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

**Title: VIDEO SWG telco report 16th January 2024**

*The VIDEO SWG has the responsibility for general 3GPP SA4 video matters.*

MINUTES

# 3 VIDEO SWG

## 3.1 Opening of the meeting and Approval of Agenda

### 3.1.1 Opening of the meeting

Gilles Teniou (Tencent, SA4 Video SWG chair) opens the session on January 16, 2024 at 15:00 CET.

Thomas Stockhammer (Qualcomm) is assigned as scribe.

The minutes are shared online: [3GPP SA4 Video SWG Telco (January 16, 2024)](https://docs.google.com/document/d/1qTnNAf1ZGwFMEpURRZOqjzF77h4lTEEzUzoxIlHL7cM/edit?usp=sharing)

Details of the meeting can be found here:

* Overview: <https://portal.3gpp.org/Home.aspx#/meeting?MtgId=60668>
* TDocs: <https://portal.3gpp.org/ngppapp/TdocList.aspx?meetingId=60668>
* [Download TDoc list (Excel)](https://portal.3gpp.org/ngppapp/GenerateDocumentList.Aspx?meetingId=60668)

### 3.1.2 Registration of Documents

The following documents were registered:

|  |  |  |  |
| --- | --- | --- | --- |
| **TDoc** | **Title** | **Source** | **Agenda item** |
| [**S4aV230117**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230117.zip) | [FS\_FGS] Permanent Document v1.1.1 | Dolby Germany GmbH | 3.7 |
| [**S4aV230116**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230116.zip) | General and Editorial comments on TS 26.119 | Huawei, HiSilicon | 3.4 |
| [**S4aV230118**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230118.zip) | [FS\_AVATAR]pCR on additional sets of facial landmarks | HUAWEI TECHNOLOGIES Co. Ltd. | 3.9 |
| [**S4aV230121**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230121.zip) | [FS\_AI4Media] Permanent Document v1.0.1 | Samsung Electronics Co., Ltd | 3.5 |
| S4aV230120 | Draft Time Plan for the FS\_3DV Study Item | China Mobile Com. Corporation, Qualcomm Germany, ZTE,Xiaomi | 3.11 |
| [**S4aV230124**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230124.zip) | [FS\_AVATAR]pCR on additional sets of facial landmarks | HUAWEI TECHNOLOGIES Co. Ltd. | 3.9 |
| [**S4aV230123**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230123.zip) | [FS\_ARMRQoE] pCR on QoE | China Unicom | 3.6 |
| [**S4aV230122**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230122.zip) | [FS\_AVATAR] pCR on Generic Avatar AR call flows | Nokia Corporation, Huawei | 3.9 |
| [**S4aV230125**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230125.zip) | [FS\_AI4Media] Update of the bit-incremental transmission scenario | Nokia Corporation | 3.5 |
| [**S4aV230119**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230119.zip) | Study on 3D Video in 5G Services (FS\_3DV) for Rel-19 | China Mobile Com. Corporation,Qualcomm Germany, ZTE, Xiaomi | 3.11 |
| [**S4aV230129**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230129.zip) | [ARMRQoE] EN on accuracy level computation | InterDigital Finland Oy | 3.6 |
| S4aV230127 | [FS\_HEVC\_Profiles] MV-HEVC conclusions | Apple | 3.8 |
| [**S4aV230128**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230128.zip) | Feasibility Study - Immersive Visual Media | InterDigital, Europe, Ltd., Nokia, Philips | 3.11 |
| [**S4aV230130**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230130.zip) | Proposed agenda for SA4 VIDEO SWG conf. call (Jan.16th, 2024) | VIDEO SWG Chair (Tencent) | 3.1 |
| [**S4aV230132**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230132.zip) | [FS\_FGS] Updated Time and Work Plan | Dolby Germany GmbH | 3.7 |
| S4aV230131 | VIDEO SWG telco report 16th January 2024 | VIDEO SWG Chair (Tencent) | 3.2 |
| [**S4aV230126**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230126.zip) | [FS\_HEVC\_Profiles] On frame-packing | Apple | 3.8 |

3.1.3 Approval of Agenda

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| --- | --- | --- | --- |
| [**S4aV230130**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230130.zip) | Proposed agenda for SA4 VIDEO SWG conf. call (Jan.16th, 2024) | VIDEO SWG Chair (Tencent) | Gilles Teniou |

**E-mail Discussion**: none

**Presenter**: Gilles Teniou

[**S4aV230130**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230130.zip) is **approved**.

