**Source: MTSI SWG Chairman**[[1]](#footnote-0)

**Title: MTSI SWG Report during SA4#108-e**

## Document for: Approval Agenda Item: 13.3

Executive summary

The 3GPP SA4 MTSI SWG met for 3 telco sessions during SA4#108-e, and handled the other documents via the MTSI\_SWG email reflector.

A total of 26 delegates participated while 42 Tdocs were discussed with SWG-status concluded for 36 Tdocs.

1. For Maintenance, agreed on a correction to the 3gpp-qos-hint examples
2. E\_FLUS agreed on the following:
   1. CR introducing a media codec profile based on TS 26.511
   2. Multiple CRs correcting and clarifying references, figures, and text in TS 26.238
   3. Merging multiple input Tdocs into a Draft CR on corrections to the F-C Stage 3 text which will serve as a baseline for further corrections to be finalized at SA4#109-e
   4. Schedule Telcos on
      1. May 6 @ 6:00 CEST
      2. May 13 @ 15:00 CEST
3. ITT4RT agreed on the following:
   1. Updated WID to change one of the rapporteurs from Huawei to Nokia
   2. Update to the Permanent Document to incorporate an alternative to viewport information signalling and draft text on using scene description for overlays
   3. Schedule Telcos on
      1. April 15 @ 17:00 CEST
      2. Apr 29 @ 17:00 CEST
      3. May 13 @ 19:00 CEST
4. FS\_FLUS\_NBMP agreed on the following:
   1. General plan & structure for developing a Permanent Document that will eventually be used to determine CRs to TR 26.939
   2. Schedule a Telco on April 22 @ 6:00 CEST

**The output documents from the MTSI SWG sessions are:**

|  |  |  |
| --- | --- | --- |
| 5.2 | Other 3GPP groups | 534 (QoS/CT3) -> replied to in 587 |
| **13** | **Reports and general issues from sub-working-groups** |  |
| 13.3 | MTSI SWG | **641** |
| **15** | **Release 16 Features** |  |
| 15.4 | E\_FLUS (Enhancements to Framework for Live Uplink Streaming) | CR: 642, 644, 645, 646, 647  TP: 652 |
| 15.7 | 5G\_MEDIA\_MTSI\_ext (Media Handling Extensions for 5G Conversational Services) | 570 |
| **16** | **Release 17 Features** |  |
| 16.2 | ITT4RT (Support of Immersive Teleconferencing and Telepresence for Remote Terminals) | WID: 508  TP: 653  PD: 650 |
| **17** | **Study Items** |  |
| 17.6 | FS\_FLUS\_NBMP (Feasibility Study on the use of NBMP in E\_FLUS) | TP: 655 |

**Agreed in MTSI SWG**

**No status in MTSI SWG**

SWG Minutes during SA4#108-e

## 11.1 Opening of the session

Mr. Nikolai Leung (Qualcomm, Chairman of MTSI SWG) opened the e-meeting sessions at 0:40 CEST on April 2nd, and the Telco sessions at 19:00?? CEST on April 6th.

The minutes are shared online here:

<https://drive.google.com/file/d/1POEnC-nlGb4_i2zM0dNMWmCrLqzxxrpk/view?usp=sharing>

Bo Burman, Ozgur Oyman, and Iraj Sodagar agreed to serve as the acting secretaries for the meeting.

## 11.2 Registration of documents

The following documents were registered before the meeting:

|  |  |  |
| --- | --- | --- |
| 11 | Multimedia Telephony Service for IMS (MTSI) SWG |  |
| 11.1 | Opening of the session |  |
| 11.2 | Registration of documents |  |
| 11.3 | Reports and liaisons from other groups | LS: 587 |
| 11.4 | CRs to Features in Release 15 and earlier |  |
| 11.5 | CRs to completed features in Release 16 | 26.114: 570, 571, 608 |
| 11.6 | E\_FLUS (Enhancements to Framework for Live Uplink Streaming) | TP: 519  26.238: 521, 523, 524, 525, 550, 551, 578, 589, 603, 604, 613 |
| 11.7 | ITT4RT (Support of Immersive Teleconferencing and Telepresence for Remote Terminals) | TP: 506  WID: 508  PD: 507->609, 542, 546, 595 |
| 11.8 | FS\_FLUS\_NBMP (Feasibility Study on the use of NBMP in E\_FLUS) | TP: 548  26.939: 549->607, 552 |
| 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 |  |

The agenda and allocation of documents were agreed.

## 11.3 Reports and liaisons from other groups

|  |  |  |
| --- | --- | --- |
| [S4-200587](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200587.zip) | Draft LS reply on QoS mapping procedure | Ericsson LM |

The document was sent for email agreement by 20:00 4/2.

Agreed via email on April 2, 21:25 CEST. Sent to Plenary Agenda Item 5.2.

## 11.4 CRs to Features in Release 15 and earlier

There were no Rel-15 or earlier CRs.

## 11.5 CRs to completed features in Release 16

|  |  |
| --- | --- |
| CRs to completed features in Release 16 | 26.114: 570, 571, 608 |

|  |  |  |
| --- | --- | --- |
| [S4-200570](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200570.zip) | Correction of 3gpp-qos-hint examples | Ericsson LM |

The document was sent for email agreement by 20:00 4/2.

