH, Eurolab*

(Replaces S6-190953)

**Discussion:**

Ericsson presented the document available as S6-191138.

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

**S6-191033 Update to VAE layer APIs**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Update to VAE layer APIs

**Discussion:**

Huawei presented the document available as S6-191033 and they remarked that procedure reference needs to be added.

**Decision:** The document was **revised to S6-191139**.

**S6-191139 Update to VAE layer APIs**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191033)

**Discussion:**

Huawei presented the document available as S6-191139.

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

**S6-191031 Complete V2X application architecture for information**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Complete V2X application architecture for information

**Discussion:**

Huawei presented the document available as S6-191031.

Ericsson made some comments to the figure, these will be discussed further offline.

**Decision:** The document was **revised to S6-191140**.

**S6-191140 Complete V2X application architecture for information**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191031)

**Discussion:**

Huawei presented the document available as S6-191140.

Ericsson pointed out inconsistencies between the figures.

The only change is to add an editor's note stating, "The functional model in clause 6.2 must be aligned with Figure A-1."

With the above change the revised contribution, S6-191196, is considered pre-agreed.

**Decision:** The document was **revised to S6-191196**.

**S6-191196 Complete V2X application architecture for information**

 *Type: pCR For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191140)

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

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

**S6-191003 SEAL editorials**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

This pCR proposes to fix some of the editorials in the latest SEAL TS 23.434.

**Discussion:**

Samsung presented the document available as S6-191003.

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

**S6-191004 SEAL updates to introduction**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

The introduction text in SEAL TS 23.434 requires update based on the developments in SEAL TS 23.434 and V2X TS 23.286.

**Discussion:**

Samsung presented the document available as S6-191004.

The only change is to revise the last sentence of the introduction to read "The SEAL functional architecture takes into consideration the existing common capabilities to support mission critical and other vertical applications."

With the above change the revised contribution, S6-191004, is considered pre-approved.

**Decision:** The document was **revised to S6-191115**.

**S6-191115 SEAL updates to introduction**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

(Replaces S6-191004)

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

**S6-191005 SEAL updates to scope**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

SEAL TS 23.434 has agreed to include NRM as a SEAL service and hence the text description for Scope subclause requires to reflect this aspect.

**Discussion:**

Samsung presented the document available as S6-191005.

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

**S6-191006 SEAL vertical application definition alignment**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

The contribution proposes a solution for the editor's note "Editor's Note: Consistent usage of terms verticals, vertical applications and vertical industry applications along with necessary clarification is FFS."

**Discussion:**

Samsung presented the document available as S6-191006.

Deutsche Telekom suggested using the term vertical domains instead of verticals.

Further discussion on the definitions continued and it was finally decided to continue discussions offline.

**Decision:** The document was **revised to S6-191116**.

**S6-191116 SEAL vertical application definition alignment**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

(Replaces S6-191006)

**Discussion:**

Samsung presented the document available as S6-191116.

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

**S6-191016 Requirements for network resource management**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Requirements for network resource management

**Discussion:**

Huawei presented the document available as S6-191006.

**Decision:** The document was **revised to S6-191117**.

**S6-191117 Requirements for network resource management**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191016)

**Discussion:**

Huawei presented the document available as S6-191117.

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

**S6-191007 SEAL identities EN**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

The contribution proposes to resolve the editor's note "Editor's note: Whether VAL UE ID can be globally unique is FFS."

**Discussion:**

Samsung presented the document available as S6-191007.

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

**S6-191008 SEAL VAL user DB**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

The contribution proposes to resolve the editor's note "Editor's note: Adding VAL user database to the functional model is FFS."

**Discussion:**

Samsung presented the document available as S6-191008.

Some further changes were proposed e.g. to use the term "VAL services" instead of "services".

**Decision:** The document was **revised to S6-191118**.

**S6-191118 SEAL VAL user DB**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

(Replaces S6-191008)

**Discussion:**

Samsung presented the document available as S6-191118.

The only changes are to:

 - Replace “communicate” with “communicates” in the last sentence of sub clause 11.2.2 and

 - Renumber the figure numbers in sub clause 6.2.

With the above changes the revised contribution, S6-191189, is considered pre-agreed pre-approved.

**Decision:** The document was **revised to S6-191189**.

**S6-191189 SEAL VAL user DB**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

(Replaces S6-191118)

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

**S6-191009 SEAL dynamic group updates**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

The contribution proposes to resolve the editor's note "Editor's Note: Group updates due to Users or UEs moving in or out of the location is FFS."

**Discussion:**

Samsung presented the document available as S6-191009.

It was suggested not to add the proposed note. Some additional text for inclusion will be discussed offline.

**Decision:** The document was **revised to S6-191119**.

**S6-191119 SEAL dynamic group updates**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

(Replaces S6-191009)

**Discussion:**

Samsung presented the document available as S6-191119.

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

**S6-191010 SEAL configuration procedures**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

The contribution proposes to resolve the editor's note

"Editor's Note: Procedure 11.3.x and related information flows for SS\_Obtain\_Updated\_User\_Profile API is FFS."

**Discussion:**

Samsung presented the document available as S6-191010.

Ericsson suggested replacing (in table 11.3.2.10-1) "consecutive reports" with "consecutive user profile updates".

**Decision:** The document was **revised to S6-191120**.

**S6-191120 SEAL configuration procedures**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

(Replaces S6-191010)

**Discussion:**

Samsung presented the document available as S6-191120.

Motorola Solutions suggested redrawing the figures showing the flows from the left to the right.

The only change is redrawing the figures showing the flows from the left to the right.

With the above changes the revised contribution, S6-191212, is considered pre-approved.

**Decision:** The document was **revised to S6-191212**.

**S6-191212 SEAL configuration procedures**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

(Replaces S6-191120)

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

**S6-191011 SEAL group procedures**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

The contribution proposes to resolve the following editor's notes:

 - Editor's Note: Procedure 10.3.6.x and related information flows for SS\_Obtain\_Group\_Configuration API is FFS.

 - Editor's Note: Procedure 10.3.6.y and related information flows for SS\_Group\_Membership\_Configuration\_Modify API is FFS.

**Discussion:**

Samsung presented the document available as S6-191011.

Qualcomm suggested making the proposal more generic.

**Decision:** The document was **revised to S6-191121**.

**S6-191121 SEAL group procedures**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

(Replaces S6-191011)

**Discussion:**

Samsung presented the document available as S6-191121.

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

**S6-191012 SEAL location procedures**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

This contribution proposes to resolve the editor's note: "Editor's Note: Procedure 9.3.x and related information flows for SS\_Location\_Reporting\_Trigger API is FFS."

**Discussion:**

Samsung presented the document available as S6-191012.

Left "open" during the first round of discussion to consider possible consequences of output of docs S6-191119 and S6-191121.

After further consideration it was noted a generic solution will be considered at a later stage. Hence no change to S6-191012 was needed.

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

**S6-191017 Unicast resource management**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Unicast resource management.

**Discussion:**

Huawei presented the document available as S6-191017.

Ericsson made some remarks e.g. that the figures were inconsistent referring to EPS and 3GPP systems. They further suggested clarifying the step 1 VAL service communication establishment.

**Decision:** The document was **revised to S6-191122**.

**S6-191122 Unicast resource management**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191017)

**Discussion:**

Huawei presented the document available as S6-191122.

Motorola Solutions suggested redrawing the figures from left to right.

**Decision:** The document was **revised to S6-191190**.

**S6-191190 Unicast resource management**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191122)

**Discussion:**

Huawei presented the document available as S6-191190.

The only change is to add an editor's note (below figure 14.2.2-1) stating "The introduction of reference N5 description is FFS".

With the above changes the revised contribution, S6-191229, is considered pre-approved.

**Decision:** The document was **revised to S6-191229**.

**S6-191229 Unicast resource management**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191190)

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

**S6-191018 Multicast resource management**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Multicast resource management.

**Discussion:**

Huawei presented the document available as S6-191018.

Ericsson suggested being more specific (e.g. in the titles) about the fact that this applies only to EPS (if that is the case) and that other modes of MBMS can be supported.

**Decision:** The document was **revised to S6-191123**.

**S6-191123 Multicast resource management**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191018)

**Discussion:**

Huawei presented the document available as S6-191123.

Motorola Solutions suggested redrawing the figures from left to right.

**Decision:** The document was **revised to S6-191191**.

**S6-191191 Multicast resource management**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191123)

**Discussion:**

Huawei presented the document available as S6-191191.

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

**S6-191019 NRM server APIs**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for NRM server APIs.

**Discussion:**

Huawei presented the document available as S6-191019.

Ericsson pointed out a typo "..resource management server to for network resource adaptation..".

**Decision:** The document was **revised to S6-191124**.

**S6-191124 NRM server APIs**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191019)

**Discussion:**

Huawei presented the document available as S6-191124.

Motorola Solutions suggested redrawing the figures from left to right.

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

**S6-191013 SEAL integration with 3GPP network systems**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

This contribution proposes to resolve the following editor's note "Editor's note: Illustrating relationship with SBA to this functional model for informative purpose is FFS."

**Discussion:**

Samsung presented the document available as S6-191013.

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

**S6-191014 SEAL mapping with CFA**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

This contribution proposes to resolve the following editor's note "Editor's Note: It is FFS how the SEAL entities and the corresponding reference points specified in 3GPP TS 23.280 [3] are harmonized."

**Discussion:**

Samsung presented the document available as S6-191014.

**Decision:** The document was **revised to S6-191125**.

**S6-191125 SEAL mapping with CFA**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

(Replaces S6-191014)

**Discussion:**

Samsung presented the document available as S6-191125.

Ericsson had some concern that the note in Table B-1 was unclear.

The only change is to rephrase the note in Table B-1 to read "Defined at the application layer for Mission Critical service (e.g. MCPTT)."

With the above change the revised contribution, S6-191192, is considered pre-approved.

**Decision:** The document was **revised to S6-191192**.

**S6-191192 SEAL mapping with CFA**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Samsung*

(Replaces S6-191125)

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

**S6-191137 Group announcement and join**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Ericsson*

**Abstract:**

The contribution proposes a solution to provide support for V2X group communication from a V2X application server to one or more V2X UEs over LTE Uu.

**Discussion:**

Ericsson presented the document available as S6-191125.

Huawei suggested adding a note stating, "Step 5 may occur any time after step 2.".

Qualcomm suggested adding a note stating something along the lines that one of the optional needs to be present.

Motorola Solutions suggested to redraw figures from left to right.

**Decision:** The document was **revised to S6-191193**.

**S6-191193 Group announcement and join**

 *Type: pCR For: Approval
 23.434 v1.1.0
 Source: Ericsson*

(Replaces S6-191137)

**Discussion:**

Ericsson presented the document available as S6-191193.

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

### 9.9 MONASTERY2 - Application Architecture for the Mobile Communication System for Railways (MONASTERY) Phase 2

**S6-190931 Status of MONASTERY2**

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

**Abstract:**

The discussion paper shows the CR implementation status for the normative work on MONASTERY2

**Discussion:**

Nokia presented the document available as S6-190931.

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

**S6-190974 Functional alias support for MCData File Distribution**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0157 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

**Abstract:**

The present change request addresses the necessary adjustments to include the functional alias of the requesting MCData user in the File Distribution service capability context.

**Discussion:**

UIC presented the document available as S6-190974.

**Decision:** The document was **revised to S6-191070**.

**S6-191070 Functional alias support for MCData File Distribution**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0157 rev 1 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-190974)

**Discussion:**

UIC presented the document available as S6-191070.

**Decision:** The document was **revised to S6-191094**.

**S6-191094 Functional alias support for MCData File Distribution**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0157 rev 2 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191070)

**Discussion:**

UIC presented the document available as S6-191094.

The only change is to update the CR revision number on the cover page.

With the above change the revised contribution, S6-191181, is considered pre-agreed.

**Decision:** The document was **revised to S6-191181**.

**S6-191181 Functional alias support for MCData File Distribution**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0157 rev 3 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191094)

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

**S6-190935 MCPTT server limits the number of simultaneous successful service authorisations**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0213 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

By using the client ID, the MCData server limits the number of parallel log-ins as configured.

**Discussion:**

Nokia presented the document available as S6-190935.

**Decision:** The document was **revised to S6-191071**.

**S6-191071 MCPTT server limits the number of simultaneous successful service authorisations**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0213 rev 1 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-190935)

**Discussion:**

Nokia presented the document available as S6-191071.

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

**S6-190934 MCVideo server limits the number of simultaneous successful service authorisations**

 *Type: CR For: Agreement
 23.281 v16.1.0 CR-0131 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

By using the client ID, the MCVideo server limits the number of parallel log-ins as configured.

**Discussion:**

Nokia presented the document available as S6-190934.

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

**S6-190946 MCData server limits the number of simultaneous successful service authorisations**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0156 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

By using the client ID, the MCData server limits the number of parallel log-ins as configured.

**Discussion:**

Nokia presented the document available as S6-190946.

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

**S6-190936 Additional commencement modes for group calls**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0214 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

The MCPTT server is pre-configured to verify whether the additional conditions are met before establishing a pre-arranged group call.

**Discussion:**

Nokia presented the document available as S6-190936.

**Decision:** The document was **revised to S6-191072**.

**S6-191072 Additional commencement modes for group calls**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0214 rev 1 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-190936)

**Discussion:**

Nokia presented the document available as S6-191072.

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

**S6-190937 Triggering an emergency group communication after an emergency alert automatically**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0215 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

MCPTT client implementation triggers a subsequent MCPTT emergency group call.

**Discussion:**

Nokia presented the document available as S6-190937.

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

**S6-190978 Functional alias based location reporting – functional alias status notification**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0202 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

**Abstract:**

The contribution proposes the necessary procedures and information flows informing the location management server about the functional alias status and its associated MC service user(s).

**Discussion:**

UIC presented the document available as S6-190978.

Further offline discussion needed.

Consolidation between S6-190971, S6-190978 and S6-190980 needed.

**Decision:** The document was **revised to S6-191073**.

**S6-191073 Functional alias based location reporting – functional alias status notification**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0202 rev 1 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-190978)

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

**S6-190979 Location information reporting based on functional alias**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0203 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

**Abstract:**

The change request addresses location reporting based on functional alias for functional alias that are shared and not shared between MC service users.

**Discussion:**

UIC presented the document available as S6-190979.

Further offline discussion needed, e.g.:

 - Can existing procedures be used?

 - Adding FA to every location report may not be the best solution?

**Decision:** The document was **revised to S6-191074**.

**S6-191074 Location information reporting based on functional alias**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0203 rev 1 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-190979)

**Discussion:**

UIC presented the document available as S6-191074.

Figure 10.9.3.Y.1-1, step3 shall be moved to preconditions.

Service type needs to be visible in the text.

Table 10.9.2.4-1 – the requesting FA not needed.

**Decision:** The document was **revised to S6-191095**.

**S6-191095 Location information reporting based on functional alias**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0203 rev 2 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191074)

**Discussion:**

UIC presented the document available as S6-191095.

Motorola Solutions suggested rewording pre-condition 2.

It was also pointed out that the CR#, CR rev should be corrected as well as Proposed change affects tick box filled in.

**Decision:** The document was **revised to S6-191182**.

**S6-191182 Location information reporting based on functional alias**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0203 rev 3 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191095)

**Discussion:**

UIC presented the document available as S6-191182.

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

**S6-190938 MCPTT client performs automatic activation and deactivation of functional aliases based on location**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0216 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

MCPTT user profile controls client initiated and location dependent activation and de-activation of functional alias(es).

**Discussion:**

Nokia presented the document available as S6-190938.

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

**S6-190939 MCVideo client performs automatic activation and deactivation of functional aliases based on location**

 *Type: CR For: Agreement
 23.281 v16.1.0 CR-0132 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

MCVideo user profile controls client initiated and location dependent activation and de-activation of functional alias(es).

**Discussion:**

Nokia presented the document available as S6-190939.

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

**S6-190940 MCData client performs automatic activation and deactivation of functional aliases based on location**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0155 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

MCData user profile controls client initiated and location dependent activation and de-activation of functional alias(es).

**Discussion:**

Nokia presented the document available as S6-190940.

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

**S6-190941 Communication priority for functional aliases**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0217 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

MCPTT service configuration data is enhanced by adding a communication priority associated to a functional alias.

**Discussion:**

Nokia presented the document available as S6-190941.

Suggestion changing parameter level and adding NOTE explaining the use of the new parameter.

Check if the user profile is the correct place for FA parameters.

**Decision:** The document was **revised to S6-191075**.

**S6-191075 Communication priority for functional aliases**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0217 rev 1 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-190941)

**Discussion:**

Nokia presented the document available as S6-191075.

Add a note to table A-5.2 explaining that the usage of “communication priority” parameter is implementation specific.

**Decision:** The document was **revised to S6-191096**.

**S6-191096 Communication priority for functional aliases**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0217 rev 2 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-191075)

**Discussion:**

Nokia presented the document available as S6-191096.

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

**S6-190944 MC service server prevents de-affiliation when using a specific functional alias(es)**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0198 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Modifying the group de-affiliation procedure to prevent de-affiliation in conjunction with functional aliases.

**Discussion:**

Nokia presented the document available as S6-190944.

Some rewording was suggested.

**Decision:** The document was **revised to S6-191076**.

**S6-191076 MC service server prevents de-affiliation when using a specific functional alias(es)**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0198 rev 1 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-190944)

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

**S6-190945 List of functional aliases used by affiliated group members**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0199 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Adds a mechanism to get the list of currently affiliated members including functional alias(es).

**Discussion:**

Nokia presented the document available as S6-190945.

The proposal requires further consideration, not pursued in Rel-16.

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

**S6-190971 Functional alias subscription and notification**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0201 Cat: B (Rel-16)

 Source: Huawei, Hisilicon*

**Abstract:**

The contribution proposes new subscription and notification procedures and information flows about the MC service user(s) who activates the functional alias.

**Discussion:**

Huawei presented the document available as S6-190971.

It was pointed out that the Unsubsribe procedure missing.

Consolidation between S6-190971, S6-190978 and S6-190980 is needed.

**Decision:** The document was **revised to S6-191077**.

**S6-191077 Functional alias subscription and notification**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0201 rev 1 Cat: B (Rel-16)

 Source: Huawei, Hisilicon*

(Replaces S6-190971)

**Discussion:**

Huawei presented the document available as S6-191077.

Spelling errors, rewording in the reasons for change.

**Decision:** The document was **revised to S6-191097**.

**S6-191097 Functional alias subscription and notification**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0201 rev 2 Cat: B (Rel-16)

 Source: Huawei, Hisilicon*

(Replaces S6-191077)

**Discussion:**

Huawei presented the document available as S6-191097.

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

**S6-190980 Functional alias - MCData ID correspondence**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0158 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

**Abstract:**

The contribution proposes necessary procedures and information flows informing the MCData server about functional alias status and its associated MCData user(s).

**Discussion:**

UIC presented the document available as S6-190980.

Consolidation between S6-190971, S6-190978 and S6-190980 is needed.

**Decision:** The document was **revised to S6-191078**.

**S6-191078 Functional alias - MCData ID correspondence**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0158 rev 1 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-190980)

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

**S6-190993 Functional alias clarifications**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0204 Cat: F (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

**Abstract:**

This contribution clarifies the procedures of functional alias activation, de-activation and take over.

**Discussion:**

TD Tech presented the document available as S6-190993.

It was suggested to remove the changes to step 1 and add a NOTE between step 1 and 2.

Furthermore, to change the proposed NOTE to read:

NOTE: The functional alias status may be updated to other servers within the MC system using the notification for functional alias procedure.

**Decision:** The document was **revised to S6-191079**.

**S6-191079 Functional alias clarifications**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0204 rev 1 Cat: F (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

(Replaces S6-190993)

**Discussion:**

TD Tech presented the document available as S6-191079.

The only changes are to rephrase the NOTE 2 in (clauses 10.13.4, 10.13.5 and 10.13.6) to read "The functional alias status is notified to other servers (e.g. MC service servers) within the MC system that have subscribed to the functional alias status."

