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

 **Meeting Report
for
TSG SA WG4
Electronic Meeting**

**Online, E-meeting, 2020-05-20 to 2020-06-03**

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## 2 Approval of the agenda and registration of documents

**S4-200701 Agenda for the SA4#109-e [Electronic Meeting]**

 *Type: agenda For: Approval
 Source: 3GPP SA4 Chairman (Ericsson)*

**Discussion:**

The Chairman approved the agenda as no comments were received since its publication 3 weeks ago. It was noted that there was a typo in the start time/day, and the start of the e-meeting should be read as Wednesday May 20th, at 0600 hours CEST.

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

**S4-200702 Guidelines for SA4#109-e as Electronic Meeting**

 *Type: other For: Endorsement
 Source: SA4 Chairman*

**Discussion:**

This document contains the general guidelines to be followed for participation in the SA4#109-e (Electronic Meeting).

It is to be noted that, 6 email exploders were used for this meeting:

a. 3GPP\_TSG\_SA\_WG4 – Main reflector announcements at the WG level

b. 3GPP\_TSG\_SA\_WG4\_SQ – email reflector for SQ SWG related Agenda Items

c. 3GPP\_TSG\_SA\_WG4\_MTSI – email reflector for MTSI SWG related Agenda Items

d. 3GPP\_TSG\_SA\_WG4\_MBS – email reflector for MBS SWG related Agenda Items

e. 3GPP\_TSG\_SA\_WG4\_EVS – email reflector for EVS SWG related Agenda Items

f. 3GPP\_TSG\_SA\_WG4\_VIDEO – email reflector for EVS Video related Agenda Items

The document is for information of the participating member companies and was Noted over official SA4 email reflector at the opening of the meeting.

The Chairman urged the members to follow the guidelines mentioned in this document to make this e-meeting a success. There were no comments recorded for this document.

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

**S4-200726 Proposed meeting schedule for 3GPP SA4#109-e**

 *Type: other For: Agreement
 Source: SA4 Chairman*

**Discussion:**

The Schedule for the e-meeting was agreed.

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

## 3 IPR and antitrust reminder

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

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

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

to notify their respective Organizational Partners of all potential IPRs, e.g., for ETSI, by means of the IPR Information Statement and the Licensing declaration forms. The attention of the delegates to the meeting was drawn to the fact that 3GPP activities were subject to all applicable antitrust and competition laws and that compliance with said laws was therefore required by any participant of the meeting, including the Chairman and Vice-Chairmen and were invited to seek any clarification needed with their legal counsel. The leadership would conduct the present meeting with impartiality and in the interests of 3GPP. Delegates were reminded that timely submission of work items in advance of TSG/WG meetings was important to allow for full and fair consideration of such matters. Delegates were reminded of the fair network use rules established by the PCG:

1. Users shall not use the network to engage in illegal activities. This includes activities such as copyright violation, hacking, espionage or any other activity that may be prohibited by local laws.

2. Users shall not engage in non-work related activities that are consume excessive bandwidth or cause significant degradation of the performance of the network.

## 4 Approval of previous meeting report

**S4-200704 Report of SA4#108-e Meeting**

 *Type: report For: Approval
 Source: 3GPP MCC*

**Decision:** The document was **revised to S4-200807**.

**S4-200807 Report of SA4#108-e Meeting**

 *Type: report For: Approval
 Source: 3GPP MCC*

(Replaces S4-200704)

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

## 5 Reports/Liaisons from other groups/meetings

### 5.1 SA4 SWG ad hoc meetings

**S4-200706 VIDEO SWG telco report on FS\_5GXR 5th Feb. 2020**

 *Type: report For: Approval
 26.928 v..
 Source: VIDEO SWG Chairman (Orange)*

**Abstract:**

Telephone conference report from VIDEO SWG on FS\_5GXR from 5th Feb. 2020

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

**S4-200708 VIDEO SWG telco report on FS\_5GXR 19th Feb. 2020**

 *Type: report For: Approval
 26.928 v..
 Source: VIDEO SWG Chairman (Orange)*

**Abstract:**

Telephone conference report from VIDEO SWG on FS\_5GXR from 19th Feb. 2020

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

**S4-200709 VIDEO SWG telco report on FS\_5GVideo 14th Apr. 2020**

 *Type: report For: Approval
 26.955 v..
 Source: VIDEO SWG Chairman (Orange)*

**Abstract:**

Telephone conference report from VIDEO SWG on FS\_5GVideo from 14th Apr. 2020

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

**S4-200710 VIDEO SWG telco report on FS\_5GVideo 28th Apr. 2020**

 *Type: report For: Approval
 26.955 v..
 Source: VIDEO SWG Chairman (Orange)*

**Abstract:**

Telephone conference report from VIDEO SWG on FS\_5GVideo from 28th Apr. 2020

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

**S4-200711 VIDEO SWG telco report on FS\_5GVideo and FS\_XRTraffic 12th May 2020**

 *Type: report For: Approval
 26.955 v..
 Source: VIDEO SWG Chairman (Orange)*

**Abstract:**

Telephone conference report from VIDEO SWG on FS\_5GVideo and FS\_XRTraffic from 12th May 2020

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

**S4-200728 Report of MBS SWG AH Telco on 5GMS3 (30APR 2020)**

 *Type: report For: Approval
 Source: MBS SWG Chairman*

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

**S4-200729 Report of MBS SWG AH Telco on 5GMS3 (5MAY 2020)**

 *Type: report For: Approval
 Source: MBS SWG Chairman*

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

**S4-200730 Report of MBS SWG AH Telco on 5GMS3 (14MAY 2020)**

 *Type: report For: Approval
 Source: MBS SWG Chairman*

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

**S4-200731 Report of MBS SWG AH Telco on FS\_5GMS\_Multicast and FS\_EMSA (7MAY 2020)**

 *Type: report For: Approval
 Source: MBS SWG Chairman*

**Decision:** The document was **revised to S4-200859**.

**S4-200859 Report of MBS SWG AH Telco on FS\_5GMS\_Multicast and FS\_EMSA (7MAY 2020)**

 *Type: report For: Approval
 Source: MBS SWG Chairman*

(Replaces S4-200731)

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

**S4-200739 Draft Report for MTSI SWG 17 April 2020 Teleconference #4 on ITT4RT**

 *Type: report For: Approval
 Source: MTSI SWG Chairman*

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

**S4-200740 Draft Report for MTSI SWG 22 April 2020 Teleconference on FS\_NBMP\_FLUS**

 *Type: report For: Approval
 Source: MTSI SWG Chairman*

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

**S4-200741 Draft Report for MTSI SWG 29 April 2020 Teleconference #5 on ITT4RT**

 *Type: report For: Approval
 Source: MTSI SWG Chairman*

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

**S4-200742 Draft Report for MTSI-MBS SWG 6 May 2020 Teleconference #13 on E\_FLUS**

 *Type: report For: Approval
 Source: MTSI SWG Chairman*

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

**S4-200743 Draft Report for MTSI-MBS SWG 13 May 2020 Teleconference #14 on E\_FLUS**

 *Type: report For: Approval
 Source: MTSI SWG Chairman*

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

**S4-200744 Draft Report for MTSI SWG 13 May 2020 Teleconference #6 on ITT4RT**

 *Type: report For: Approval
 Source: MTSI SWG Chairman*

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

### 5.2 Other 3GPP groups

**S4-200718 Reply LS on updates to CHEM feature and use of Application Layer Redundancy**

 *Type: LS in For: Information
 Original outgoing LS: -, to SA4, cc -
 Source: 3GPP CT3*

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

**S4-200719 Reply LS on support for eCall over NR**

 *Type: LS in For: Discussion
 Original outgoing LS: SP-200287/S2-2002665, to TSG SA, RAN2, CT1, TSG CT, cc SA1, SA4, TSG RAN, SA5, RAN5
 Source: 3GPP SA2*

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

**S4-200720 Reply LS on QoE Measurement Collection**

 *Type: LS in For: Action
 Original outgoing LS: S4-200241(S5-202020), to SA4, CT1, RAN2 and RAN3, cc -
 Source: 3GPP SA5*

**Decision:** The document was **replied to in S4-200885**.

**S4-200885 Reply to: Reply LS on QoE Measurement Collection**

 *Type: LS out For: approval
 to 3GPP SA5, cc CT1, RAN2 and RAN3
 Source: 3GPP SA5*

**Discussion:**

After analysing TS 28.405, SA4 has implemented the following functionality (refer to S4-200946 and S4-200947):

- QoE Reference Id

- Recording Session Id

- Recording Session Indication

- Within-area Indication

SA4 is of the opinion that, the temporary stop and storing of any reports is a generic service-agnostic functionality which can be handled directly at RAN level in the UE.

**Decision:** The document was **revised to S4-200962**.

**S4-200962 Reply LS on QoE Measurement Collection**

 *Type: LS out For: approval
 to 3GPP SA5, cc CT1, RAN2 and RAN3
 Source: 3GPP SA5*

(Replaces S4-200885)

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

**S4-200721 Reply LS on QoE Measurement Collection**

 *Type: LS in For: Discussion
 Original outgoing LS: R2-1916328 (S5-202021), to RAN2 and RAN3, cc CT1 and SA4
 Source: 3GPP RAN2*

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

**S4-200722 Response LS on the support for ECN in 5GS**

 *Type: LS in For: Discussion
 Original outgoing LS: S2-1912765 (R2-2000059), to SA2, cc RAN3, CT1, SA4
 Source: 3GPP RAN2*

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

### 5.3 Other groups

**S4-200705 LS/r on Revision of Recommendation P.501 (reply to ETSI-TC-STQ-LS29)**

 *Type: LS in For: Information
 Original outgoing LS: -, to 3GPP SA4; ETSI TC STQ; IEEE Working group on Communication Electroacoustics; TIA TR41, cc -
 Source: ITU-T SG 12*

**Abstract:**

SG12 hereby inform about giving consent of an updated Recommendation ITU-T P.501 taking into account, the proposal on broader applicability of the test signals for telephonometry, and speech-based applications in general.

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

**S4-200723 PHASE 1 TECHNICAL SPECIFICATION ON ABR MULTICAST**

 *Type: LS in For: Discussion
 Original outgoing LS: S4-200538 submitted to SA4#108-e, to 3GPP SA4, cc Jon Piesing (Technical Module Chair, DVB Project) Carter Eltzroth (Legal Director, DVB Project) Emily Dubs (Head of Technology, DVB Project) Guillaume Bichot (Co-chair DVB TM-Mcast) liaison@dvb.org 3GPPLiaison@etsi.org
 Source: DVB*

**Decision:** The document was **revised to S4-200733**.

**S4-200733 PHASE 1 TECHNICAL SPECIFICATION ON ABR MULTICAST**

 *Type: LS in For: Discussion
 Original outgoing LS: S4-200538 submitted to SA4#108-e, to 3GPP SA4, cc Jon Piesing (Technical Module Chair, DVB Project) Carter Eltzroth (Legal Director, DVB Project) Emily Dubs (Head of Technology, DVB Project) Guillaume Bichot (Co-chair DVB TM-Mcast) liaison@dvb.org 3GPPLiaison@etsi.org
 Source: DVB*

(Replaces S4-200723)

**Abstract:**

Acknowledgement of liaison.

Notify DVB that a new version of TS 26.346 is up for approval at SA#88-e.

**Decision:** The document was **revised to S4-200860**.

**S4-200860 Reply LS on PHASE 1 TECHNICAL SPECIFICATION ON ABR MULTICAST**

 *Type: LS out For: approval
 to DVB
 Source: current meeting*

(Replaces S4-200733)

**Abstract:**

Discussed in Plenary

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

**S4-200967 nn**

 *Type: other For: approval
 Source: current meeting*

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

**S4-200736 LS from SC 29/WG 11 (ISO/IEC JTC 1/SC 29/WG 11) to 3GPP SA WG 4 on CMAF [SC 29/WG 11 N 19266]**

 *Type: LS in For: Information
 Original outgoing LS: -, to -, cc -
 Source: ISO/IEC JTC 1/SC 29/WG 11*

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

**S4-200804 MPEG-I Video-based Point Cloud Compression [SC 29/WG 11 N 19377]**

 *Type: LS in For: Discussion
 Original outgoing LS: -, to 3GPP SA4, cc -
 Source: ISO/IEC JTC 1/SC 29/WG 11*

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

## 6 Issues for immediate consideration

**S4-200734 SA4#109-e Online Sessions: GoToMeeting invitation links**

 *Type: other For: Information
 Source: 3GPP MCC*

**Decision:** The document was **revised to S4-200851**.

**S4-200851 SA4#109-e Online Sessions: GoToMeeting invitation links**

 *Type: other For: Information
 Source: 3GPP MCC*

(Replaces S4-200734)

**Discussion:**

This document contains list of invitation links.