Agreed via email on April 2, 21:33 CEST. Sent to Plenary Agenda Item 15.7

|  |  |  |
| --- | --- | --- |
| [S4-200571](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200571.zip) | Bandwidth for open offer | Ericsson LM |

The document was sent for email agreement by 20:00 4/6.

Stephane Ragot/Orange

We are checking this Tdoc internally (571) and request more time for approval.

The proposal would create a kind of inconsistent behavior: set b=AS according to highest mode when modes/birates are listed vs a different logic for open offers. This may create some confusion.

MTSI SWG Chair

To allow more time for review I am extending the reply deadline to 20:00 CEST/Monday April 6.

Kyunghun Jung/Samsung

Well, at least the proposal seems to be better than the one GSMA originally

asked, as this does not require any changes in the negotiation logic of UEs.

These errors occur mainly from inaccurate computation of b=AS or open market

UEs used in a distanced area but nowadays the possibility is getting smaller.

Examples showing the interaction would have helped the understanding of readers.

Bo Burman/Ericsson

The proposal is to keep the behavior to set b= according to the highest explicitly listed mode, if any, and to relax that requirement if no explicit mode is present (= the open offer).

Can you elaborate on what you believe would be confusing?

Would it be sufficient to explicitly clarify that when not using b=AS according to the highest mode, the modes that are allowed in the session are the ones with b=AS values in Tables 6.7-6.9 that are lower than or equal to the provided b=AS?

Min Wang/QUALCOMM

I am not sure I understand the motivation of including EVS open offer but with b=AS less than the highest mode. If b=AS matching the highest mode of an open offer can’t be offered anyway, can it be achieved to offer up to the mode that matches the b=AS intended to be included in the offer?

Links to parts of the email thread (non-exhaustive list):

|  |  |  |
| --- | --- | --- |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=11922) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Thu, 2 Apr 2020 21:47:23 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=13936) | Stephane Ragot <stephane.ragot@ORANGE.COM> | Thu, 2 Apr 2020 22:37:10 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=17902) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Thu, 2 Apr 2020 23:28:33 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=23386) | Timo Pousi <timo.pousi@ERICSSON.COM> | Fri, 3 Apr 2020 11:45:09 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=24816) | Bo Burman <bo.burman@ERICSSON.COM> | Fri, 3 Apr 2020 14:46:08 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=23092) | 정경훈 <kyunghun.jung@SAMSUNG.COM> | Fri, 3 Apr 2020 16:23:05 +0900 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=29064) | Min Wang <minw@QTI.QUALCOMM.COM> | Fri, 3 Apr 2020 22:00:20 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=37334) | Stefan Döhla <stefan.doehla@IIS.FRAUNHOFER.DE> | Mon, 6 Apr 2020 09:38:24 +0200 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=38578) | Bo Burman <bo.burman@ERICSSON.COM> | Mon, 6 Apr 2020 11:28:57 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=40456) | Stephane Ragot <stephane.ragot@ORANGE.COM> | Mon, 6 Apr 2020 12:36:49 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=41245) | Bo Burman <bo.burman@ERICSSON.COM> | Mon, 6 Apr 2020 14:43:34 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=42105) | Min Wang <minw@QTI.QUALCOMM.COM> | Mon, 6 Apr 2020 15:08:38 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=42797) | Bo Burman <bo.burman@ERICSSON.COM> | Mon, 6 Apr 2020 18:09:52 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=44144) | Stephane Ragot <stephane.ragot@ORANGE.COM> | Mon, 6 Apr 2020 19:54:09 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=48443) | Kyunghun Jung <kyunghun.jung@SAMSUNG.COM> | Tue, 7 Apr 2020 11:17:21 +0900 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=57318) | Bo Burman <bo.burman@ERICSSON.COM> | Tue, 7 Apr 2020 14:57:43 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=58176) | Min Wang <minw@QTI.QUALCOMM.COM> | Tue, 7 Apr 2020 15:19:30 +0000 |
| [[11.5, Bandwidth for open offer, S4-200571] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=59876) | Bo Burman <bo.burman@ERICSSON.COM> | Tue, 7 Apr 2020 16:24:28 +0000 |

Presented by Bo Burman

Stephane - It would be good to understand the motivation around the problems for the paper and CR. If the problem is mostly for EVS, we already have all the tools to set the bitrate. We do not need the way to change how we compute b=AS. We spent a lot of time in the past on how to define open offers, and now this is reopening the discussions for EVS.

Bo - Remaining issue is how to handle AMRWB IO into EVS. The open offer problem remains with the AMRWB IO part.

Stephane - We follow onion principle for AMR-WB and there should not be an interoperability issue. AMR may be a bit different but overprovisioning could be a problem

Bo - If you do not even believe there is problem AMR WB IO, including the mode set could solve the issue. Any comments on 608?

Stefan - 608 and 571 are interrelated. Open offer is not attractive to use in the field. High b=AS values are also causing issues.

Bo - Almost everyone relies on the answer. Risk of answer including high bitrate needs to be overcome.

Stefan - this is just a draft CR and was intended to trigger discussion. If you look at IR.92, you have one of the configurations along with the open offer, so we should try to circumvent an issues people see with open offer

Bo - do we then believe that this is a non-issue. how does SA4 respond to such concern? Maybe concerned ones could include the fmtp and modeset? Some perceive it as an issue so it needs to be discussed.

Stefan - agreed

Stephane - If IO is kept in the open offer, one may restrict the mode set and also restrict the max rate. Maybe a device management object could address the issue? Still checking on detailed call flows. There could be cases where bearer could be pre-provisioned. There may be other solutions like device management.