With the above change the revised contribution, S6-191183, is considered pre-agreed.

**Decision:** The document was **revised to S6-191183**.

**S6-191183 Functional alias clarifications**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0204 rev 2 Cat: F (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

(Replaces S6-191079)

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

**S6-190992 Functional alias as called party in private call**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0221 Cat: B (Rel-16)

 Source: TD Tech, Chengdu TD Tech, Huawei*

**Abstract:**

This contribution provides solutions for private calls supporting functional alias as called party.

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

**S6-190942 Information flows for the first-to-answer call procedure**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0218 Cat: F (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Adding the information flows for the first-to-answer call procedure.

**Discussion:**

Nokia presented the document available as S6-190942.

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

**S6-190943 First-to-answer emergency call setup**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0219 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

**Abstract:**

Adding the information flows and the procedure for the first-to-answer emergency call procedure.

**Discussion:**

Nokia presented the document available as S6-190943.

**Decision:** The document was **revised to S6-191080**.

**S6-191080 First-to-answer emergency call setup**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0219 rev 1 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-190943)

**Discussion:**

Nokia presented the document available as S6-191080.

After some discussion it was suggested to rephrase the last sentence.

**Decision:** The document was **revised to S6-191184**.

**S6-191184 First-to-answer emergency call setup**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0219 rev 2 Cat: B (Rel-16)

 Source: Nokia, Nokia Shanghai Bell*

(Replaces S6-191080)

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

**S6-190928 Add configuration for call forwarding and transfer of MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0210 Cat: B (Rel-16)

 Source: Kapsch CarrierCom*

**Abstract:**

Add configuration for call forwarding and transfer of MCPTT private calls

**Discussion:**

Kapsch CarrierCom presented the document available as S6-190928.

It was decided to progress further during a drafting session.

**Decision:** The document was **revised to S6-191081**.

**S6-191081 Add configuration for call forwarding and transfer for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0210 rev 1 Cat: B (Rel-16)

 Source: Kapsch CarrierCom*

(Replaces S6-190928)

**Discussion:**

Kapsch CarrierCom presented the document available as S6-191081.

The only changes are to update the title to read "Add configuration for call forwarding for MCPTT private calls"

With the above change the revised contribution, S6-191185, is considered pre-agreed.

**Decision:** The document was **revised to S6-191185**.

**S6-191185 Add configuration for call forwarding for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0210 rev 2 Cat: B (Rel-16)

 Source: Kapsch CarrierCom*

(Replaces S6-191081)

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

**S6-190929 Add call forwarding for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0211 Cat: B (Rel-16)

 Source: Kapsch CarrierCom*

**Abstract:**

Add call forwarding for MCPTT private calls

**Discussion:**

Kapsch CarrierCom presented the document available as S6-190929.

It was decided to progress further during a drafting session.

**Decision:** The document was **revised to S6-191082**.

**S6-191082 Add call forwarding for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0211 rev 1 Cat: B (Rel-16)

 Source: Kapsch CarrierCom*

(Replaces S6-190929)

**Discussion:**

Kapsch CarrierCom presented the document available as S6-191082.

Motorola Solutions suggested changing (or deleting) step 7 in clause 10.7.y.2.3.

The Police of Netherlands suggested rephrasing the step 2 in the Figure 10.7.y.2.3-1.

**Decision:** The document was **revised to S6-191186**.

**S6-191186 Add call forwarding for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0211 rev 2 Cat: B (Rel-16)

 Source: Kapsch CarrierCom*

(Replaces S6-191082)

**Discussion:**

Kapsch CarrierCom presented the document available as S6-191186.

The only changes are to:

 - update font style in figure 10.7.y.2.3-1 and

 - complete clauses affected.

With the above changes the revised contribution, S6-191230, is considered pre-agreed.

**Decision:** The document was **revised to S6-191230**.

**S6-191230 Add call forwarding for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0211 rev 3 Cat: B (Rel-16)

 Source: Kapsch CarrierCom*

(Replaces S6-191186)

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

**S6-190930 Add call transfer for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0212 Cat: B (Rel-16)

 Source: Kapsch CarrierCom*

**Abstract:**

Add call transfer for MCPTT private calls

**Discussion:**

Kapsch CarrierCom presented the document available as S6-190930.

It was decided to progress further during a drafting session.

**Decision:** The document was **revised to S6-191083**.

**S6-191083 Add call transfer for MCPTT private calls**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0212 rev 1 Cat: B (Rel-16)

 Source: Kapsch CarrierCom*

(Replaces S6-190930)

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

**S6-190981 IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0159 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

**Abstract:**

This change request contains the transactions and the related message information field to establish point-to-point and group communication in the context with IP connectivity service capabilities.

**Discussion:**

UIC presented the document available as S6-190981.

It was suggested to postpone Group procedures to Rel-17, making MCData ID mandatory and moving TX/RX control box in the figures downwards.

**Decision:** The document was **revised to S6-191084**.

**S6-191084 IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0159 rev 1 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-190981)

**Discussion:**

UIC presented the document available as S6-190984.

Ericsson made a number of comments e.g. on the step 9 in clause 7.X.2.2.2 and suggestion to delete clause 7.X.3.

Motorola Solutions noted the new parameter requires sub-items.

**Decision:** The document was **revised to S6-191188**.

**S6-191188 IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0159 rev 2 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191084)

**Discussion:**

UIC presented the document available as S6-191188.

The only changes are to

 - update the other comments field changing the CR reference to read "CR0148r3 in S6-190864" and

 - in Table A.3-2 to set the cells for >>MCData ID as "Y","Y","Y" and "Y".

With the above changes the revised contribution, S6-191231, is considered pre-agreed.

**Decision:** The document was **revised to S6-191231**.

**S6-191231 IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0159 rev 3 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191188)

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

**S6-190982 Functional Alias management for interworking between MC service system and LMR system**

 *Type: CR For: Agreement
 23.283 v16.2.0 CR-0035 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

**Abstract:**

This change request enables the entire management for functional alias activation, deactivation, query and take over and is a precondition for the use of functional alias in the communication procedures.

**Discussion:**

UIC presented the document available as S6-190982.

**Decision:** The document was **revised to S6-191085**.

**S6-191085 Functional Alias management for interworking between MC service system and LMR system**

 *Type: CR For: Agreement
 23.283 v16.2.0 CR-0035 rev 1 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-190982)

**Discussion:**

UIC presented the document available as S6-190985.

Motorola Solutions suggested rephrasing the definition as"

User homed in the IWF: An MC service ID that represents an LMR user in the MC system.

The rest of the contribution needs to be modified accordingly.

**Decision:** The document was **revised to S6-191187**.

**S6-191187 Functional Alias management for interworking between MC service system and LMR system**

 *Type: CR For: Agreement
 23.283 v16.2.0 CR-0035 rev 2 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

(Replaces S6-191085)

**Discussion:**

UIC presented the document available as S6-191187.

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

**S6-190983 Functional alias in LMR interworking for private calls.**

 *Type: CR For: Agreement
 23.283 v16.2.0 CR-0036 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

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

**S6-190984 Functional alias for floor control interworking between MC service system and LMR system**

 *Type: CR For: Agreement
 23.283 v16.2.0 CR-0037 Cat: B (Rel-16)

 Source: Union Inter. Chemins de Fer*

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

### 9.10 TEI16 – Technical Enhancements and Improvements

**S6-190911 MCX service servers should be defined in a user profile**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0152 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

MCX service servers should be defined in a user profile

**Discussion:**

Revised prior to presentation as a result of the discussion on S6-190909.

**Decision:** The document was **revised to S6-191067**.

**S6-191067 Remove the duplicated MCPTT server URI in UE configuration table**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0152 rev 1 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-190911)

**Discussion:**

AT&T presented the document available as S6-191067.

The only changes are to use the work item code eMCDATA2 and replace all occurrences of MCPTT with MCDATA (incl. the title).

With the above change the revised contribution, S6-191177, is considered pre-agreed.

**Decision:** The document was **revised to S6-191178**.

**S6-191178 Remove the duplicated MCDATA server URI in UE configuration table**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0152 rev 2 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191067)

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

**S6-190912 KMSUri is missing in various configuration data**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0195 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

KMSUri is missing in various configuration data

**Discussion:**

AT&T presented the document available as S6-190912.

Motorola Solutions did not agree with the need to add:

> Application plane server identity information of identity management server which provides authorization for group (see NOTE X)

>> Server URI

> KMSUri for security domain of group (see NOTE 3)

> Presentation priority of the group relative to other groups and users (see NOTE Y)

nor the proposed list of authorised users.

**Decision:** The document was **revised to S6-191103**.

**S6-191103 KMSUri is missing in various configuration data**

 *Type: CR For: Agreement
 23.280 v16.2.0 CR-0195 rev 1 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-190912)

**Discussion:**

AT&T presented the document available as S6-191103.

Motorola Solutions suggested using the work item code eMCDATA2 and inserting the new parameters into TS 23.282.

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

**S6-190915 KMSUri is missing in various configuration data**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0153 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

KMSUri is missing in various configuration data

**Discussion:**

AT&T presented the document available as S6-190915.

Motorola Solutions suggested several changes e.g. that the proposed parameters to "List of groups user implicitly affiliates to after MCData service authorization for the user" were not needed.

**Decision:** The document was **revised to S6-191068**.

**S6-191068 KMSUri is missing in various configuration data**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0153 rev 1 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-190915)

**Discussion:**

AT&T presented the document available as S6-191068.

The Police of Netherlands was of the view that there might be an issue with lossless communication in the off-network case.

It was also noted that the work items code could be eMCDATA2 instead of TEI16.

**Decision:** The document was **revised to S6-191180**.

**S6-191180 Add lossless communication to network group configuration and fix missing configuration parameter**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0153 rev 2 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191068)

**Discussion:**

AT&T presented the document available as S6-191180.

The Police of Netherlands suggested replacing "Per user group conversation hang time" with "Conversation hang time".

**Decision:** The document was **revised to S6-191250**.

**S6-191250 Add lossless communication to network group configuration and fix missing configuration parameter**

 *Type: CR For: Agreement
 23.282 v16.2.0 CR-0153 rev 3 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191180)

**Discussion:**

AT&T presented the document available as S6-191250.

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

**S6-190914 KMSUri is missing in various configuration data**

 *Type: CR For: Agreement
 23.281 v16.1.0 CR-0130 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

KMSUri is missing in various configuration data

**Discussion:**

AT&T presented the document available as S6-190914.

**Decision:** The document was **revised to S6-191069**.

**S6-191069 KMSUri is missing in various configuration data**

 *Type: CR For: Agreement
 23.281 v16.1.0 CR-0130 rev 1 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-190914)

**Discussion:**

AT&T presented the document available as S6-191069.

It was suggested using the work item codes TEI16, eMCVIDEO.

Also, the date field needs to be filled in.

**Decision:** The document was **revised to S6-191179**.

**S6-191179 KMSUri is missing in various configuration data**

 *Type: CR For: Agreement
 23.281 v16.1.0 CR-0130 rev 2 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

(Replaces S6-191069)

**Discussion:**

AT&T presented the document available as S6-191179.

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

**S6-190913 KMSUri is missing in various configuration data**

 *Type: CR For: Agreement
 23.379 v16.2.0 CR-0209 Cat: F (Rel-16)

 Source: AT&T GNS Belgium SPRL*

**Abstract:**

KMSUri is missing in various configuration data

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

## 10 Study Items

### 10.1 FS\_MCSAA – Study on MC services access aspects

**S6-190997 Pseudo-CR on Update to solution 4**

 *Type: pCR For: Approval
 23.778 v1.3.0
 Source: Ericsson*

**Abstract:**

Update to solution 4

**Discussion:**

Ericsson presented the document available as S6-190997.

Suggestion to remove new text under figure Figure 6.4.1-1 and to check all clause numbers and figure numbers.

**Decision:** The document was **revised to S6-191086**.

**S6-191086 Pseudo-CR on Update to solution 4**

 *Type: pCR For: Approval
 23.778 v1.3.0
 Source: Ericsson*

(Replaces S6-190997)

**Discussion:**

Ericsson presented the document available as S6-191086.

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

**S6-190998 Overall analysis of IOPS solutions**

 *Type: discussion For: Discussion
 23.778 v..
 Source: Ericsson*

**Abstract:**

Overall analysis of IOPS solutions

**Discussion:**

Ericsson presented the document available as S6-190998.

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

**S6-190999 Pseudo-CR on Update to the overall evaluation section**

 *Type: pCR For: Approval
 23.778 v1.3.0
 Source: Ericsson*

**Abstract:**

Update to overall evaluation section

**Discussion:**

Ericsson presented the document available as S6-190999.

Table 7.2-1 – add dependency on SA3.

Add a note that solution 4 adds a new EPC interface.

**Decision:** The document was **revised to S6-191087**.

**S6-191087 Pseudo-CR on Update to the overall evaluation section**

 *Type: pCR For: Approval
 23.778 v1.3.0
 Source: Ericsson*

(Replaces S6-190999)

**Discussion:**

Ericsson presented the document available as S6-191087.

Motorola Solutions suggested deleting the sentence "This solution is based on reutilizing the off-network protocols and procedures." in the last paragraph.

The only change is deleting the sentence "This solution is based on reutilizing the off-network protocols and procedures." from the last paragraph in clause 7.3.

With the above change the revised contribution, S6-191197, is considered pre-approved.

**Decision:** The document was **revised to S6-191197**.

**S6-191197 Pseudo-CR on Update to the overall evaluation section**

 *Type: pCR For: Approval
 23.778 v1.3.0
 Source: Ericsson*

(Replaces S6-191087)

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

**S6-191000 Pseudo-CR on Update to conclusions section**

 *Type: pCR For: Approval
 23.778 v1.3.0
 Source: Ericsson*

**Abstract:**

Update to conclusions section

**Discussion:**

Ericsson presented the document available as S6-191000.

Further offline discussion needed.

**Decision:** The document was **revised to S6-191088**.

**S6-191088 Pseudo-CR on Update to conclusions section**

 *Type: pCR For: Approval
 23.778 v1.3.0
 Source: Ericsson*

(Replaces S6-191000)

**Discussion:**

Ericsson presented the document available as S6-191088.

The Police of Netherlands suggested adding a Note or Editor's Note stating that these solutions apply to application layer only (as opposed to the network layer).

The matter will be discussed offline.

**Decision:** The document was **revised to S6-191198**.

**S6-191198 Pseudo-CR on Update to conclusions section**

 *Type: pCR For: Approval
 23.778 v1.3.0
 Source: Ericsson*

(Replaces S6-191088)

**Discussion:**

Ericsson presented the document available as S6-191198.

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

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

**S6-190920 Key issue 5GS network slicing supporting Mission Critical**

 *Type: pCR For: Approval
 23.783 v0.5.0
 Source: BDBOS*

**Discussion:**

BDBOS presented the document available as S6-190920.

Huawei raised a concern with several of the aspects listed, as they did not think these were affected by slicing.

The Police of Netherlands welcomed the input on network slicing but maybe this proposal went a step too far at this stage.

Motorola Solutions supported in general the contribution but did not understand the bullet on "How scalability to dynamic adaption…".

**Decision:** The document was **revised to S6-191099**.

**S6-191099 Key issue 5GS network slicing supporting Mission Critical**

 *Type: pCR For: Approval
 23.783 v0.5.0
 Source: BDBOS*

(Replaces S6-190920)

**Discussion:**

BDBOS presented the document available as S6-191099.

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

### 10.3 FS\_MCLOG – Study into discreet listening and logging for mission critical services

**S6-190899 Update solution 1 for multiple UEs**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: Motorola Solutions*

**Abstract:**

Updates discreet listening solution for user with multiple UEs

**Discussion:**

Motorola Solutions presented the document available as S6-190899.

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

**S6-190900 Update solution 2 for multiple UEs**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: Motorola Solutions*

**Abstract:**

Updates discreet listening video push/pull solution for user with multiple UEs

**Discussion:**

Motorola Solutions presented the document available as S6-190900.

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

**S6-190901 Update solution 3 for multiple UEs**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: Motorola Solutions*

**Abstract:**

Updates logging solution for user with multiple UEs

**Discussion:**

Motorola Solutions presented the document available as S6-190901.

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

**S6-190902 Update overall evaluation**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: Motorola Solutions*

**Abstract:**

Updates overall evaluation to include latest solutions

**Discussion:**

Motorola Solutions presented the document available as S6-190902.

Revised to take into account the progress achieved in the present meeting.

**Decision:** The document was **revised to S6-191089**.

**S6-191089 Update overall evaluation**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: Motorola Solutions*

(Replaces S6-190902)

**Discussion:**

Motorola Solutions presented the document available as S6-191089.

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

**S6-190903 Conclusions**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: Motorola Solutions*

**Abstract:**

Adds conclusions to TR 23.784

**Discussion:**

Motorola Solutions presented the document available as S6-190903.

The only change is to delete the sentence “Some of the solutions will impact stage 3 work.”

With the above change the revised contribution, S6-191090, is considered pre-approved.

**Decision:** The document was **revised to S6-191090**.

**S6-191090 Conclusions**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: Motorola Solutions*

(Replaces S6-190903)

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

**S6-190921 Pseudo-CR on solution supporting regulatory constraints and operator security policies**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: BDBOS, Motorola Solutions*

**Abstract:**

Regulatory constraints can have an impact on specific functionalities and in this case on discreet listening and logging. The present contribution proposes functionality for discreet listening with regulatory constraints and operator security policies.

**Discussion:**

BDBOS presented the document available as S6-190921.

Figure 6.x.1.3.4-1 – move flow 9c downwards.

Figure 6.x.1.3.3-1 – move flow 8c downwards.

Configuration parameter needed to restrict DL to one target.

**Decision:** The document was **revised to S6-191091**.

**S6-191091 Pseudo-CR on solution supporting regulatory constraints and operator security policies**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: BDBOS, Motorola Solutions*

(Replaces S6-190921)

**Discussion:**

BDBOS presented the document available as S6-191091.

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

**S6-190972 Pseudo-CR on Functionality for on-network logging and replay**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

This contribution introduces a new solution to Functionality for on-network logging and replay.

**Discussion:**

Huawei presented the document available as S6-190972.

**Decision:** The document was **revised to S6-191092**.

**S6-191092 Pseudo-CR on Functionality for on-network logging and replay**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-190972)

**Discussion:**

Huawei presented the document available as S6-191092.

The only change is to replace the second paragraph in clause 6.x.3 with the sentence "The interaction between the MC replay client and the MC logging function is out of scope of the present document."

With the above change the revised contribution, S6-191201, is considered pre-approved.

**Decision:** The document was **revised to S6-191201**.

**S6-191201 Pseudo-CR on Functionality for on-network logging and replay**

 *Type: pCR For: Approval
 23.784 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191092)

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

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

**S6-190918 Pseudo-CR on solution sharing location information across MC service Ues**

 *Type: pCR For: Approval
 23.744 v0.4.0
 Source: BDBOS*

**Abstract:**

This pCR adds a solution for sharing location information across MC service Ues. The solution refers to key issue 5: Sharing of location information.

**Discussion:**

BDBOS presented the document available as S6-190918.

**Decision:** The document was **revised to S6-191093**.

**S6-191093 Pseudo-CR on solution sharing location information across MC service Ues**

 *Type: pCR For: Approval
 23.744 v0.4.0
 Source: BDBOS*

(Replaces S6-190918)

**Discussion:**

BDBOS presented the document available as S6-191093.

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

**S6-190919 Solution sharing location information with other MC service users at partner MC system**

 *Type: pCR For: Approval
 23.744 v0.4.0
 Source: BDBOS*

**Abstract:**

This pCR adds a solution for sharing location information with other MC service users at partner MC system. The solution refers to key issue 5: Sharing of location information.

**Discussion:**

BDBOS presented the document available as S6-190919.

The existing architecture does not support this solution.

New key issue needed to solve location mgmt. signalling within one system (location mgmt. client – mc server – location mgmt. server).