This is provided for information to the delegates.

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

**S4-200776 new SID on AR Conversational Services for Terminals**

 *Type: SID new For: (not specified)
 Source: HUAWEI TECHNOLOGIES Co. Ltd.*

**Discussion:**

This document was discussed in the opening plenary on 25th May.

Huawei, Teng presented the document.

Samsung, Ryan:

1 Former version from MTSI to Video as was suggested by SA4 leadership as there weere opverlap between the two.

2. 776 is fundamentally covered by 725

3. There are dependencies on 725 (extension of SCPN IMS but they can only be discussed )

4. So, 725 can take precedence.

Huawei,Teng: It covers end to end tx. of AR services and extends to extra glass type devices. 776 is mostly related AR conversational overlay function basis the IMS function.

Intel, Ozgur: It is certainly more related to MTSI. Looking AR capabilities around MTSI. But there are similar proposals from Samsung. OK to move to Video SWG. However, discussion over common time can be proposed so that MTSI delegates can attend.

Qualcomm, Thomas: A detailed SID available in 725 was developed during the last meeting and cosigned by many companies. To be discussed in co-ordination with MTSI +Video SWG

Samsung, Ryan: 26.928 indicates further studies on AR glasses in 5G radio and networks. The objective of 725 is to study 5GXR A4 and A2,A5 as the two AR glasses. Further, 725 is the SID supported by many companies.

Nokia, Igor: It is more relevant, to have discussion in MTSI SWG.

Orange, Gilles: Overlaps with various ongoining studies on similar topics - gap analysis required. As has been done for VR, XR, there is a need of joint sessions. Proposed to keep this in the Video SWG and inviting people from MTSI SWG. To progress, an email discussion can be trigerred to merge the proposals.

Chair: On Wednesday 27th May morning CEST, 726 and 776 can be studied together to find a common ground.

Samsung, Ryan: Target approval for the SI is SA#89-e in Sep 2020, which is very ambitous to be achieved.

Way Forward: This document is being taken up in the Video SWG with the proposal of gap analysis between 776 and 725.

Online Discussion held during the Video SWG on S4-200776:

Video SWG Chair: to find a way forward on this study.

Huawei, Teng: summarises the proposal

Overlaps

776 focusses on XR service centric references. If they can remove the conversational part contained in 725

Video SWG Chair: to Huawei: Do you want to restrict the scope of 725?

Huawei, Teng: TO update the objectives as all use cases are not updated.

Samsung, Ryan: 725 has never restricted the architecuture to be device specific.

Test protocol is mentioned in Objective item 4.

Qualcomm, Thomas: there has been a certain collaborative agreement in the development of 725.

Huawei, Teng: If some of the objectives can be extended to cater some of the 776 needs, then Huawei can co-sign the same.

Nokia: On Converasational AR - if 725 is also covering conversational AR, then it could be clarifying the aspects. But if it not covering conversational AR aspects, then good to have SID.

Video SWG Chair: want to dealt with MTSI in the last meeting.

Nokia: the initial intentions are still the same. But all through the discussions, the scope is to clarify the conversational AR aspects.

Video SWG Chair: ITT4RT also cover some of the above aspects.

Teng: 5G XR studies is more related to the 776 than ITT4RT.

Video SWG Chair: The prime importance is the objectives where members have mentioned that, the same has been partly covered.

Teng: checked with 725. It cant cover all the objectives mentioned in 776.

As two studies are focussing on two different aspects - device centric and service centric.

Therefore, two different SIs need to be created.

Nokia, Igor: For ITT4RT, there is a change in rapporteur. Regarding the content, there is no overlap between ITT4RT and 776. ITT4RT does not contain conversational AR.

Video SWG Chair: Noted the document as of now and look into 725.

MCC: Note, the discussions pertaining to this topic has been continued in email as well and can be found in further details in Video SWG Chairman's report - S4-200898.

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

**S4-200777 New SID on Media Negotiation Extensions for Super Resolution and Bandwidth Extension**

 *Type: SID new For: (not specified)
 Source: HUAWEI TECHNOLOGIES Co. Ltd.*

**Discussion:**

This document was discussed in the opening plenary on 25th May

Huawei, Teng: The objectived of this SID is as follows:

Based on the above considerations, the objective of this Study Item is to analyse the technologies related to super resolution and bandwidth extension that can be supported in media function element and/or MTSI clients.

Samsung, Kyunhun: The use-cases are not defined. Less technical relevance is found in this contribution where research based outputs are presented. It should be dealt in the SQ, Video or EVS SWG.

Ericsson, Tomas: Views alike Samsung. For the audio, the specifications on codecs ar available already. Also, the scoping needs more clarity.

Qualcomm, Imre: to discuss this document in EVS SWG.

Qualcomm, Thomas: This document should be given more details in terms of usecases before being able to discuss by any SWG.

Fraunhofer, Stefan: Issues regarding the operating range.

Huawei, Huan: Reported that some information is missing. He supported Imre's suggestion to take it up in EVS SWG.

Chair: This Document to be handled in MTSI and EVS SWG under AI 7.6. This document was noted in both the SWGs.

MCC: Note, the discussions pertaining to this topic has been continued in joint discussions between MTSI and EVS SWGs and further details can be found in EVS SWG Chairman's report S4-200953.

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

**S4-200900 Issues for immediate considerations**

 *Type: other For: discussion
 Source: SA4 Chairman*

**Discussion:**

The Chairman has presented this document in the opening plenary of SA4.

The discussions in the group has touched upon having a github/gitlab as an alternate approach to the official 3GPP email exploder (listserve).

An excerpt of the various views expressed by members in the meeting is given below:

1. Hosting of the same in MCC/ETSI servers is a pertinent issue which needs to be looked upon.

2. Github/Gitlab is used predominantly as a devops tool for collaboration at different stages of a source-code for S/W and the scope of its applciation for an email exchange needs to be evaluated thoroughly.

3. With the ongoing e-meetings, a lot of tools are in use already. So, addition of another tool might not be a smooth way of working in the meetings, specifically when there is a mailing list in place already. It can add to more complexities in future.

MCC: As it primarily a DevOps platform for source-code management, it would be good to have a survey on the feasibility of using Gitlab to exchange emails as compared to Listserv.

After deliberation from the members, SA4 Chairman suggested to come back on this issue during the closing plenary.

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

## 7 Enhanced Voice Service (EVS) SWG

**S4-200815 Draft EVS SWG Agenda**

 *Type: agenda For: (not specified)
 Source: Qualcomm Austria RFFE GmbH*

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

**S4-200936 EVS SWG Agenda**

 *Type: agenda For: Approval
 Source: EVS SWG Chair*

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

**S4-200938 (reserved)**

 *Type: other For: discussion
 Source: EVS*

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

**S4-200939 (reserved)**

 *Type: other For: discussion
 Source: EVS*

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

**S4-200940 (reserved)**

 *Type: other For: discussion
 Source: EVS*

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

### 7.1 Opening of the session

### 7.2 Registration of documents

### 7.3 CRs to Features in Release 16 and earlier

**S4-200779 Proposed Corrections to EVS Source Code**

 *Type: other For: Agreement
 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

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

**S4-200780 Composite ZIP of proposed EVS Fixed-Point Source Code v12.13.0 / v13.8.0 / v14.4.0 / v15.2.0 / v16.0.0 / v17.0.0**

 *Type: other For: Information
 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200921**.

**S4-200781 Composite ZIP of proposed EVS Floating-Point Source Code v12.12.0 / v13.8.0 / v14.4.0 / v15.2.0 / v16.1.0 / v17.0.0**

 *Type: other For: Information
 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200922**.

**S4-200782 Composite ZIP of proposed EVS Alternative Fixed-Point Source Code v16.2.0 / v17.0.0**

 *Type: other For: Information
 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200923**.

**S4-200783 Corrections to EVS Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.442 v12.12.0 CR-0033 Cat: F (Rel-12)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Abstract:**

Correct issues as outlined in S4-200779:

• Handling of possible corrupt SID frames in AMR-WB IO/EVS modes

• Wrong arithmetic in MSLVQ encoder module

• Improvements in decoder robustness based on torture testing

• Hardening of code

• Editorial changes (Wrong commandline help)

**Decision:** The document was **revised to S4-200926**.

**S4-200784 Corrections to EVS Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.442 v13.7.0 CR-0034 Cat: A (Rel-13)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200927**.

**S4-200785 Corrections to EVS Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.442 v14.3.0 CR-0035 Cat: A (Rel-14)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200928**.

**S4-200786 Corrections to EVS Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.442 v15.1.0 CR-0036 Cat: A (Rel-15)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200929**.

**S4-200787 Corrections to EVS Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.442 v15.1.0 CR-0037 Cat: A (Rel-16)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200930**.

**S4-200788 Corrections to EVS Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.442 v15.1.0 CR-0038 Cat: A (Rel-17)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

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

**S4-200789 Corrections to EVS Floating-Point Source Code**

 *Type: CR For: Agreement
 26.443 v12.11.0 CR-0030 Cat: F (Rel-12)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200931**.

**S4-200790 Corrections to EVS Floating-Point Source Code**

 *Type: CR For: Agreement
 26.443 v13.7.0 CR-0031 Cat: A (Rel-13)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200932**.

**S4-200791 Corrections to EVS Floating-Point Source Code**

 *Type: CR For: Agreement
 26.443 v14.3.0 CR-0032 Cat: A (Rel-14)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200933**.

**S4-200792 Corrections to EVS Floating-Point Source Code**

 *Type: CR For: Agreement
 26.443 v15.1.0 CR-0033 Cat: A (Rel-15)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200934**.

**S4-200793 Corrections to EVS Floating-Point Source Code**

 *Type: CR For: Agreement
 26.443 v16.0.0 CR-0034 Cat: A (Rel-16)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200935**.

**S4-200794 Corrections to EVS Floating-Point Source Code**

 *Type: CR For: Agreement
 26.443 v16.0.0 CR-0035 Cat: A (Rel-17)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

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

**S4-200795 Corrections to EVS Alternative Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.452 v16.1.0 CR-0002 Cat: F (Rel-16)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Decision:** The document was **revised to S4-200924**.

**S4-200796 Corrections to EVS Alternative Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.452 v16.1.0 CR-0003 Cat: A (Rel-17)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

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

**S4-200802 Update of test vectors for the EVS codec**

 *Type: CR For: Agreement
 26.444 v16.2.1 CR-0035 Cat: A (Rel-17)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

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

**S4-200819 EVS\_WBIO Code Issues**

 *Type: discussion For: (not specified)
 Source: Apple, Intel*

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

**S4-200921 Composite ZIP of proposed EVS Fixed-Point Source Code v12.13.0 / v13.8.0 / v14.4.0 / v15.2.0 / v16.0.0 / v17.0.0**

 *Type: other For: Information
 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200780)

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

**S4-200922 Composite ZIP of proposed EVS Floating-Point Source Code v12.12.0 / v13.8.0 / v14.4.0 / v15.2.0 / v16.1.0 / v17.0.0**

 *Type: other For: Information
 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200781)

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

**S4-200923 Composite ZIP of proposed EVS Alternative Fixed-Point Source Code v16.2.0 / v17.0.0**

 *Type: other For: Information
 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200782)

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

### 7.4 Liaisons with other groups/meetings

### 7.5 IVAS\_Codec (EVS Codec Extension for Immersive Voice and Audio Services)

**S4-200816 Public Collaboration in the IVAS Standardization Process**

 *Type: discussion For: Information
 Source: Dolby Laboratories Inc., Ericsson LM, Fraunhofer IIS, Huawei Technologies Co Ltd., Nokia Corporation, NTT, Orange, Panasonic Corporation, Philips International B.V., Qualcomm Inc., VoiceAge Corporation*

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

**S4-200817 Public Collaboration in the IVAS Standardization Process**

 *Type: discussion For: Information
 Source: Dolby Laboratories Inc., Ericsson LM, Fraunhofer IIS, Huawei Technologies Co Ltd., Nokia Corporation, NTT, Orange, Panasonic Corporation, Philips International B.V., Qualcomm Inc., VoiceAge Corporation*

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

**S4-200838 Clarification on the IVAS Standardization Process**

 *Type: discussion For: Agreement
 Source: Sony Mobile Communications*

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

### 7.6 New Work / New Work Items and Study Items

### 7.7 Any Other Business

### 7.8 Close of the session

## 8 Multicast-Broadcast-Streaming (MBS) SWG

### 8.1 Opening of the session

### 8.2 Registration of documents

### 8.3 Reports/Liaisons from other groups/meetings

### 8.4 Issues for immediate consideration

### 8.5 CRs to features in Release 15 and earlier

**S4-200712 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.346 v15.4.0 CR-0632 rev 0 Cat: F (Rel-15)

 Source: Qualcomm Incorporated*

**Abstract:**

Enable signaling by MBMS client of partial file availability, in response to having received an HTTP GET request for the file from the MBMS application and which does not correspond to the partial-file-accept request.