Bo - Does not help me. So you want to leave it as it is today and leave it up to device config. Or would you be ok with Fraunhofer soln?

Stephane - I prefer to keep b=AS calculation the same, and keep it optional to include mode sets. Device config can handle the issue

Bo - We can consider the use of open offer and clarify that a lower bitrate may be needed. Anything that includes bitrate for EVS primary cannot be an open offer by definition.

Stefan - From options depicted by Stephane, show of capability of the device, mixing radio and codec capabilities. As soon as you use br parameter, it is not an open offer anymore than shows capability

Stephane - Your point is understood. This would not be an open offer. If we want to include this as an open offer by principle, then we can define a max rate parameter and this is somehow configured in the device, that could keep the principle of open offer

Bo - Would you then not signal it in the call setup or would you reflect it in the br parameter?

Stephane - need to identify which networks have this kind of issue. If you take GSMA compliant phones, open offer is recommended to be included and not mandatory. So it is not clear what the issue is and what solution would resolve it. In deployment we do not see any issue with open offers

Stefan - Excellent discussion but probably our proposed solution in 608 won't be acceptable in light of the comments.

Bo - let’s revisit the recommendations around use of open offer and clarify it as needed.

Stefan - sure but this does not mean it will affect the use of open offer in IR.92 scope.

Nik - May want to relook at the provisioning of offer-answer procedures for open offer in comparison to IR.92

Document was **noted.**

Nik - As a next step a LS to GSMA could be considered. Or new proposals on open offer procedures. Please bring new proposals on these aspects.

|  |  |  |
| --- | --- | --- |
| [S4-200608](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200608.zip) | Setting b=AS in presence of an open offer | Fraunhofer IIS |

The document was sent for email agreement by 20:00 4/6.

Stephane Ragot/Orange

Are there any impacts on CT specifications / specified behaviors?

We are also checking the impact of this proposal.

MTSI SWG Chair

To allow more time for review I am extending the reply deadline to 20:00 CEST/Monday April 6.

Timo Pousi/Ericsson

Few minor comments (typos) attached (on email reflector)

It should also be noted that there can be functionality in the core network to modify received the open offer based on operator preferences. This is done e.g. to limit bandwidth usage in the radio network. Such functionality can effectively prevent passing of open offer to the terminating network/UE

Stefan Döhla/Fraunhofer

Edits are good suggestions.

Bo Burman/Ericsson

I would be interested to know more on the reasoning behind making this b= relaxation for EVS open offer only when there are another, “non-open” EVS payload type present?

Why not make such relaxation for all open offers, also when they appear as the only payload type for that codec?

I would also like to know if it is intentional to just make the relaxation for b=AS and (implicitly) not for b=TIAS?

Stefan Döhla/Fraunhofer

A typical application is the case where you’d have two payload types for m=audio listed (in fact you may have even more due to AMR and AMR-WB being offered), where the first payload type is the preferred configuration, e.g. EVS-SWB 5.9-24.4kbps, and the second PT being the open offer. While it would be expected that the answering UE uses the first PT in its answer, the second PT indicates the capability of the offering UE for interoperability beyond the preferred configuration, i.e. to support all EVS modes.

If the open offer is present stand-alone, this is imho not just an indication of capability, but there is no preferred configuration and thus b=AS would need to be set according to the highest bit rate of the codec.

There has been no intention to limit this to b=AS. However, 26.114 doesn’t seem to mention the use of b=TIAS and thus this was not considered. (In fact, b=TIAS seems more intuitive to me nowadays with use of RoHC on the links, but that’s beyond the scope of this contribution).

Min Wang/Qualcomm

Three comments inserted in the CR, attached (on email reflector)

CM1/CM2 - I don’t think more than one payload type is allowed in an SDP answer.

CM3 – Does this proposal mean that the open offer is actually limited to modes with bit rate less than or equal to br or br-recv? If this understanding is correct, can we replace the open offer with a payload type will all modes with bit rate less than or equal to br or br-recv as in this way, the current rule of b=AS is not required to be changed?

Stefan Döhla/Fraunhofer

On CM1/2: Agreed. I was misguided by the text above, which also talks about “offer or answer”, but this is not very precise. So, removal of “or answer” is fine.

On CM3: The open offer is an indication of the offering UE’s capability (i.e. all EVS modes). Other specifications recommend the use of a PT with a bitrate range plus an open offer to indicate the “preferred configuration” and the “capability”.

I would see this more like the case of video, where the codecs are capable of adapting the bit rate over a large bit rate range, while b=AS is set to the maximum “desired” rate in the receiving direction.