Functional model needs to be updated to enable intersystem location sharing.

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

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

**S6-190954 Key issue - TSN supporting**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

**Abstract:**

This contribution discusses a key issue for TSN supporting by Factories of the Future related applications.

**Discussion:**

ZTE presented the document available as S6-190954.

Qualcomm suggested adding the explanation of TSN (Time Sensitive Network), they further suggested to reword text such that it is clear whether text comes from another specification e.g. TS 22.104.

It was also suggested to clarify the TSN bridge concept (ref to TS 23.502 ?).

Huawei suggested splitting the open issue into two.

**Decision:** The document was **revised to S6-191161**.

**S6-191161 Key issue - TSN supporting**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-190954)

**Discussion:**

ZTE presented the document available as S6-191161.

It was pointed out that "3GPP TS 22.104 [3] describes" should appear with revisions marks. Also, the changes on changes should be removed. Furthermore, the changes between revisions should be shown in different colour.

**Decision:** The document was **revised to S6-191213**.

**S6-191213 Key issue - TSN supporting**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191161)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191239**.

**S6-191239 Key issue - TSN supporting**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191213)

**Discussion:**

ZTE presented the document available as S6-191239.

Ericsson suggested deleting the word mapping from the sentence under open issues.

The only changes are to:

- remove “mapping” from the open issues, first bullet and

- add EN under open issues “The relationship with existing key issues/solution in FS\_V2XAPP is FFS”.

With the above changes the revised contribution, S6-191254, is considered pre-approved.

**Decision:** The document was **revised to S6-191254**.

**S6-191254 Key issue - TSN supporting**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191239)

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

**S6-190955 Key issue - QoS monitoring**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

**Abstract:**

This contribution discusses a key issue for QoS monitoring by Factories of the Future related applications.

**Discussion:**

ZTE presented the document available as S6-190955.

Samsung suggested adding an editor's note stating, "The relationship with existing key issue/solution in V2XAPP is FFS."

AT&T suggested rewording the last sentence along the lines of "Whether and how to support the QoS monitoring from the application layer of Factories of the Future, based on the 5GC QoS monitoring capabilities?"

**Decision:** The document was **revised to S6-191162**.

**S6-191162 Key issue - QoS monitoring**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-190955)

**Discussion:**

ZTE presented the document available as S6-191162.

It was pointed out that there was inconsistency on the usage of revision marks and that the changes between revisions should be shown in different colour. Furthermore, there were some style issues.

**Decision:** The document was **revised to S6-191214**.

**S6-191214 Key issue - QoS monitoring**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191162)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191240**.

**S6-191240 Key issue - QoS monitoring**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191214)

**Discussion:**

ZTE presented the document available as S6-191240.

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

**S6-190956 Key issue - QoS for 5G communication services**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

**Abstract:**

This contribution discusses QoS for 5G communication services key issue for Factories of the Future related applications.

**Discussion:**

ZTE presented the document available as S6-190956.

Qualcomm remarked they did not understand what exactly was meant with "..based on application service level requirements".

It was suggested to rephrase the open issue along the lines of "How to manage the mapping of application service level requirements with underlying QoS control?"

**Decision:** The document was **revised to S6-191163**.

**S6-191163 Key issue - QoS for 5G communication services**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-190956)

**Discussion:**

ZTE presented the document available as S6-191163.

It was pointed out that there was inconsistency on the usage of revision marks and that the changes between revisions should be shown in different colour. Furthermore, there were some style issues.

**Decision:** The document was **revised to S6-191215**.

**S6-191215 Key issue - QoS for 5G communication services**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191163)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191241**.

**S6-191241 Key issue - QoS for 5G communication services**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191215)

**Discussion:**

ZTE presented the document available as S6-191241.

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

**S6-190957 Key issue - Monitoring network situation of 3GPP systems**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

**Abstract:**

This contribution discusses a key issue for Monitoring network situation of 3GPP systems by Factories of the Future related applications.

**Discussion:**

ZTE presented the document available as S6-190957.

It was suggested to rephrase the open issue along the lines of "How to utilize the network capability exposure interface for monitoring network status (e.g. loss of connectivity) from the application layer of Factories of the Future?"

It was also noted that whether current application layer mechanisms can be reused is FFS.

Deutsche Telekom suggested state the exact requirements from SA1.

It was also suggested to note the current SA2 status.

**Decision:** The document was **revised to S6-191164**.

**S6-191164 Key issue - Monitoring network situation of 3GPP systems**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-190957)

**Discussion:**

ZTE presented the document available as S6-191164.

It was pointed out that there was inconsistency on the usage of revision marks and that the changes between revisions should be shown in different colour.

Deutshe Telekom raised a concern with in relation to the predictive communication.

Qualcomm noted that the open issue should be further clarified.

**Decision:** The document was **revised to S6-191216**.

**S6-191216 Key issue - Monitoring network situation of 3GPP systems**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191164)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191242**.

**S6-191242 Key issue - Monitoring network situation of 3GPP systems**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191216)

**Discussion:**

ZTE presented the document available as S6-191242.

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

**S6-190958 Key issue – Managing non-public network**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

**Abstract:**

This contribution discusses a key issue of managing non-public network for Factories of the Future related applications.

**Discussion:**

ZTE presented the document available as S6-190958.

There was some concern raised with regard to the use of the term "manage".

Deutsche Telekom raised concern about referencing 5G-ACIA white paper.

**Decision:** The document was **revised to S6-191165**.

**S6-191165 Key issue – Managing non-public network**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-190958)

**Discussion:**

ZTE presented the document available as S6-191165.

It was pointed out that there was inconsistency on the usage of revision marks and that the changes between revisions should be shown in different colour.

Deutsche Telekom suggested clarifying the automatic configuration.

**Decision:** The document was **revised to S6-191217**.

**S6-191217 Key issue – Managing non-public network**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191165)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191243**.

**S6-191243 Key issue – Managing non-public network**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191217)

**Discussion:**

ZTE presented the document available as S6-191243.

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

**S6-190959 Key issue - 5GLAN QoE**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

**Abstract:**

This contribution discusses a key issue for 5GLAN QoE by Factories of the Future related applications.

**Discussion:**

ZTE presented the document available as S6-190959.

Huawei suggested rephrasing the first sentence along the lines of "3GPP TS 22.261 [2] describes the following 5G LAN-type service and related requirements."

It was also suggested to include a description of the actual key issue.

**Decision:** The document was **revised to S6-191166**.

**S6-191166 Key issue - 5GLAN QoE**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-190959)

**Discussion:**

ZTE presented the document available as S6-191166.

It was pointed out that there was inconsistency on the usage of revision marks and that the changes between revisions should be shown in different colour.

It was noted that the text was coming from SA1 contribution (not yet incorporated to a spec. and approved by plenary), so it was hence decided to postpone the contribution.

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

**S6-190960 Key issue - 5GLAN group management**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

**Abstract:**

This contribution discusses a key issue for 5GLAN group management by Factories of the Future related applications.

**Discussion:**

ZTE presented the document available as S6-190960.

The chairman suggested rephrasing the first sentence along the lines of "3GPP TS 22.261 [2] describes the following 5G LAN-type service and 5GLAN traffic types, service exposure requirements."

It was suggested to include a description of the actual key issue and to describe what is provided by SA2 and what is needed from SA6.

Furthermore, it was suggested to reword the open issue along the lines of "Whether and how to map application-level groups with the underlying 5GLAN groups from the application layer of Factories of the Future?"

**Decision:** The document was **revised to S6-191167**.

**S6-191167 Key issue - 5GLAN group management**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-190960)

**Discussion:**

ZTE presented the document available as S6-191167.

It was pointed out that there was inconsistency on the usage of revision marks and that the changes between revisions should be shown in different colour.

Qualcomm suggested to reformulate the open issues along the lines of "Whether and how..".

Deutsche Telekom raised the question, which SA1 contribution this was related to. ZTE stated they would provide the information offline.

**Decision:** The document was **revised to S6-191218**.

**S6-191218 Key issue - 5GLAN group management**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191167)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191244**.

**S6-191244 Key issue - 5GLAN group management**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191218)

**Discussion:**

ZTE presented the document available as S6-191244.

The only change is to replace "How to integrate 5G LAN type service with TSN for group management on application level?" with "How to integrate 5G LAN type service with TSN for group management ?"

With the above changes the revised contribution, S6-191255, is considered pre-approved.

**Decision:** The document was **revised to S6-191255**.

**S6-191255 Key issue - 5GLAN group management**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191244)

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

**S6-190961 Key issue-5GLAN configuration management**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

**Abstract:**

This contribution discusses a key issue for 5GLAN configuration management by Factories of the Future related applications.

**Discussion:**

ZTE presented the document available as S6-190961.

The chairman suggested rephrasing the first sentence along the lines of "3GPP TS 22.261 [2] describes the following 5G LAN-type service and 5GLAN service exposure requirements."

It was suggested to include a description of the actual key issue and to describe what is available in SA2 and what is needed from SA6.

There was a suggestion rephrase the open issue along the lines of "How to configure 5GLAN-VN from the application layer based on network exposure capabilities."

**Decision:** The document was **revised to S6-191168**.

**S6-191168 Key issue-5GLAN configuration management**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-190961)

**Discussion:**

ZTE presented the document available as S6-191168.

It was pointed out that there was inconsistency on the usage of revision marks and that the changes between revisions should be shown in different colour.

Qualcomm suggested to reformulate the open issues along the lines of "Whether and how..".

Deutsche Telekom raised the question, which SA1 contribution this was related to. ZTE stated they would provide the information offline.

Ericsson requested for more justification why an application level solution was required.

**Decision:** The document was **revised to S6-191219**.

**S6-191219 Key issue-5GLAN configuration management**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191168)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191245**.

**S6-191245 Key issue-5GLAN configuration management**

 *Type: pCR For: Approval
 23.745 v0.2.0
 Source: ZTE Corporation*

(Replaces S6-191219)

**Discussion:**

ZTE presented the document available as S6-191245.

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

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

**S6-191037 Analysis of UAS service requirements**

 *Type: pCR For: Approval
 23.755 v0.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Analysis of UAS service requirements

**Discussion:**

Huawei presented the document available as S6-191037.

Airbus made a remark that it would seem that many of the requirements were not application related.

Motorola Solutions suggested moving the table 4.1.2-1 to an annex and they further suggested adding a column for network impacts.

Samsung pointed out a typo in the ref. to 3GPP TS 22.185.

**Decision:** The document was **revised to S6-191098**.

**S6-191098 Analysis of UAS service requirements**

 *Type: pCR For: Approval
 23.755 v0.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191037)

**Discussion:**

Huawei presented the document available as S6-191098.

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

### 10.7 FS\_EDGEAPP – Study on Application Architecture for enabling Edge Applications

**S6-190991 Work plan**

 *Type: discussion For: Approval
 23.758 v..
 Source: Samsung Electronics*

**Abstract:**

The document discusses the progress of FS\_EDGEAPP study and the work plan.

**Discussion:**

Samsung presented the document available as S6-190991.

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

**S6-190965 Terminologies for edge computing**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

**Abstract:**

The contribution proposes to adopt the first change of adding new terminologies, second changes This contribution further introduces a set of terminologies to describe the concept of edge computing and updates the description of key issues and the application architecture diagram to give the better understanding to the readers and contributors.

**Discussion:**

Samsung presented the document available as S6-190965.

Sony made a number of comments e.g. that the change to key issue 2 would seem to be wrongly placed, furthermore they made a remark that the Edge Enabler server is not necessarily bound to one hosting platform only.

AT&T suggested rewording of the change to clause 4.1.

Huawei suggested some modifications to the Edge Data Network definition.

Qualcomm stressed the importance of the basic definitions like Application Client and Edge Data Network. They thought for example that whether the Application Client was pre-installed or downloadable was irrelevant and hence suggested to delete this.

**Decision:** The document was **revised to S6-191141**.

**S6-191141 Terminologies for edge computing**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung, Qualcomm, Sony, AT&T*

(Replaces S6-190965)

**Discussion:**

Samsung presented the document available as S6-191141.

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

**S6-190986 Architecture enhancements**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics*

**Abstract:**

The pCR proposes following enhancements to the application architecture:

 - introduction of a new entity in the UE - Edge Enabler Client

 - a new interface between the Edge Enabler Server and the Edge Enabler Client, EDGE-1, connecting the UE to the Edge Enabler Server.

 - a new interface between the Edge Enabler Server and the 3GPP Network, EDGE-2.

 - a new interface between the Edge Enabler Server and the Edge Applications, EDGE-3.

**Discussion:**

Samsung presented the document available as S6-190986.

Qualcomm suggested removing the text above the arrows (in the figure) and correcting the figure title.

Sony raised the question whether the bullet in 6.4.3 is supposed to read as "Access to 3GPP Network functions only..".

AT&T made various remarks like e.g. how the Application Client and Edge Enabler client interacts.

Nokia pointed out that e.g. the registration of Edge Applications had already been covered within ETSI MEC.

**Decision:** The document was **revised to S6-191143**.

**S6-191143 Architecture enhancements**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics*

(Replaces S6-190986)

**Discussion:**

Samsung presented the document available as S6-191143.

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

**S6-190987 Edge aware applications**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics*

**Abstract:**

This contribution introduces the concept of Edge Aware Applications and proposes its definition.

**Discussion:**

Samsung presented the document available as S6-190987.

The definition of Edge Aware Applications was rephrased along the lines of:

Aware Edge Application Client: An Application on the UE that can leverage the Edge Computing capabilities available in Edge Data Network.

It was noted that the following should be defined:

 - Edge Aware Application Server

 - Edge Unaware Application Client

 - Edge Application Server (in ETSI MEC defined as MEC app)

**Decision:** The document was **revised to S6-191144**.

**S6-191144 Edge aware applications**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics*

(Replaces S6-190987)

**Discussion:**

Samsung presented the document available as S6-191144.

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

**S6-190923 Pseudo-CR on Update KeyIssue#4 and #5**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Sony Europe Limited*

**Abstract:**

This contribution proposes updates to key issue#4 and key issue#5 for the Edge Computing study.

**Discussion:**

Sony presented the document available as S6-190923.

Qualcomm suggested deleting the "available" in the first bullet of Open Issues (Key Issue 4).

Samsung suggested to replace "optimal" with "available".

**Decision:** The document was **revised to S6-191145**.

**S6-191145 Pseudo-CR on Update KeyIssue#4 and #5**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Sony Europe Limited*

(Replaces S6-190923)

**Discussion:**

Sony presented the document available as S6-191145.

Samsung pointed out the solution was related to key issue 2.

The only changes are to:

 - reword the pCR title to read "Pseudo-CR on Edge Data network selection",

 - reword the NOTE to read "This key issue is related to key issues 2 and 4" and

 - replace "but also select the optimal" with "..but first select the optimal..".

With the above changes the revised contribution, S6-191220, is considered pre-approved.

**Decision:** The document was **revised to S6-191220**.

**S6-191220 Pseudo-CR on Edge Data network selection**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Sony Europe Limited*

(Replaces S6-191145)

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

**S6-190962 Update for key issue 5**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics Romania*

**Abstract:**

The contribution proposes the following changes:

 - clarification that Edge Enabler Server provides exposure APIs based on the interworking with 3GPP network.

 - editorial change of ‘Application Server in the Edge Data Network’ to ‘Edge Application’ in order to follow architecture model and definition. (which should be discussed in other proposal, but agreement shall be captured this paper in revision phase.) and

 - new open issues

**Discussion:**

Samsung presented the document available as S6-190962.

There was a suggestion to replace the proposed open issue with something along the lines of:

Whether and how to expose the service APIs of the 3GPP network functions (e.g. UE ID) to the Edge applications

 - How to uniquely identify application client on the UE and how to potentially re-use the UE identifier as part of the addressability.

**Decision:** The document was **revised to S6-191146**.

**S6-191146 Update for key issue 5**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics Romania*

(Replaces S6-190962)

**Discussion:**

Samsung presented the document available as S6-191146.

The only change is to delete the word "value-added" from the contribution.

With the above change the revised contribution, S6-191221, is considered pre-approved.

**Decision:** The document was **revised to S6-191221**.

**S6-191221 Update for key issue 5**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics Romania*

(Replaces S6-191146)

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

**S6-190966 Update on the key issue 6: Application Architecture**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

**Abstract:**

It is proposed to restructure the key issue 6: application architecture and clarify what is edge computing service.

**Discussion:**

Samsung presented the document available as S6-190966.

Sony was of the opinion that Key Issue 6 should be a requirement, and that the private network aspect should be taken into account.

Qualcomm was of the opinion that the Edge Computing Service definition needs further clarification.

AT& T suggested rephrasing the Key Issue 6 to read "How to enable the MNO to authorize the usage of the Edge computing service by UE."

**Decision:** The document was **revised to S6-191147**.

**S6-191147 Update on the key issue 6: Application Architecture**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

(Replaces S6-190966)

**Discussion:**

Samsung presented the document available as S6-191147.

Qualcomm suggested clarifying the difference between the bullets under key issue 6.

**Decision:** The document was **revised to S6-191222**.

**S6-191222 Update on the key issue 6: Application Architecture**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

(Replaces S6-191147)

**Discussion:**

Samsung presented the document available as S6-191222.

The only change is removing the definition "Edge Computing Service".

With the above changes the revised contribution, S6-191256, is considered pre-approved.

**Decision:** The document was **revised to S6-191256**.

**S6-191256 Update on the key issue 6: Application Architecture**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

(Replaces S6-191222)

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

**S6-190892 KeyIssue#7 Service Continuity and Mobility**

 *Type: pCR For: Agreement
 23.758 v0.1.0
 Source: Intel Deutschland GmbH*

**Abstract:**

This contribution proposes a key issue on preserving service continuity during and after a mobility event of the UE, as part of the FS\_EDGEAPP study.

**Discussion:**

Intel presented the document available as S6-190892.

Intel pointed out that they had received offline comments from Samsung and was already preparing a revised contribution taking into account these.

Sony made remark that including the mobility will be demanding. They suggested to reduce scope of the first bullet. They further suggested merging bullets 4 and 5.

**Decision:** The document was **revised to S6-191148**.

**S6-191148 KeyIssue#7 Service Continuity and Mobility**

 *Type: pCR For: Agreement
 23.758 v0.1.0
 Source: Intel Deutschland GmbH*

(Replaces S6-190892)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191208**.

**S6-191208 KeyIssue#7 Service Continuity and Mobility**

 *Type: pCR For: Agreement
 23.758 v0.1.0
 Source: Intel Deutschland GmbH*

(Replaces S6-191148)

**Discussion:**

Intel presented the document available as S6-191208 and indicated they wished to introduce some further changes.

**Decision:** The document was **revised to S6-191226**.

**S6-191226 KeyIssue#7 Service Continuity and Mobility**

 *Type: pCR For: Agreement
 23.758 v0.1.0
 Source: Intel Deutschland GmbH*

(Replaces S6-191208)

**Discussion:**

Intel presented the document available as S6-191226.

It was noted that Sony wished to be considered as co-signer.

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

**S6-190988 New key issue - Dynamic availability**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics*

**Abstract:**

This contribution proposes a new key issue on dynamic availability of Edge Data Network and the Application Server(s).

**Discussion:**

Samsung presented the document available as S6-190988.

Qualcomm requested to remove terms like "in time".

It was also suggested to remove "to fine tune the services provided accordingly."

**Decision:** The document was **revised to S6-191149**.

**S6-191149 New key issue - Dynamic availability**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics*

(Replaces S6-190988)

**Discussion:**

Samsung presented the document available as S6-191149.

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

**S6-190967 A new solution for flexible deployment**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

**Abstract:**

To support the architecture principle of flexible deployment of edge computing service and to meet the related key issues, it is proposed to add a new solution for provisioning of Edge Data Network configuration.

**Discussion:**

Samsung presented the document available as S6-190967.

AT&T suggested adding preceding events before arriving at the presented scenario, so that a more complete picture is given.