**Decision:** The document was **revised to S4-200868**.

**S4-200868 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.346 v15.4.0 CR-0632 rev 1 Cat: F (Rel-15)

 Source: Qualcomm Incorporated*

(Replaces S4-200712)

**Decision:** The document was **revised to S4-200980**.

**S4-200713 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.247 v15.5.0 CR-0164 rev 0 Cat: F (Rel-15)

 Source: Qualcomm Incorporated*

**Abstract:**

Enable signaling by HTTP server of partial file availability, in response to having received an HTTP GET request for the file from the 3GP-DASH client, and which does not correspond to the partial-file-accept request.

**Decision:** The document was **revised to S4-200870**.

**S4-200870 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.247 v15.5.0 CR-0164 rev 1 Cat: F (Rel-15)

 Source: Qualcomm Incorporated*

(Replaces S4-200713)

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

**S4-200714 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.347 v15.1.0 CR-0009 rev 0 Cat: F (Rel-15)

 Source: Qualcomm Incorporated*

**Abstract:**

Enable signaling by MBMS client of partial file availability, in response to having received an HTTP GET request for the file from the MBMS application and which does not correspond to the partial-file-accept request.

**Decision:** The document was **revised to S4-200872**.

**S4-200872 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.347 v15.1.0 CR-0009 rev 1 Cat: F (Rel-15)

 Source: Qualcomm Incorporated*

(Replaces S4-200714)

**Decision:** The document was **revised to S4-200984**.

**S4-200715 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.346 v16.4.1 CR-0633 rev 0 Cat: A (Rel-16)

 Source: Qualcomm Incorporated*

**Abstract:**

Enable signaling by MBMS client of partial file availability, in response to having received an HTTP GET request for the file from the MBMS application and which does not correspond to the partial-file-accept request.

**Decision:** The document was **revised to S4-200869**.

**S4-200869 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.346 v16.4.1 CR-0633 rev 1 Cat: A (Rel-16)

 Source: Qualcomm Incorporated*

(Replaces S4-200715)

**Decision:** The document was **revised to S4-200981**.

**S4-200716 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.247 v16.2.0 CR-0165 rev 0 Cat: A (Rel-16)

 Source: Qualcomm Incorporated*

**Abstract:**

Enable signaling by HTTP server of partial file availability, in response to having received an HTTP GET request for the file from the 3GP-DASH client and which does not correspond to the partial-file-accept request.

**Decision:** The document was **revised to S4-200871**.

**S4-200871 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.247 v16.2.0 CR-0165 rev 1 Cat: A (Rel-16)

 Source: Qualcomm Incorporated*

(Replaces S4-200716)

**Decision:** The document was **revised to S4-200983**.

**S4-200717 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.347 v16.2.1 CR-0010 rev 0 Cat: A (Rel-16)

 Source: Qualcomm Incorporated*

**Abstract:**

Enable signaling by MBMS client of partial file availability, in response to having received an HTTP GET request for the file from the MBMS application and which does not correspond to the partial-file-accept request.

**Decision:** The document was **revised to S4-200873**.

**S4-200873 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.347 v16.2.1 CR-0010 rev 1 Cat: A (Rel-16)

 Source: Qualcomm Incorporated*

(Replaces S4-200717)

**Decision:** The document was **revised to S4-200985**.

### 8.6 CRs to completed features in Release 16

**S4-200703 Update domain model diagrams**

 *Type: draftCR For: Agreement
 26.501 v16.3.1
 Source: BBC*

**Abstract:**

Bring domain model diagrams into line with latest stage 2 updates and stage 3 design.

• Update the M1d provisioning domain model in Figure 5.3.1-1.

• Update the domain model for dynamic policies in Figure 5.7.2-1.

**Decision:** The document was **revised to S4-200732**.

**S4-200732 Update domain model diagrams**

 *Type: draftCR For: Agreement
 26.501 v16.3.1
 Source: BBC, Ericsson LM*

(Replaces S4-200703)

**Abstract:**

Bring domain model diagrams into line with latest stage 2 updates and stage 3 design.

• Update the M1d provisioning domain model in Figure 5.3.1-1.

• Update the domain model for dynamic policies in Figure 5.7.2-1.

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

**S4-200707 Consolidated changes from SA4#108-e et seq.**

 *Type: draftCR For: Agreement
 26.501 v16.3.1
 Source: BBC, Tencent, Sony, Ericsson LM, Qualcomm Incorporated, Enensys*

**Abstract:**

• Consolidated changes agreed at SA4#108-e.

• Issues outstanding addressed by e-mail since SA4#108-e.

• Additional editorial changes.

**Decision:** The document was **revised to S4-200863**.

**S4-200863 Consolidated changes from SA4#108-e et seq.**

 *Type: draftCR For: Agreement
 26.501 v16.3.1
 Source: BBC, Tencent, Sony, Ericsson LM, Qualcomm Incorporated, Enensys*

(Replaces S4-200707)

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

**S4-200757 Service Announcement API for enTV**

 *Type: draftCR For: Agreement
 26.347 v16.2.1
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S4-200858**.

**S4-200858 Service Announcement API for enTV**

 *Type: draftCR For: Agreement
 26.347 v16.2.1
 Source: Qualcomm Incorporated*

(Replaces S4-200757)

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

**S4-200809 Correction on Media Architecture**

 *Type: draftCR For: Approval
 26.501 v16.3.1
 Source: Tencent*

**Decision:** The document was **revised to S4-200864**.

**S4-200864 Correction on Media Architecture**

 *Type: draftCR For: Approval
 26.501 v16.3.1
 Source: Tencent*

(Replaces S4-200809)

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

**S4-200811 Correction on Media Ingest procedure**

 *Type: draftCR For: Approval
 26.501 v16.3.1
 Source: Tencent*

**Decision:** The document was **revised to S4-200875**.

**S4-200875 Correction on Media Ingest procedure**

 *Type: draftCR For: Approval
 26.501 v16.3.1
 Source: Tencent*

(Replaces S4-200811)

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

**S4-200812 Correction on Metrics collection and reporting**

 *Type: draftCR For: Approval
 26.501 v16.3.1
 Source: Tencent*

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

**S4-200823 Correction to collaboration scenarios (Stage 2)**

 *Type: draftCR For: Agreement
 26.501 v16.3.1
 Source: Ericsson LM*

**Decision:** The document was **revised to S4-200865**.

**S4-200865 Correction to collaboration scenarios (Stage 2)**

 *Type: draftCR For: Agreement
 26.501 v16.3.1
 Source: Ericsson LM*

(Replaces S4-200823)

**Decision:** The document was **revised to S4-200876**.

**S4-200876 Correction to collaboration scenarios (Stage 2)**

 *Type: draftCR For: Agreement
 26.501 v16.3.1
 Source: Ericsson LM*

(Replaces S4-200865)

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

**S4-200824 Correction of 5GMSd AF-based Network Assistance (Stage 2)**

 *Type: draftCR For: Agreement
 26.501 v16.3.1
 Source: Ericsson LM*

**Decision:** The document was **revised to S4-200866**.

**S4-200866 Correction of 5GMSd AF-based Network Assistance (Stage 2)**

 *Type: draftCR For: Agreement
 26.501 v16.3.1
 Source: Ericsson LM*

(Replaces S4-200824)

**Decision:** The document was **revised to S4-200877**.

**S4-200877 Correction of 5GMSd AF-based Network Assistance (Stage 2)**

 *Type: draftCR For: Agreement
 26.501 v16.3.1
 Source: Ericsson LM*

(Replaces S4-200866)

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

**S4-200861 QoE Measurement Collection**

 *Type: draftCR For: Agreement
 Source: Ericsson LM*

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

**S4-200879 Service Announcement API for enTV**

 *Type: LS out For: Agreement
 26.347 v..
 to -
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S4-200884**.

### 8.7 5GMS3 (5G Media Streaming stage 3)

**S4-200745 RAN-based Network Assistance**

 *Type: pCR For: (not specified)
 26.512 v1.1.0
 Source: QUALCOMM Europe Inc. - Italy*

**Decision:** The document was **revised to S4-200878**.

**S4-200878 RAN-based Network Assistance**

 *Type: pCR For: -
 26.512 v1.1.0
 Source: QUALCOMM Europe Inc. - Italy*

(Replaces S4-200745)

**Decision:** The document was **revised to S4-200886**.

**S4-200746 AF-based Network Assistance**

 *Type: pCR For: (not specified)
 26.512 v1.1.0
 Source: QUALCOMM Europe Inc. - Italy*

**Abstract:**

to be discussed in plenary

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

**S4-200751 Policy Template Provisioning**

 *Type: pCR For: (not specified)
 26.512 v1.1.0
 Source: QUALCOMM Europe Inc. - Italy*

**Decision:** The document was **revised to S4-200887**.

**S4-200752 5GMSu extension for discovery of application functions**

 *Type: other For: Agreement
 Source: Tencent*

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

**S4-200755 Network Assistance background**

 *Type: discussion For: Information
 Source: Sony Corporation, Ericsson LM*

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

**S4-200758 Client APIs for 5GMS**

 *Type: pCR For: Agreement
 26.512 v1.1.0
 Source: Qualcomm Incorporated*

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

**S4-200759 DASH/CMAF in 5GMS**

 *Type: pCR For: Agreement
 26.512 v1.1.0
 Source: Qualcomm Incorporated*

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

**S4-200760 Video Codec Support for Downlink Streaming**

 *Type: pCR For: Agreement
 26.511 v1.3.0
 Source: Qualcomm Incorporated*

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

**S4-200761 Proposed General Updates**

 *Type: pCR For: Agreement
 26.511 v1.3.0
 Source: Qualcomm Incorporated*

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

**S4-200805 Consumption reporting in M7d interface**

 *Type: pCR For: (not specified)
 26.512 v1.1.0
 Source: ENENSYS*

**Decision:** The document was **revised to S4-200874**.

**S4-200874 Consumption reporting in M7d interface**

 *Type: pCR For: -
 26.512 v1.1.0
 Source: ENENSYS*

(Replaces S4-200805)

**Decision:** The document was **revised to S4-200920**.

**S4-200810 Draft LS to CT1 on AT Command Support for Bit Rate Recommendation**

 *Type: discussion For: (not specified)
 Source: QUALCOMM Europe Inc. - Italy*

**Decision:** The document was **revised to S4-200880**.

**S4-200820 5GMSd AF-based Network Assistance (Stage 3)**

 *Type: pCR For: Agreement
 26.512 v1.1.0
 Source: Ericsson LM*

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

**S4-200821 M1d Procedure for Dynamic Policy Provisioning (Stage 3)**

 *Type: pCR For: Agreement
 26.512 v1.1.0
 Source: Ericsson LM*

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

**S4-200822 API for Service Access information acquisition (Stage 3)**

 *Type: pCR For: Agreement
 26.512 v1.1.0
 Source: Ericsson LM, Enensys, BBC*

**Decision:** The document was **revised to S4-200889**.

**S4-200839 APIs for Server Certificates, Content Preparation Templates and Ingest Protocols**

 *Type: pCR For: Approval
 26.512 v1.1.0
 Source: BBC*

**Abstract:**

Providing missing APIs for Server Certificates, Content Preparation Templates and Ingest Protocols.