Links to parts of the email thread (non-exhaustive list):

|  |  |  |
| --- | --- | --- |
| [[11.5, Setting b=AS in presence of an open offer, S4-200608] for agreement by 20:00 CEST/Friday April 3](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=11046) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Thu, 2 Apr 2020 21:47:12 +0000 |
| [[11.5, Setting b=AS in presence of an open offer, S4-200608] for agreement by 20:00 CEST/Friday April 3](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=13236) | Stephane Ragot <stephane.ragot@ORANGE.COM> | Thu, 2 Apr 2020 22:35:22 +0000 |
| [[11.5, Setting b=AS in presence of an open offer, S4-200608] for agreement by 20:00 CEST/Friday April 3](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=14626) | Stephane Ragot <stephane.ragot@ORANGE.COM> | Thu, 2 Apr 2020 22:42:01 +0000 |
| [[11.5, Setting b=AS in presence of an open offer, S4-200608] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=18838) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Thu, 2 Apr 2020 23:31:01 +0000 |
| [[11.5, Setting b=AS in presence of an open offer, S4-200608] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=24163) | Bo Burman <bo.burman@ERICSSON.COM> | Fri, 3 Apr 2020 14:16:11 +0000 |
| [[11.5, Setting b=AS in presence of an open offer, S4-200608] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=31511) | Min Wang <minw@QTI.QUALCOMM.COM> | Sun, 5 Apr 2020 05:14:03 +0000 |
| [[11.5, Setting b=AS in presence of an open offer, S4-200608] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=37811) | Stephane Ragot <stephane.ragot@ORANGE.COM> | Mon, 6 Apr 2020 07:46:51 +0000 |
| [[11.5, Setting b=AS in presence of an open offer, S4-200608] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=35690) | Stefan Döhla <stefan.doehla@IIS.FRAUNHOFER.DE> | Mon, 6 Apr 2020 08:57:20 +0200 |
| [[11.5, Setting b=AS in presence of an open offer, S4-200608] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=36427) | Stefan Döhla <stefan.doehla@IIS.FRAUNHOFER.DE> | Mon, 6 Apr 2020 09:34:20 +0200 |
| [[11.5, Setting b=AS in presence of an open offer, S4-200608] for agreement by 20:00 CEST/Friday April 3 -> 20:00 CEST/Monday April 6](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=39461) | Timo Pousi <timo.pousi@ERICSSON.COM> | Mon, 6 Apr 2020 11:56:43 +0000 |

Please see the above discussion w.r.t document 571. 608 was jointly discussed

Document was **noted.**

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

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| E\_FLUS (Enhancements to Framework for Live Uplink Streaming) | TP: 519  26.238: 521, 523, 524, 525, 550, 551, 578, 589, 603, 604, 613 |

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| [S4-200521](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200521.zip) | Correction of References | Samsung R&D Institute India |

The document was sent for email agreement by 20:00 4/2.

Comment from chair to convert to Category D was agreed.

Revised into S4-200644

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| --- | --- | --- |
| [S4-200644](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200644.zip) | Correction of References | Samsung R&D Institute India |

Sent for email agreement by 07APR 07:00.

Receiving no comments, the document is agreed and will be sent to SA4 agenda item 15.4

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| --- | --- | --- |
| [S4-200523](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200523.zip) | Clarification on uplink assistance | Samsung R&D Institute India |

The document was sent for email agreement by 20:00 4/2.

No comments via email on April 2, 21:42 CEST.

Authors agreed to convert into a formal CR

Revised into a formal CR in S4-200645

|  |  |  |
| --- | --- | --- |
| [S4-200645](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200645.zip) | Clarification on uplink assistance | Samsung R&D Institute India |

Sent for email agreement by 07APR 07:00.

Receiving no comments, the document is agreed and will be sent to SA4 agenda item 15.4

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| [S4-200524](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200524.zip) | Update and correction of FLUS source systems | Samsung R&D Institute India |

The document was sent for email agreement by 20:00 4/3.

No comments received. Chair offered to convert to formal CR. Agreed by authors. Revised into

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| [S4-200647](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200647.zip) | Update and correction of FLUS source systems | Samsung R&D Institute India |

Sent for email agreement by April 7, 20:00

Receiving no comments, the document is agreed and will be sent to SA4 agenda item 15.4

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| [S4-200525](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200525.zip) | Update, correction and clarification of text | Samsung R&D Institute India |

The document was sent for email agreement by 20:00 4/2.

Comment from chair to convert to Category D was agreed. Also will convert to formal CR.

Revised into a formal CR in S4-200646

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| [S4-200646](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200646.zip) | Update, correction and clarification of text | Samsung R&D Institute India |

Sent for email agreement by 07APR 07:00.

Receiving no comments, the document is agreed and will be sent to SA4 agenda item 15.4

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| [S4-200589](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200589.zip) | Draft CR TS 26.238 Media Codec Profile for E\_FLUS | QUALCOMM, Incorporated |

The document was sent for email agreement by 20:00 4/2.

No comments via email on April 2, 21:48 CEST.

Revised into a formal CR in S4-200642

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| [S4-200642](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200642.zip) | Media Codec Profile for E\_FLUS | QUALCOMM, Incorporated |

The document was sent for email agreement by 20:00 4/6.

No comments received.

Agreed the CR which will be sent to SA4 plenary agenda item 15.4

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| [S4-200550](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200550.zip) | Sink Capabilities in FLUS | Tencent |

Presented by Iraj Sodagar of Tencent.