### 3.1.4 IPR and Anti-trust Reminder

Available in: [**S4-201473**](https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_111-e/Docs/S4-201473.zip)

## 3.2 Reports/Liaisons from other groups/meetings

### 3.2.1 Reports from previous meetings

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| [S4aV230114](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230114.zip) | VIDEO SWG telco report 19th December 2023 | VIDEO SWG Chair (Tencent) | Gilles Teniou |

None

* [S4aV230114](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230114.zip) is **noted**.

## 3.4 MeCAR (Media Capabilities for Augmented Reality)

*WID:* [*SP-220242*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_95E_Electronic_2022_03/Docs/SP-220242.zip) *New WID on ‘Media Capabilities for Augmented Reality’*

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| --- | --- | --- | --- |
| [**S4aV230116**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230116.zip) | General and Editorial comments on TS 26.119 | Huawei, HiSilicon | Qi Pan |

**Presenter**: Rufael Mekuria

**Discussion:**

* Emmanuel: Thanks this is very helpful to have fresh eyes. Propose to have offline before SA4#127 in order to implement the proposals
	+ Gilles: as editor, I concur. Explains some background, in particular for XR
	+ Rufael: propose to introduce earlier the terms XR

**Decision:**

* Document is agreed, we will work on a detailed input.

[**S4aV230116**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230116.zip) is **agreed**.

3.5 FS\_AI4Media (Feasibility Study on Artificial Intelligence (AI) and Machine Learning (ML) for Media)

*WID:* [*SP-220328*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_95E_Electronic_2022_03/Docs/SP-220328.zip) *New SID on Artificial Intelligence (AI) and Machine Learning (ML) for Media*

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| [**S4aV230121**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230121.zip) | [FS\_AI4Media] Permanent Document v1.0.1 | Samsung Electronics Co., Ltd | Eric Yip |

**Presenter**: Eric Yip

**Discussion:**

* No comments

**Decision:**

* Agreed as basis for future work

[**S4aV230121**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230121.zip) is **agreed**.

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| --- | --- | --- | --- |
| [**S4aV230125**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230125.zip) | [FS\_AI4Media] Update of the bit-incremental transmission scenario | Nokia Corporation | Serhan Gül |

**Presenter**: Serhan Gül

**Discussion:**

* Serhan: here is the uploaded software <https://github.com/5G-MAG/rt-ai-ml-evaluation-framework/tree/bit_incremental_transfer/scripts/BitIncremental-SA4>
* Imed: thanks - cross-validation should happen
* Imed: What did you start with in the download?
	+ Serhan: Model update is added to lower precision model.
	+ Imed: Scripts for quantization is provided?
	+ Serhan: Yes functions are available - same as in PyTorch, please check code.
* Gilles: For low precision model, bitstream size is half of 16 bit. But version is compressed. Also high precision model?
	+ Serhan: yes
	+ Gilles: low precision and model update provides to same accuracy with lower latency and smaller bitstream size?
	+ Serhan: Yes correct
	+ Gilles: Results are promising. Are other configurations possible?
	+ Serhan: Can be done as well, but for example 16 and 32 does not make a huge difference. Better is to have 4 bit model and 8 bit model initially.
* Eric: What about continuity when update from low precision to high precision. Still some discussion
	+ Serhan: not yet implemented, conceptual model for now.
	+ Eric: Support what Gilles said, namely use 4 bit model as well.

**Decision:**

* Agreed are added to the PD, cross-check should happen before moving it to the evaluation TR.

[**S4aV230125**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230125.zip) is **agreed**.