**Decision:** The document was **revised to S4-200883**.

**S4-200883 APIs for Server Certificates, Content Preparation Templates and Ingest Protocols**

 *Type: pCR For: Approval
 26.512 v1.1.0
 Source: BBC*

(Replaces S4-200839)

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

**S4-200847 26.512 Content Preparation Template: scope and design for R16**

 *Type: discussion For: Agreement
 Source: Tencent*

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

**S4-200848 Default downlink profile**

 *Type: pCR For: Agreement
 26.511 v1.3.0
 Source: Orange*

**Decision:** The document was **revised to S4-200867**.

**S4-200867 Default downlink profile**

 *Type: pCR For: Agreement
 26.511 v1.3.0
 Source: Orange*

(Replaces S4-200848)

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

### 8.8 FS\_5GMS\_Multicast (Feasibility Study on Multicast Architecture Enhancements for 5GMSA)

**S4-200773 [FS\_5GMulticast] More Thoughts on Key Issues**

 *Type: pCR For: Agreement
 26.802 v0.0.0
 Source: Qualcomm Incorporated*

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

**S4-200837 [FS\_5GMS\_Multicast] Proposed Skeleton TR 26.802**

 *Type: discussion For: Agreement
 Source: TELUS*

**Abstract:**

Attached to this document is a proposed draft skeleton of TR 26.802 with revisions to address the comments received in MBS SWG AH Telco on FS\_5GMS\_Multicast and FS\_EMSA (7 May 2020).

**Decision:** The document was **revised to S4-200941**.

**S4-200841 Initial considerations on scenarios and key issues for 5G MS multicast ingestion and distribution**

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

**Abstract:**

In this contribution, we share initial considerations on scenarios and key issues for 5G MS multicast ingestion and distribution.

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

### 8.9 FS\_EMSA (Feasibility Study on Streaming Architecture extensions For Edge processing)

**S4-200749 FS\_EMSA: use cases and technical requirements**

 *Type: other For: Agreement
 Source: Tencent*

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

**S4-200750 FS\_ESMA: Discovery of Edge Processing Capabilities Requirements**

 *Type: other For: Agreement
 Source: Tencent*

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

**S4-200774 [FS\_EMSA] Use cases for EMSA Study**

 *Type: pCR For: Agreement
 26.803 v0.0.0
 Source: Qualcomm Incorporated*

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

**S4-200806 FS\_EMSA: Edge Caching for Video Streaming**

 *Type: discussion For: Agreement
 Source: KPN N.V.*

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

**S4-200808 Downlink Services with Network Edge**

 *Type: pCR For: Agreement
 26.803 v0.0.3
 Source: Samsung Electronics Co., Ltd.*

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

**S4-200813 Adding SA2 Architecture and Support for Edge Computing**

 *Type: discussion For: Approval
 26.803 v..
 Source: Tencent*

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

**S4-200842 EMSA Use Case Template and Definitions**

 *Type: discussion For: (not specified)
 Source: QUALCOMM Europe Inc. - Italy*

**Decision:** The document was **revised to S4-200942**.

**S4-200843 Overview of ongoing 3GPP activities on Edge**

 *Type: discussion For: (not specified)
 Source: QUALCOMM Europe Inc. - Italy*

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

**S4-200844 Use case: Caching downlink streaming content**

 *Type: pCR For: Agreement
 26.803 v0.0.1
 Source: KPN N.V.*

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

### 8.10 New Work / New Work Items and Study Items

### 8.11 Others including TEI

### 8.12 Review of the future work plan (next meeting dates, hosts)

### 8.13 Any Other Business

### 8.14 Close of the session

## 9 Speech Quality (SQ) SWG

**S4-200944 (reserved)**

 *Type: other For: discussion
 Source: SQ*

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

**S4-200945 (reserved)**

 *Type: other For: discussion
 Source: SQ*

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

### 9.1 Opening of the session

### 9.2 Registration of documents

### 9.3 Liaison Statements

### 9.4 CRs to Features in Release 16 and earlier, and other contributions on terminal acoustics

### 9.5 ATIAS (Terminal Audio quality performance and Test methods for Immersive Audio Services)

### 9.6 HaNTE (Handsets Featuring Non-Traditional Earpieces)

**S4-200845 Report on HaNTE round robin progress at Lab 1**

 *Type: discussion For: Information
 Source: Qualcomm Incorporated*

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

**S4-200916 Proposals for data collection of HaNTE – test methods**

 *Type: other For: discussion
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S4-200919**.

### 9.7 New Work / New Work Items and Study Items

**S4-200756 New WID on Extension for headset interface tests of UE**

 *Type: WID new For: Agreement
 Source: HEAD acoustics GmbH*

**Decision:** The document was **revised to S4-200918**.

### 9.8 Any Other Business

### 9.9 Close of the session

## 10 Video SWG

**S4-200899 (reserved)**

 *Type: other For: discussion
 Source: Video*

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

### 10.1 Opening of the session

### 10.2 Registration of documents

### 10.3 Reports and liaisons from other groups

### 10.4 CRs to Features in Release 16 and earlier

**S4-200852 Making some space for new codecs: Take H.263 to rest**

 *Type: discussion For: Discussion
 Source: Qualcomm Incorporated*

**Discussion:**

This document analyses the relevance of continuing older codecs and subsequently proposes removal of H.263 from the leftover 3GPP specifications.

Although it was a late submission, the SA4 community felt the need to discuss and agree this document in light of the urgency and importance attached to it. This document has paved the way to the draft CRs in S4-200853, S4-200854, S4-200855, S4-200856 and S4-200857.

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

**S4-200853 Removing H.263**

 *Type: CR For: discussion
 Source: Qualcomm Incorporated*

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

**S4-200854 Removing H.263**

 *Type: CR For: discussion
 Source: Qualcomm Incorporated*

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

**S4-200855 Removing H.263**

 *Type: CR For: discussion
 Source: Qualcomm Incorporated*

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

**S4-200856 Removing H.263**

 *Type: CR For: discussion
 Source: Qualcomm Incorporated*

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

**S4-200857 Removing H.263**

 *Type: CR For: Agreement
 26.234 v..
 Source: Qualcomm Incorporated*

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

### 10.5 FS\_VR\_CoGui (Feasibility Study on VR Streaming Conformance and Guidelines)

### 10.6 FS\_5GVideo (Feasibility Study on 5G Video Codec Characteristics)

**S4-200762 Proposed Updated Work Plan for FS\_5GVideo**

 *Type: Work Plan For: Agreement
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S4-200890**.

**S4-200890 Proposed Updated Work Plan for FS\_5GVideo**

 *Type: Work Plan For: Agreement
 Source: Qualcomm Incorporated*

(Replaces S4-200762)

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

**S4-200763 TR26.955: Proposed Editor's Update**

 *Type: draft TR For: Agreement
 26.955 v0.1.0
 Source: Qualcomm Incorporated*

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

**S4-200764 pCR26.955: Messaging and Social Sharing Scenario**

 *Type: pCR For: Agreement
 26.955 v0.1.0
 Source: Qualcomm Incorporated*

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

**S4-200765 pCR26.955: Gaming and Screen Content Scenario**

 *Type: pCR For: Agreement
 26.955 v0.1.0
 Source: Qualcomm Incorporated*

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

**S4-200766 pCR26.955: Consolidated Evaluation Conditions**

 *Type: pCR For: Agreement
 26.955 v0.1.0
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S4-200892**.

**S4-200892 pCR26.955: Consolidated Evaluation Conditions**

 *Type: pCR For: Agreement
 26.955 v0.1.0
 Source: Qualcomm Incorporated*

(Replaces S4-200766)

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

**S4-200767 [5G Video] First thoughts on evaluation metrics**

 *Type: discussion For: Agreement
 Source: Qualcomm Incorporated*

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

**S4-200778 4K-TV Scenario fo FS\_5GVideo**

 *Type: pCR For: Agreement
 26.955 v0.1.0
 Source: ATEME, InterDigital*

**Decision:** The document was **revised to S4-200846**.

**S4-200846 4K-TV Scenario for FS\_5GVideo**

 *Type: pCR For: Agreement
 26.955 v0.1.0
 Source: ATEME, InterDigital, Orange, Qualcomm*

(Replaces S4-200778)

**Abstract:**

Update of S4-200778 after offline discussions

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

### 10.7 FS\_XRTraffic (Feasibility Study on Typical Traffic Characteristics for XR Services and other Media)

**S4-200769 Proposed Skeleton Draft CR for XR Traffic**

 *Type: draftCR For: Agreement
 26.925 v16.0.0
 Source: Qualcomm Incorporated*

**Decision:** The document was **revised to S4-200893**.

**S4-200893 Proposed Skeleton Draft CR for XR Traffic**

 *Type: draftCR For: Agreement
 26.925 v16.0.0
 Source: Qualcomm Incorporated*

(Replaces S4-200769)

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

**S4-200770 Proposed Updates to Permanent Document**

 *Type: discussion For: Agreement
 Source: Qualcomm Incorporated*

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

**S4-200771 [FS\_XRTraffic] System Design Assumptions for Split Rendering**

 *Type: discussion For: Agreement
 Source: Qualcomm Incorporated*

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

**S4-200772 [FS\_XRTraffic] Considerations for Traffic Modelling for Split Rendering**

 *Type: discussion For: Agreement
 Source: Qualcomm Incorporated*

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

### 10.8 New Work / New Work Items and Study Items

**S4-200725 New SID on 5G Glass-type AR/MR Devices**

 *Type: SID new For: Approval
 Source: Samsung Electronics France SA*

(Replaces S4-200668)

**Discussion:**

After considerable discussion on 725, the Chair decided that, 200725 is revised in order to include co-supporters.

**Decision:** The document was **revised to S4-200894**.

**S4-200894 New SID on 5G Glass-type AR/MR Devices**

 *Type: SID new For: Approval
 Source: Samsung Electronics France SA*

(Replaces S4-200725)

**Decision:** The document was **revised to S4-200897**.

### 10.9 Liaisons and Liaison Responses

### 10.10 Any Other Business

### 10.11 Close of the session

## 11 Multimedia Telephony Service for IMS (MTSI) SWG

**S4-200906 Draft LS to CT1/CT3 (cc: SA2) on media feature tag for IMS data channel**

 *Type: LS out For: Discussion
 to -
 Source: Ericsson LM*

**Abstract:**

under discussion till june 1, 2020 over email.

**Decision:** The document was **revised to S4-200908**.

**S4-200909 (reserved)**

 *Type: other For: discussion
 Source: MTSI*

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

**S4-200910 (reserved)**

 *Type: other For: discussion
 Source: MTSI*

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

**S4-200911 (reserved)**

 *Type: other For: discussion
 Source: MTSI*

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

**S4-200912 (reserved)**

 *Type: other For: discussion
 Source: MTSI*

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

**S4-200913 (reserved)**

 *Type: other For: discussion
 Source: MTSI*

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

**S4-200914 (reserved)**

 *Type: other For: discussion
 Source: MTSI*

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

**S4-200915 (reserved)**

 *Type: other For: discussion
 Source: MTSI*

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

### 11.1 Opening of the session

### 11.2 Registration of documents

### 11.3 Reports and liaisons from other groups

### 11.4 CRs to Features in Release 15 and earlier

### 11.5 CRs to completed features in Release 16

**S4-200825 Adding media feature tag for IMS data channel**

 *Type: draftCR For: Agreement
 26.114 v16.5.2
 Source: Ericsson LM*

**Decision:** The document was **revised to S4-200905**.

**S4-200862 Draft CR to TS 26.114 on Management of QoE measurement collection**

 *Type: draftCR For: discussion
 Source: Ericsson*

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

### 11.6 E\_FLUS (Enhancements to Framework for Live Uplink Streaming)

**S4-200803 Discussion of way forward with FLUS**

 *Type: discussion For: Agreement
 Source: SK Telecom, Samsung Electronics Co., Ltd.*

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

**S4-200818 Adding Support for Remote Control**

 *Type: draftCR For: (not specified)
 26.238 v16.4.2
 Source: QUALCOMM Europe Inc. - Italy*

**Decision:** The document was **revised to S4-200902**.

**S4-200904 Adding Support for Remote Control**

 *Type: CR For: -
 26.238 v16.4.2
 Source: QUALCOMM Europe Inc. - Italy*

(Replaces S4-200902)

**Decision:** The document was **revised to S4-200907**.

**S4-200826 FLUS Remote Control (Stage 3)**

 *Type: draftCR For: Agreement
 26.238 v16.4.2
 Source: Ericsson LM*

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

**S4-200902 FLUS Remote Control (Stage 3)**

 *Type: draftCR For: Agreement
 26.238 v16.4.2
 Source: Ericsson LM*

(Replaces S4-200826)