Huawei raised a concern with how the UE can make use of the PDU information as described in step 1 in clause 7.x.1.

Qualcomm made remark that the contribution included too much detail.

**Decision:** The document was **revised to S6-191150**.

**S6-191150 A new solution for flexible deployment**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

(Replaces S6-190967)

**Discussion:**

Samsung presented the document available as S6-191150.

**Decision:** The document was **revised to S6-191223**.

**S6-191223 A new solution for flexible deployment**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

(Replaces S6-191150)

**Discussion:**

Samsung presented the document available as S6-191223.

Qualcomm pointed out a hanging paragraph that can be corrected by the rapporteur.

The only change is to replace “establish the PDU Session to” with “connect” in bullet 1) of subclause 6.2.x and 7.x.1.

With the above change the revised contribution, S6-191251, is considered pre-approved.

**Decision:** The document was **revised to S6-191251**.

**S6-191251 A new solution for flexible deployment**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

(Replaces S6-191223)

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

**S6-190985 A new solution using LADN**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

**Abstract:**

Since the LADN concept is already defined and it can satisfy the key issues, it is proposed to add a new solution using LADN as one of edge computing solutions.

**Discussion:**

Samsung presented the document available as S6-190985.

Huawei made a remark that it was not clear whether the LADN supports more than one Edge Data Network.

Qualcomm mad the remark that it seems the key issue is the EDGE data network identifier; however, this was not clear from the proposal.

**Decision:** The document was **revised to S6-191151**.

**S6-191151 A new solution using LADN**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

(Replaces S6-190985)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191200**.

**S6-191200 A new solution using LADN**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

(Replaces S6-191151)

**Discussion:**

Samsung presented the document available as S6-191200.

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

**S6-190989 New solution - Edge Application discovery**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics*

**Abstract:**

This contribution proposes a solution for Key Issue #4, related to the Application Server discovery and proposes to address the related Editor's Note.

**Discussion:**

Samsung presented the document available as S6-190989.

Sony suggested adding a step between steps 1 and 2, for how the EDGE client discovers the server and suggested making "Edge Hosting Platform" (in step 4) plural.

Huawei suggested splitting the solution into multiple solutions.

Qualcomm suggested removing step 6.

**Decision:** The document was **revised to S6-191152**.

**S6-191152 New solution - Edge Application discovery**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics*

(Replaces S6-190989)

**Discussion:**

Samsung presented the document available as S6-191152.

Qualcomm suggested to replace "Trigger conditions meet" with "trigger conditions met" in figure step one and the description step 1.

The rapporteur will correct this when implementing the pCR.

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

**S6-190963 Solution for key issue 5 – Location API**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics Romania*

**Abstract:**

This paper proposes Location Service API exposed by the Edge Enabler Server to the Edge Application, based on the interworking with 3GPP network (e.g., NEF, SCEF).

**Discussion:**

Samsung presented the document available as S6-190963.

Qualcomm raised a concern about the fact that the proposal mixed subscription request and reporting. For inclusion in a study this could be accepted but considering a future normative work these should be separated.

There was a discussion on the need of location information and how it is handled.

**Decision:** The document was **revised to S6-191153**.

**S6-191153 Solution for key issue 5 – Location API**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics Romania*

(Replaces S6-190963)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191209**.

**S6-191209 Solution for key issue 5 – Location API**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung, Deutsche Telekom AG*

(Replaces S6-191153)

**Discussion:**

Samsung presented the document available as S6-191209.

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

**S6-190964 Solution for key issue 5 – UE Identifier API**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics Romania*

**Abstract:**

In order to support such interworking with 3GPP system for external exposure service, for example, if Edge Enabler Server wants to request T8 API to NEF, the Edge Enabler Server needs to include UE identifier in the T8 API request to identify specific UE

**Discussion:**

Samsung presented the document available as S6-190964.

Huawei suggested clarifying whether this was one-time effort.

AT&T made a remark that the authorization at the early stage as presented in the proposal was not needed.

**Decision:** The document was **revised to S6-191154**.

**S6-191154 Solution for key issue 5 – UE Identifier API**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics Romania*

(Replaces S6-190964)

**Discussion:**

Samsung presented the document available as S6-191154.

It was suggested to correct the figure title and redraw the figure with a flow from the left to the right.

**Decision:** The document was **revised to S6-191224**.

**S6-191224 Solution for key issue 5 – UE Identifier API**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics Romania*

(Replaces S6-191154)

**Discussion:**

Samsung presented the document available as S6-191224.

The rapporteur will add ref. to the referenced OMA TS and remove the shading style in the figure.

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

**S6-190968 Service differentiation based on mobile subscription**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

**Abstract:**

To support the architecture principle of service differentiation based on mobile subscription and to meet the related key issue, it is proposed add a new solution for application authentication and authorization for service differentiation.

**Discussion:**

Samsung presented the document available as S6-190968.

Huawei suggested a precondition stating the UE is authenticated.

It was noted that with regard to steps 1 and 2 SA6 should interact with SA3.

**Decision:** The document was **revised to S6-191155**.

**S6-191155 Service differentiation based on mobile subscription**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

(Replaces S6-190968)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191172**.

**S6-191172 Service differentiation based on mobile subscription**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

(Replaces S6-191155)

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191234**.

**S6-191234 Service differentiation based on mobile subscription**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung*

(Replaces S6-191172)

**Discussion:**

Samsung presented the document available as S6-191234.

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

**S6-190990 New solution - Dynamic availability of Edge Applications**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics*

**Abstract:**

This contribution proposes a solution for the new key issue on dynamic availability, related to keeping the UEs updated about changes in availability of Edge Applications.

**Discussion:**

Samsung presented the document available as S6-190990.

Sony made a number of remarks e.g. that there was no reason to include the Application Client actions as proposed in step 8.

Qualcomm did not think the third paragraph in clause 7.x.1 was needed.

**Decision:** The document was **revised to S6-191156**.

**S6-191156 New solution - Dynamic availability of Edge Applications**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Samsung Electronics*

(Replaces S6-190990)

**Discussion:**

Samsung presented the document available as S6-191156.

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

**S6-190973 Analysis of 3GPP standards on edge computing**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Subclause 5.13 in 3GPP TS 23.501 provides a general description about the edge computing related features that 5G system provides. The analysis of subclause 5.13 of TS 23.501 should be captured in TR 23.758.

In another aspect, the definitions and terminologies used in SA2 in regard of edge computing include DN, Local Area Data Network, DN Access Identifier (DNAI). In TS 23.758, the definition of “Edge Data Network” is lack of the association with terminologies and definitions defined in SA2.

The present contribution proposes corresponding changes in relation to above to the 3GPP TR 23.758 v0.1.0.

**Discussion:**

Huawei presented the document available as S6-190973.

**Decision:** The document was **revised to S6-191157**.

**S6-191157 Analysis of 3GPP standards on edge computing**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-190973)

**Discussion:**

Huawei presented the document available as S6-191157.

Samsung pointed out that that the abbreviation DNAI was not used.

The only changes are to:

 - remove DNAI from the definitions and

 - remove ", when UE is utilizing applications from the local DN" from the first sentence from first sentence of clause X.1.2.

With the above changes the revised contribution, S6-191252, is considered pre-approved.

**Decision:** The document was **revised to S6-191252**.

**S6-191252 Analysis of 3GPP standards on edge computing**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191157)

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

**S6-191046 MEC update for SA6**

 *Type: discussion For: Discussion
 Source: Nokia, Nokia Shanghai Bell, Huawei, Sony Mobile, Vodafone, Intel, KDDI, Interdigital*

**Abstract:**

The contribution provides a description of the ETSI MEC organisation, technical framework and current status of work.

**Discussion:**

Nokia presented the document available as S6-191046.

Qualcomm invited ETSI MEC to contribute towards the study in SA6.

Sony remarked that a mapping work is required, but this will be company contribution driven.

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

**S6-191038 Analysis of ETSI MEC**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

This contribution provides a proposal for analysis of ETSI MEC.

**Discussion:**

Huawei presented the document available as S6-191038.

Sony suggested replacing "UE application interface" with Mx2 and "MEC application enablement API" with Mp1 in titles of X.1.3.1 and X.1.3.1 respectively.

It was a further proposal to remove the above subclauses (clauses X.1.3.1 to X.1.3.3) at this stage.

Samsung suggested to introduce referencing to corresponding ETSI MEC specifications.

**Decision:** The document was **revised to S6-191158**.

**S6-191158 Analysis of ETSI MEC**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191038)

**Discussion:**

Huawei presented the document available as S6-191158.

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

**S6-191042 Pseudo-CR on KeyIssue – bandwidth management for 5G Edge Network**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Alibaba Group*

**Abstract:**

This contribution proposes a key issue on bandwidth management for 5G Edge Network related aspects for Edge Computing study.

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191127**.

**S6-191127 Pseudo-CR on KeyIssue – bandwidth management for 5G Edge Network**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Alibaba Group, Samsung*

(Replaces S6-191042)

**Discussion:**

China Mobile presented the document available as S6-191127 on behalf of Alibaba.

Sony made a remark that ETSI MEC has defined a band width related API similar to the original contribution S6-191042 and suggested Alibaba to study this.

Qualcomm agreed that there was a key issue in here, but suggested rewording.

It was also pointed out the contribution contained changes on changes that should be removed.

**Decision:** The document was **revised to S6-191159**.

**S6-191159 Pseudo-CR on KeyIssue – bandwidth management for 5G Edge Network**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Alibaba Group, Samsung*

(Replaces S6-191127)

**Discussion:**

Samsung presented the document available as S6-191159 on behalf of Alibaba.

It was considered that it was best to postpone the contributions until the actual source can be present.

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

**S6-191043 Pseudo-CR on KeyIssue – location information exposure for 5G Edge Network**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Alibaba Group*

**Abstract:**

This contribution proposes a key issue on location information exposure for 5G Edge Network related aspects for Edge Computing study.

**Discussion:**

Revised prior to presentation.

**Decision:** The document was **revised to S6-191128**.

**S6-191128 Pseudo-CR on KeyIssue – location information exposure for 5G Edge Network**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Alibaba Group*

(Replaces S6-191043)

**Discussion:**

China Mobile presented the document available as S6-191128 on behalf of Alibaba.

Sony was of the view that the proposed key issue belongs to key issue 5.

Qualcomm suggested clarification on whether the edge application should use location provided by NEF and location changes should be notified asynchronously?

It was also pointed out the contribution contained changes on changes that should be removed.

**Decision:** The document was **revised to S6-191160**.

**S6-191160 Pseudo-CR on KeyIssue – Use of location information**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Alibaba Group*

(Replaces S6-191128)

**Discussion:**

Samsung presented the document available as S6-191160 on behalf of Alibaba.

The only changes are to replace strike-through formatting with MS word revision marks.

With the above changes the revised contribution, S6-191227, is considered pre-approved.

**Decision:** The document was **revised to S6-191227**.

**S6-191227 Pseudo-CR on KeyIssue – Use of location information**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Alibaba Group*

(Replaces S6-191160)

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

**S6-191199 Terminologies**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Qualcomm, Samsung, Intel, Sony, AT&T, Nokia*

**Abstract:**

This pCR provides definitions for terms necessary to describe Edge concepts.

**Discussion:**

Qualcomm presented the document available as S6-191199.

The only change is to update the contact information.

With the above change the revised contribution, S6-191202, is considered pre-approved.

**Decision:** The document was **revised to S6-191202**.

**S6-191202 Terminologies**

 *Type: pCR For: Approval
 23.758 v0.1.0
 Source: Qualcomm, Samsung, Intel, Sony, AT&T, Nokia*

(Replaces S6-191199)

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

## 11 Future work / New WIDs (including related contributions)

**S6-190895 Revised SID Study on Mission Critical Services support over 5G System**

 *Type: SID revised For: Agreement
 Source: The Police of the Netherlands*

**Discussion:**

The Police of Netherlands presented the document available as S6-190895.

Motorola Solutions suggested adding the plenary doc header.

**Decision:** The document was **revised to S6-191100**.

**S6-191100 Revised SID Study on Mission Critical Services support over 5G System**

 *Type: SID revised For: Agreement
 Source: The Police of the Netherlands*

(Replaces S6-190895)

**Discussion:**

The Police of Netherlands presented the document available as S6-191100.

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

**S6-190922 Discussion on non-3GPP interface**

 *Type: discussion For: Discussion
 Source: BDBOS*

**Abstract:**

Dispatchers are an essential part of first responder’s daily work. This work environment not only reflects the hierarchical structure under which first responders operate but also their over several years derived experience. An interface provided by 3GPP technology will be required to carry one this part of mission critical operation.

**Discussion:**

BDBOS presented the document available as S6-190922.

Motorola Solutions view was that there maybe is not much missing, but maybe there would be room for a study on the needs of the dispatcher community.

Qualcomm noted that the answer to the question is no, there are now 3GPP specifications. However there are now problems for dispatcher to connect to the MCX systems. They further noted there would probably not be a need for a study, potentially a white paper.

FirstNet made a remark that they have encouraged the development of MCX based dispatch solutions. A first step could be based on utilising IWF.

The Police of Netherlands was of the view that the topic in important, and hence it would be helpful to receive an official LS that could be replied to.

Qualcomm further noted that it was not clear from the paper what the actual problem is.

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

**S6-190932 MONASTERY requirements not yet covered by stage 2**

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

**Abstract:**

The discussion paper identifies those stage 1 requirements not yet covered by stage 2.

**Discussion:**

Nokia presented the document available as S6-190932.

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

**S6-190933 New WID on Application Architecture for the Mobile Communication System for Railways (MONASTERY) Phase 3**

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

**Abstract:**

New WID on MONASTERY for Rel-17

**Discussion:**

Nokia presented the document available as S6-190933.

Motorola Solutions was of the view it would be a mistake to try to skip the study phase and going directly to normative work.

The Police of Netherlands supported the view of Motorola Solutions.

Nokia suggested to restrict the work item to the left overs from the study.

**Decision:** The document was **revised to S6-191101**.

**S6-191101 New WID on Application Architecture for the Mobile Communication System for Railways (MONASTERY) Phase 3**

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

(Replaces S6-190933)

**Discussion:**

Nokia presented the document available as S6-191101.They pointed out that the TS 23.283 still needs to be included.

BDBOS indicated they wished to be listed as a supporter.

It was suggested to modify the title to read "Enhancements on Application Architecture for the Mobile Communication System for Railways Phase 2"

**Decision:** The document was **revised to S6-191225**.

**S6-191225 New WID on Application Architecture for the Mobile Communication System for Railways (MONASTERY) Phase 3**

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

(Replaces S6-191101)

**Discussion:**

Nokia presented the document available as S6-191225.

The only changes are to:

- In clause 5 table, Change “September 2019” to “December 2019”, and "were implemented” to “were not implemented”

- Update the list of supporting companies

With the above changes the revised contribution, S6-191246, is considered pre-agreed.

**Decision:** The document was **revised to S6-191246**.

**S6-191246 New WID on Application Architecture for the Mobile Communication System for Railways (MONASTERY) Phase 3**

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

(Replaces S6-191225)

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

**S6-191001 New WID on MC services support on IOPS mode of operation**

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

**Abstract:**

New WID on MC services support on IOPS mode of operation.

**Discussion:**

Ericsson presented the document available as S6-191001.

Motorola Solutions suggested being a bit more specific with regard to the first bullet of the objective, they also indicated their support for the work item.

**Decision:** The document was **revised to S6-191102**.

**S6-191102 New WID on MC services support on IOPS mode of operation**

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

(Replaces S6-191001)

**Discussion:**

Ericsson presented the document available as S6-191102.

It was suggested to rework the objective along the lines of:

1. Develop normative changes to existing technical specification(s) based on the identified solutions and conclusions captured in 3GPP TR 23.778, including but not limited to.

 - Functional model to support MC service for IOPS

 - Communication continuity

 - MC service client configuration

**Decision:** The document was **revised to S6-191203**.

**S6-191203 New WID on MC services support on IOPS mode of operation**

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

(Replaces S6-191102)

**Discussion:**

Ericsson presented the document available as S6-191203.

TD Tech indicated their wish to be listed as a supporting company.

The only change is adding new supporting companies.

With the above change the revised contribution, S6-191232, is considered pre-agreed.

**Decision:** The document was **revised to S6-191232**.

**S6-191232 New WID on MC services support on IOPS mode of operation**

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

(Replaces S6-191203)

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

**S6-191036 New WID for study on enhancements to application layer support for V2X services**

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

**Abstract:**

Proposal for New WID for study on enhancements to application layer support for V2X services

**Discussion:**

Huawei presented the document available as S6-191036.

Motorola Solutions suggested adding few examples under objective 1 and clarifying the objective 2.

Deutsche Telekom made a remark that the SA2 study has not yet been completed.

The chairman suggested some rewording of the justification.

**Decision:** The document was **revised to S6-191104**.

**S6-191104 New WID for study on enhancements to application layer support for V2X services**

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

(Replaces S6-191036)

**Discussion:**

Huawei presented the document available as S6-191104.

A typo i.e. VX was pointed out.

The only changes are to:

- in clause 3, replace “VX” with “V2X” and

- update the list of supporting companies.

With the above changes the revised contribution, S6-191233, is considered pre-agreed.

**Decision:** The document was **revised to S6-191233**.

**S6-191233 New WID for study on enhancements to application layer support for V2X services**

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

(Replaces S6-191104)

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

**S6-190906 Study on message service for MIoT over 5G System**

 *Type: discussion For: Information
 Source: China Mobile Com. Corporation*

**Abstract:**

Background information for study on message service for MIoT over 5G System.

**Discussion:**

China Mobile presented the document available as S6-190906.

Motorola Solutions did think the proposed application level functionalities required any work within SA6. Furthermore, there has been no indication from SA2 that they would not be able to this work.

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

**S6-190893 Study on message service for MIoT over 5G System**

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

**Abstract:**

The contribution contains a proposal for a Study on message service for MIoT over 5G System

**Discussion:**

China Mobile presented the document available as S6-190893.

Motorola Solutions raised the concern that this proposal could well be a proposal from SA2, also the justification seems rather weak.

**Decision:** The document was **revised to S6-191105**.

**S6-191105 Study on message service for MIoT over 5G System**

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

(Replaces S6-190893)

**Discussion:**

China Mobile presented the document available as S6-191105.

Motorola Solutions was of the opinion that there was too much overlap with work in SA2 and that it therefore was premature to start the work in SA6.

A general debate followed on whether or not go forward with the new WID.

Huawei noted there were application level aspects that SA6 can study.

Motorola Solutions suggested to send an LS to SA2 to enquire if they are working on network aspects.

The only changes are to:

 - add a new objective reading

1) Evaluation of existing messaging solutions to identify any gaps at the application layer,

 - add “Rel-16 Stage 1 requirements for MIoT “ to the description in table of clause 2.3 and

 - add “Rel-16 Stage 1 study for MIoT“ to the table of clause 2.3.

With the above changes the revised contribution, S6-191235, is considered pre-agreed.

**Decision:** The document was **revised to S6-191235**.

**S6-191235 Study on message service for MIoT over 5G System**

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

(Replaces S6-191105)

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

**S6-190917 Study on support of the 5GMSG Service-skeleton**

 *Type: discussion For: Approval
 Source: China Mobile Com. Corporation*

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

**S6-191041 Data model for 5G IoT UE**

 *Type: discussion For: Discussion
 Source: Alibaba Group*

**Abstract:**

In the future, there will be millions of industrial IoT UE connected to their server via 5G system. For example, robotics and sensing devices in factories of the future, etc. In order to achieve interoperability at the semantic layer for different type of industrial IoT UE, unifying data model is essential.

The contribution presents a discussion paper on the topic of a possible study 5G IoT UE.

**Discussion:**

China Mobile presented the document available as S6-191041 on behalf of Alibaba.

The Police of Netherlands noted that a similar discussion paper had been presented to the SA1 WG, where it had been decided that this should be discussed within SA.

Deutsche Telekom made a remark that it was not in the framework of 3GPP to define data models.