## 3.6 FS\_ARMRQoE (Feasibility Study on AR and MR QoE Metrics)

*WID:* [*SP-220616*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_96_Budapest_2022_06/Docs/SP-220616.zip) *New SID on Feasibility Study on AR and MR QoE Metrics*

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| --- | --- | --- | --- |
| [**S4aV230123**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230123.zip) | [FS\_ARMRQoE] pCR on QoE | China Unicom | Shuai Gao |

**Presenter**: Shuai Gao

**Discussion:**

* Liangping: What does the conclusion/recommendation mean? Will it impact TS 26.119?
	+ Shuai: would like discuss some additional conclusions
* Thomas:
	+ Unclear on conclusion - what does it mean? Add all any?
	+ What would be the justification to add these metrics?
	+ There are several hanging paragraphs
	+ Shuai: explains that TS 26.119 has only one metric
	+ Thomas: at this stage we cannot agree on the conclusions, metrics need to be justified to provide QoE impact. Also some implementability should be discussed.
* Imed: Implementability with OpenXR and webXR should be addressed
* Gilles:
	+ Change 1: you can remove clauses that are irrelevant
	+ Editor’s Note: can be converted into a NOTE
	+ Do not add release
	+ Change MPEG-I to MPEG
	+ Suggest to separate the editorial comments from the conclusion for SA4#127.
* Rufael: What was the justification for QoE metrics in TS 26.119?

**Decision:**

* The document is noted. Suggest to separate editorials from conclusions.

[**S4aV230123**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230123.zip) is **noted**.

|  |  |  |  |
| --- | --- | --- | --- |
| [**S4aV230129**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230129.zip) | [ARMRQoE] EN on accuracy level computation | InterDigital Finland Oy | Stephane Onno |

**Presenter**: Stephane Onno

**Discussion:**

* Liangping: How do you derive the accuracy level? From OpenXR?
	+ Stephane: very simple formula. We have 8 different cases, no specific mathematics. Maybe we could have something better
	+ Gilles: concur with Liangping’s conclusion. Maybe we can have some level providing a percentage?
	+ Stephane: could also be a possibility, kind of a different proposal
* Imed: We should add an exact measurement, and not an accuracy definition. These bits just say whether you can use them or not. Should not codify as a value, just convey them.
	+ In 3DoF, orientation more important than position !
	+ Gilles: seems to be better addressed in offline. Accuracy level not good.

**Decision:**

* Noted. Encourage offline

[**S4aV230129**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230129.zip) is **noted**.

## 3.7 FS\_FGS (Feasibility Study on Film Grain Synthesis)

*WID:* [*SP-230539*](https://www.3gpp.org/ftp/TSG_SA/TSG_SA/TSGS_100_Taipei_2023-06/Docs/SP-230539.zip) *New SID on Feasibility Study on Film Grain Synthesis*

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| [**S4aV230117**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230117.zip) | [FS\_FGS] Permanent Document v1.1.1 | Dolby Germany GmbH | Brian Lee |

**Presenter**: Brian Lee

**Discussion:**

* Gilles: Modifications should appear in revision marks
* Alexis:
	+ My biggest concern is that this does not address one of the major comments, in particular the fixed QP. We should use an encoder with adaptive quantization. The metric should account for these changes. The conclusions for real encoder, the conclusions are different. It should say that the test conditions are restricted. This has been commented many times.
	+ You are testing MOS, but not artistic intent. You should also test with additive dithering. Should be asked does it look different, not better.
	+ Brian: Will incorporate the feedback
* Madhukar:
	+ similar comments as Alexis.
	+ Also for low bitrate, would it not be better to lower the resolution
	+ Brian: We have not done lower resolution, only 4K and 1080p as part of the TR
	+ Madhukar: Question would be more on using 720p as encoding
	+ Alexis: You could also do temporal de-noising. Similar as mentioned above. Artist may want grain in perfect conditions, but in lower bitrate, denoising may be done.
* Thomas:
	+ Cannot comment, need more time due to MLK holiday
	+ Also is this aligned with JVET TR?
	+ Brian: There are differences, added JND. Also different sequences.

**Decision:**

* Suggest to note the document, address with revision marks.