**Decision:** The document was **revised to S4-200904**.

### 11.7 ITT4RT (Support of Immersive Teleconferencing and Telepresence for Remote Terminals)

**S4-200738 ITT4RT Permanent Document v0.7.0**

 *Type: other For: Agreement
 Source: Intel, Nokia Corporation (ITT4RT Rapporteurs)*

**Decision:** The document was **revised to S4-200840**.

### 11.8 FS\_FLUS\_NBMP (Feasibility Study on the use of NBMP in E\_FLUS)

**S4-200748 FS\_FLUS\_NBMP: Updated Workplan**

 *Type: Work Plan For: Agreement
 Source: Tencent*

**Decision:** The document was **revised to S4-200903**.

**S4-200814 FLUS Services with NBMP**

 *Type: discussion For: Agreement
 Source: Samsung Electronics Co., Ltd.*

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

### 11.9 Others including TEI

### 11.10 New Work / New Work Items and Study Items

### 11.11 Any Other Business

### 11.12 Close of the session

## 12 LSs received during the meeting and Postponed Liaisons (from A. I. 5)

## 13 Reports and general issues from sub-working-groups

### 13.1 EVS SWG

**S4-200937 EVS SWG Chairman Report during SA4#109-e**

 *Type: report For: discussion
 Source: EVS*

**Decision:** The document was **revised to S4-200953**.

**S4-200953 EVS SWG Chairman Report during SA4#109-e**

 *Type: report For: discussion
 Source: EVS*

(Replaces S4-200937)

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

### 13.2 MBS SWG

**S4-200881 MBS SWG report during SA4#109-e**

 *Type: report For: Approval
 Source: MBS SWG Chairman*

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

### 13.3 MTSI SWG

**S4-200901 MTSI SWG Report during SA4#109-e**

 *Type: report For: discussion
 Source: MTSI*

**Discussion:**

MTSI SWG Chair presented the document.

Discussion:

Ericsson: status of Draft CR on QoE.

Chair: Tdocs - 946 and 947 assigned for the above.

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

### 13.4 SQ SWG

**S4-200917 SQ SWG report at SA4#109-e**

 *Type: report For: Agreement
 Source: SQ SWG Chairman*

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

### 13.5 Video SWG

**S4-200898 Video SWG Report during the SA4#109-e**

 *Type: other For: discussion
 Source: Video*

**Discussion:**

Video SWG will have a telco on 9th June, 2020 to agree the CRs to be presented in SA plenary.

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

## 14 CRs to Features in Release 15 and earlier

**S4-200980 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.346 v15.4.0 CR-0632 rev 2 Cat: F (Rel-15)

 Source: Qualcomm Incorporated*

(Replaces S4-200868)

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

**S4-200982 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.247 v15.5.0 CR-0164 rev 2 Cat: F (Rel-15)

 Source: Qualcomm Incorporated*

(Replaces S4-200870)

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

**S4-200984 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.347 v15.1.0 CR-0009 rev 2 Cat: F (Rel-15)

 Source: Qualcomm Incorporated*

(Replaces S4-200872)

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

**S4-200981 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.346 v16.4.1 CR-0633 rev 2 Cat: A (Rel-16)

 Source: Qualcomm Incorporated*

(Replaces S4-200869)

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

**S4-200983 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.247 v16.2.0 CR-0165 rev 2 Cat: A (Rel-16)

 Source: Qualcomm Incorporated*

(Replaces S4-200871)

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

**S4-200985 Correction on Partial File Handling**

 *Type: CR For: Agreement
 26.347 v16.2.1 CR-0010 rev 2 Cat: A (Rel-16)

 Source: Qualcomm Incorporated*

(Replaces S4-200873)

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

**S4-200797 Update of test vectors for the EVS codec**

 *Type: CR For: Agreement
 26.444 v12.11.0 CR-0030 Cat: F (Rel-12)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Abstract:**

Update of the test vectors for the fixed point and floating point conformance testing.

Otherwise, the test vectors in TS 26.444 does not match the output from the EVS codec implementations in TS 26.442 and TS 26.443.

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

**S4-200798 Update of test vectors for the EVS codec**

 *Type: CR For: Agreement
 26.444 v13.6.0 CR-0031 Cat: A (Rel-13)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Abstract:**

Update of the test vectors for the fixed point and floating point conformance testing.

Otherwise, the test vectors in TS 26.444 does not match the output from the EVS codec implementations in TS 26.442 and TS 26.443.

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

**S4-200799 Update of test vectors for the EVS codec**

 *Type: CR For: Agreement
 26.444 v14.3.0 CR-0032 Cat: A (Rel-14)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Abstract:**

Update of the test vectors for the fixed point and floating point conformance testing.

Otherwise, the test vectors in TS 26.444 does not match the output from the EVS codec implementations in TS 26.442 and TS 26.443.

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

**S4-200800 Update of test vectors for the EVS codec**

 *Type: CR For: Agreement
 26.444 v15.1.0 CR-0033 Cat: A (Rel-15)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Abstract:**

Update of the test vectors for the fixed point and floating point conformance testing.

Otherwise, the test vectors in TS 26.444 does not match the output from the EVS codec implementations in TS 26.442 and TS 26.443.

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

**S4-200827 Corrections of algorithmic description**

 *Type: CR For: Agreement
 26.445 v12.13.0 CR-0047 Cat: F (Rel-12)

 Source: Ericsson LM, NTT DOCOMO, INC., Orange*

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

**S4-200828 Corrections of algorithmic description**

 *Type: CR For: Agreement
 26.445 v13.8.0 CR-0048 Cat: A (Rel-13)

 Source: Ericsson LM, NTT DOCOMO, INC., Orange*

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

**S4-200829 Corrections of algorithmic description**

 *Type: CR For: Agreement
 26.445 v14.4.0 CR-0049 Cat: A (Rel-14)

 Source: Ericsson LM, NTT DOCOMO, INC., Orange*

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

**S4-200830 Corrections of algorithmic description**

 *Type: CR For: Agreement
 26.445 v15.2.0 CR-0050 Cat: A (Rel-15)

 Source: Ericsson LM, NTT DOCOMO, INC., Orange*

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

**S4-200832 Corrections to the algorithmic description**

 *Type: CR For: Agreement
 26.447 v12.7.0 CR-0013 Cat: F (Rel-12)

 Source: Ericsson LM*

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

**S4-200833 Corrections to the algorithmic description**

 *Type: CR For: Agreement
 26.447 v13.2.0 CR-0014 Cat: A (Rel-13)

 Source: Ericsson LM*

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

**S4-200834 Corrections to the algorithmic description**

 *Type: CR For: Agreement
 26.447 v14.1.0 CR-0015 Cat: A (Rel-14)

 Source: Ericsson LM*

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

**S4-200835 Corrections to the algorithmic description**

 *Type: CR For: Agreement
 26.447 v15.0.0 CR-0016 Cat: A (Rel-15)

 Source: Ericsson LM*

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

**S4-200926 Corrections to EVS Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.442 v12.12.0 CR-0033 rev 1 Cat: F (Rel-12)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200783)

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

**S4-200927 Corrections to EVS Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.442 v13.7.0 CR-0034 rev 1 Cat: A (Rel-13)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200784)

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

**S4-200928 Corrections to EVS Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.442 v14.3.0 CR-0035 rev 1 Cat: A (Rel-14)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200785)

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

**S4-200929 Corrections to EVS Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.442 v15.1.0 CR-0036 rev 1 Cat: A (Rel-15)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200786)

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

**S4-200930 Corrections to EVS Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.442 v15.1.0 CR-0037 rev 1 Cat: A (Rel-16)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200787)

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

**S4-200931 Corrections to EVS Floating-Point Source Code**

 *Type: CR For: Agreement
 26.443 v12.11.0 CR-0030 rev 1 Cat: F (Rel-12)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200789)

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

**S4-200932 Corrections to EVS Floating-Point Source Code**

 *Type: CR For: Agreement
 26.443 v13.7.0 CR-0031 rev 1 Cat: A (Rel-13)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200790)

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

**S4-200933 Corrections to EVS Floating-Point Source Code**

 *Type: CR For: Agreement
 26.443 v14.3.0 CR-0032 rev 1 Cat: A (Rel-14)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200791)

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

**S4-200934 Corrections to EVS Floating-Point Source Code**

 *Type: CR For: Agreement
 26.443 v15.1.0 CR-0033 rev 1 Cat: A (Rel-15)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200792)

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

**S4-200935 Corrections to EVS Floating-Point Source Code**

 *Type: CR For: Agreement
 26.443 v16.0.0 CR-0034 rev 1 Cat: A (Rel-16)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200793)

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

**S4-200924 Corrections to EVS Alternative Fixed-Point Source Code**

 *Type: CR For: Agreement
 26.452 v16.1.0 CR-0002 rev 1 Cat: F (Rel-16)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

(Replaces S4-200795)

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

**S4-200925 Corrections of ch-aw-recv specification**

 *Type: CR For: Agreement
 26.445 v16.0.0 CR-0052 rev 1 Cat: F (Rel-16)

 Source: Orange*

(Replaces S4-200850)

**Decision:** The document was **revised to S4-200954**.

## 15 Release 16 Features

**S4-200801 Update of test vectors for the EVS codec**

 *Type: CR For: Agreement
 26.444 v16.2.1 CR-0034 Cat: A (Rel-16)

 Source: Ericsson LM, Fraunhofer IIS, VoiceAge Corporation*

**Abstract:**

Update of the test vectors for the fixed point and floating point conformance testing.

Otherwise, the test vectors in TS 26.444 does not match the output from the EVS codec implementations in TS 26.442 and TS 26.443.

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

**S4-200831 Corrections of algorithmic description**

 *Type: CR For: Agreement
 26.445 v16.0.0 CR-0051 Cat: A (Rel-16)

 Source: Ericsson LM, NTT DOCOMO, INC., Orange*

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

**S4-200836 Corrections to the algorithmic description**

 *Type: CR For: Agreement
 26.447 v16.0.0 CR-0017 Cat: A (Rel-16)

 Source: Ericsson LM*

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

**S4-200850 Corrections of ch-aw-recv specification**

 *Type: CR For: Agreement
 26.445 v16.0.0 CR-0052 Cat: F (Rel-16)

 Source: Orange*

**Decision:** The document was **revised to S4-200925**.

**S4-200954 Corrections of ch-aw-recv specification**

 *Type: CR For: Agreement
 26.445 v16.0.0 CR-0052 rev 2 Cat: F (Rel-16)

 Source: Orange*

(Replaces S4-200925)

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

### 15.1 CAPIF4xMB (Usage of CAPIF for xMB API)

### 15.2 SerInter (Service Interactivity)

### 15.3 Alt\_FX\_EVS (Alternative EVS implementation using updated fixed-point basic operators)

### 15.4 E\_FLUS (Enhancements to Framework for Live Uplink Streaming)

**S4-200907 Adding Support for Remote Control**

 *Type: CR For: Agreement
 26.238 v16.4.2 CR-0024 Cat: B (Rel-16)

 Source: QUALCOMM Europe Inc. - Italy*

(Replaces S4-200904)

**Discussion:**

Qualcomm, Imed presented the document.

Comments:

Revision of the CR

Chair: Is 'OASIS' a standard that can be referenced in 3GPP.

Qualcomm: No reason why not it can be referenced. It is available on a public domain.