Discussion:

* Thorsten: In this vendor URN scheme, the capability name already includes meaningful values, but I could be wrong.
* Iraj: Even if that would be the case, embedding parameters and values in the URN, you still need a description of what it means. Even if you recognize the initial part of the URN and you don’t know the vendor, there’s no way to find descriptions of what those fields mean.
* Thorsten: I agree. It might be interesting to have the location URL in. Was it Imed that suggested this vnd scheme?
* Imed: Yes, we decided to use these globally unique identifiers, assuming that each vendor would define its own features. The intention was not to provide a pointer to a description provided by the vendor itself. Not sure if that would help. If I’m a source, I would check to find certain capabilities. If it provides capabilities I don’t understand, I’m not following those links.
* Iraj: A group of companies can use a single scheme, but the parameters would be provided by that scheme and the location would provide the descriptions. As you describe it, every single encoder vendor would have to provide its own scheme. With the location, a group of companies can provide a common description.
* Imed: I would suggest that a second level of negotiation occurs. Each encoder vendor might have its own set of parameters. They must first agree on the namespace. At session setup you can agree on parameters. First discover and once you try to use it you find the rest.
* Iraj: For each sink you get a URL and you have to choose which one to use. If you don’t understand the vendor-specific schemes you cannot do a comparison. If you use a common scheme name and (optionally) vendors can use it, a source can look at all the sinks and decide which one to use. A common language provides interoperability.
* Imed: When looking for a particular capability and finding several sinks have that capability. You cannot force them to use the same.
* Iraj: Of course. If you describe in a common way, you can increase interoperability.
* Imed: A source finding multiple sinks with the same capability must choose between them.
* Iraj: There might be different tools available in different sinks.
* Imed: Are you proposing to define a common URN?
* Iraj: No just providing the possibility to convey that. An example is the NBMP common template.
* Imed: Are you suggesting to define how to use the location and description?
* Iraj: No.
* Imed: It is not according to the original intention, which was to negotiate the parameters in the session. The standard specifies certain capabilities that we can expect that all implement.
* Hyunkoo: If the URN is not understood, I don’t understand how any of the values can be understood.
* Nikolai: Continue in offline discussion. Tencent (to set-up the telco), Samsung, Qualcomm, Ericsson, Sony.
* Document was parked and discussed offline.
* Iraj: Offline call added only the location parameter. We change this to a draft CR and merge it with 651.

The document was **not pursued**.

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| [S4-200551](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200551.zip) | Sink Configuration in FLUS | Tencent |

* Nikolai: In offline discussion. Tencent (to set-up the telco), Samsung, Qualcomm, Ericsson, Sony.
* Document was parked and discussed offline.
* Iraj: Add processing description when creating was accepted, pending CT practice of CRUDE design. A second change regarding if resources can be included in the CREATE method.
* Thorsten: CT allows that.
* Iraj: We change this to a draft CR and merge it with 651.

The document was **not pursued**.

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| [S4-200578](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200578.zip) | Correction of F-C Stage 3 | Ericsson LM |
| [S4-200603](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200603.zip) | E\_FLUS: Discovery of FLUS sinks using a Sink Discovery Server | Samsung Research America |
| [S4-200604](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200604.zip) | Discovery Server for FLUS Sinks | Samsung Research America |
| [S4-200613](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200613.zip) | The resource addressing in FLUS | Tencent |

The document was sent for email merge into S4-200643 by 18:00 4/6.

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| [S4-200643](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200643.zip) | Correction of F-C Stage 3 | Ericsson LM, Tencent, Samsung Research America, Qualcomm |

Presented by Thorsten Lohmar of Ericsson.

Discussion:

* Thorsten: There are a couple of editorial mistakes.
* Iraj: We have not discussed the Tencent contributions yet (550 and 551). There’s no conflict with changes in this document.
* Thorsten: We should discuss it and not push for offline, at least not as an editorial exercise.

The document was **revised to 648**.

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| [S4-200648](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200648.zip) | Correction of F-C Stage 3 | Ericsson LM, Tencent, Samsung Research America, Qualcomm |

Presented by Thorsten Lohmar of Ericsson.

Discussion:

* Hyunkoo: In 7.1.1.2 is the changed table reference to 5.3.5-1 correct?
* Thorsten No, that’s wrong, it should be 5.3.6-1.
* Hyunkoo: In 4.2.1, the last added sentence, is your intention with asking FLUS sink capabilities, is it the FLUS sink itself or asking for (multiple) FLUS sinks?
* Thorsten: It’s asking the capabilities of the FLUS sink.
* Iraj: I think if you use a FLUS sink capability server, you can use it to find capabilities for all?
* Thorsten: The second is for discovering capabilities of the own capability of the FLUS sink.
* Iraj: I think this becomes confusing when written just after the text that discovers FLUS sinks. Perhaps use bullet points?
* Imed: I think we are making the FLUS sink be two AFs, both a discovery server and a media sink. I believe what we had earlier is better, separating discovery from actual FLUS sink, what sinks that are also discovery servers. In Table 7.1.1-1 the resource naming should follow the naming conventions, starting with small letters.
* Prakash: I think clause 4 is talking about FLUS sinks and clause 5 separating control and media. Can this be clarified?
* Iraj: Can we use “control sink”?
* Imed: Yes, but don’t overload sink with discovery function.
* Iraj: How does the source discover the discovery server?
* Imed: There’s the URL and could also use DNS.
* Iraj: In terms of functionality, the FLUS discovery server is a completely different entity from a FLUS sink?
* Imed: Yes.
* Thorsten: The discovery server is an optional function and not always needed.
* Iraj: We should clarify that.
* Prakash: Don’t you need the procedure to discover, too?
* Imed: I think we have.
* Prakash: So we update the figure with discovery and some text.
* Imed: The text in 5.3.2.1b could do.
* Nikolai: Change the figure name from Control Sink to discovery server?
* Iraj: In clause 5, we should clarify that it is all about control plane.
* Thorsten: Asking Iraj to initiate changes.

The document was **revised to 649**.