[**S4aV230117**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230117.zip) is **noted**.

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| --- | --- | --- | --- |
| [**S4aV230132**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230132.zip) | [FS\_FGS] Updated Time and Work Plan | Dolby Germany GmbH | Brian Lee |

**Presenter**: Brian Lee

**Discussion:**

* Madhukar: looks very aggressive, but can revisit in January meeting.
* Thomas: this seems very ambitious, consider that submission deadline is in one week, JVET is happening and we also want to make sure that quality is high, like cross-verification. We should carefully balance quality and timeliness
* Gilles: extension may be done, justified for verification
	+ Fred: exception for studies is not possible
* Thomas: also aware that for example DVB is organizing workshop, with a different timeline. Worry that we come up with different conclusions than other SDOs and we have diverging technologies.
* Thomas: also there should be a formal CR, not a draft CR.

**Decision:**

* Agreed as of now.

[**S4aV230132**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230132.zip) is **agreed**.

## 3.8 FS\_HEVC\_Profiles (Feasibility Study on new HEVC profiles and operating points)

*WID:* [*SP-230540*](https://www.3gpp.org/ftp/TSG_SA/TSG_SA/TSGS_100_Taipei_2023-06/Docs/SP-230540.zip) *New SID on Feasibility Study on HEVC profiles and operating points*

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| [**S4aV230126**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230126.zip) | [FS\_HEVC\_Profiles] On frame-packing | Apple | Waqar Zia |

**Presenter**: Waqar Zia

**Discussion:**

* Waqar refers to a typo MV-HEVC
* Madhukar: On conclusions, why would someone put MV-HEVC to a legacy player? The conclusion needs to be updated.
	+ Waqar: We can do this today, but not with frame packing.
	+ Madhukar: understand use case, capture on iPhone 15, than share. This is a different use case.
* Madhukar: need to look at the study in terms of conclusions. WRT to frame-packed encodings, you may use advanced structures in prediction
* Emmanuel: Frame-packing only studied in AVC context, not HEVC.
	+ Waqar: have not found any results in 3GPP. Keep looking if anything can be added.
	+ Emmanuel: AVC is older technology, we have many ways to address file format aspects in the file format when using HEVC, for example tile tracks
	+ Waqar: will look into this.

**Decision:**

* As submitted late, will be noted. Expect revision for SA4#127.

[**S4aV230126**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230126.zip) is **noted**.

|  |  |  |  |
| --- | --- | --- | --- |
| S4aV230127 | [FS\_HEVC\_Profiles] MV-HEVC conclusions | Apple | Waqar Zia |

[**S4aV230127**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230127.zip) is **withdrawn**.

## 3.9 FS\_AVATAR (Feasibility Study on Avatars for Real-Time Communication)

*WID:* [*SP-230544*](https://www.3gpp.org/ftp/TSG_SA/TSG_SA/TSGS_100_Taipei_2023-06/Docs/SP-230544.zip) *New SID on Feasibility Study on Avatars for Real-Time Communication*

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| --- | --- | --- | --- |
| [**S4aV230118**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230118.zip) | [FS\_AVATAR]pCR on additional sets of facial landmarks | HUAWEI TECHNOLOGIES Co. Ltd. | Yongjing Zhang |

[**S4aV230118**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230118.zip) is **revised to** [**S4aV230124**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230124.zip).

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| --- | --- | --- | --- |
| [**S4aV230124**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230124.zip) | [FS\_AVATAR]pCR on additional sets of facial landmarks | HUAWEI TECHNOLOGIES Co. Ltd. | Yongjing Zhang |

**Presenter**: Yongjing Zhang

**Discussion:**

* Imed: Morgan is just one example. Agree that different solutions use different landmarks. Point now is to document as much as possible. Should be independent of Morgan, also for other representations. Would be ok to add this to PD.
	+ Yongjing: We can add it to PD
	+ Eric: Google also has a media pipe solution with 478 landmarks. Can also be added to the PD.

**Decision:**

* Agreed to be added to the PD to collect more information for other representations.