Chair: revised to 950

**Decision:** The document was **revised to S4-200950**.

**S4-200950 Adding Support for Remote Control**

 *Type: CR For: Agreement
 26.238 v16.4.2 CR-0024 rev 1 Cat: B (Rel-16)

 Source: QUALCOMM Europe Inc. - Italy*

(Replaces S4-200907)

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

### 15.5 HLG\_HDR (Hybrid Log Gamma High Dynamic Range)

### 15.6 E2E\_DELAY (Media Handling Aspects of RAN Delay Budget Reporting in MTSI)

### 15.7 5G\_MEDIA\_MTSI\_ext (Media Handling Extensions for 5G Conversational Services)

**S4-200905 Adding media feature tag for IMS data channel**

 *Type: CR For: Agreement
 26.114 v16.5.2 CR-0499 rev 0- Cat: F (Rel-16)

 Source: Ericsson LM*

(Replaces S4-200825)

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

**S4-200908 LS on media feature tag for IMS data channel**

 *Type: LS out For: Discussion
 to 3GPP CT1 & CT3, cc SA2
 Source: Ericsson LM*

(Replaces S4-200906)

**Discussion:**

Action to CT1 and CT3 (with a cc to SA2). The action is reference to the CR in 905

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

### 15.8 CHEM (Coverage and Handoff Enhancements for Multimedia)

### 15.9 MC\_XMB (MCData File Distribution support over xMB)

### 15.10 EVS\_FCNBE (EVS Floating-point Conformance for Non Bit-Exact)

### 15.11 5GMSA (5G Media streaming architecture)

**S4-200882 Consolidated changes from SA4#108-e and SA4#109-e**

 *Type: CR For: discussion
 Source: BBC, Tencent, Sony, Ericsson LM, Qualcomm Incorporated, Enensys*

**Abstract:**

Consolidated changes agreed at SA4#108-e:

• S4-200590: Corrections to Network Slicing.

• S4-200593: Uplink Network Assistance.

• S4-200594: Adding sample percentage to consumption reporting.

• S4-200601: Network Assistance baseline configuration parameters.

• S4-200623: Renaming "Application Service Configuration Id" to "Provisioning Session Id"

• S4-200624: Adding multi-MNO collaboration scenarios.

• S4-200625: Renaming "Ingest and Distribution Configuration" to "Content Hosting Configuration"

• S4-200629: Consumption reporting.

• S4-200627: Corrections to ingest configuration procedures.

Consolidated changes agreed at SA4#109-e:

• S4-200863: Issues addressed by e-mail between meetings:

o Additional term definitions “5GMS System”, “5GMS Application Provier”, “5GMS Client”.

o “QoE reporting” → “metrics reporting” throughout.

o Revised sequence diagrams from consumption reporting to make “consumption reporting” part of Media Session Hander.

o Data Network made white in architecture diagrams (clause 4.2.1 and 4.3.1), indicating that it may or may not be part of the 5G System (trusted or untrusted).

o “Media [Down|Up]link Streaming” → “[Down|Up]link Media Streaming”.

• S4-200732: Replacement domain model diagrams.

• S4-200864: Correcting architecture Figure 4.1-1 and clarifying notes about the use of NEF to access PCF.

• S4-200875: Correcting media ingest procedure.

• S4-200876: Annex describing Service Access Information resolution.

• S4-200877: Correcting AF-based Network Assistance procedure.

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

### 15.12 5GMS3 (5G Media Streaming stage 3)

**S4-200957 3GPP TS 26.512**

 *Type: draft TS For: Discussion
 26.512 v1.2.0
 Source: MBS*

**Discussion:**

This document was presented by Ericsson, Thorsten Lohmar.

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

**S4-200887 M1d Procedure for Dynamic Policy Provisioning (Stage 3)**

 *Type: pCR For: Agreement
 26.512 v..
 Source: Qualcomm Inc., Ericsson LM, BBC*

**Abstract:**

Discussed in Plenary

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

**S4-200727 5G Media Streaming (5GMS); Protocols**

 *Type: draft TS For: Agreement
 26.512 v1.1.0
 Source: Ericsson Japan K.K.*

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

**S4-200886 RAN-based Network Assistance**

 *Type: pCR For: -
 26.512 v1.1.0
 Source: QUALCOMM Europe Inc. - Italy*

(Replaces S4-200878)

**Abstract:**

Discussed in plenary

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

**S4-200753 5GMS3 work plan V0.13**

 *Type: Work Plan For: Agreement
 Source: Sony Corporation*

**Decision:** The document was **revised to S4-200956**.

**S4-200956 5GMS3 work plan V0.13**

 *Type: Work Plan For: Agreement
 Source: Sony Corporation*

(Replaces S4-200753)

**Decision:** The document was **revised to S4-200964**.

**S4-200964 5GMS3 work plan V0.13**

 *Type: Work Plan For: Agreement
 Source: Sony Corporation*

(Replaces S4-200956)

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

**S4-200754 5GMS3 Exception sheet**

 *Type: WI exception request For: Agreement
 Source: Sony Corporation*

**Decision:** The document was **revised to S4-200955**.

**S4-200955 5GMS3 Exception sheet**

 *Type: WI exception request For: Agreement
 Source: Sony Corporation*

(Replaces S4-200754)

**Decision:** The document was **revised to S4-200965**.

**S4-200965 5GMS3 Exception sheet**

 *Type: WI exception request For: Agreement
 Source: Sony Corporation*

(Replaces S4-200955)

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

**S4-200920 Consumption reporting in M7d interface**

 *Type: pCR For: -
 26.512 v1.1.0
 Source: ENENSYS*

(Replaces S4-200874)

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

**S4-200880 Draft LS to CT1 on AT Command Support for Bit Rate Recommendation**

 *Type: LS out For: -
 to -
 Source: QUALCOMM Europe Inc. - Italy*

(Replaces S4-200810)

**Abstract:**

Discussed in Plenary.

**Discussion:**

Qualcomm, Imed has presented the document.

The LS mainly asks CT1 to consider extending the AT interface as defined in TS 27.007, to enable the exchange of bit rate recommendation and bit rate recommendation queries between the modem and the application.

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

**S4-200889 API for Service Access information acquisition (Stage 3)**

 *Type: pCR For: Agreement
 26.512 v1.1.0
 Source: Ericsson LM, Enensys, BBC*

(Replaces S4-200822)

**Abstract:**

Discussed in Plenary

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

**S4-200849 5GMS3 TV profiles**

 *Type: pCR For: Agreement
 26.511 v1.3.0
 Source: Orange*

**Abstract:**

proposal to split TV profiles and associated requirements

**Discussion:**

Discussed in Plenary.

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

**S4-200888 Way forward on 5GMS3 policy and NA procedures**

 *Type: discussion For: discussion
 Source: Ericsson*

**Abstract:**

Discussed in the plenary

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

**S4-200943 5G Media Streaming (5GMS);**

**Profiles, Codecs and Formats**

**(Release 16)**

 *Type: draft TS For: discussion
 26.511 v1.4.1
 Source: MBS*

**Discussion:**

Orange, Gilles has presented the document.

Discussion:

Chair: Is it just a basis for the work or to be sent to SA plenary for approval.

Orange, Gilles: It is ready enough to be sent to SA plenary.

Sony, Paul: supports Orange

Samaung, Kiho: To add a 10 bit bitdepth definition along with HD-HDR

Chair: Here, a working assumption is presented which is agreed.

But, lets check if there is an agreement to add 10 bit bitdepth to the definition of HD-HDR.

Sony, Paul: it is a bit unclear- needs more clarity.

Qualcomm, Thomas: A detailed update uploaded. This should be correctly phrased and assosiated with the signal. 'bit depth of atleast 10, atleast 60 frames per second, Wide color gamut and high dynamic range' should be the correct wording.

Xiaomi, Mary-Luc: It needs to have the word 'All of' so that it includes the them needs to be present.

Chair: The definition of HD-HDR: capability of a UE to present video signals with all of the following: Atleast Full-HD resolution, atleast bit depth of 10, atleast 60 frames per second, wide colour Gamut and High Dynamic range.

It is to be noted that in light of the above and pertaining to the scope of discussion for this document, Orange would like to have the following text minuted.

"1. Orange appreciates all the efforts that have been taken in order to improve the video capabilities for media delivery over 5G.

2. Orange agrees that the "working assumption agreed as the baseline for future work" from S4-AHI975 is a significant step forward compared to the inherited capabilities from PSS.

3. However, Orange wants to clearly state that the decision made is not suitable from a mobile network operator and a media service provider point of view.

4. Orange strongly prefers the distribution of the most popular 5G media streaming services (FullHD) to be built on a more efficient default video codec than legacy H.264/AVC. This would require the support for H.265/HEVC on 5G terminals, regardless of the dynamic range of the video.

5. Although disagreeing on it, Orange respects the 3GPP consensus on the current version of the specification and will not object to it.

"

As there were no further comments to this document, this was revised to S4-200963.

**Decision:** The document was **revised to S4-200963**.

**S4-200963 5G Media Streaming (5GMS);**

**Profiles, Codecs and Formats**

**(Release 16)**

 *Type: draft TS For: discussion
 26.511 v2.0.0
 Source: MBS*

(Replaces S4-200943)

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

### 15.13 VRQoE (VR QoE metrics)

### 15.14 RTCPVer (RTP/RTCP Verification for Real-Time Services)

### 15.15 DAHOE (Support of Hybrid DASH/HLS over eMBMS)

### 15.16 ANTeM (Ambient noise test methodology for evaluation of acoustic UE performance)

### 15.17 TEI16 and any other Rel-16 documents

**S4-200724 Editorial Improvements**

 *Type: CR For: Approval
 26.114 v16.5.2 CR-0498 Cat: D (Rel-16)

 Source: Samsung Electronics Romania*

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

**S4-200884 Service Announcement API for enTV**

 *Type: LS out For: Agreement
 26.347 v.. CR-0011 rev 0 Cat: F (Rel-16)

 to -
 Source: qualcomm incorporated*

(Replaces S4-200879)

**Abstract:**

discussed in plenary

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

**S4-200946 QoE Measurement Collection**

 *Type: CR For: Decision
 26.247 v..
 Source: Ericsson LM*

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

**S4-200947 QoE Measurement Collection**

 *Type: CR For: discussion
 26.114 v.. CR-0499 rev 0 Cat: C (Rel-16)

 Source: Ericsson LM*

**Discussion:**

Ericsson, Gunnar presented the document.

Ericsson, Bo:

**Decision:** The document was **revised to S4-200951**.

**S4-200951 QoE Measurement Collection**

 *Type: CR For: discussion
 26.114 v.. CR-0500 rev 1 Cat: C (Rel-16)

 Source: Ericsson LM*

(Replaces S4-200947)

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

## 16 Release 17 Features

**S4-200968 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

**S4-200969 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

### 16.1 IVAS\_Codec (EVS Codec Extension for Immersive Voice and Audio Services)

### 16.2 ITT4RT (Support of Immersive Teleconferencing and Telepresence for Remote Terminals)

**S4-200737 ITT4RT: Proposed Draft Time Plan v.0.7.0**

 *Type: Work Plan For: Agreement
 Source: Intel, Nokia Corporation (ITT4RT Rapporteurs)*

**Decision:** The document was **revised to S4-200952**.

**S4-200952 ITT4RT: Proposed Draft Time Plan v.0.7.0**

 *Type: Work Plan For: Agreement
 Source: Intel, Nokia Corporation (ITT4RT Rapporteurs)*

(Replaces S4-200737)

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

**S4-200840 ITT4RT Permanent Document v0.7.1**

 *Type: other For: Agreement
 Source: Intel, Nokia Corporation (ITT4RT Rapporteurs)*

(Replaces S4-200738)

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

### 16.3 ATIAS (Terminal Audio quality performance and Test methods for Immersive Audio Services)

### 16.4 HaNTE (Handsets Featuring Non-Traditional Earpieces)

**S4-200919 Proposals for data collection of HaNTE – test methods**

 *Type: other For: discussion
 Source: Qualcomm Incorporated*

(Replaces S4-200916)

**Abstract:**

discussed in plenary

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

### 16.5 TEI17 and any other Rel-17 documents

## 17 Study Items

**S4-200970 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

**S4-200971 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

**S4-200972 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

**S4-200973 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

**S4-200974 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

**S4-200975 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

**S4-200976 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

**S4-200977 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

**S4-200978 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

**S4-200979 (reserved)**

 *Type: other For: discussion
 Source: SA4 Closing Plenary*

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

### 17.1 FS\_5GMS\_Multicast (Feasibility Study on Multicast Architecture Enhancements for 5GMSA)

**S4-200941 [FS\_5GMS\_Multicast] Proposed Skeleton TR 26.802**

 *Type: discussion For: Agreement
 26.802 v..
 Source: TELUS*

(Replaces S4-200837)

**Abstract:**

Discussed in Plenary

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

### 17.2 FS\_XRTraffic (Feasibility Study on Typical Traffic Characteristics for XR Services and other Media)

**S4-200768 Proposed Updates to Work Plan for FS\_XRTraffic**

 *Type: Work Plan For: Agreement
 Source: Qualcomm Incorporated*

**Discussion:**

Qualcomm, Thomas has presented the timeplan.

