**Source: SA4 MTSI SWG Chairman[[1]](#footnote-0)**

**Title: Draft Report for MTSI-MBS SWG 23 March 2020 Teleconference #12 on E\_FLUS**

**Document for: Approval**

**Agenda Item: 5.1**

## **Executive Summary**

The MTSI SWG teleconference on E\_FLUS received one contribution proposing corrections to the FLUS F-C Stage 3 text which was revised and the revision agreed. This agreed document will serve as the basis for generating a CR to TS 26.238.

## **1. Opening of the conference call**

|  |  |
| --- | --- |
| **SA4 MTSI SWG****Telco #12 on E\_FLUS (12->23 March 2020, time 16.00-18.00 CET, Host: Qualcomm)** | * **Discuss/agree on additional contributions to E\_FLUS**
* **Document submission deadline: 9->19 March 2020 @ 23:59 PM CET to 3GPP SA4 reflector**
 |

The SA4 MTSI SWG chairman, Nikolai Leung (Qualcomm), opened the conference call at about 16:05 hours CET on March 23, 2020.

Charles Lo and Bo Burman volunteered to take minutes on the conference call. Nikolai also requested the participants to add their names to the attendance list at the end of the on-line minutes located here:

https://docs.google.com/document/d/12lXY3mWcfj3-t4ymp1JYYJPC7CGrdVo7ClDhLwLjUD8/edit?usp=sharing

## **2. Approval of the agenda and registration of documents**

|  |  |  |  |
| --- | --- | --- | --- |
| S4-AHM519 | Proposed agenda for SA4 MTSI-MBS SWG 23 March 2020 Teleconference #12 on E-FLUS | MTSI SWG Chair(Nikolai Leung) | 2 |

The MTSI SWG chairman Nikolai Leung (Qualcomm) presented the agenda and registration of documents.

**S4-AHM519 was agreed.**

## **3. Reports and liaisons**

## **4.**  Enhancements to Framework for Live Uplink Streaming (E\_FLUS)

|  |  |  |  |
| --- | --- | --- | --- |
| S4-AHM528 | Discussion of FLUS F-C stage 3 corrections | Ericsson LM | 4 |

Presented by Thorsten Lohmar of Ericsson.

Discussion:

* Charles: Sink and session are separate resources but it seems we made a mistake in TS 26.238. I think we should leave “session” as a resource. A FLUS source can only GET a sink resource, to find information on it (cannot create, update, or terminate).
* Thorsten: I think the “sink” is related to capabilities. “Sinks” is different, to get the collection. I’m not sure why it is necessary during the sink discovery procedure to also get the URL. It also makes sense to get capabilities on an individual sink. I will call it capabilities.
* Charles: I prefer to keep “session” and make 5.3 consistent.
* Thorsten. It is not a FLUS session. That is a configuration.
* Imed: I have the same confusion. To me, it is quite clear that we have endpoints and sessions. Now it is even more confusing than before, when you renamed session to configuration.
* Thorsten: Start with proposal 3 and 4. In 7.1.1, you provide a property of a sink, which is really a capability. Rename that to capability, mapping to 7.3.
* Imed: That is also when you talk to one sink?
* Thorsten: Yes. In 7.1.1 we then don’t have 3 resources, we have 4. Add a Capabilities resource.
* Charles: Yes, you can only GET that capability resource.
* Imed: You can also only GET a sinks resource.
* Thorsten: there is missing functionality in the sink discovery procedure; such as query parameters to find only the sinks with certain capabilities.
* Charles: When correcting 5.3, we can then use the session resource.
* Thorsten: The session is overloaded, also media-related. How do we distinguish the entity that sends media and the one that receives media? How do we describe remote control and how do we fix stage 2?
* Prakash: Do we need a discovery server as an endpoint?
* Thorsten: in stage 2 text there isn’t clarity in distinguishing sink discovery vs. capabilities discovery. Might add in Section 5 text about discovery.
* Thorsten: new proposals:
	+ add new ‘Sinks’ resource which points to clause 7.2;
	+ rename ‘Sink’ resource by ‘Capabilities’ resource which can refer to clause 7.3;
	+ add some description text to clause 4.2.1 re. FLUS Sink capabilities and FLUS Sink discovery;
	+ add a new FLUS Sink discovery procedure to clause 5
* Nik: re. 5.3.2, there are mixed description titles between ‘session’ and ‘sink configuration’
* Thorsten: FLUS session also relates to transport of media streams
* Charles: are you concerned with ‘session’ as pertaining to both communication association and transmission of individual media streams.
* Thorsten: FLUS session only exists between media source and sink
* Thorsten: in 5GMS3: there is provisioning session and also uplink streaming session; two separate forms of sessions. I have no clear understanding of what to do with the term FLUS session.
* Nik: suggests some clarification text be added to Sec. 5.3.2 to describe session management.
* Charles asked why POST command does not specify individual session Ids
* Thorsten: that’s how RESTful API operates - desired changes to the subsequent GET by FLUS Source would make use of PUT and PATCH
* Charles: what happens if FLUS Source wishes to create separate audio and video sessions?
* Thorsten: then two separate POSTs would be needed
* Agreement on Proposals 3-5, plus added Proposal 6 and 7

The document was **revised to AHM529, which was agreed without presentation**.

## **5. Review of the future work plan**

|  |  |
| --- | --- |
| **SA4#108e (02-09 Apr, 2020)** | · Discuss/agree on additional contributions to E\_FLUSo Non-use case specific contributions to TR 26.939o Use case related contributions to TR 26.939o CRs to TS 26.238 |
| **SA4#109e (25-29 May, 2020)** | · Final proposals ono Non-use case specific contributions to TR 26.939o Use case related contributions to TR 26.939o CRs to TS 26.238· Reach agreement on any remaining contributions to TR 26.939 and/or TS 26.238· Prepare work item summary to be presented at SA#88 |
| **SA#88 (17-19 June, 2020, Malmo, Sweden)** | · Present work item summary to SA Plenary· Present CR to TR 26.939 for approval· Present CRs to TS 26.238 for approval |

## **6. Any Other Business**

## **7. Close of the conference call**

Call was closed at 17:25 CET.

List of Annexes:

1. Annex 1: Meeting Agenda (the final revision)

2. Annex 2: List of documents

3. Annex 3: List of participants

## **Annex 1: Meeting Agenda (the final revision)**

**Source: SA4 MTSI SWG Chairman[1]**

**Title: Proposed agenda for SA4 MTSI-MBS SWG 23 March 2020
 Teleconference #12 on E\_FLUS**

**Document for: Approval**

**Agenda Item: 2**

**1. Opening of the conference call**

|  |  |
| --- | --- |
| **SA4 MTSI SWG****Telco #12 on E\_FLUS (23 Mar 2020, time 16.00-18.00 CET, Host: Qualcomm)** | Discuss/agree on additional contributions to E\_FLUS* **Document submission deadline: 19 Mar 2020 @ 23:59 PM CET to 3GPP SA4 reflector**
 |

**2. Approval of the agenda and registration of documents**

|  |  |  |  |
| --- | --- | --- | --- |
| S4-AHM519 | Proposed agenda for SA4 MTSI-MBS SWG 23 Mar 2020 Teleconference #12 on E-FLUS | MTSI SWG Chair(Nikolai Leung) | 2 |

**3. Reports and liaisons**

**4. Enhancements to Framework for Live Uplink Streaming (E\_FLUS)**

|  |  |  |  |
| --- | --- | --- | --- |
| S4-AHM528 | Discussion of FLUS F-C stage 3 corrections | Ericsson LM | 4 |

**5. Review of the future work plan**

|  |  |
| --- | --- |
| **SA4#108e (02-09 Apr, 2020)** | · Discuss/agree on additional contributions to E\_FLUSo Non-use case specific contributions to TR 26.939o Use case related contributions to TR 26.939o CRs to TS 26.238 |
| **SA4#109e (25-29 May, 2020)** | · Final proposals ono Non-use case specific contributions to TR 26.939o Use case related contributions to TR 26.939o CRs to TS 26.238· Reach agreement on any remaining contributions to TR 26.939 and/or TS 26.238· Prepare work item summary to be presented at SA#88 |
| **SA#88 (17-19 June, 2020, Malmo, Sweden)** | · Present work item summary to SA Plenary· Present CR to TR 26.939 for approval· Present CRs to TS 26.238 for approval |

**6. Any Other Business**

**7. Close of the conference call**

Note: The deadline for document submission is **19 Mar 2020 @ 23:59 PM CET**. Please ask the MTSI SWG Chair for Tdoc# assignments.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tdoc “colour code”: **black** = submitted for the meeting

 **blue** = postponed from an earlier SA4 meeting

 **red**  = covered during this meeting

 **grey** = late submission

 **~~strikethrough~~** = withdrawn

Conclusion codes: **a** = agreed

 **app =** approved

 **n** = noted

 **u** = updated

 **np** = not pursued

 **pp** = postponed

*Note: These conclusion codes appearing in the agenda are only informative. Please refer always to the main body of the meeting report for precise and complete explanation of decisions for each document.*

Other notations: \* = allocated under more than one agenda item

-> = replaced by, [or] action follows

"Noted": A document is "noted" to indicate that its content was made available to the meeting, but that the document itself was not agreed or endorsed by the meeting. Any agreements or actions resulting from discussion of the document are explicitly indicated in the meeting report.

[1] Nikolai Leung (nleung@qti.qualcomm.com)

## Annex 2: List of documents

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tdoc** | **Title** | **Source** | **Agenda Item** | **Conclusion** |
| S4-AHM519 | Proposed agenda for SA4 MTSI-MBS SWG 23 Mar 2020 Teleconference #12 on E-FLUS | MTSI SWG Chair(Nikolai Leung) | 2 | Agreed |
| S4-AHM528 | Discussion of FLUS F-C stage 3 corrections | Ericsson LM | 4 | Revised to S4-AHM529 |
| S4-AHM529 | Discussion of FLUS F-C stage 3 corrections | Ericsson LM | 4 | Agreed |

## **Annex 3: List of participants**

|  |  |
| --- | --- |
| **Name** | **Organization Represented** |
|  Bouazizi, Imed |  Qualcomm Incorporated |
| Burman, Bo | Ericsson LM |
|  Gunkel, Simon | KPN N.V. |
| Kolan, Prakash | Samsung |
| Leung, Nikolai | Qualcomm Incorporated |
| Lo, Charles | Qualcomm Incorporated |
| Lohmar, Thorsten | Ericsson LM |
|  Szucs, Paul | Sony Corporation |
|  Sodagar, Iraj | Tencent |
|  Wang, Min |  Qualcomm Incorporated |
|  Yang, Hyun-Koo |  Samsung |
|  Zhuoyun, Zhang |  Tencent |

1. Nikolai Leung [↑](#footnote-ref-0)