[**S4aV230124**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230124.zip) is **agreed**.

|  |  |  |  |
| --- | --- | --- | --- |
| [**S4aV230122**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230122.zip) | [FS\_AVATAR] pCR on Generic Avatar AR call flows | Nokia Corporation, Huawei | Gazi Karam Illahi |

[**S4aV230122**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230122.zip) is **noted due to lack of time.**

## 3.10 Others including TEI

No documents.

## 3.11 Close of the session

### 3.11.1 Any other business

|  |  |  |  |
| --- | --- | --- | --- |
| [**S4aV230119**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230119.zip) | Study on 3D Video in 5G Services (FS\_3DV) for Rel-19 | China Mobile Com. Corporation,Qualcomm Germany, ZTE, Xiaomi | Jiayi Xu |

[**S4aV230119**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230119.zip) is **noted due to lack of time**.

|  |  |  |  |
| --- | --- | --- | --- |
| [**S4aV230128**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230128.zip) | Feasibility Study - Immersive Visual Media | InterDigital, Europe, Ltd., Nokia, Philips | Gaelle Martin-Cocher |

[**S4aV230128**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230128.zip) is **noted due to lack of time**.

|  |  |  |  |
| --- | --- | --- | --- |
| **S4aV230120** | Draft Time Plan for the FS\_3DV Study Item | China Mobile Com. Corporation, Qualcomm Germany, ZTE,Xiaomi | Jiayi Xu |

**S4aV230120** is **noted due to lack of time**.

### 3.11.2 Review of the future work plan

### 3.11.3 Report

The report will be made available here:

|  |  |  |  |
| --- | --- | --- | --- |
| S4aV230131 | VIDEO SWG telco report 16th January 2024 | VIDEO SWG Chair (Tencent) | Gilles Teniou |

S4aV230131 is **noted**.

3.11.4 Close of the session

The meeting was closed at 17:05 CET.

Telco Participants

45 participants

|  |  |
| --- | --- |
| **Name** | **Company** |
| **Alexis Tourapis** | **Apple** |
| **Waqar Zia** | **Apple** |
| **Jan Outters** | **Ateme** |
| **Paul Gorley** | **CATT** |
| **Yujian Yin** | **China Mobile** |
| **Jiayi Xu** | **China Mobile** |
| **Shuai Gao** | **China Unicom** |
| **Brian Lee** | **Dolby** |
| **Frédéric Gabin** | **Dolby (SA4 chair)** |
| **Mauricio Aracena** | **Ericsson** |
| **Stefan Döhla** | **Fraunhofer IIS** |
| **Gerhard Tech** | **Fraunhofer HHI** |
| **Huan-Yu Su** | **Huawei** |
| **Yongjing Zhang** | **Huawei** |
| **Qi Pan** | **Huawei** |
| **Rufael Mekuria** | **Huawei** |
| **Elfed Howells** | **Huawei** |
| **Gaëlle Martin-Cocher** | **InterDigital** |
| **Stéphane Onno** | **InterDigital** |
| **Ahmed Hamza** | **InterDigital** |
| **Srinivas Gudumasu** | **InterDigital** |
| **Loïc Fontaine** | **InterDigital** |
| **Alan Stein** | **InterDigital** |
| **Razvan Andrei Stoica** | **Lenovo** |
| **Woosuk Kwon** | **LGE** |
| **Joonhee Yoon** | **LGE** |
| **Serhan Gül** | **Nokia** |
| **Igor Curcio** | **Nokia** |
| **Gazi Illahi** | **Nokia** |
| **Saba Ahsan** | **Nokia** |
| **Shane He** | **Nokia** |
| **Julien Lemotheux** | **Orange** |
| **Stéphane Ragot** | **Orange** |
| **Bart Kroon**  | **Philips** |
| **Thomas Stockhammer**  | **Qualcomm** |
| **Imed Bouazizi**  | **Qualcomm** |
| **Shilin Ding** | **Qualcomm** |
| **Liangping Ma**  | **Qualcomm** |
| **Eric Yip** | **Samsung** |
| **Madhukar Budagavi** | **Samsung** |
| **Paul Szucs** | **Sony** |
| **Gilles Teniou** | **Tencent** |
| **Elmira Ramazanirend** | **Vodafone** |
| **Emmanuel Thomas** | **Xiaomi** |
| **Quiting Li** | **ZTE** |