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| [S4-200649](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200649.zip) | Correction of F-C Stage 3 | Ericsson LM, Tencent, Samsung Research America, Qualcomm |

Presented by Thorsten Lohmar of Ericsson.

Discussion:

* Iraj: In section 7, we said that FLUS sink and source should in some cases be changed to FLUS control source and sink, which I did. In 7.6, the sink cannot use HTTP DELETE, it must be the source.
* Iraj: In section 4, figure 4.2-1, the sink discovery server should show up as a change mark. In 4.2 does the text on discovery mean that there is always a sink discovery server in the network?
* Thorsten: No, it is optional and that should be reflected.
* Imed: Is it a “may” for functionality on query FLUS sink capabilities?
* Iraj: No, it is mandatory.
* Nikolai: Changemarks-over-changemarks should be removed.
* Thorsten: We should use this as a baseline and continue adding text until the next meeting.

The document was **revised to 651**

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| [S4-200651](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200651.zip) | Correction of F-C Stage 3 | Ericsson LM, Tencent, Samsung Research America, Qualcomm |

The document was **agreed** without presentation.

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| [S4-200519](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200519.zip) | Time Plan for E\_FLUS Work Item v0.12.0 | QUALCOMM Incorporated (Rapporteur) |

Revised to [S4-200652](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200652.zip)

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| [S4-200652](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200652.zip) | Time Plan for E\_FLUS Work Item v0.12.1 | QUALCOMM Incorporated (Rapporteur) |

**Not treated** in the SWG. Sent to SA4 plenary agenda item 15.4.

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

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| ITT4RT (Support of Immersive Teleconferencing and Telepresence for Remote Terminals) | TP: 506  WID: 508  PD: 507->609, 543, 546, 595 |

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| [S4-200506](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200506.zip) | Proposed Timeplan for ITT4RT (v0.6.0) | Intel (Rapporteur) |

Revised to [S4-200653](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200653.zip)

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| [S4-200653](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200653.zip) | Proposed Timeplan for ITT4RT (v0.6.0) | Intel (Rapporteur) |

**Not treated** in the SWG. Sent to SA4 plenary agenda item 16.2.

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| [S4-200507](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200507.zip) | ITT4RT Permanent Document - Requirements, Working Assumptions and Potential Solutions (v0.6.0) | Intel (Rapporteur) |

Revised into [S4-200609](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200609.zip)

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| [S4-200609](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200609.zip) | ITT4RT Permanent Document - Requirements, Working Assumptions and Potential Solutions (v0.6.1) | Intel (Rapporteur) |

Sent for email agreement by 07APR 22:00 and updated to 650.

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| [S4-200650](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200650.zip) | ITT4RT Permanent Document - Requirements, Working Assumptions and Potential Solutions (v0.6.2) | Intel (Rapporteur) |

Document will be sent to SA4 closing plenary with **not treated** in the MTSI SWG.

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| [S4-200508](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200508.zip) | Updated ITT4RT WID | Intel, Nokia Corporation, Huawei Technologies Co. Ltd. |

Sent for email agreement by 07APR 22:00

The document was **agreed** via email.

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| [S4-200546](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200546.zip) | ITT4RT: An Alternative Potential Solution on Viewport Information Signaling | Intel |

Sent for email agreement by 07APR 22:00

The document was **agreed** via email.

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| [S4-200543](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200543.zip) | Scene Description for Overlays and Beyond | Qualcomm India Pvt Ltd |

Sent for email agreement by 07APR 22:00 and discussed in an offline call.

Links to parts of the email thread (non-exhaustive list) in the discussion of [S4-200543](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200543.zip), [S4-200546](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200546.zip), and [S4-200609](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200609.zip) are provided below:

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| [[11.7, ITT4RT documents that have been pre-discussed, S4-200508, S4-200543, S4-200546, S4-200609] for agreement by 22:00 CEST/Tuesday 07 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=45911) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Mon, 6 Apr 2020 21:22:22 +0000 |

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| --- | --- | --- |
| [[11.7, ITT4RT documents that have been pre-discussed, S4-200508, S4-200543, S4-200546, S4-200609] for agreement by 22:00 CEST/Tuesday 07 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=58971) | Curcio, Igor (Nokia - FI/Tampere) <igor.curcio@NOKIA.COM> | Tue, 7 Apr 2020 16:03:18 +0000 |
| [[11.7, ITT4RT documents that have been pre-discussed, S4-200508, S4-200543, S4-200546, S4-200609] for agreement by 22:00 CEST/Tuesday 07 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=60756) | Oyman, Ozgur <ozgur.oyman@INTEL.COM> | Tue, 7 Apr 2020 17:14:31 +0000 |

Telco discussion:

Igor: The document would be OK to agree for inclusion in the PD in square brackets and with an editor’s note stating that this work is phased, awaiting completion in MPEG. With this change to be captures in the PD, this Tdoc 543 is agreeable.