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

**S4-200895 FS\_XRTraffic: Permanent document**

 *Type: draft TR For: discussion
 Source: Video*

**Discussion:**

It has to be a permanent document which collects all the initial discussions.

Qualcomm, Thomas presented the document.

 Chair: is the baseline for future work?

Thomas: Yes.

Chiar: 895 is agreed as there were no further questions regarding this document.

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

### 17.3 FS\_EMSA (Feasibility Study on Streaming Architecture extensions For Edge processing)

**S4-200942 EMSA Use Case Template and Definitions**

 *Type: discussion For: -
 Source: QUALCOMM Europe Inc. - Italy*

(Replaces S4-200842)

**Abstract:**

Discussed in plenary

**Discussion:**

Qualcomm ,Imed presented the document.

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

**S4-200959 Draft Time Plan for the EMSA Study Item v0.2.1**

 *Type: discussion For: discussion
 Source: Qualcomm*

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

### 17.4 FS\_VR\_CoGui (Feasibility Study on VR Streaming Conformance and Guidelines)

### 17.5 FS\_5GVideo (Feasibility Study on 5G Video Codec Characteristics)

**S4-200958 LS on video codec evaluation**

 *Type: LS out For: Agreement
 to ITU-T Q6/16 (Question 6, Study Group 16), ISO/IEC SC29 WG 11 (MPEG)
 Source: 3GPP SA4*

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

**S4-200891 Draft TR 26.955 v0.2.0**

 *Type: draft TR For: Agreement
 Source: Video*

**Abstract:**

Agreed over Email discussion

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

**S4-200896 Proposed Work Plan for FS\_5GVideo**

 *Type: other For: Agreement
 Source: Video*

**Abstract:**

Agreed over email discussion

**Discussion:**

Qualcomm, Thomas has presented the document.

Discussions:

Chair: Instead of having power in everycall for sending out the LS, it would be good to have the 'power for agreement' to send the LS before the ITU SG 16 or MPEG meeting, when it is most required.

Gilles: In order to solve this, it would be wise to put this LS on the agenda as necessary so that, interested people can join in.

No other comments being made on this document, it was agreed.

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

**S4-200948 Github Repository for 5G Video**

 *Type: report For: discussion
 Source: Qualcomm*

**Discussion:**

Qualcomm, Thomas has presented this document.

For generating test, or reference bit streams. Potentially colelcting s/w tools.

To support these collaborative issues, it is good to have a ETSI repository. It is a Github repository.

Chair: MCC needs to confident

GitHub is a platform alternative to the ETSI platform.

Ericsson, Thorsten: It is confusing to use ETSI and github as they are two alternative platform. So, it is important to use the specific platform. Github accounts cannot be used and ETSI log in has to be used.

We can create a 2nd sub-repository apart from SA4 TS 26.512 for 5G\_Video.

Qualcomm, Thomas: let's just fix

Imed: We have a SA4 repository. By the direction of ETSI, it should be a new sub-repository should be created like the existing.

But, why it needs to be on Github.

Qualcomm, Thomas: Is it going to be taking care of ? ETSI ?

Imed: yes, ETSI

Thomas: I don’t think why it should not be kept public (the scripts, etc)

Chair: We have in principle agreement to make the scripts, codes, public over the ETSI sub-repository.

Revised to 960.

**Decision:** The document was **revised to S4-200960**.

**S4-200960 Github Repository for 5G Video**

 *Type: report For: Agreement
 Source: Qualcomm*

(Replaces S4-200948)

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

### 17.6 FS\_FLUS\_NBMP (Feasibility Study on the use of NBMP in E\_FLUS)

**S4-200747 FS\_FLUS\_NBMP: Draft of Permanent Document**

 *Type: other For: Agreement
 Source: Tencent*

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

**S4-200903 FS\_FLUS\_NBMP: Updated Workplan**

 *Type: Work Plan For: Agreement
 Source: Tencent*

(Replaces S4-200748)

**Abstract:**

sent for agreement over email. (may 29)

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

## 18 Work Items and Study Items under the responsibility of other TSGs/WGs impacting SA4 work

## 19 New Work / New Work Items and Study Items

**S4-200918 New WID on Extension for headset interface tests of UE (HInT)**

 *Type: WID new For: Agreement
 Source: HEAD acoustics GmbH, Orange, Sony Mobile Communications, Samsung Electronics Co., Ltd, Qualcomm Incorporated*

(Replaces S4-200756)

**Abstract:**

Discussed in plenary

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

**S4-200897 New SID on 5G Glass-type AR/MR Devices**

 *Type: SID new For: Approval
 Source: Samsung Electronics France SA*

(Replaces S4-200894)

**Discussion:**

Samsung, Ryan Lee presented this document.

Discussions:

Chair: Hope 'access networks' Iis included to as to relate it with radio systems parameters as there could be impacts on it.

However, why the 'UICC apps', or why 'others' box is ticked.

Ryan: Need to find out.

Chair: there might be impacts due to the sidelink, that might be the reason why UICC is ticked.

Gilles: appreciate the efforts to reach consensus on this document.

Chair: Revised to 961

**Decision:** The document was **revised to S4-200961**.

**S4-200961 New SID on 5G Glass-type AR/MR Devices**

 *Type: SID new For: Agreement
 Source: Samsung Electronics Co., Ltd., Ericsson LM, Nokia Corporation, Tencent, Beijing Xiaomi Mobile Software, SK Telecom, Qualcomm Incorporated, AT&T, LG Electronics Inc., KPN N.V., Deutsche Telekom AG, Huawei Technologies Co., Ltd., China Mobile Com. Corporation, InterDigital Communications, Inc, Facebook*

(Replaces S4-200897)

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

## 20 Postponed issues

## 21 Review of the future work plan (next meeting dates, hosts)

**S4-200735 Summary of the consolidated Workplan update status for SA4 WIs as on SA4#108-e**

 *Type: Work Plan For: Information
 Source: 3GPP MCC*

**Decision:** The document was **revised to S4-200949**.

**S4-200949 Summary of the consolidated Workplan update status for SA4 WIs as on SA4#109-e**

 *Type: Work Plan For: Information
 Source: 3GPP MCC*

(Replaces S4-200735)

**Decision:** The document was **revised to S4-200966**.

**S4-200966 Summary of the consolidated Workplan update status for SA4 WIs as on SA4#109-e**

 *Type: Work Plan For: Information
 Source: 3GPP MCC*

(Replaces S4-200949)