Motorola Solutions agreed with the view Deutsche Telekom.

Huawei noted that it was not clear whether the proposal was for smart factories of the future only.

The chairman suggested that at least some of the topics could be addressed within the current factories of the future study.

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

## 12 Work Plan review

**S6-190977 Rel-16 Work Item Exception for eMCCI**

 *Type: WI exception request For: Agreement
 Source: Harris Corporation*

**Abstract:**

Request and extension to Rel-16 eMCCI to incorporate regroup in the IWF

**Discussion:**

Harris presented the document available as S6-190977.

It was suggested to complete the document with e.g. adding in the abstract

eMCCI developed the following solutions..

Remaining aspects to be considered include..

**Decision:** The document was **revised to S6-191204**.

**S6-191204 Rel-16 Work Item Exception for eMCCI**

 *Type: WI exception request For: Agreement
 Source: Harris Corporation*

(Replaces S6-190977)

**Discussion:**

Harris presented the document available as S6-191204.

The only changes are to:

- replace header with SA6#31 information and

- in the table, under tasks, replace “Regroup” with “Group regroup and user regroup”.

With the above changes the revised contribution, S6-191247, is considered pre-agreed.

**Decision:** The document was **revised to S6-191247**.

**S6-191247 Rel-16 Work Item Exception for eMCCI**

 *Type: WI exception request For: Agreement
 Source: Harris Corporation*

(Replaces S6-191204)

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

**S6-190904 Presentation of Report to TSG:TR 23.784, Version 2.0.0**

 *Type: TS or TR cover For: Approval
 23.784 v1.1.0
 Source: Motorola Solutions*

**Abstract:**

Coversheet for SA presentation of TR 23.784 v200

**Discussion:**

Motorola Solutions presented the document available as S6-190904.

It was noted that solutions from the present meeting needs to be included.

**Decision:** The document was **revised to S6-191205**.

**S6-191205 Presentation of Report to TSG:TR 23.784, Version 2.0.0**

 *Type: TS or TR cover For: Approval
 23.784 v1.1.0
 Source: Motorola Solutions*

(Replaces S6-190904)

**Discussion:**

Motorola Solutions presented the document available as S6-191205.

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

**S6-191002 Presentation of Report to TSG: TR 23.778, Version 2.0.0**

 *Type: TS or TR cover For: Approval
 23.778 v1.3.0
 Source: Ericsson*

**Abstract:**

Presentation of Report to SA: TR 23.778, Version 2.0.0

**Discussion:**

Ericsson presented the document available as S6-191002.

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

**S6-191015 SEAL Coversheet - TS 23.434 for approval**

 *Type: TS or TR cover For: Approval
 23.434 v1.1.0
 Source: Samsung*

**Abstract:**

Proposal for Presentation of TS 23.434 to SA for approval

**Discussion:**

Samsung presented the document available as S6-191015.

There was a discussion on whether or not to send the TS for approval or continue with a draft and ask for exception.

It was decided to complete the list of outstanding issues to get an overview of remaining work.

**Decision:** The document was **revised to S6-191206**.

**S6-191206 SEAL Coversheet - TS 23.434 for approval**

 *Type: TS or TR cover For: Approval
 23.434 v1.1.0
 Source: Samsung*

(Replaces S6-191015)

**Discussion:**

Samsung presented the document available as S6-191206.

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

**S6-191034 Presentation of TS 23.286 to SA for approval**

 *Type: TS or TR cover For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

**Abstract:**

Proposal for Presentation of TS 23.286 to SA for approval

**Discussion:**

Huawei presented the document available as S6-191034.

**Decision:** The document was **revised to S6-191207**.

**S6-191207 Presentation of TS 23.286 to SA for approval**

 *Type: TS or TR cover For: Approval
 23.286 v1.1.0
 Source: Huawei, Hisilicon*

(Replaces S6-191034)

**Discussion:**

Huawei presented the document available as S6-191207.

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

**S6-191106 Rel-16 Work Item Exception for eMCData2**

 *Type: other For: discussion
 Source: parallel session*

**Discussion:**

AT&T presented the document available as S6-191106.

Motorola Solutions suggested a slight rewording of the Task(s) within work which are not complete.

FirstNet suggested replacing the emergency alert procedures with emergency procedures.

Furthermore, some text for the Abstract of the document was suggested.

**Decision:** The document was **revised to S6-191236**.

**S6-191236 Rel-16 Work Item Exception for eMCData2**

 *Type: other For: discussion
 Source: parallel session*

(Replaces S6-191106)

**Discussion:**

AT&T presented the document available as S6-191236.

The only changes are to:

- insert “X” under ME in the affects row and

- add “None” under Contentious Issues.

With the above changes the revised contribution, S6-191248, is considered pre-agreed.

**Decision:** The document was **revised to S6-191248**.

**S6-191248 Rel-16 Work Item Exception for eMCData2**

 *Type: other For: discussion
 Source: parallel session*

(Replaces S6-191236)

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

**S6-191210 Presentation of Report to SA:**

**TR 23.744, Version 0.6.0**

 *Type: other For: Agreement
 23.744 v..
 Source: Motorola Solutions*

**Abstract:**

TR 23.744 for information

**Discussion:**

Motorola Solutions presented the document available as S6-191210.

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

**S6-191170 Work Plan review at SA6#31**

 *Type: report For: discussion
 Source: Vice Chairman*

**Abstract:**

The document provides a status update of the SA6 work items.

**Discussion:**

The chairman presented the document S6-191170.

Minor changes were done during the presentation.

**Decision:** The document was **revised to S6-191249**.

**S6-191249 Work Plan review at SA6#31**

 *Type: report For: discussion
 Source: Vice Chairman*

(Replaces S6-191170)

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

## 13 Future meetings

**13.1 Confirmed locations**

SA6#35 India, city to be confirmed

SA6#36 New Zealand, city to be confirmed

**13.2 Travelling concerns**

Huawei noted that they (and possibly some other Chinese companies) may face issues travelling to meetings organised in North America. The development of the situation will be followed.

BDBOS raised concern that a possible re-location of a meeting must not seem like taking side of one or the other party.

**13.3 MRP/5G Vertical Users Workshop**

The chairman informed that there will be a (second) MRP/5G Vertical Users Workshop taking place in parallel to the SA6#32 meeting in July in Rome. It was noted this the occasion might be beneficial for both sides.