Annex A - The documents status

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| --- | --- | --- | --- | --- | --- | --- |
| **Tdoc number** | Title | Source | SWG Agenda Item | Replaced by | SWG Status | SA4 A.I. for Tdocs presented at SA4 plenary\* |
| [S4aV230085](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230085.zip) | [FS\_AI4Media] Scenario for sign language translation | CMCC, HuaWei Technologies Co., Ltd | 3.5 |  | agreed |  |
| [S4aV230086](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230086.zip) | [FS\_HEVC\_Profiles] Shared viewing experience | Nokia Corporation | 3.8 | [S4aV230090](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230090.zip) | revised |  |
| [S4aV230087](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230087.zip) | [FS\_AVATAR] Avatar animation using Morph Target | Tencent | 3.9 |  | noted |  |
| [S4aV230088](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230088.zip) | [FS\_AI4Media] basic architecture update | HuaWei Technologies Co., Ltd | 3.5 |  | agreed |  |
| [S4aV230089](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230089.zip) | Proposed agenda for SA4 VIDEO SWG conf. call (Nov. 28th, 2023) | VIDEO SWG Chair (Tencent) | 3.1 |  | approved |  |
| [S4aV230090](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230090.zip) | [FS\_HEVC\_Profiles] Shared viewing experience | Nokia Corporation | 3.8 |  | noted |  |
| [S4aV230091](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230091.zip) | VIDEO SWG telco report 28th November 2023 | VIDEO SWG Chair (Tencent) | 3.2 |  | noted |  |
| [S4aV230092](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230092.zip) | [FS\_AVATAR] Security and privacy consideration on Avatar communication  | Nokia Germany | 3.9 |  | noted |  |
| [S4aV230093](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230093.zip) | [FS\_AVATAR] Permanent Document for Avatar | Qualcomm Incorporated | 3.9 |  | agreed |  |
| S4aV230094 | [FS\_AVATAR] Description of Metahuman DNA format | Qualcomm Incorporated | 3.9 |  | postponed |  |
| [S4aV230095](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230095.zip) | [FS\_HEVC\_Profiles] Miscellaneous corrections | Apple | 3.8 |  | agreed |  |
| [S4aV230096](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230096.zip) | [FS\_HEVC\_Profiles] Updates on HEVC Evaluations | Apple | 3.8 |  | agreed |  |
| [S4aV230097](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230097.zip) | [FS\_HEVC\_Profiles] Updates on LD MV-HEVC | Apple | 3.8 |  | agreed |  |
| [S4aV230098](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230098.zip) | [FS\_AVATAR] pCR on Network Assisted Avatar Generation | Nokia Corporation | 3.9 |  | noted |  |
| [S4aV230099](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230099.zip) | [FS\_AVATAR] pCR on Network Assisted Avatar Animation | Nokia Corporation | 3.9 |  | noted |  |
| [S4aV230100](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230100.zip) | Proposed agenda for SA4 VIDEO SWG conf. call (Dec. 5th, 2023) | VIDEO SWG Chair (Tencent) | 3.1 |  | approved |  |
| [S4aV230101](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230101.zip) | VIDEO SWG telco report 5th December 2023 | VIDEO SWG Chair (Tencent) | 3.2 |  | noted |  |
| [S4aV230102](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230102.zip) | [FS\_AVATAR] Planning for Avatar SI | Qualcomm CDMA Technologies | 3.11 |  | noted |  |
| [S4aV230103](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230103.zip) | [FS\_AI4Media] Considerations on AI/ML Study | Qualcomm Incorporated | 3.11 |  | noted |  |
| [S4aV230104](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230104.zip) | Qualcomm's View on Rel-19 Planning | Qualcomm Germany | 3.11 |  | noted |  |
| [S4aV230105](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230105.zip) | [AI4Media] AIML Rel 19 planning and rel 18 completion | