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

 **MCC Meeting Report
for
SA4 Rel-18
Workshop**

**Online,17/08/2021**

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## 1 Opening of the Meeting: Tuesday August 17 at 1500 hrs CEST

The SA4 Chairman, officially declared the opening of SA4 Rel-18 workshop on 17th Aug 2021 at 15:00 hrs CEST on GoToMeeting (official tool for 3GPP e-meetings). This workshop was converted to an online meeting from the previously decided SA4 Face to Face meeting due to the lingering COVID 19 crisis worldwide.

During this meeting, the following official positions were held as:

TSG SA WG4 Chairman: Mr. Frederic Gabin (Dolby Laboratories Inc, ETSI)

TSG SA WG4 Vice Chairman: Mr. Gilles Teniou (Tencent, CCSA)
TSG SA WG4 Vice Chairman: Mr. Stefan Bruhn (Dolby Laboratories Inc, ETSI)

TSG SA WG4 Secretary: Ms. Jayeeta Saha (3GPP MCC)

More than 85 delegates representing various 3GPP IMs participated in this meeting and 10 documents were treated during the meeting.

It was brought to the attention of the Chair and other delegates, that a report from MCC on this workshop will be uploaded at the designated SA4 FTP site at the end of this workshop.

## 2 Opening Remarks by SA4 Chair

The Chair kicked off the workshop on Rel-18 with the discussion on the agenda items and its related document allocation.

The Chair read out the IPR declaration and antitrust compliance policies at the start of the workshop.

He mentioned that this workshop did not have any decision power and all the submitted documents will be discussed and noted, subsequently.

The contributions came in from various segments of the industry and 10 - 15 mins were alloted to discuss each of these contributions.

Mr. Thomas Stockhammer, Qualcomm also volunteered to take a note of the proceedings.

## A3 Reminders for usage of IT resources, IPR declaration and antitrust compliance

**IT resources:**

Delegates are reminded that they share the meeting IT resources with their fellow delegates. You should not abuse the service by using bandwidth-hogging applications such as movie downloads, streaming video, web-based gaming, etc during the meeting. Use the internet service in your hotel rooms for this!

Delegates must respect the law of the hosting country, and should not visit prohibited internet sites.

In cases of persistent abuse of the internet bandwidth, MCC may restrict individual’s use of the service.

In particular, the PCG has laid down the following network usage conditions:

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.

Since the network is a shared resource, users should exercise some basic etiquette when using the 3GPP network at a meeting. It is understood that high bandwidth applications such as downloading large files or video streaming might be required for business purposes, but delegates should be strongly discouraged in performing these activities for personal use. Downloading a movie or doing something in an interactive environment for personal use essentially wastes bandwidth that others need to make the meeting effective. The meeting chairman should remind end users that the network is a shared resource; the more one user grabs, the less there is for another. Email and its attachments already take up significant bandwidth (certain email programs are not very bandwidth efficient). In case of need the chair can ask the delegates to restrict IT usage to things that are essential for the meeting itself.

1. DON’T place your WiFi device in ad-hoc mode

2. DON’T set up a personal hotspot in the meeting room

3. DO try 802.11a if your WiFi device supports it

4. DON’T manually allocate an IP address

5. DON’T be a bandwidth hog by streaming video, playing online games, or downloading huge files

6. DON’T use packet probing software which clogs the local network (e.g., packet sniffers or port scanners)

Based on the report of the PCG ad hoc group on IT improvements:

<http://www.3gpp.org/ftp/PCG/PCG_27/DOCS/PCG27_13r1.zip>

& <http://www.3gpp.org/specifications-groups/delegates-corner>

**IPR Declaration:**

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.

Based on <http://www.3gpp.org/3gpp-calendar/89-call-for-ipr-meetings>

Antitrust Compliance:

The attention of the delegates to the meeting is drawn to the fact that 3GPP activities are subject to all applicable antitrust and competition laws and that compliance with said laws is therefore required by any participant of the meeting, including the Chairman and Vice-Chairmen and are 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 are reminded that timely submission of work items in advance of TSG/WG meetings is important to allow for full and fair consideration of such matters.

The above is based on the information given at: <http://www.3gpp.org/about-3gpp/legal-matters/21-3gpp-calendar/1616-statement-of-antitrust-compliance>

Information regarding US Export Administration Regulations (EAR):

- The information is available at <https://www.3gpp.org/about-3gpp/legal-matters>

## 4 Approval of the agenda

**S4WS-210001 Agenda for the SA4 Rel-18 Workshop on August 17, 2021**

 *Type: agenda For: Approval
 Source: Dolby Laboratories Inc.*

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

## 5 Contributions/Reports if any, from SA4 SWG Chairpersons

## 6 Proposals for Release 18

**S4WS-210002 ITT4RT and possible next steps for RL18**

 *Type: discussion For: Discussion
 Source: KPN N.V., Nokia Corporation*

**Abstract:**

Input of current status of ITT4RT and how to extend the current normative work in RL18 (i.e. ITT4XT, Immersive Teleconferencing and Telepresence for Extended Reality). Most importantly the presentation is to trigger discussion and input from interested parties to collaborate on a new RL18 work item starting begging of 2022.

**Discussion:**

This document is a joint contribution by Nokia and KPN N.V and was presented in this workshop by the latter.

It provides an overview of the current ITT4RT status and its possible extensions in RL18 (i.e., ITT4XR, Immersive Teleconferencing, and Telepresence for Extended Reality).

Discussion:

Nikolai Leung, Qualcomm: ITT4RT is currently been built up on MTSI structure.

In future, could a framework be in place to integrate other services as well ?

Igor Curcio, Nokia: There has been no pressing requirement of doing this activity in the boundaries of MTSI. It can be extended to other environments as long as functionalities are available.

Thomas Stockhammer, Qualcomm: The architecture in STAR could be taken into account. Here, only one use case is mentioned which has no connection to STAR.

Nikolai Leung, Qualcomm: One use case of bidirectional AR conferencing is supported, currently.

Simon, KPN: Agree with Thomas. In future, there is a scope with trigger antoher WI>

Jayeon: Is there a specific reason for having only one WI ?

Simon, KPN: He briefly mentioned about the plans of having more than one WI in future.

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

**S4WS-210003 On media delivery in Rel-18**

 *Type: discussion For: Discussion
 Source: BBC*

**Discussion:**

Richard Bradbury from BBC presented this document.

Thorsten Lohmar, Ericsson: Enquired about the identification of any "missing elements" in radio services.

Thomas Stockhammer, Qualcomm: Is there a full set of service requirements available ?

Is it a specific SA4 requirement or broadly a service requirement.

Richard Bradbury, BBC: A study on gap analysis would be required. This has to be chalked down before drawing the requirements that are essential to SA4.

Some of the requirements could map to SA1 as well.

Ravi, Lenevo: The commercial viability including the cost factors (specifically when the usage of spectrum in involved), for providing broadcast as a service needs be discussed at length. Lineat TV could be used as well.

Richard Bradbury, BBC: The demand for broadcast services in certain domain like Sports demands for a MBS kind of environment (like to point-to-point, point-to-multipoint).

Apart from this, there was discussion on the Uplink enhancement via gap analysis against AV production. Richard mentioned the possibility of enhancing the uplink for broadcasting with microphone feeds and cameras.

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

**S4WS-210004 Views on Rel-18**

 *Type: discussion For: Discussion
 Source: Dolby Laboratories Inc.*

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

**S4WS-210005 Quality Metric for XR in R18**

 *Type: discussion For: Discussion
 Source: HUAWEI Technologies Japan K.K.*

**Discussion:**

Qi Pan from Huawei presented this document.

Thorsten Lohmar, Ericsson: Some related discussions in SA2.

P frames and B frames are lost. In case of usage of transport protocols, they could be recovered.

It would be interesting to optimize by

1. Respecting the privacy

2. TCPs, however, this might lead to buffering issues.

So, this topic would need more study.

Qi Pan, Huawei: If we don’t need the details of exact frame and timings, then it could be acceptable from the privacy point of view.

Thorsten Lohmar, Ericsson: This type of solutions work for video retransmissions.

Imed Bouazizi, Qualcomm: Need to understand the media formats before staring QI.

Iraj Saudagar, Tencent: are they applicable to XR only ?

Qi Pan, Huawei: Parameters in QoE metrics will be useful in measuring impact in 2D or 3D videos as well.

Spencer, Tencent:

Thomas Stockhammer, Qualcomm: My question was discussed. We should not have the cart in front of the horse. Let's do the protocols and media first

 Ryan Lee, Samsung: I was almost overtaken by others too. It's okay

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

**S4WS-210006 Tencent Vision on Release 18 priorities**

 *Type: discussion For: Discussion
 Source: Tencent*

**Discussion:**

Iraj Saudagar, Tencent presented this document.

Discussion:

Thomas Stockhammer, Qualcomm: Quantification of the term "very low latency" for delivery using edge computing is required.

Iraj Saudagar, Tencent: Latency < 1sec, but not necessarily in the order of 5 - 10 ms.

IN interest of time, members decided to discuss this matter offline.

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

**S4WS-210007 5G-MAG Proposals for 3GPP SA/SA4 Rel-18**

 *Type: discussion For: Discussion
 Source: 5G MAG, ESA, Qualcomm, Saankhya Labs, ONE Media 3.0, EBU, BBC*

**Abstract:**

Input to SA4 Workshop from the 5G Media Action Group (5G-MAG)

**Discussion:**

Jordi Gimenez presented this document.

Discussion:

James Hu, AT & T: Are there any details of enhancements for XR ?

Jordi Gimenez , representing 5G-MAG: nothing in particular.

Thomas Stockhammer, Qualcomm: thank you, we support this as we are contributors. I want to specifically highlight the definition of Universal Access, which is interesting and good, but importantly it is technology agnostic.

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

**S4WS-210008 Samsung view on SA4 Rel-18 roadmap**

 *Type: discussion For: Discussion
 Source: Samsung R&D Institute UK*

**Discussion:**

Jaeyeon Song from Samsung presented this document.

No further discussion happened as the presentation was explanatory and te proponent took most of her allocated time.

There was no explicit Q&A session.

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

**S4WS-210009 3GPP SA4 Rel-18 Priorities**

 *Type: discussion For: Discussion
 Source: QUALCOMM Europe Inc. - Spain*

**Discussion:**

Nikolai Leung, Qualcomm presented this document.

Discussion:

James Hu, AT&T: Two aspects comprising the serviec framework and media service enablers are vital.

Tomas Toftgard, Ericsson: Is IVAS a matter of "concern" ?

Nikolai Leung, Qualcomm: Nothing as such.

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

### 6.1 Contributions invited for Release 18 - Stage 2 from Individual Members [IM(s)]

### 6.2 Contributions invited for Release 18 - Stage 3 from Individual Members [IM(s)]

### 6.3 Contributions to existing SA4 WID(s)/SID(s) for an extension to Rel 18

## 7 Way Forward - a short summary of this proceeding

As the meeting was drawn towards its closure, the Chairman briefly touched upon the possible areas for further work in Rel18. The areas mentioned include:

1. Media distribution with traditional media services.

2. Uplink enhancements related to AV production and contribution.

3. Framework to integrate other services, and not be limited within MTSI. Usecases of XR to be included in the future studies.

4. This should not be bounded to vertical services, and enabling collaboration and support for OTT services over 5G has to be considered.

5.To cover the interactive serives and proposal for new 5G RTC architectures.

6. A key deliverable should be commercially relevant specification.

7. Other applications integrating software support for the services

The Chair also mentioned that "summary of this workshop" will be deliberated during the opening plenary of SA4#115-e which shall serve as the basis for the upaoming SA REl18 workshop during Sep 9 - 10, 2021.

## 8 Any Other Business

Vote of Thanks: The Chair applauded Jayeon Song for coming up with the idea of this workshop and also extended a a warm thanking note to all the proponents/contributors, and delegates in this workshop.

Thomas Stockhammer, Qualcomm mentioned that it would be nice to hold this kind of workshop and discussion once the F2F meetings start. It helps in a free-hold participation where there is a seamless exchange of ideas.

Dave Singer, Apple also thanked the presenters.

All the other members have also expressed their appreciation for holding this workshop.

## 9 Closing of the Meeting: Tuesday August 17 at 18:00 hrs CEST

With no other topics left to be discussed, the Chairperson adjourned this workshop.

The meeting rose at 17:57 hrs CEST.

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*In case of any queries or comments regarding this report, please contact:*

***Ms. Jayeeta Saha*** *(email:jayeeta.saha@3gpp.org), SA4 Secretary, 3GPP MCC*