The document was **agreed.**

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| [S4-200595](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200595.zip) | ITT4RT: Improvements of Signaling the FOV information using RTCP feedback | Tencent |

Sent for email agreement by 07APR 22:00

Links to parts of the email thread (non-exhaustive list):

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| [[11.7, ITT4RT documents that have been pre-discussed, S4-200595] for agreement by 22:00 CEST/Tuesday 07 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=46563) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Mon, 6 Apr 2020 21:28:05 +0000 |
| [[11.7, ITT4RT documents that have been pre-discussed, S4-200595] for agreement by 22:00 CEST/Tuesday 07 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=47100) | Oyman, Ozgur <ozgur.oyman@INTEL.COM> | Mon, 6 Apr 2020 23:37:46 +0000 |
| [[11.7, ITT4RT documents that have been pre-discussed, S4-200595] for agreement by 22:00 CEST/Tuesday 07 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=47825) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Tue, 7 Apr 2020 00:05:15 +0000 |
| [[11.7, ITT4RT documents that have been pre-discussed, S4-200595] for agreement by 22:00 CEST/Tuesday 07 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=51178) | Iraj Sodagar <irajs@LIVE.COM> | Tue, 7 Apr 2020 03:54:28 +0000 |
| [[11.7, ITT4RT documents that have been pre-discussed, S4-200595] for agreement by 22:00 CEST/Tuesday 07 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=53340) | Imed Bouazizi <BOUAZIZI@QTI.QUALCOMM.COM> | Tue, 7 Apr 2020 04:30:41 +0000 |
| [[11.7, ITT4RT documents that have been pre-discussed, S4-200595] for agreement by 22:00 CEST/Tuesday 07 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=53971) | Iraj Sodagar <irajs@LIVE.COM> | Tue, 7 Apr 2020 04:42:27 +0000 |
| [[11.7, ITT4RT documents that have been pre-discussed, S4-200595] for agreement by 22:00 CEST/Tuesday 07 APR(Internet mail)](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=54939) | rabhishek(RohitAbhishek) <rabhishek@TENCENT.COM> | Tue, 7 Apr 2020 05:22:16 +0000 |
| [[11.7, ITT4RT documents that have been pre-discussed, S4-200595] for agreement by 22:00 CEST/Tuesday 07 APR(Internet mail)](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=55846) | Curcio, Igor (Nokia - FI/Tampere) <igor.curcio@NOKIA.COM> | Tue, 7 Apr 2020 11:42:23 +0000 |

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| [[11.7, ITT4RT documents that have been pre-discussed, S4-200595] for agreement by 22:00 CEST/Tuesday 07 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=61642) | Imed Bouazizi <BOUAZIZI@QTI.QUALCOMM.COM> | Tue, 7 Apr 2020 19:51:24 +0000 |

The document is “not treated” and will be re-submitted for a telco.

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

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| FS\_FLUS\_NBMP (Feasibility Study on the use of NBMP in E\_FLUS) | TP: 548  26.939: 549->607, 552 |

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| [S4-200548](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200548.zip) | Proposed Work Plan for FS\_FLUS\_NBMP | Tencent |

Revised to [S4-200654](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200654.zip)

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| [S4-200654](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200654.zip) | Proposed Work Plan for FS\_FLUS\_NBMP | Tencent |

Revised to [S4-200655](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200655.zip)

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| [S4-200655](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200655.zip) | Proposed Work Plan for FS\_FLUS\_NBMP | Tencent |

**Not treated** in the SWG. Sent to SA4 plenary agenda item 17.6.

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| [S4-200549](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200549.zip) | Workflow example for FS\_FLUS\_NBMP | Tencent |

Revised to [S4-200607](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200607.zip)

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| [S4-200607](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200607.zip) | Workflow example for FS\_FLUS\_NBMP | Tencent |

Links to parts of the email thread (non-exhaustive list):

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| [[11.8, FS\_FLUS\_NBMP Workflow example, S4-200607] for agreement by 06:00 CEST/Wednesday 08 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=48731) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Tue, 7 Apr 2020 03:06:48 +0000 |
| [[11.8, FS\_FLUS\_NBMP Workflow example, S4-200607] for agreement by 06:00 CEST/Wednesday 08 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=50354) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Tue, 7 Apr 2020 03:29:24 +0000 |
| [[11.8, FS\_FLUS\_NBMP Workflow example, S4-200607] for agreement by 06:00 CEST/Wednesday 08 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=52352) | Iraj Sodagar <irajs@LIVE.COM> | Tue, 7 Apr 2020 04:12:28 +0000 |
| [[11.8, FS\_FLUS\_NBMP Workflow example, S4-200607] for agreement by 06:00 CEST/Wednesday 08 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=62438) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Tue, 7 Apr 2020 20:41:23 +0000 |

On the telco:

Presented by Iraj Sodagar of Tencent.

Iraj: Suggest to merge with 552 and make a permanent document.

Imed: I don’t think we spent sufficient time to go through all issues.

Iraj: I don’t think the text doesn’t have solutions.

Imed: It is too early for solutions. Can we take time to discuss it?

Iraj: That’s not clear to me. The objectives in the SID describe what should be discussed. What other issues should be discussed before workflows?

Imed: I think your proposal goes more into details. Why did we replicate the entire TS 26.939?

Iraj: It intends to show where the new text goes in the existing text. Do you consider the flow in 8.4 a solution?

Imed: Yes, this is already an integration of FLUS and workflow.

Iraj: What should then be the middle step, the issue to discuss?

Imed: I’d first document one or two FLUS use cases, mapping procedures and functions that we have right now in FLUS and NBMP, identify the gaps…

Iraj: The gaps come up here, showing what you can do with existing text.

Imed: To me, this is a solution how to integrate FLUS with NBMP.

Iraj: You want a list of questions?

Imed: Yes.

Iraj: We can have that.

Imed: I’m fine if this goes to the PD and the mapping can be an example mapping.

Iraj: Yes, we plan to do that.

Imed. I want to evaluate the pros and cons with different approaches. For example, should the FLUS sink be the workflow manager or not?

Prakash: I agree to keep this open.

Iraj: In the PD, the described flows will be two possible cases.

Nikolai: We need a draft of the PD.

The document was **noted**.

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| --- | --- | --- |
| [S4-200552](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_108-e/Docs/S4-200552.zip) | TR Skeleton | Tencent |

Links to parts of the email thread (non-exhaustive list):

|  |  |  |
| --- | --- | --- |
| [[11.8, FS\_FLUS\_NBMP TR Skeleton, S4-200552] for agreement by 06:00 CEST/Wednesday 08 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=49248) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Tue, 7 Apr 2020 03:06:52 +0000 |
| [[11.8, FS\_FLUS\_NBMP TR Skeleton, S4-200552] for agreement by 06:00 CEST/Wednesday 08 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=49760) | Nikolai Leung <nleung@QTI.QUALCOMM.COM> | Tue, 7 Apr 2020 03:15:08 +0000 |
| [[11.8, FS\_FLUS\_NBMP TR Skeleton, S4-200552] for agreement by 06:00 CEST/Wednesday 08 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=51774) | Iraj Sodagar <irajs@LIVE.COM> | Tue, 7 Apr 2020 04:04:28 +0000 |
| [[11.8, FS\_FLUS\_NBMP TR Skeleton, S4-200552] for agreement by 06:00 CEST/Wednesday 08 APR](https://list.etsi.org/scripts/wa.exe?A2=ind2004A&L=3GPP_TSG_SA_WG4_MTSI&O=D&P=54680) | Hyun-Koo Yang <hyunkoo.yang@SAMSUNG.COM> | Tue, 7 Apr 2020 14:12:33 +0900 |

Telco discussion:

Presented by Iraj Sodagar of Tencent.

Discussion:

* Prakash: Should this new text be in separate sections or spread out?
* Nikolai: Think of how to structure the PD and we can decide how to merge it into the TR later. Is the content acceptable to include in a PD? (no opposition)

The document was **noted**.

## 11.9 Others including TEI

No contributions were received.

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

## 11.11 Any Other Business

## 11.12 Close of the session

The MTSI SWG chairman, Nikolai Leung thanked the delegates and closed the session at 17:07 CEST on Wednesday, April 8 2020.

# Annex A: Meeting Agenda

**MTSI SWG Tdoc Reservation (200641-200660): 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655**

|  |  |  |
| --- | --- | --- |
| 11 | Multimedia Telephony Service for IMS (MTSI) SWG |  |
| 11.1 | Opening of the session |  |
| 11.2 | Registration of documents |  |
| 11.3 | Reports and liaisons from other groups | LS: 587a |
| 11.4 | CRs to Features in Release 15 and earlier |  |
| 11.5 | CRs to completed features in Release 16 | 26.114: 570a, 571n, 608n |
| 11.6 | E\_FLUS (Enhancements to Framework for Live Uplink Streaming) | TP: 519->652nt  26.238: 521->644a(CR), 523->645a(CR), 524->647a(CR), 525->646a(CR), 550not pursued, 551not pursued, 578->->m643->648->649->651awp,  589->642a(CR),  603->m643->648->649->651awp, 604->m643->648->649->651awp, 613->m643->648->649->651awp |
| 11.7 | ITT4RT (Support of Immersive Teleconferencing and Telepresence for Remote Terminals) | TP: 506->653nt  WID: 508a  PD: 507->609->650nt, 543a, 546a, 595nt |
| 11.8 | FS\_FLUS\_NBMP (Feasibility Study on the use of NBMP in E\_FLUS) | TP: 548->654->655nt  26.939: 549not pursued, 607n, 552n |
| 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 |  |

# Annex B: List of participants

26 delegates attended

|  |  |
| --- | --- |
| **Name** | **Organization Represented** |
| Bouazizi, Imed | Qualcomm |
| Burman, Bo | Ericsson LM |
| Chan, Yee Sin | Facebook |
| Curcio, Igor | Nokia |
| Doehla, Stefan | Fraunhofer IIS |
| Han, Jae-Shin | LG Electronics Inc. |
| Kyunghun Jung | Samsung Electronics |
| Kolan, Prakash | Samsung Research America |
| Sodagar, Iraj | Tencent |
| Leung, Nikolai | Qualcomm Incorporated |
| Lohmar, Thorsten | Ericsson LM |
| Morita, Naotaka | NTT |
| Oh, Sejin | LG Electronics Inc. |
| Oyman, Ozgur | Intel |
| Pousi, Timo | Ericsson LM |
| Hu, James | AT&T |
| Singh, Gurdeep | FhG HHI |
| Szucs, Paul | Sony Corporation |
| Yang, Hyun-Koo | Samsung Electronics |
| Yip, Eric | Samsung Electronics |
| Toftgård, Tomas | Ericsson LM |
| Gabin, Frédéric | Ericsson |
| Plante, Fabrice | Apple |
| Hakju Ryan Lee | Samsung Electronics |
| Champel, Mary-Luc | Xiaomi |
| Isberg, Peter | Sony |

1. Nikolai Leung, Qualcomm Inc., with detailed minutes provided by Bo Burman, Ozgur Oyman, Timo Pousi [↑](#footnote-ref-0)