## 14 AOB

## 15 Close of the meeting

Report prepared by: MCC

## Annex A: List of contribution documents

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Decision | Replaces | Replaced by |
| S6-190886 | SA6 Meeting 31 Agenda | SA6 Chairman | noted |  |  |
| S6-190887 | SA6 Meeting 30 Report | MCC | approved |  |  |
| S6-190888 | SA6 Meeting #31 - Agenda with Tdocs allocation after submission deadline | SA6 Chairman | noted |  |  |
| S6-190889 | SA6 Meeting #31 - Agenda with Tdocs allocation at start of the meeting | SA6 Chairman | approved |  |  |
| S6-190890 | SA6 Meeting #31 - Chairman's notes at end of the meeting | SA6 Chairman | noted |  |  |
| S6-190891 | LS on LI Impacts for LMR-LTE Interworking study | SA3-LI | noted |  |  |
| S6-190892 | KeyIssue#7 Service Continuity and Mobility | Intel Deutschland GmbH | revised |  | S6-191148 |
| S6-190893 | Study on message service for MIoT over 5G System | China Mobile Com. Corporation | revised |  | S6-191105 |
| S6-190894 | Notification of affiliated MCPTT group members not included in the call | The Police of the Netherlands | revised |  | S6-191049 |
| S6-190895 | Revised SID Study on Mission Critical Services support over 5G System | The Police of the Netherlands | revised |  | S6-191100 |
| S6-190896 | Affiliation clarifications | Motorola Solutions | revised |  | S6-191051 |
| S6-190897 | Preconfigured regroup information in dynamic data | Motorola Solutions | revised |  | S6-191052 |
| S6-190898 | Preconfigured regroup usage | Motorola Solutions | withdrawn |  |  |
| S6-190899 | Update solution 1 for multiple UEs | Motorola Solutions | approved |  |  |
| S6-190900 | Update solution 2 for multiple UEs | Motorola Solutions | approved |  |  |
| S6-190901 | Update solution 3 for multiple UEs | Motorola Solutions | approved |  |  |
| S6-190902 | Update overall evaluation | Motorola Solutions | revised |  | S6-191089 |
| S6-190903 | Conclusions | Motorola Solutions | revised |  | S6-191090 |
| S6-190904 | Presentation of Report to TSG:TR 23.784, Version 2.0.0 | Motorola Solutions | revised |  | S6-191205 |
| S6-190905 | Preconfigured regroup usage | Motorola Solutions | revised |  | S6-191053 |
| S6-190906 | Study on message service for MIoT over 5G System | China Mobile Com. Corporation | noted |  |  |
| S6-190907 | Remove the procedure in 7.5.2.9 File removal using HTTP by MCData server | AT&T GNS Belgium SPRL | agreed |  |  |
| S6-190908 | MCX service servers should be defined in a user profile | AT&T GNS Belgium SPRL | revised |  | S6-191064 |
| S6-190909 | MCX service servers should be defined in a user profile | AT&T GNS Belgium SPRL | revised |  | S6-191065 |
| S6-190910 | MCX service servers should be defined in a user profile | AT&T GNS Belgium SPRL | revised |  | S6-191066 |
| S6-190911 | MCX service servers should be defined in a user profile | AT&T GNS Belgium SPRL | revised |  | S6-191067 |
| S6-190912 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | revised |  | S6-191103 |
| S6-190913 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | not pursued |  |  |
| S6-190914 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | revised |  | S6-191069 |
| S6-190915 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | revised |  | S6-191068 |
| S6-190916 | Resolutions of some Editor's Notes | AT&T GNS Belgium SPRL | revised |  | S6-191060 |
| S6-190917 | Study on support of the 5GMSG Service-skeleton | China Mobile Com. Corporation | noted |  |  |
| S6-190918 | Pseudo-CR on solution sharing location information across MC service Ues | BDBOS | revised |  | S6-191093 |
| S6-190919 | Solution sharing location information with other MC service users at partner MC system | BDBOS | postponed |  |  |
| S6-190920 | Key issue 5GS network slicing supporting Mission Critical | BDBOS | revised |  | S6-191099 |
| S6-190921 | Pseudo-CR on solution supporting regulatory constraints and operator security policies | BDBOS, Motorola Solutions | revised |  | S6-191091 |
| S6-190922 | Discussion on non-3GPP interface | BDBOS | noted |  |  |
| S6-190923 | Pseudo-CR on Update KeyIssue#4 and #5 | Sony Europe Limited | revised |  | S6-191145 |
| S6-190924 | Change to Location Subscription for notification immediate | HOME OFFICE | revised |  | S6-191050 |
| S6-190925 | LS reply on PCF and NEF discovery for Edge Computing | SA2 | noted |  |  |
| S6-190926 | Observations on standards and technical constraints from 3rd MCX remote Plugtests | ETSI CTI | noted |  |  |
| S6-190927 | Addition of name of Groups to Group Configuration data for organising UE | HOME OFFICE | postponed |  |  |
| S6-190928 | Add configuration for call forwarding and transfer of MCPTT private calls | Kapsch CarrierCom | revised |  | S6-191081 |
| S6-190929 | Add call forwarding for MCPTT private calls | Kapsch CarrierCom | revised |  | S6-191082 |
| S6-190930 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | revised |  | S6-191083 |
| S6-190931 | Status of MONASTERY2 | Nokia, Nokia Shanghai Bell | noted |  |  |
| S6-190932 | MONASTERY requirements not yet covered by stage 2 | Nokia, Nokia Shanghai Bell | noted |  |  |
| S6-190933 | New WID on Application Architecture for the Mobile Communication System for Railways (MONASTERY) Phase 3 | Nokia, Nokia Shanghai Bell | revised |  | S6-191101 |
| S6-190934 | MCVideo server limits the number of simultaneous successful service authorisations | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S6-190935 | MCPTT server limits the number of simultaneous successful service authorisations | Nokia, Nokia Shanghai Bell | revised |  | S6-191071 |
| S6-190936 | Additional commencement modes for group calls | Nokia, Nokia Shanghai Bell | revised |  | S6-191072 |
| S6-190937 | Triggering an emergency group communication after an emergency alert automatically | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S6-190938 | MCPTT client performs automatic activation and deactivation of functional aliases based on location | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S6-190939 | MCVideo client performs automatic activation and deactivation of functional aliases based on location | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S6-190940 | MCData client performs automatic activation and deactivation of functional aliases based on location | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S6-190941 | Communication priority for functional aliases | Nokia, Nokia Shanghai Bell | revised |  | S6-191075 |
| S6-190942 | Information flows for the first-to-answer call procedure | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S6-190943 | First-to-answer emergency call setup | Nokia, Nokia Shanghai Bell | revised |  | S6-191080 |
| S6-190944 | MC service server prevents de-affiliation when using a specific functional alias(es) | Nokia, Nokia Shanghai Bell | revised |  | S6-191076 |
| S6-190945 | List of functional aliases used by affiliated group members | Nokia, Nokia Shanghai Bell | not pursued |  |  |
| S6-190946 | MCData server limits the number of simultaneous successful service authorisations | Nokia, Nokia Shanghai Bell | agreed |  |  |
| S6-190947 | User regroup using group creation and using preconfigured group | FirstNet, The Police of the Netherlands, AT&T, UIC, UK HO, Kapsch CarrierCom, Motorola Solutions, Harris | revised |  | S6-191058 |
| S6-190948 | pCR architectural requirements | Ericsson GmbH, Eurolab | revised |  | S6-191126 |
| S6-190949 | pCR resolve EN information flows V2X message distribution | Ericsson GmbH, Eurolab | revised |  | S6-191134 |
| S6-190950 | pCR resolve EN unsubscription step | Ericsson GmbH, Eurolab | merged |  | S6-191133 |
| S6-190951 | pCR resolve EN geographical identifiers | Ericsson GmbH, Eurolab | merged |  | S6-191133 |
| S6-190952 | pCR V2X group communication over LTE Uu | Ericsson GmbH, Eurolab | revised |  | S6-191136 |
| S6-190953 | pCR procedure uplink V2X message delivery | Ericsson GmbH, Eurolab | revised |  | S6-191138 |
| S6-190954 | Key issue - TSN supporting | ZTE Corporation | revised |  | S6-191161 |
| S6-190955 | Key issue - QoS monitoring | ZTE Corporation | revised |  | S6-191162 |
| S6-190956 | Key issue - QoS for 5G communication services | ZTE Corporation | revised |  | S6-191163 |
| S6-190957 | Key issue - Monitoring network situation of 3GPP systems | ZTE Corporation | revised |  | S6-191164 |
| S6-190958 | Key issue – Managing non-public network | ZTE Corporation | revised |  | S6-191165 |
| S6-190959 | Key issue - 5GLAN QoE | ZTE Corporation | revised |  | S6-191166 |
| S6-190960 | Key issue - 5GLAN group management | ZTE Corporation | revised |  | S6-191167 |
| S6-190961 | Key issue-5GLAN configuration management | ZTE Corporation | revised |  | S6-191168 |
| S6-190962 | Update for key issue 5 | Samsung Electronics Romania | revised |  | S6-191146 |
| S6-190963 | Solution for key issue 5 – Location API | Samsung Electronics Romania | revised |  | S6-191153 |
| S6-190964 | Solution for key issue 5 – UE Identifier API | Samsung Electronics Romania | revised |  | S6-191154 |
| S6-190965 | Terminologies for edge computing | Samsung | revised |  | S6-191141 |
| S6-190966 | Update on the key issue 6: Application Architecture | Samsung | revised |  | S6-191147 |
| S6-190967 | A new solution for flexible deployment | Samsung | revised |  | S6-191150 |
| S6-190968 | Service differentiation based on mobile subscription | Samsung  | revised |  | S6-191155 |
| S6-190969 | Discussion on group regroup using preconfigured regroup group at GMS | Huawei, Hisilicon | noted |  |  |
| S6-190970 | Group regroup at GMS using preconfigured regroup group | Huawei, Hisilicon | revised |  | S6-191059 |
| S6-190971 | Functional alias subscription and notification | Huawei, Hisilicon | revised |  | S6-191077 |
| S6-190972 | Pseudo-CR on Functionality for on-network logging and replay | Huawei, Hisilicon | revised |  | S6-191092 |
| S6-190973 | Analysis of 3GPP standards on edge computing | Huawei, Hisilicon | revised |  | S6-191157 |
| S6-190974 | Functional alias support for MCData File Distribution | Union Inter. Chemins de Fer | revised |  | S6-191070 |
| S6-190975 | 23.283 location with implicit floor request | Harris Corporation | revised |  | S6-191063 |
| S6-190976 | 23.283 support for interworking in MC systems | Harris Corporation | withdrawn |  |  |
| S6-190977 | Rel-16 Work Item Exception for eMCCI | Harris Corporation | revised |  | S6-191204 |
| S6-190978 | Functional alias based location reporting – functional alias status notification | Union Inter. Chemins de Fer | revised |  | S6-191073 |
| S6-190979 | Location information reporting based on functional alias | Union Inter. Chemins de Fer | revised |  | S6-191074 |
| S6-190980 | Functional alias - MCData ID correspondence | Union Inter. Chemins de Fer | revised |  | S6-191078 |
| S6-190981 | IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication | Union Inter. Chemins de Fer | revised |  | S6-191084 |
| S6-190982 | Functional Alias management for interworking between MC service system and LMR system | Union Inter. Chemins de Fer | revised |  | S6-191085 |
| S6-190983 | Functional alias in LMR interworking for private calls. | Union Inter. Chemins de Fer | postponed |  |  |
| S6-190984 | Functional alias for floor control interworking between MC service system and LMR system | Union Inter. Chemins de Fer | postponed |  |  |
| S6-190985 | A new solution using LADN | Samsung | revised |  | S6-191151 |
| S6-190986 | Architecture enhancements | Samsung Electronics | revised |  | S6-191143 |
| S6-190987 | Edge aware applications | Samsung Electronics | revised |  | S6-191144 |
| S6-190988 | New key issue - Dynamic availability | Samsung Electronics | revised |  | S6-191149 |
| S6-190989 | New solution - Edge Application discovery | Samsung Electronics | revised |  | S6-191152 |
| S6-190990 | New solution - Dynamic availability of Edge Applications | Samsung Electronics | revised |  | S6-191156 |
| S6-190991 | Work plan | Samsung Electronics | noted |  |  |
| S6-190992 | Functional alias as called party in private call | TD Tech, Chengdu TD Tech, Huawei | postponed |  |  |
| S6-190993 | Functional alias clarifications | TD Tech, Chengdu TD Tech, Huawei | revised |  | S6-191079 |
| S6-190994 | Abbreviations | TD Tech, Chengdu TD Tech, Huawei | revised |  | S6-191048 |
| S6-190995 | Clarification on group regroup rules | TD Tech, Chengdu TD Tech, Huawei | revised |  | S6-191056 |
| S6-190996 | Enhancements on preconfigured group regroup | TD Tech, Chengdu TD Tech, Huawei | revised |  | S6-191057 |
| S6-190997 | Pseudo-CR on Update to solution 4 | Ericsson | revised |  | S6-191086 |
| S6-190998 | Overall analysis of IOPS solutions | Ericsson | noted |  |  |
| S6-190999 | Pseudo-CR on Update to the overall evaluation section | Ericsson | revised |  | S6-191087 |
| S6-191000 | Pseudo-CR on Update to conclusions section | Ericsson | revised |  | S6-191088 |
| S6-191001 | New WID on MC services support on IOPS mode of operation | Ericsson | revised |  | S6-191102 |
| S6-191002 | Presentation of Report to TSG: TR 23.778, Version 2.0.0 | Ericsson | agreed |  |  |
| S6-191003 | SEAL editorials | Samsung | approved |  |  |
| S6-191004 | SEAL updates to introduction | Samsung | revised |  | S6-191115 |
| S6-191005 | SEAL updates to scope | Samsung | approved |  |  |
| S6-191006 | SEAL vertical application definition alignment | Samsung | revised |  | S6-191116 |
| S6-191007 | SEAL identities EN | Samsung | approved |  |  |
| S6-191008 | SEAL VAL user DB | Samsung | revised |  | S6-191118 |
| S6-191009 | SEAL dynamic group updates | Samsung | revised |  | S6-191119 |
| S6-191010 | SEAL configuration procedures | Samsung | revised |  | S6-191120 |
| S6-191011 | SEAL group procedures | Samsung | revised |  | S6-191121 |
| S6-191012 | SEAL location procedures | Samsung | approved |  |  |
| S6-191013 | SEAL integration with 3GPP network systems | Samsung | approved |  |  |
| S6-191014 | SEAL mapping with CFA | Samsung | revised |  | S6-191125 |
| S6-191015 | SEAL Coversheet - TS 23.434 for approval | Samsung | revised |  | S6-191206 |
| S6-191016 | Requirements for network resource management | Huawei, Hisilicon | revised |  | S6-191117 |
| S6-191017 | Unicast resource management | Huawei, Hisilicon | revised |  | S6-191122 |
| S6-191018 | Multicast resource management | Huawei, Hisilicon | revised |  | S6-191123 |
| S6-191019 | NRM server APIs | Huawei, Hisilicon | revised |  | S6-191124 |
| S6-191020 | Clarification on Vc reference point | Huawei, Hisilicon | approved |  |  |
| S6-191021 | Clarification on VAE-E reference point | Huawei, Hisilicon | approved |  |  |
| S6-191022 | Clarification on V2X UE ID | Huawei, Hisilicon | revised |  | S6-191130 |
| S6-191023 | Clarification on V2X service and V2X application | Huawei, Hisilicon | revised |  | S6-191131 |
| S6-191024 | Description for GEO ID | Huawei, Hisilicon | revised |  | S6-191132 |
| S6-191025 | Correction to application level location tracking procedure | Huawei, Hisilicon | revised |  | S6-191133 |
| S6-191026 | Information flows for V2X message distribution | Huawei, Hisilicon | merged |  | S6-191134 |
| S6-191027 | Resolving procedures requiring coordination with SA2 | Huawei, Hisilicon | revised |  | S6-191135 |
| S6-191028 | Description for VAE layer functional entities | Huawei, Hisilicon | approved |  |  |
| S6-191029 | Alignment of V2X application layer identities with SEAL identities | Huawei, Hisilicon | revised |  | S6-191129 |
| S6-191030 | Structure of configuration data | Huawei, Hisilicon | approved |  |  |
| S6-191031 | Complete V2X application architecture for information | Huawei, Hisilicon | revised |  | S6-191140 |
| S6-191032 | Alignment of NRM service and editorial correction for referencing SEAL | Huawei, Hisilicon | approved |  |  |
| S6-191033 | Update to VAE layer APIs | Huawei, Hisilicon | revised |  | S6-191139 |
| S6-191034 | Presentation of TS 23.286 to SA for approval | Huawei, Hisilicon | revised |  | S6-191207 |
| S6-191035 | LS on application layer support for V2X services | Huawei, Hisilicon | revised |  | S6-191107 |
| S6-191036 | New WID for study on enhancements to application layer support for V2X services | Huawei, Hisilicon | revised |  | S6-191104 |
| S6-191037 | Analysis of UAS service requirements | Huawei, Hisilicon | revised |  | S6-191098 |
| S6-191038 | Analysis of ETSI MEC | Huawei, Hisilicon | revised |  | S6-191158 |
| S6-191039 | Handling editor’s notes in CR 0150 for 3GPP TS 23.282 | Expway | noted |  |  |
| S6-191040 | MCData File Distribution using the MBMS download delivery method | Expway | revised | S6-190884 | S6-191061 |
| S6-191041 | Data model for 5G IoT UE | Alibaba Group | noted |  |  |
| S6-191042 | Pseudo-CR on KeyIssue – bandwidth management for 5G Edge Network | Alibaba Group | revised |  | S6-191127 |
| S6-191043 | Pseudo-CR on KeyIssue – location information exposure for 5G Edge Network | Alibaba Group | revised |  | S6-191128 |
| S6-191044 | OMA NMS RESTful API Reuse over MCData-7 and MCData-8 Interfaces | AT&T GNS Belgium SPRL | noted |  |  |
| S6-191045 | MCData SD distribution using the MBMS download delivery method | Sepura PLC | revised |  | S6-191062 |
| S6-191046 | MEC update for SA6 | Nokia, Nokia Shanghai Bell, Huawei, Sony Mobile, Vodafone, Intel, KDDI, Interdigital | noted |  |  |
| S6-191047 | NGMN 5G End-to-End Architecture Framework. | NGMN Alliance | noted | - | - |
| S6-191048 | Abbreviations | TD Tech, Chengdu TD Tech, Huawei | revised | S6-190994 | S6-191108 |
| S6-191049 | Notification of affiliated MCPTT group members not included in the call | The Police of the Netherlands | revised | S6-190894 | S6-191109 |
| S6-191050 | Change to Location Subscription for notification immediate | HOME OFFICE | revised | S6-190924 | S6-191110 |
| S6-191051 | Affiliation clarifications | Motorola Solutions | revised | S6-190896 | S6-191111 |
| S6-191052 | Preconfigured regroup information in dynamic data | Motorola Solutions | agreed | S6-190897 | - |
| S6-191053 | Preconfigured regroup usage | Motorola Solutions | revised | S6-190905 | S6-191112 |
| S6-191054 | LS on ETSI Plugtest standards Issues | CT1 | postponed | - | - |
| S6-191055 | LS on clarification for usage of MC Service emergency state for MCData service | CT1 | postponed | - | - |
| S6-191056 | Clarification on group regroup rules | TD Tech, Chengdu TD Tech, Huawei | revised | S6-190995 | S6-191113 |
| S6-191057 | Enhancements on preconfigured group regroup | TD Tech, Chengdu TD Tech, Huawei | revised | S6-190996 | S6-191114 |
| S6-191058 | User regroup using group creation and using preconfigured group | FirstNet, The Police of the Netherlands, AT&T, UIC, UK HO, Kapsch CarrierCom, Motorola Solutions, Harris, Sepura, BDBOS | revised | S6-190947 | S6-191169 |
| S6-191059 | Group regroup at GMS using preconfigured regroup group | Huawei, Hisilicon | revised | S6-190970 | S6-191171 |
| S6-191060 | Resolutions of some Editor's Notes | AT&T GNS Belgium SPRL | revised | S6-190916 | S6-191173 |
| S6-191061 | MCData File Distribution using the MBMS download delivery method | Expway | revised | S6-191040 | S6-191174 |
| S6-191062 | MCData SD distribution using the MBMS download delivery method | Sepura PLC | postponed | S6-191045 | - |
| S6-191063 | 23.283 location with implicit floor request | Harris Corporation | agreed | S6-190975 | - |
| S6-191064 | Remove the duplicated Key Management Server URI definiton | AT&T GNS Belgium SPRL | revised | S6-190908 | S6-191175 |
| S6-191065 | Remove the duplicated MCPTT server URI in UE configuration table | AT&T GNS Belgium SPRL | revised | S6-190909 | S6-191176 |
| S6-191066 | Remove the duplicated MCVideo server URI in UE configuration table | AT&T GNS Belgium SPRL | revised | S6-190910 | S6-191177 |
| S6-191067 | Remove the duplicated MCPTT server URI in UE configuration table | AT&T GNS Belgium SPRL | revised | S6-190911 | S6-191178 |
| S6-191068 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | revised | S6-190915 | S6-191180 |
| S6-191069 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | revised | S6-190914 | S6-191179 |
| S6-191070 | Functional alias support for MCData File Distribution | Union Inter. Chemins de Fer | revised | S6-190974 | S6-191094 |
| S6-191071 | MCPTT server limits the number of simultaneous successful service authorisations | Nokia, Nokia Shanghai Bell | agreed | S6-190935 | - |
| S6-191072 | Additional commencement modes for group calls | Nokia, Nokia Shanghai Bell | agreed | S6-190936 | - |
| S6-191073 | Functional alias based location reporting – functional alias status notification | Union Inter. Chemins de Fer | withdrawn | S6-190978 | - |
| S6-191074 | Location information reporting based on functional alias | Union Inter. Chemins de Fer | revised | S6-190979 | S6-191095 |
| S6-191075 | Communication priority for functional aliases | Nokia, Nokia Shanghai Bell | revised | S6-190941 | S6-191096 |
| S6-191076 | MC service server prevents de-affiliation when using a specific functional alias(es) | Nokia, Nokia Shanghai Bell | noted | S6-190944 | - |
| S6-191077 | Functional alias subscription and notification | Huawei, Hisilicon | revised | S6-190971 | S6-191097 |
| S6-191078 | Functional alias - MCData ID correspondence | Union Inter. Chemins de Fer | withdrawn | S6-190980 | - |
| S6-191079 | Functional alias clarifications | TD Tech, Chengdu TD Tech, Huawei | revised | S6-190993 | S6-191183 |
| S6-191080 | First-to-answer emergency call setup | Nokia, Nokia Shanghai Bell | revised | S6-190943 | S6-191184 |
| S6-191081 | Add configuration for call forwarding and transfer for MCPTT private calls | Kapsch CarrierCom | revised | S6-190928 | S6-191185 |
| S6-191082 | Add call forwarding for MCPTT private calls | Kapsch CarrierCom | revised | S6-190929 | S6-191186 |
| S6-191083 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | postponed | S6-190930 | - |
| S6-191084 | IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication | Union Inter. Chemins de Fer | revised | S6-190981 | S6-191188 |
| S6-191085 | Functional Alias management for interworking between MC service system and LMR system | Union Inter. Chemins de Fer | revised | S6-190982 | S6-191187 |
| S6-191086 | Pseudo-CR on Update to solution 4 | Ericsson | approved | S6-190997 | - |
| S6-191087 | Pseudo-CR on Update to the overall evaluation section | Ericsson | revised | S6-190999 | S6-191197 |
| S6-191088 | Pseudo-CR on Update to conclusions section | Ericsson | revised | S6-191000 | S6-191198 |
| S6-191089 | Update overall evaluation | Motorola Solutions | approved | S6-190902 | - |
| S6-191090 | Conclusions | Motorola Solutions | approved | S6-190903 | - |
| S6-191091 | Pseudo-CR on solution supporting regulatory constraints and operator security policies | BDBOS, Motorola Solutions | approved | S6-190921 | - |
| S6-191092 | Pseudo-CR on Functionality for on-network logging and replay | Huawei, Hisilicon | revised | S6-190972 | S6-191201 |
| S6-191093 | Pseudo-CR on solution sharing location information across MC service Ues | BDBOS | approved | S6-190918 | - |
| S6-191094 | Functional alias support for MCData File Distribution | Union Inter. Chemins de Fer | revised | S6-191070 | S6-191181 |
| S6-191095 | Location information reporting based on functional alias | Union Inter. Chemins de Fer | revised | S6-191074 | S6-191182 |
| S6-191096 | Communication priority for functional aliases | Nokia, Nokia Shanghai Bell | agreed | S6-191075 | - |
| S6-191097 | Functional alias subscription and notification | Huawei, Hisilicon | agreed | S6-191077 | - |
| S6-191098 | Analysis of UAS service requirements | Huawei, Hisilicon | approved | S6-191037 | - |
| S6-191099 | Key issue 5GS network slicing supporting Mission Critical | BDBOS | approved | S6-190920 | - |
| S6-191100 | Revised SID Study on Mission Critical Services support over 5G System | The Police of the Netherlands | agreed | S6-190895 | - |
| S6-191101 | New WID on Application Architecture for the Mobile Communication System for Railways (MONASTERY) Phase 3 | Nokia, Nokia Shanghai Bell | revised | S6-190933 | S6-191225 |
| S6-191102 | New WID on MC services support on IOPS mode of operation | Ericsson | revised | S6-191001 | S6-191203 |
| S6-191103 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | merged | S6-190912 | S6-191180 |
| S6-191104 | New WID for study on enhancements to application layer support for V2X services | Huawei, Hisilicon | revised | S6-191036 | S6-191233 |
| S6-191105 | Study on message service for MIoT over 5G System | China Mobile Com. Corporation | revised | S6-190893 | S6-191235 |
| S6-191106 | Rel-16 Work Item Exception for eMCData2 | parallell session | revised | - | S6-191236 |
| S6-191107 | LS on application layer support for V2X services | Huawei, Hisilicon | revised | S6-191035 | S6-191237 |
| S6-191108 | Abbreviations | TD Tech, Chengdu TD Tech, Huawei | agreed | S6-191048 | - |
| S6-191109 | Notification of affiliated MCPTT group members not included in the call | The Police of the Netherlands | agreed | S6-191049 | - |
| S6-191110 | Change to Location Subscription for notification immediate | HOME OFFICE | revised | S6-191050 | S6-191211 |
| S6-191111 | Affiliation clarifications | Motorola Solutions | revised | S6-191051 | S6-191228 |
| S6-191112 | Preconfigured regroup usage | Motorola Solutions | agreed | S6-191053 | - |
| S6-191113 | Clarification on group regroup rules | TD Tech, Chengdu TD Tech, Huawei | agreed | S6-191056 | - |
| S6-191114 | Enhancements on preconfigured group regroup | TD Tech, Chengdu TD Tech, Huawei | revised | S6-191057 | S6-191238 |
| S6-191115 | SEAL updates to introduction | Samsung | approved | S6-191004 | - |
| S6-191116 | SEAL vertical application definition alignment | Samsung | approved | S6-191006 | - |
| S6-191117 | Requirements for network resource management | Huawei, Hisilicon | approved | S6-191016 | - |
| S6-191118 | SEAL VAL user DB | Samsung | revised | S6-191008 | S6-191189 |
| S6-191119 | SEAL dynamic group updates | Samsung | postponed | S6-191009 | - |
| S6-191120 | SEAL configuration procedures | Samsung | revised | S6-191010 | S6-191212 |
| S6-191121 | SEAL group procedures | Samsung | approved | S6-191011 | - |
| S6-191122 | Unicast resource management | Huawei, Hisilicon | revised | S6-191017 | S6-191190 |
| S6-191123 | Multicast resource management | Huawei, Hisilicon | revised | S6-191018 | S6-191191 |
| S6-191124 | NRM server APIs | Huawei, Hisilicon | approved | S6-191019 | - |
| S6-191125 | SEAL mapping with CFA | Samsung | revised | S6-191014 | S6-191192 |
| S6-191126 | pCR architectural requirements | Ericsson GmbH, Eurolab | approved | S6-190948 | - |
| S6-191127 | Pseudo-CR on KeyIssue – bandwidth management for 5G Edge Network | Alibaba Group, Samsung | revised | S6-191042 | S6-191159 |
| S6-191128 | Pseudo-CR on KeyIssue – location information exposure for 5G Edge Network | Alibaba Group | revised | S6-191043 | S6-191160 |
| S6-191129 | Alignment of V2X application layer identities with SEAL identities | Huawei, Hisilicon | approved | S6-191029 | - |
| S6-191130 | Clarification on V2X UE ID | Huawei, Hisilicon | approved | S6-191022 | - |
| S6-191131 | Clarification on V2X service and V2X application | Huawei, Hisilicon | approved | S6-191023 | - |
| S6-191132 | Description for GEO ID | Huawei, Hisilicon | approved | S6-191024 | - |
| S6-191133 | Correction to application level location tracking procedure | Huawei, Hisilicon, Ericsson | approved | S6-191025 | - |
| S6-191134 | pCR resolve EN information flows V2X message distribution | Ericsson GmbH, Eurolab, Huawei, Hisilicon | revised | S6-190949 | S6-191194 |
| S6-191135 | Resolving procedures requiring coordination with SA2 | Huawei, Hisilicon | revised | S6-191027 | S6-191195 |
| S6-191136 | V2X group communication over LTE Uu | Ericsson GmbH, Eurolab | approved | S6-190952 | - |
| S6-191137 | Group announcement and join | Ericsson | revised | - | S6-191193 |
| S6-191138 | pCR procedure uplink V2X message delivery | Ericsson GmbH, Eurolab | approved | S6-190953 | - |
| S6-191139 | Update to VAE layer APIs | Huawei, Hisilicon | approved | S6-191033 | - |
| S6-191140 | Complete V2X application architecture for information | Huawei, Hisilicon | revised | S6-191031 | S6-191196 |
| S6-191141 | Terminologies for edge computing | Samsung, Qualcomm, Sony, AT&T | approved | S6-190965 | - |
| S6-191142 | LS reply on SCEF support for V2XAPP procedures | SA2 | noted | - | - |
| S6-191143 | Architecture enhancements | Samsung Electronics | approved | S6-190986 | - |
| S6-191144 | Edge aware applications | Samsung Electronics | approved | S6-190987 | - |
| S6-191145 | Pseudo-CR on Update KeyIssue#4 and #5 | Sony Europe Limited | revised | S6-190923 | S6-191220 |
| S6-191146 | Update for key issue 5 | Samsung Electronics Romania | revised | S6-190962 | S6-191221 |
| S6-191147 | Update on the key issue 6: Application Architecture | Samsung | revised | S6-190966 | S6-191222 |
| S6-191148 | KeyIssue#7 Service Continuity and Mobility | Intel Deutschland GmbH | revised | S6-190892 | S6-191208 |
| S6-191149 | New key issue - Dynamic availability | Samsung Electronics | approved | S6-190988 | - |
| S6-191150 | A new solution for flexible deployment | Samsung | revised | S6-190967 | S6-191223 |
| S6-191151 | A new solution using LADN | Samsung | revised | S6-190985 | S6-191200 |
| S6-191152 | New solution - Edge Application discovery | Samsung Electronics | approved | S6-190989 | - |
| S6-191153 | Solution for key issue 5 – Location API | Samsung Electronics Romania | revised | S6-190963 | S6-191209 |
| S6-191154 | Solution for key issue 5 – UE Identifier API | Samsung Electronics Romania | revised | S6-190964 | S6-191224 |
| S6-191155 | Service differentiation based on mobile subscription | Samsung  | revised | S6-190968 | S6-191172 |
| S6-191156 | New solution - Dynamic availability of Edge Applications | Samsung Electronics | approved | S6-190990 | - |
| S6-191157 | Analysis of 3GPP standards on edge computing | Huawei, Hisilicon | revised | S6-190973 | S6-191252 |
| S6-191158 | Analysis of ETSI MEC | Huawei, Hisilicon | approved | S6-191038 | - |
| S6-191159 | Pseudo-CR on KeyIssue – bandwidth management for 5G Edge Network | Alibaba Group, Samsung | postponed | S6-191127 | - |
| S6-191160 | Pseudo-CR on KeyIssue – Use of location information | Alibaba Group | revised | S6-191128 | S6-191227 |
| S6-191161 | Key issue - TSN supporting | ZTE Corporation | revised | S6-190954 | S6-191213 |
| S6-191162 | Key issue - QoS monitoring | ZTE Corporation | revised | S6-190955 | S6-191214 |
| S6-191163 | Key issue - QoS for 5G communication services | ZTE Corporation | revised | S6-190956 | S6-191215 |
| S6-191164 | Key issue - Monitoring network situation of 3GPP systems | ZTE Corporation | revised | S6-190957 | S6-191216 |
| S6-191165 | Key issue – Managing non-public network | ZTE Corporation | revised | S6-190958 | S6-191217 |
| S6-191166 | Key issue - 5GLAN QoE | ZTE Corporation | postponed | S6-190959 | - |
| S6-191167 | Key issue - 5GLAN group management | ZTE Corporation | revised | S6-190960 | S6-191218 |
| S6-191168 | Key issue-5GLAN configuration management | ZTE Corporation | revised | S6-190961 | S6-191219 |
| S6-191169 | User regroup using group creation and using preconfigured group | FirstNet, The Police of the Netherlands, AT&T, UIC, UK HO, Kapsch CarrierCom, Motorola Solutions, Harris, Sepura, BDBOS | agreed | S6-191058 | - |
| S6-191170 | Work Plan review at SA6#31 | Vice Chairman | revised | - | S6-191249 |
| S6-191171 | Group regroup at GMS using preconfigured regroup group | Huawei, Hisilicon | postponed | S6-191059 | - |
| S6-191172 | Service differentiation based on mobile subscription | Samsung  | revised | S6-191155 | S6-191234 |
| S6-191173 | Resolutions of some Editor's Notes | AT&T GNS Belgium SPRL | agreed | S6-191060 | - |
| S6-191174 | MCData File Distribution using the MBMS download delivery method | Expway | agreed | S6-191061 | - |
| S6-191175 | Remove the duplicated Key Management Server URI definiton | AT&T GNS Belgium SPRL | agreed | S6-191064 | - |
| S6-191176 | Remove the duplicated MCPTT server URI in UE configuration table | AT&T GNS Belgium SPRL | agreed | S6-191065 | - |
| S6-191177 | Remove the duplicated MCVideo server URI in UE configuration table | AT&T GNS Belgium SPRL | agreed | S6-191066 | - |
| S6-191178 | Remove the duplicated MCDATA server URI in UE configuration table | AT&T GNS Belgium SPRL | agreed | S6-191067 | - |
| S6-191179 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | agreed | S6-191069 | - |
| S6-191180 | Add lossless communication to network group configuration and fix missing configuration parameter | AT&T GNS Belgium SPRL | revised | S6-191068 | S6-191250 |
| S6-191181 | Functional alias support for MCData File Distribution | Union Inter. Chemins de Fer | agreed | S6-191094 | - |
| S6-191182 | Location information reporting based on functional alias | Union Inter. Chemins de Fer | agreed | S6-191095 | - |
| S6-191183 | Functional alias clarifications | TD Tech, Chengdu TD Tech, Huawei | agreed | S6-191079 | - |
| S6-191184 | First-to-answer emergency call setup | Nokia, Nokia Shanghai Bell | postponed | S6-191080 | - |
| S6-191185 | Add configuration for call forwarding for MCPTT private calls | Kapsch CarrierCom | agreed | S6-191081 | - |
| S6-191186 | Add call forwarding for MCPTT private calls | Kapsch CarrierCom | revised | S6-191082 | S6-191230 |
| S6-191187 | Functional Alias management for interworking between MC service system and LMR system | Union Inter. Chemins de Fer | agreed | S6-191085 | - |
| S6-191188 | IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication | Union Inter. Chemins de Fer | revised | S6-191084 | S6-191231 |
| S6-191189 | SEAL VAL user DB | Samsung | approved | S6-191118 | - |
| S6-191190 | Unicast resource management | Huawei, Hisilicon | revised | S6-191122 | S6-191229 |
| S6-191191 | Multicast resource management | Huawei, Hisilicon | approved | S6-191123 | - |
| S6-191192 | SEAL mapping with CFA | Samsung | approved | S6-191125 | - |
| S6-191193 | Group announcement and join | Ericsson | approved | S6-191137 | - |
| S6-191194 | pCR resolve EN information flows V2X message distribution | Ericsson GmbH, Eurolab, Huawei, Hisilicon | approved | S6-191134 | - |
| S6-191195 | Resolving procedures requiring coordination with SA2 | Huawei, Hisilicon | approved | S6-191135 | - |
| S6-191196 | Complete V2X application architecture for information | Huawei, Hisilicon | approved | S6-191140 | - |
| S6-191197 | Pseudo-CR on Update to the overall evaluation section | Ericsson | approved | S6-191087 | - |
| S6-191198 | Pseudo-CR on Update to conclusions section | Ericsson | approved | S6-191088 | - |
| S6-191199 | Terminologies | Qualcomm, Samsung, Intel, Sony, AT&T, Nokia | revised | - | S6-191202 |
| S6-191200 | A new solution using LADN | Samsung | approved | S6-191151 | - |
| S6-191201 | Pseudo-CR on Functionality for on-network logging and replay | Huawei, Hisilicon | approved | S6-191092 | - |
| S6-191202 | Terminologies | Qualcomm, Samsung, Intel, Sony, AT&T, Nokia | approved | S6-191199 | - |
| S6-191203 | New WID on MC services support on IOPS mode of operation | Ericsson | revised | S6-191102 | S6-191232 |
| S6-191204 | Rel-16 Work Item Exception for eMCCI | Harris Corporation | revised | S6-190977 | S6-191247 |
| S6-191205 | Presentation of Report to TSG:TR 23.784, Version 2.0.0 | Motorola Solutions | agreed | S6-190904 | - |
| S6-191206 | SEAL Coversheet - TS 23.434 for approval | Samsung | agreed | S6-191015 | - |
| S6-191207 | Presentation of TS 23.286 to SA for approval | Huawei, Hisilicon | agreed | S6-191034 | - |
| S6-191208 | KeyIssue#7 Service Continuity and Mobility | Intel Deutschland GmbH | revised | S6-191148 | S6-191226 |
| S6-191209 | Solution for key issue 5 – Location API | Samsung, Deutsche Telekom AG | approved | S6-191153 | - |
| S6-191210 | Presentation of Report to SA:TR 23.744, Version 0.6.0 | Motorola Solutions | agreed | - | - |
| S6-191211 | Change to Location Subscription for notification immediate | HOME OFFICE | agreed | S6-191110 | - |
| S6-191212 | SEAL configuration procedures | Samsung | approved | S6-191120 | - |
| S6-191213 | Key issue - TSN supporting | ZTE Corporation | revised | S6-191161 | S6-191239 |
| S6-191214 | Key issue - QoS monitoring | ZTE Corporation | revised | S6-191162 | S6-191240 |
| S6-191215 | Key issue - QoS for 5G communication services | ZTE Corporation | revised | S6-191163 | S6-191241 |
| S6-191216 | Key issue - Monitoring network situation of 3GPP systems | ZTE Corporation | revised | S6-191164 | S6-191242 |
| S6-191217 | Key issue – Managing non-public network | ZTE Corporation | revised | S6-191165 | S6-191243 |
| S6-191218 | Key issue - 5GLAN group management | ZTE Corporation | revised | S6-191167 | S6-191244 |
| S6-191219 | Key issue-5GLAN configuration management | ZTE Corporation | revised | S6-191168 | S6-191245 |
| S6-191220 | Pseudo-CR on Edge Data network selection | Sony Europe Limited | approved | S6-191145 | - |
| S6-191221 | Update for key issue 5 | Samsung Electronics Romania | approved | S6-191146 | - |
| S6-191222 | Update on the key issue 6: Application Architecture | Samsung | revised | S6-191147 | S6-191256 |
| S6-191223 | A new solution for flexible deployment | Samsung | revised | S6-191150 | S6-191251 |
| S6-191224 | Solution for key issue 5 – UE Identifier API | Samsung Electronics Romania | approved | S6-191154 | - |
| S6-191225 | New WID on Application Architecture for the Mobile Communication System for Railways (MONASTERY) Phase 3 | Nokia, Nokia Shanghai Bell | revised | S6-191101 | S6-191246 |
| S6-191226 | KeyIssue#7 Service Continuity and Mobility | Intel Deutschland GmbH | approved | S6-191208 | - |
| S6-191227 | Pseudo-CR on KeyIssue – Use of location information | Alibaba Group | approved | S6-191160 | - |
| S6-191228 | Affiliation clarifications | Motorola Solutions | agreed | S6-191111 | - |
| S6-191229 | Unicast resource management | Huawei, Hisilicon | approved | S6-191190 | - |
| S6-191230 | Add call forwarding for MCPTT private calls | Kapsch CarrierCom | agreed | S6-191186 | - |
| S6-191231 | IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication | Union Inter. Chemins de Fer | agreed | S6-191188 | - |
| S6-191232 | New WID on MC services support on IOPS mode of operation | Ericsson | agreed | S6-191203 | - |
| S6-191233 | New WID for study on enhancements to application layer support for V2X services | Huawei, Hisilicon | agreed | S6-191104 | - |
| S6-191234 | Service differentiation based on mobile subscription | Samsung  | approved | S6-191172 | - |
| S6-191235 | Study on message service for MIoT over 5G System | China Mobile Com. Corporation | agreed | S6-191105 | - |
| S6-191236 | Rel-16 Work Item Exception for eMCData2 | parallell session | revised | S6-191106 | S6-191248 |
| S6-191237 | LS on application layer support for V2X services | Huawei, Hisilicon | approved | S6-191107 | - |
| S6-191238 | Enhancements on preconfigured group regroup | TD Tech, Chengdu TD Tech, Huawei | revised | S6-191114 | S6-191253 |
| S6-191239 | Key issue - TSN supporting | ZTE Corporation | revised | S6-191213 | S6-191254 |
| S6-191240 | Key issue - QoS monitoring | ZTE Corporation | approved | S6-191214 | - |
| S6-191241 | Key issue - QoS for 5G communication services | ZTE Corporation | postponed | S6-191215 | - |
| S6-191242 | Key issue - Monitoring network situation of 3GPP systems | ZTE Corporation | noted | S6-191216 | - |
| S6-191243 | Key issue – Managing non-public network | ZTE Corporation | approved | S6-191217 | - |
| S6-191244 | Key issue - 5GLAN group management | ZTE Corporation | revised | S6-191218 | S6-191255 |
| S6-191245 | Key issue-5GLAN configuration management | ZTE Corporation | noted | S6-191219 | - |
| S6-191246 | New WID on Application Architecture for the Mobile Communication System for Railways (MONASTERY) Phase 3 | Nokia, Nokia Shanghai Bell | agreed | S6-191225 | - |
| S6-191247 | Rel-16 Work Item Exception for eMCCI | Harris Corporation | agreed | S6-191204 | - |
| S6-191248 | Rel-16 Work Item Exception for eMCData2 | parallell session | agreed | S6-191236 | - |
| S6-191249 | Work Plan review at SA6#31 | Vice Chairman | noted | S6-191170 | - |
| S6-191250 | Add lossless communication to network group configuration and fix missing configuration parameter | AT&T GNS Belgium SPRL | agreed | S6-191180 | - |
| S6-191251 | A new solution for flexible deployment | Samsung | approved | S6-191223 | - |
| S6-191252 | Analysis of 3GPP standards on edge computing | Huawei, Hisilicon | approved | S6-191157 | - |
| S6-191253 | Enhancements on preconfigured group regroup | TD Tech, Chengdu TD Tech, Huawei | agreed | S6-191238 | - |
| S6-191254 | Key issue - TSN supporting | ZTE Corporation | approved | S6-191239 | - |
| S6-191255 | Key issue - 5GLAN group management | ZTE Corporation | approved | S6-191244 | - |
| S6-191256 | Update on the key issue 6: Application Architecture | Samsung | approved | S6-191222 | - |

## Annex B: List of change requests

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Document | Title | Source | Spec | CR | Rev | Rel | Cat | WI | Decision |
| S6-190896 | Affiliation clarifications | Motorola Solutions | 23.280 | 0191 | - | Rel-16 | F | enh2MCPTT | revised |
| S6-191051 | Affiliation clarifications | Motorola Solutions | 23.280 | 0191 | 1 | Rel-16 | F | enh2MCPTT | revised |
| S6-191111 | Affiliation clarifications | Motorola Solutions | 23.280 | 0191 | 2 | Rel-16 | F | enh2MCPTT | revised |
| S6-191228 | Affiliation clarifications | Motorola Solutions | 23.280 | 0191 | 3 | Rel-16 | F | enh2MCPTT | agreed |
| S6-190897 | Preconfigured regroup information in dynamic data | Motorola Solutions | 23.280 | 0192 | - | Rel-16 | C | enh2MCPTT | revised |
| S6-191052 | Preconfigured regroup information in dynamic data | Motorola Solutions | 23.280 | 0192 | 1 | Rel-16 | C | enh2MCPTT | agreed |
| S6-190898 | Preconfigured regroup usage | Motorola Solutions | 23.280 | 0193 | - | Rel-16 | F | enh2MCPTT | withdrawn |
| S6-190908 | MCX service servers should be defined in a user profile | AT&T GNS Belgium SPRL | 23.280 | 0194 | - | Rel-16 | F | TEI16 | revised |
| S6-191064 | Remove the duplicated Key Management Server URI definiton | AT&T GNS Belgium SPRL | 23.280 | 0194 | 1 | Rel-16 | F | TEI16 | revised |
| S6-191175 | Remove the duplicated Key Management Server URI definiton | AT&T GNS Belgium SPRL | 23.280 | 0194 | 2 | Rel-16 | F | enh2MCPTT | agreed |
| S6-190912 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | 23.280 | 0195 | - | Rel-16 | F | TEI16 | revised |
| S6-191103 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | 23.280 | 0195 | 1 | Rel-16 | F | TEI16 | merged |
| S6-190924 | Change to Location Subscription for notification immediate | HOME OFFICE | 23.280 | 0196 | - | Rel-16 | C | enh2MCPTT | revised |
| S6-191050 | Change to Location Subscription for notification immediate | HOME OFFICE | 23.280 | 0196 | 1 | Rel-16 | B | enh2MCPTT | revised |
| S6-191110 | Change to Location Subscription for notification immediate | HOME OFFICE | 23.280 | 0196 | 2 | Rel-16 | B | enh2MCPTT | revised |
| S6-191211 | Change to Location Subscription for notification immediate | HOME OFFICE | 23.280 | 0196 | 3 | Rel-16 | B | enh2MCPTT | agreed |
| S6-190927 | Addition of name of Groups to Group Configuration data for organising UE | HOME OFFICE | 23.280 | 0197 | - | Rel-16 | C | enh2MCPTT | postponed |
| S6-190944 | MC service server prevents de-affiliation when using a specific functional alias(es) | Nokia, Nokia Shanghai Bell | 23.280 | 0198 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191076 | MC service server prevents de-affiliation when using a specific functional alias(es) | Nokia, Nokia Shanghai Bell | 23.280 | 0198 | 1 | Rel-16 | B | MONASTERY2 | noted |
| S6-190945 | List of functional aliases used by affiliated group members | Nokia, Nokia Shanghai Bell | 23.280 | 0199 | - | Rel-16 | B | MONASTERY2 | not pursued |
| S6-190970 | Group regroup at GMS using preconfigured regroup group | Huawei, Hisilicon | 23.280 | 0200 | - | Rel-16 | B | enh2MCPTT | revised |
| S6-191059 | Group regroup at GMS using preconfigured regroup group | Huawei, Hisilicon | 23.280 | 0200 | 1 | Rel-16 | B | enh2MCPTT | revised |
| S6-191171 | Group regroup at GMS using preconfigured regroup group | Huawei, Hisilicon | 23.280 | 0200 | 2 | Rel-16 | B | enh2MCPTT | postponed |
| S6-190971 | Functional alias subscription and notification | Huawei, Hisilicon | 23.280 | 0201 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191077 | Functional alias subscription and notification | Huawei, Hisilicon | 23.280 | 0201 | 1 | Rel-16 | B | MONASTERY2 | revised |
| S6-191097 | Functional alias subscription and notification | Huawei, Hisilicon | 23.280 | 0201 | 2 | Rel-16 | B | MONASTERY2 | agreed |
| S6-190978 | Functional alias based location reporting – functional alias status notification | Union Inter. Chemins de Fer | 23.280 | 0202 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191073 | Functional alias based location reporting – functional alias status notification | Union Inter. Chemins de Fer | 23.280 | 0202 | 1 | Rel-16 | B | MONASTERY2 | withdrawn |
| S6-190979 | Location information reporting based on functional alias | Union Inter. Chemins de Fer | 23.280 | 0203 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191074 | Location information reporting based on functional alias | Union Inter. Chemins de Fer | 23.280 | 0203 | 1 | Rel-16 | B | MONASTERY2 | revised |
| S6-191095 | Location information reporting based on functional alias | Union Inter. Chemins de Fer | 23.280 | 0203 | 2 | Rel-16 | B | MONASTERY2 | revised |
| S6-191182 | Location information reporting based on functional alias | Union Inter. Chemins de Fer | 23.280 | 0203 | 3 | Rel-16 | B | MONASTERY2 | agreed |
| S6-190993 | Functional alias clarifications | TD Tech, Chengdu TD Tech, Huawei | 23.280 | 0204 | - | Rel-16 | F | MONASTERY2 | revised |
| S6-191079 | Functional alias clarifications | TD Tech, Chengdu TD Tech, Huawei | 23.280 | 0204 | 1 | Rel-16 | F | MONASTERY2 | revised |
| S6-191183 | Functional alias clarifications | TD Tech, Chengdu TD Tech, Huawei | 23.280 | 0204 | 2 | Rel-16 | F | MONASTERY2 | agreed |
| S6-190994 | Abbreviations | TD Tech, Chengdu TD Tech, Huawei | 23.280 | 0205 | - | Rel-16 | F | enh2MCPTT | revised |
| S6-191048 | Abbreviations | TD Tech, Chengdu TD Tech, Huawei | 23.280 | 0205 | 1 | Rel-16 | F | enh2MCPTT | revised |
| S6-191108 | Abbreviations | TD Tech, Chengdu TD Tech, Huawei | 23.280 | 0205 | 2 | Rel-16 | F | enh2MCPTT | agreed |
| S6-190995 | Clarification on group regroup rules | TD Tech, Chengdu TD Tech, Huawei | 23.280 | 0206 | - | Rel-16 | F | enh2MCPTT | revised |
| S6-191056 | Clarification on group regroup rules | TD Tech, Chengdu TD Tech, Huawei | 23.280 | 0206 | 1 | Rel-16 | F | enh2MCPTT | revised |
| S6-191113 | Clarification on group regroup rules | TD Tech, Chengdu TD Tech, Huawei | 23.280 | 0206 | 2 | Rel-16 | F | enh2MCPTT | agreed |
| S6-190910 | MCX service servers should be defined in a user profile | AT&T GNS Belgium SPRL | 23.281 | 0129 | - | Rel-16 | F | TEI16 | revised |
| S6-191066 | Remove the duplicated MCVideo server URI in UE configuration table | AT&T GNS Belgium SPRL | 23.281 | 0129 | 1 | Rel-16 | F | TEI16 | revised |
| S6-191177 | Remove the duplicated MCVideo server URI in UE configuration table | AT&T GNS Belgium SPRL | 23.281 | 0129 | 2 | Rel-16 | F | enh2MCPTT | agreed |
| S6-190914 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | 23.281 | 0130 | - | Rel-16 | F | TEI16 | revised |
| S6-191069 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | 23.281 | 0130 | 1 | Rel-16 | F | TEI16 | revised |
| S6-191179 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | 23.281 | 0130 | 2 | Rel-16 | F | TEI16 | agreed |
| S6-190934 | MCVideo server limits the number of simultaneous successful service authorisations | Nokia, Nokia Shanghai Bell | 23.281 | 0131 | - | Rel-16 | B | MONASTERY2 | agreed |
| S6-190939 | MCVideo client performs automatic activation and deactivation of functional aliases based on location | Nokia, Nokia Shanghai Bell | 23.281 | 0132 | - | Rel-16 | B | MONASTERY2 | agreed |
| S6-191040 | MCData File Distribution using the MBMS download delivery method | Expway | 23.282 | 0150 | 4 | Rel-16 | B | eMCData2 | revised |
| S6-191061 | MCData File Distribution using the MBMS download delivery method | Expway | 23.282 | 0150 | 5 | Rel-16 | B | eMCData2 | revised |
| S6-191174 | MCData File Distribution using the MBMS download delivery method | Expway | 23.282 | 0150 | 6 | Rel-16 | B | eMCData2 | agreed |
| S6-190907 | Remove the procedure in 7.5.2.9 File removal using HTTP by MCData server | AT&T GNS Belgium SPRL | 23.282 | 0151 | - | Rel-16 | C | eMCData2 | agreed |
| S6-190911 | MCX service servers should be defined in a user profile | AT&T GNS Belgium SPRL | 23.282 | 0152 | - | Rel-16 | F | TEI16 | revised |
| S6-191067 | Remove the duplicated MCPTT server URI in UE configuration table | AT&T GNS Belgium SPRL | 23.282 | 0152 | 1 | Rel-16 | F | TEI16 | revised |
| S6-191178 | Remove the duplicated MCDATA server URI in UE configuration table | AT&T GNS Belgium SPRL | 23.282 | 0152 | 2 | Rel-16 | F | eMCDATA2 | agreed |
| S6-190915 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | 23.282 | 0153 | - | Rel-16 | F | TEI16 | revised |
| S6-191068 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | 23.282 | 0153 | 1 | Rel-16 | F | TEI16 | revised |
| S6-191180 | Add lossless communication to network group configuration and fix missing configuration parameter | AT&T GNS Belgium SPRL | 23.282 | 0153 | 2 | Rel-16 | F | eMCData2 | revised |
| S6-191250 | Add lossless communication to network group configuration and fix missing configuration parameter | AT&T GNS Belgium SPRL | 23.282 | 0153 | 3 | Rel-16 | F | eMCData2 | agreed |
| S6-190916 | Resolutions of some Editor's Notes | AT&T GNS Belgium SPRL | 23.282 | 0154 | - | Rel-16 | D | eMCData2 | revised |
| S6-191060 | Resolutions of some Editor's Notes | AT&T GNS Belgium SPRL | 23.282 | 0154 | 1 | Rel-16 | F | eMCData2 | revised |
| S6-191173 | Resolutions of some Editor's Notes | AT&T GNS Belgium SPRL | 23.282 | 0154 | 2 | Rel-16 | F | eMCData2 | agreed |
| S6-190940 | MCData client performs automatic activation and deactivation of functional aliases based on location | Nokia, Nokia Shanghai Bell | 23.282 | 0155 | - | Rel-16 | B | MONASTERY2 | agreed |
| S6-190946 | MCData server limits the number of simultaneous successful service authorisations | Nokia, Nokia Shanghai Bell | 23.282 | 0156 | - | Rel-16 | B | MONASTERY2 | agreed |
| S6-190974 | Functional alias support for MCData File Distribution | Union Inter. Chemins de Fer | 23.282 | 0157 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191070 | Functional alias support for MCData File Distribution | Union Inter. Chemins de Fer | 23.282 | 0157 | 1 | Rel-16 | B | MONASTERY2 | revised |
| S6-191094 | Functional alias support for MCData File Distribution | Union Inter. Chemins de Fer | 23.282 | 0157 | 2 | Rel-16 | B | MONASTERY2 | revised |
| S6-191181 | Functional alias support for MCData File Distribution | Union Inter. Chemins de Fer | 23.282 | 0157 | 3 | Rel-16 | B | MONASTERY2 | agreed |
| S6-190980 | Functional alias - MCData ID correspondence | Union Inter. Chemins de Fer | 23.282 | 0158 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191078 | Functional alias - MCData ID correspondence | Union Inter. Chemins de Fer | 23.282 | 0158 | 1 | Rel-16 | B | MONASTERY2 | withdrawn |
| S6-190981 | IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication | Union Inter. Chemins de Fer | 23.282 | 0159 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191084 | IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication | Union Inter. Chemins de Fer | 23.282 | 0159 | 1 | Rel-16 | B | MONASTERY2 | revised |
| S6-191188 | IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication | Union Inter. Chemins de Fer | 23.282 | 0159 | 2 | Rel-16 | B | MONASTERY2 | revised |
| S6-191231 | IP connectivity part 2 MC Data User IP connectivity service capability– part 2 IP connectivity for Point-to-Point and Group communication | Union Inter. Chemins de Fer | 23.282 | 0159 | 3 | Rel-16 | B | MONASTERY2 | agreed |
| S6-191045 | MCData SD distribution using the MBMS download delivery method | Sepura PLC | 23.282 | 0160 | - | Rel-16 | B | eMCData2 | revised |
| S6-191062 | MCData SD distribution using the MBMS download delivery method | Sepura PLC | 23.282 | 0160 | 1 | Rel-16 | B | eMCData2 | postponed |
| S6-190975 | 23.283 location with implicit floor request | Harris Corporation | 23.283 | 0033 | - | Rel-16 | C | eMCCI | revised |
| S6-191063 | 23.283 location with implicit floor request | Harris Corporation | 23.283 | 0033 | 1 | Rel-16 | C | eMCCI | agreed |
| S6-190976 | 23.283 support for interworking in MC systems | Harris Corporation | 23.283 | 0034 | - | Rel-16 | C | eMCCI | withdrawn |
| S6-190982 | Functional Alias management for interworking between MC service system and LMR system | Union Inter. Chemins de Fer | 23.283 | 0035 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191085 | Functional Alias management for interworking between MC service system and LMR system | Union Inter. Chemins de Fer | 23.283 | 0035 | 1 | Rel-16 | B | MONASTERY2 | revised |
| S6-191187 | Functional Alias management for interworking between MC service system and LMR system | Union Inter. Chemins de Fer | 23.283 | 0035 | 2 | Rel-16 | B | MONASTERY2 | agreed |
| S6-190983 | Functional alias in LMR interworking for private calls. | Union Inter. Chemins de Fer | 23.283 | 0036 | - | Rel-16 | B | MONASTERY2 | postponed |
| S6-190984 | Functional alias for floor control interworking between MC service system and LMR system | Union Inter. Chemins de Fer | 23.283 | 0037 | - | Rel-16 | B | MONASTERY2 | postponed |
| S6-190894 | Notification of affiliated MCPTT group members not included in the call | The Police of the Netherlands | 23.379 | 0206 | - | Rel-16 | F | enh2MCPTT | revised |
| S6-191049 | Notification of affiliated MCPTT group members not included in the call | The Police of the Netherlands | 23.379 | 0206 | 1 | Rel-16 | F | enh2MCPTT | revised |
| S6-191109 | Notification of affiliated MCPTT group members not included in the call | The Police of the Netherlands | 23.379 | 0206 | 2 | Rel-16 | F | enh2MCPTT | agreed |
| S6-190905 | Preconfigured regroup usage | Motorola Solutions | 23.379 | 0207 | - | Rel-16 | F | enh2MCPTT | revised |
| S6-191053 | Preconfigured regroup usage | Motorola Solutions | 23.379 | 0207 | 1 | Rel-16 | F | enh2MCPTT | revised |
| S6-191112 | Preconfigured regroup usage | Motorola Solutions | 23.379 | 0207 | 2 | Rel-16 | F | enh2MCPTT | agreed |
| S6-190909 | MCX service servers should be defined in a user profile | AT&T GNS Belgium SPRL | 23.379 | 0208 | - | Rel-16 | F | TEI16 | revised |
| S6-191065 | Remove the duplicated MCPTT server URI in UE configuration table | AT&T GNS Belgium SPRL | 23.379 | 0208 | 1 | Rel-16 | F | TEI16 | revised |
| S6-191176 | Remove the duplicated MCPTT server URI in UE configuration table | AT&T GNS Belgium SPRL | 23.379 | 0208 | 2 | Rel-16 | F | enh2MCPTT | agreed |
| S6-190913 | KMSUri is missing in various configuration data | AT&T GNS Belgium SPRL | 23.379 | 0209 | - | Rel-16 | F | TEI16 | not pursued |
| S6-190928 | Add configuration for call forwarding and transfer of MCPTT private calls | Kapsch CarrierCom | 23.379 | 0210 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191081 | Add configuration for call forwarding and transfer for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0210 | 1 | Rel-16 | B | MONASTERY2 | revised |
| S6-191185 | Add configuration for call forwarding for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0210 | 2 | Rel-16 | B | MONASTERY2 | agreed |
| S6-190929 | Add call forwarding for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0211 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191082 | Add call forwarding for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0211 | 1 | Rel-16 | B | MONASTERY2 | revised |
| S6-191186 | Add call forwarding for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0211 | 2 | Rel-16 | B | MONASTERY2 | revised |
| S6-191230 | Add call forwarding for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0211 | 3 | Rel-16 | B | MONASTERY2 | agreed |
| S6-190930 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0212 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191083 | Add call transfer for MCPTT private calls | Kapsch CarrierCom | 23.379 | 0212 | 1 | Rel-16 | B | MONASTERY2 | postponed |
| S6-190935 | MCPTT server limits the number of simultaneous successful service authorisations | Nokia, Nokia Shanghai Bell | 23.379 | 0213 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191071 | MCPTT server limits the number of simultaneous successful service authorisations | Nokia, Nokia Shanghai Bell | 23.379 | 0213 | 1 | Rel-16 | B | MONASTERY2 | agreed |
| S6-190936 | Additional commencement modes for group calls | Nokia, Nokia Shanghai Bell | 23.379 | 0214 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191072 | Additional commencement modes for group calls | Nokia, Nokia Shanghai Bell | 23.379 | 0214 | 1 | Rel-16 | B | MONASTERY2 | agreed |
| S6-190937 | Triggering an emergency group communication after an emergency alert automatically | Nokia, Nokia Shanghai Bell | 23.379 | 0215 | - | Rel-16 | B | MONASTERY2 | agreed |
| S6-190938 | MCPTT client performs automatic activation and deactivation of functional aliases based on location | Nokia, Nokia Shanghai Bell | 23.379 | 0216 | - | Rel-16 | B | MONASTERY2 | agreed |
| S6-190941 | Communication priority for functional aliases | Nokia, Nokia Shanghai Bell | 23.379 | 0217 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191075 | Communication priority for functional aliases | Nokia, Nokia Shanghai Bell | 23.379 | 0217 | 1 | Rel-16 | B | MONASTERY2 | revised |
| S6-191096 | Communication priority for functional aliases | Nokia, Nokia Shanghai Bell | 23.379 | 0217 | 2 | Rel-16 | B | MONASTERY2 | agreed |
| S6-190942 | Information flows for the first-to-answer call procedure | Nokia, Nokia Shanghai Bell | 23.379 | 0218 | - | Rel-16 | F | MONASTERY2 | agreed |
| S6-190943 | First-to-answer emergency call setup | Nokia, Nokia Shanghai Bell | 23.379 | 0219 | - | Rel-16 | B | MONASTERY2 | revised |
| S6-191080 | First-to-answer emergency call setup | Nokia, Nokia Shanghai Bell | 23.379 | 0219 | 1 | Rel-16 | B | MONASTERY2 | revised |
| S6-191184 | First-to-answer emergency call setup | Nokia, Nokia Shanghai Bell | 23.379 | 0219 | 2 | Rel-16 | B | MONASTERY2 | postponed |
| S6-190947 | User regroup using group creation and using preconfigured group | FirstNet, The Police of the Netherlands, AT&T, UIC, UK HO, Kapsch CarrierCom, Motorola Solutions, Harris | 23.379 | 0220 | - | Rel-16 | B | enh2MCPTT | revised |
| S6-191058 | User regroup using group creation and using preconfigured group | FirstNet, The Police of the Netherlands, AT&T, UIC, UK HO, Kapsch CarrierCom, Motorola Solutions, Harris, Sepura, BDBOS | 23.379 | 0220 | 1 | Rel-16 | B | enh2MCPTT | revised |
| S6-191169 | User regroup using group creation and using preconfigured group | FirstNet, The Police of the Netherlands, AT&T, UIC, UK HO, Kapsch CarrierCom, Motorola Solutions, Harris, Sepura, BDBOS | 23.379 | 0220 | 2 | Rel-16 | B | enh2MCPTT | agreed |
| S6-190992 | Functional alias as called party in private call | TD Tech, Chengdu TD Tech, Huawei | 23.379 | 0221 | - | Rel-16 | B | MONASTERY2 | postponed |
| S6-190996 | Enhancements on preconfigured group regroup | TD Tech, Chengdu TD Tech, Huawei | 23.379 | 0222 | - | Rel-16 | C | enh2MCPTT | revised |
| S6-191057 | Enhancements on preconfigured group regroup | TD Tech, Chengdu TD Tech, Huawei | 23.379 | 0222 | 1 | Rel-16 | C | enh2MCPTT | revised |
| S6-191114 | Enhancements on preconfigured group regroup | TD Tech, Chengdu TD Tech, Huawei | 23.379 | 0222 | 2 | Rel-16 | C | enh2MCPTT | revised |
| S6-191238 | Enhancements on preconfigured group regroup | TD Tech, Chengdu TD Tech, Huawei | 23.379 | 0222 | 3 | Rel-16 | C | enh2MCPTT | revised |
| S6-191253 | Enhancements on preconfigured group regroup | TD Tech, Chengdu TD Tech, Huawei | 23.379 | 0222 | 4 | Rel-16 | C | enh2MCPTT | agreed |

## Annex C: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Document | Original | Title | From | Decision | Reply TDoc |
| S6-190891 | S3i190281 | LS on LI Impacts for LMR-LTE Interworking study | SA3-LI | noted | (none) |
| S6-190925 | S2-1904837 | LS reply on PCF and NEF discovery for Edge Computing | SA2 | noted | (none) |
| S6-190926 | - | Observations on standards and technical constraints from 3rd MCX remote Plugtests | ETSI CTI | noted | (none) |
| S6-191047 | - | NGMN 5G End-to-End Architecture Framework. | NGMN Alliance | noted | (none) |
| S6-191054 | C1-193601 | LS on ETSI Plugtest standards Issues | CT1 | postponed | (none) |
| S6-191055 | C1-193738 | LS on clarification for usage of MC Service emergency state for MCData service | CT1 | postponed | (none) |
| S6-191142 | S2-1906333 | LS reply on SCEF support for V2XAPP procedures | SA2 | noted | (none) |

### C2: Outgoing liaison statements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Document | Title | To | Cc | reply to i/c LS |
| S6-191237 | LS on application layer support for V2X services | 5GAA WG2, ETSI TC ITS, SAE C-V2X TC, NGMN Alliance V2X Task-Force | SA | - |

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

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | Source | new/revised |
| S6-191233 | New WID for study on enhancements to application layer support for V2X services | Huawei, Hisilicon | SID new |
| S6-191100 | Revised SID Study on Mission Critical Services support over 5G System | The Police of the Netherlands | SID revised |
| S6-191232 | New WID on MC services support on IOPS mode of operation | Ericsson | WID new |
| S6-191235 | Study on message service for MIoT over 5G System | China Mobile Com. Corporation | WID new |
| S6-191246 | New WID on Application Architecture for the Mobile Communication System for Railways (MONASTERY) Phase 3 | Nokia, Nokia Shanghai Bell | WID new |

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

None

## Annex F: List of action items

None

## Annex G: List of decisions

None

## Annex H: List of participants

|  |  |  |
| --- | --- | --- |
| Name | Representing | Status (OP) |
| Aleksiev, Vasil | Deutsche Telekom AG | 3GPPMEMBER (ETSI) |
| Amogh, Niranth | Huawei Technologies Co. Ltd. | 3GPPMEMBER (ETSI) |
| Artero Gallardo, Guillaume | SYSOCO | 3GPPMEMBER (ETSI) |
| Beicht, Peter | Kapsch CarrierCom France S.A.S | 3GPPMEMBER (ETSI) |
| Burdinat, Christophe | Expway | 3GPPMEMBER (ETSI) |
| Chater-Lea, David | Airwave Solutions Limited | 3GPPMEMBER (ETSI) |
| Chitturi, Suresh | Samsung Electronics Co., Ltd | 3GPPMEMBER (TTA) |
| Dees, Walter | Philips International B.V. | 3GPPMEMBER (ETSI) |
| Dewaele, Jo | A.S.T.R.I.D. S.A. | 3GPPMEMBER (ETSI) |
| Dijk, Esko | Philips International B.V. | 3GPPMEMBER (ETSI) |
| Dossche, Stan | A.S.T.R.I.D. S.A. | 3GPPMEMBER (ETSI) |
| El Essaili, Ali | Ericsson GmbH, Eurolab | 3GPPMEMBER (ETSI) |
| Ge, Cuili | Huawei Technologies R&D UK | 3GPPMEMBER (ETSI) |
| Gupta, Nishant | Samsung R&D Institute India | 3GPPMEMBER (TSDSI) |
| Han, Zhiqiang | ZTE Corporation | 3GPPMEMBER (ETSI) |
| Janky, William | FirstNet | 3GPPMEMBER (ATIS) |
| Jepsen, Jeppe | Motorola Solutions Danmark A/S | 3GPPMEMBER (ETSI) |
| Kilgour, Kit | Hytera Communications Corp. | 3GPPMEMBER (CCSA) |
| Kim, Sunghoon | Samsung Electronics Romania | 3GPPMEMBER (ETSI) |
| Lazara, Dominic | Motorola Solutions UK Ltd. | 3GPPMEMBER (ETSI) |
| Lee, Jicheol | Samsung Electronics Benelux BV | 3GPPMEMBER (ETSI) |
| Liu, Yue | China Mobile Com. Corporation | 3GPPMEMBER (CCSA) |
| Lyu, Guangxu | China Unicom | 3GPPMEMBER (CCSA) |
| Mattsson, Bernt | ETSI | 3GPPORG\_REP (ETSI) |
| Merrick, Robert | HOME OFFICE | 3GPPMEMBER (ETSI) |
| Mohajeri, Shahram | AT&T GNS Belgium SPRL | 3GPPMEMBER (ETSI) |
| Moses, Danny | Intel Deutschland GmbH | 3GPPMEMBER (ETSI) |
| Negalaguli, Harish | Motorola Solutions Poland | 3GPPMEMBER (ETSI) |
| Oettl, Martin | Nokia Belgium | 3GPPMEMBER (ETSI) |
| Pattan, Basavaraj (Basu) | Samsung Research America | 3GPPMEMBER (ATIS) |
| Pison, Laurent | Bull SAS | 3GPPMEMBER (ETSI) |
| Pollakowski, Olaf | Nokia France | 3GPPMEMBER (ETSI) |
| Rurainsky, Juergen | BDBOS | 3GPPMEMBER (ETSI) |
| Shao, Weixiang | ZTE Corporation | 3GPPMEMBER (ETSI) |
| Shih, Jerry | AT&T GNS Belgium SPRL | 3GPPMEMBER (ETSI) |
| Solano, Camilo | Ericsson France S.A.S | 3GPPMEMBER (ETSI) |
| Soloway, Alan | Qualcomm UK Ltd | 3GPPMEMBER (ETSI) |
| Song, Yongsoo | KRRI | 3GPPMEMBER (TTA |
| Trang, Linh | Sony Europe Limited | 3GPPMEMBER (ETSI) |
| Verweij, Kees | The Police of the Netherlands | 3GPPMEMBER (ETSI) |
| Vialen, Jukka | Airbus DS SLC | 3GPPMEMBER (ETSI) |
| Wells, Derek | Harris Corporation | 3GPPMEMBER (ATIS) |
| Wendler, Ingo | Union Inter. Chemins de Fer | 3GPPMEMBER (ETSI) |
| Yang, Yanmei | HuaWei Technologies Co., Ltd | 3GPPMEMBER (CCSA) |
| Zhang, Ling | TD Tech Ltd | 3GPPMEMBER (CCSA) |

## Annex I: List of future meetings

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Title** | **Start date** | **End date (OP)** | **Town** | **Country** | **Reference** |
| 3GPPSA6#32 | 08/07/2019 09:00:00 | 12/07/2019 17:30:00 | Rome | IT | S6-32 |
| 3GPPSA6#33 | 02/09/2019 09:00:00 | 06/09/2019 17:30:00 | Sophia Antipolis | FR | S6-33 |
| 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 | TBC | IN | S6-35 |
| 3GPPSA6#36 | 24/01/2020 09:00:00 | 28/02/2020 17:30:00 | TBC | 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 | Sophia Antipolis | FR | S6-38 |
| 3GPPSA6#39 | 24/08/2020 09:00:00 | 28/08/2020 17:30:00 | Helsinki/Espoo | FI | S6-39 |
| 3GPPSA6#40 | 16/11/2020 09:00:00 | 20/11/2020 17:30:00 | TBD | - | S6-40 |