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

## 22 Any Other Business

**S4-200775 InterSDO Meeting Summary**

 *Type: other For: Information
 Source: Qualcomm Incorporated*

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

## 23 Closing of e-meeting: Wednesday June 3rd, at 17:00 hours CEST (at the latest)

Report prepared by: Jayeeta Saha

## Annex A: Contribution documents and status

### A1: List of Change Requests

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **TDoc** | **Title** | **Source** | **TDoc Status** | **Is revision of** | **Release** | **Spec** | **Version** | **Related WIs** | **CR** | **CR** **category**  |
| [**S4-200712**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200712.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised |  | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.346**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1452) | 15.4.0 | TEI15, eDASH | 0632 | F |
| [**S4-200713**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200713.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised |  | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.247**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1444) | 15.5.0 | TEI15, eDASH | 0164 | F |
| [**S4-200714**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200714.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised |  | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.347**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3009) | 15.1.0 | TEI15, eDASH | 0009 | F |
| [**S4-200715**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200715.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.346**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1452) | 16.4.1 | TEI15, eDASH | 0633 | A |
| [**S4-200716**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200716.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.247**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1444) | 16.2.0 | TEI15, eDASH | 0165 | A |
| [**S4-200717**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200717.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.347**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3009) | 16.2.1 | TEI15, eDASH | 0010 | A |
| [**S4-200724**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200724.zip) | Editorial Improvements | Samsung Electronics Romania | agreed |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.114**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1404) | 16.5.2 | [**TEI16**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=770050) | 0498 | D |
| [**S4-200783**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200783.zip) | Corrections to EVS Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | revised |  | [**Rel-12**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=186) | [**26.442**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1464) | 12.12.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0033 | F |
| [**S4-200784**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200784.zip) | Corrections to EVS Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | revised |  | [**Rel-13**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=187) | [**26.442**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1464) | 13.7.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0034 | A |
| [**S4-200785**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200785.zip) | Corrections to EVS Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | revised |  | [**Rel-14**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=189) | [**26.442**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1464) | 14.3.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0035 | A |
| [**S4-200786**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200786.zip) | Corrections to EVS Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | revised |  | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.442**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1464) | 15.1.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0036 | A |
| [**S4-200787**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200787.zip) | Corrections to EVS Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | revised |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.442**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1464) | 15.1.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0037 | A |
| [**S4-200788**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200788.zip) | Corrections to EVS Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | withdrawn |  | [**Rel-17**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [**26.442**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1464) | 15.1.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0038 | A |
| [**S4-200789**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200789.zip) | Corrections to EVS Floating-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | revised |  | [**Rel-12**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=186) | [**26.443**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1465) | 12.11.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0030 | F |
| [**S4-200790**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200790.zip) | Corrections to EVS Floating-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | revised |  | [**Rel-13**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=187) | [**26.443**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1465) | 13.7.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0031 | A |
| [**S4-200791**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200791.zip) | Corrections to EVS Floating-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | revised |  | [**Rel-14**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=189) | [**26.443**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1465) | 14.3.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0032 | A |
| [**S4-200792**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200792.zip) | Corrections to EVS Floating-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | revised |  | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.443**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1465) | 15.1.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0033 | A |
| [**S4-200793**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200793.zip) | Corrections to EVS Floating-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | revised |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.443**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1465) | 16.0.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0034 | A |
| [**S4-200794**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200794.zip) | Corrections to EVS Floating-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | withdrawn |  | [**Rel-17**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [**26.443**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1465) | 16.0.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0035 | A |
| [**S4-200795**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200795.zip) | Corrections to EVS Alternative Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | revised |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.452**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3473) | 16.1.0 | EVS\_codec, Alt\_FX\_EVS | 0002 | F |
| [**S4-200796**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200796.zip) | Corrections to EVS Alternative Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | withdrawn |  | [**Rel-17**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [**26.452**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3473) | 16.1.0 | EVS\_codec, Alt\_FX\_EVS | 0003 | A |
| [**S4-200797**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200797.zip) | Update of test vectors for the EVS codec | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed |  | [**Rel-12**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=186) | [**26.444**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1466) | 12.11.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0030 | F |
| [**S4-200798**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200798.zip) | Update of test vectors for the EVS codec | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed |  | [**Rel-13**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=187) | [**26.444**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1466) | 13.6.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0031 | A |
| [**S4-200799**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200799.zip) | Update of test vectors for the EVS codec | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed |  | [**Rel-14**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=189) | [**26.444**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1466) | 14.3.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0032 | A |
| [**S4-200800**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200800.zip) | Update of test vectors for the EVS codec | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed |  | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.444**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1466) | 15.1.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0033 | A |
| [**S4-200801**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200801.zip) | Update of test vectors for the EVS codec | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.444**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1466) | 16.2.1 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0034 | A |
| [**S4-200802**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200802.zip) | Update of test vectors for the EVS codec | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | withdrawn |  | [**Rel-17**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=192) | [**26.444**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1466) | 16.2.1 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0035 | A |
| [**S4-200827**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200827.zip) | Corrections of algorithmic description | Ericsson LM, NTT DOCOMO, INC., Orange | agreed |  | [**Rel-12**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=186) | [**26.445**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1467) | 12.13.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0047 | F |
| [**S4-200828**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200828.zip) | Corrections of algorithmic description | Ericsson LM, NTT DOCOMO, INC., Orange | agreed |  | [**Rel-13**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=187) | [**26.445**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1467) | 13.8.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0048 | A |
| [**S4-200829**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200829.zip) | Corrections of algorithmic description | Ericsson LM, NTT DOCOMO, INC., Orange | agreed |  | [**Rel-14**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=189) | [**26.445**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1467) | 14.4.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0049 | A |
| [**S4-200830**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200830.zip) | Corrections of algorithmic description | Ericsson LM, NTT DOCOMO, INC., Orange | agreed |  | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.445**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1467) | 15.2.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0050 | A |
| [**S4-200831**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200831.zip) | Corrections of algorithmic description | Ericsson LM, NTT DOCOMO, INC., Orange | agreed |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.445**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1467) | 16.0.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0051 | A |
| [**S4-200832**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200832.zip) | Corrections to the algorithmic description | Ericsson LM | agreed |  | [**Rel-12**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=186) | [**26.447**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1469) | 12.7.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0013 | F |
| [**S4-200833**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200833.zip) | Corrections to the algorithmic description | Ericsson LM | agreed |  | [**Rel-13**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=187) | [**26.447**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1469) | 13.2.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0014 | A |
| [**S4-200834**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200834.zip) | Corrections to the algorithmic description | Ericsson LM | agreed |  | [**Rel-14**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=189) | [**26.447**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1469) | 14.1.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0015 | A |
| [**S4-200835**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200835.zip) | Corrections to the algorithmic description | Ericsson LM | agreed |  | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.447**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1469) | 15.0.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0016 | A |
| [**S4-200836**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200836.zip) | Corrections to the algorithmic description | Ericsson LM | agreed |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.447**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1469) | 16.0.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0017 | A |
| [**S4-200850**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200850.zip) | Corrections of ch-aw-recv specification | Orange | revised |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.445**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1467) | 16.0.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0052 | F |
| [**S4-200868**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200868.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised | [**S4-200712**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1117313) | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.346**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1452) | 15.4.0 | TEI15, eDASH | 0632 | F |
| [**S4-200869**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200869.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised | [**S4-200715**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1117317) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.346**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1452) | 16.4.1 | TEI15, eDASH | 0633 | A |
| [**S4-200870**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200870.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised | [**S4-200713**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1117314) | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.247**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1444) | 15.5.0 | TEI15, eDASH | 0164 | F |
| [**S4-200871**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200871.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised | [**S4-200716**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1117318) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.247**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1444) | 16.2.0 | TEI15, eDASH | 0165 | A |
| [**S4-200872**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200872.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised | [**S4-200714**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1117315) | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.347**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3009) | 15.1.0 | TEI15, eDASH | 0009 | F |
| [**S4-200873**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200873.zip) | Correction on Partial File Handling | Qualcomm Incorporated | revised | [**S4-200717**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1117321) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.347**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3009) | 16.2.1 | TEI15, eDASH | 0010 | A |
| [**S4-200882**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200882.zip) | Consolidated changes from SA4#108-e and SA4#109-e | BBC, Tencent, Sony, Ericsson LM, Qualcomm Incorporated, Enensys | agreed |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.501**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3582) | 16.3.1 | [**5GMSA**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=820002) | 0018 | F |
| [**S4-200884**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200884.zip) | Service Announcement API for enTV | qualcomm incorporated | agreed | [**S4-200879**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129516) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.347**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3009) | 16.2.1 | [**TEI16**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=770050) | 0011 | F |
| [**S4-200904**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200904.zip) | Adding Support for Remote Control | QUALCOMM Europe Inc. - Italy | revised | [**S4-200902**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129544) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.238**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3243) | 16.4.2 | [**E\_FLUS**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800001) |   | B |
| [**S4-200905**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200905.zip) | Adding media feature tag for IMS data channel | Ericsson France S.A.S | available | [**S4-200825**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121587) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.114**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1404) | 16.5.2 | [**5G\_MEDIA\_MTSI\_ext**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=810040) | 0499 | F |
| [**S4-200907**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200907.zip) | Adding Support for Remote Control | QUALCOMM Europe Inc. - Italy | revised | [**S4-200904**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129545) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.238**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3243) | 16.4.2 | [**E\_FLUS**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800001) | 0024 | B |
| [**S4-200924**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200924.zip) | Corrections to EVS Alternative Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed | [**S4-200795**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121531) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.452**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3473) | 16.1.0 | EVS\_codec, Alt\_FX\_EVS | 0002 | F |
| [**S4-200925**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200925.zip) | Corrections of ch-aw-recv specification | Orange | revised | [**S4-200850**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1122004) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.445**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1467) | 16.0.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0052 | F |
| [**S4-200926**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200926.zip) | Corrections to EVS Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed | [**S4-200783**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121515) | [**Rel-12**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=186) | [**26.442**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1464) | 12.12.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0033 | F |
| [**S4-200927**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200927.zip) | Corrections to EVS Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed | [**S4-200784**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121516) | [**Rel-13**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=187) | [**26.442**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1464) | 13.7.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0034 | A |
| [**S4-200928**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200928.zip) | Corrections to EVS Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed | [**S4-200785**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121518) | [**Rel-14**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=189) | [**26.442**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1464) | 14.3.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0035 | A |
| [**S4-200929**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200929.zip) | Corrections to EVS Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed | [**S4-200786**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121519) | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.442**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1464) | 15.1.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0036 | A |
| [**S4-200930**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200930.zip) | Corrections to EVS Fixed-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed | [**S4-200787**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121520) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.442**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1464) | 15.1.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0037 | A |
| [**S4-200931**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200931.zip) | Corrections to EVS Floating-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed | [**S4-200789**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121522) | [**Rel-12**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=186) | [**26.443**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1465) | 12.11.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0030 | F |
| [**S4-200932**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200932.zip) | Corrections to EVS Floating-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed | [**S4-200790**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121523) | [**Rel-13**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=187) | [**26.443**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1465) | 13.7.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0031 | A |
| [**S4-200933**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200933.zip) | Corrections to EVS Floating-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed | [**S4-200791**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121524) | [**Rel-14**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=189) | [**26.443**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1465) | 14.3.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0032 | A |
| [**S4-200934**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200934.zip) | Corrections to EVS Floating-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed | [**S4-200792**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121525) | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.443**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1465) | 15.1.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0033 | A |
| [**S4-200935**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200935.zip) | Corrections to EVS Floating-Point Source Code | Ericsson LM, Fraunhofer IIS, VoiceAge Corporation | agreed | [**S4-200793**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1121527) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.443**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1465) | 16.0.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0034 | A |
| [**S4-200946**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200946.zip) | QoE Measurement Collection | Ericsson LM | agreed |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.247**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1444) | 16.2.0 | [**QOED**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=760058) | 0166 | C |
| [**S4-200947**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200947.zip) | QoE Measurement Collection | Ericsson LM | revised |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.114**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1404) | 16.5.2 | [**QOED**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=760058) | 0499 | C |
| [**S4-200950**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200950.zip) | Adding Support for Remote Control | QUALCOMM Europe Inc. - Italy | agreed | [**S4-200907**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129589) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.238**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3243) | 16.4.2 | [**E\_FLUS**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=800001) | 0024 | B |
| [**S4-200951**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200951.zip) | QoE Measurement Collection | Ericsson LM | agreed | [**S4-200947**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129587) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.114**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1404) | 16.5.2 | [**QOED**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=760058) | 0500 | C |
| [**S4-200954**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200954.zip) | Corrections of ch-aw-recv specification | Orange | agreed | [**S4-200925**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129553) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.445**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1467) | 16.0.0 | [**EVS\_codec**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=470030) | 0052 | F |
| [**S4-200967**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200967.zip) | Removing H.263 from MMS | Qualcomm Incorporated | agreed |  | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.140**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1416) | 15.0.0 | [**TEI15**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=750033) | 0020 | C |
| [**S4-200968**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200968.zip) | Removing H.263 and MPEG-4 Visual from MTSI | Qualcomm Incorporated | agreed |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.114**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1404) | 16.5.2 | [**TEI16**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=770050) | 0501 | C |
| [**S4-200969**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200969.zip) | Removing MPEG-4 Visual from 3G FF | Qualcomm Incorporated | agreed |  | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.244**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1441) | 15.0.0 | [**TEI15**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=750033) | 0065 | C |
| [**S4-200970**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200970.zip) | Removing H.263 from MBMS | Qualcomm Incorporated | agreed |  | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.346**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1452) | 16.4.1 | [**TEI16**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=770050) | 0634 | C |
| [**S4-200971**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200971.zip) | Removing H.263 and MPEG-4 Visual from PSS | Qualcomm Incorporated | not pursued |  | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.234**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1436) | 15.1.0 | [**TEI15**](http://portal.3gpp.org/desktopmodules/WorkItem/WorkItemDetails.aspx?workitemId=750033) | 0230 | C |
| [**S4-200980**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200980.zip) | Correction on Partial File Handling | Qualcomm Incorporated | agreed | [**S4-200868**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129501) | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.346**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1452) | 15.4.0 | eDASH, TEI15 | 0632 | F |
| [**S4-200981**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200981.zip) | Correction on Partial File Handling | Qualcomm Incorporated | agreed | [**S4-200869**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129502) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.346**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1452) | 16.4.1 | eDASH, TEI15 | 0633 | A |
| [**S4-200982**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200982.zip) | Correction on Partial File Handling | Qualcomm Incorporated | agreed | [**S4-200870**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129503) | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.247**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1444) | 15.5.0 | eDASH, TEI15 | 0164 | F |
| [**S4-200983**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200983.zip) | Correction on Partial File Handling | Qualcomm Incorporated | agreed | [**S4-200871**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129504) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.247**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=1444) | 16.2.0 | eDASH, TEI15 | 0165 | A |
| [**S4-200984**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200984.zip) | Correction on Partial File Handling | Qualcomm Incorporated | agreed | [**S4-200872**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129505) | [**Rel-15**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=190) | [**26.347**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3009) | 15.1.0 | eDASH, TEI15 | 0009 | F |
| [**S4-200985**](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200985.zip) | Correction on Partial File Handling | Qualcomm Incorporated | agreed | [**S4-200873**](https://portal.3gpp.org/ngppapp/CreateTdoc.aspx?mode=view&contributionId=1129506) | [**Rel-16**](http://portal.3gpp.org/desktopmodules/Release/ReleaseDetails.aspx?releaseId=191) | [**26.347**](http://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3009) | 16.2.1 | eDASH, TEI15 | 0010 | A |

## Annex B: Lists of liaisons

### C1: Incoming liaison statements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Document** | **Original** | **Title** | **From** | **Decision** | **Reply TDoc** |
| S4-200705 |  | LS/r on Revision of Recommendation P.501 (reply to ETSI-TC-STQ-LS29) | ITU-T SG 12 | noted | (none) |
| S4-200718 |  | Reply LS on updates to CHEM feature and use of Application Layer Redundancy | 3GPP CT3 | noted | (none) |
| S4-200719 | SP-200287/S2-2002665 | Reply LS on support for eCall over NR | 3GPP SA2 | noted | (none) |
| S4-200720 | S4-200241(S5-202020) | Reply LS on QoE Measurement Collection | 3GPP SA5 | replied to | S4-200962 |
| S4-200721 | R2-1916328 (S5-202021) | Reply LS on QoE Measurement Collection | 3GPP SA5 | noted | (none) |
| S4-200722 | S2-1912765 (R2-2000059) | Response LS on the support for ECN in 5GS | 3GPP RAN2 | noted | (none) |
| S4-200723 | S4-200538 submitted to SA4#108-e | PHASE 1 TECHNICAL SPECIFICATION ON ABR MULTICAST | DVB | replied to | S4-200733 |
| S4-200733 | S4-200538 submitted to SA4#108-e | PHASE 1 TECHNICAL SPECIFICATION ON ABR MULTICAST | DVB | revised | S4-200860 |
| S4-200736 |  | LS from SC 29/WG 11 (ISO/IEC JTC 1/SC 29/WG 11) to 3GPP SA WG 4 on CMAF [SC 29/WG 11 N 19266] | ISO/IEC JTC 1/SC 29/WG 11 | noted | (none) |
| S4-200804 |  | MPEG-I Video-based Point Cloud Compression [SC 29/WG 11 N 19377] | ISO/IEC JTC 1/SC 29/WG 11 | noted | (none) |

### C2: Outgoing liaison statements

|  |  |  |  |
| --- | --- | --- | --- |
| Document | Title | To | Cc |
| S4-200860 | Reply LS on PHASE 1 TECHNICAL SPECIFICATION ON ABR MULTICAST | DVB | - |
| S4-200908 | LS on media feature tag for IMS data channel | 3GPP CT1 & CT3 | 3GPP SA2 |
| S4-200958 | LS on video codec evaluation | ITU-T Q6/16 (Question 6, Study Group 16), ISO/IEC SC29 WG 11 (MPEG) | - |
| S4-200962 | Reply LS on QoE Measurement Collection | 3GPP SA5 | 3GPP CT1, RAN2 & RAN3 |
| S4-200880 | LS on AT Commands for Bit Rate Recommendation | 3GPP CT1 | 3GPP SA2, RAN2  |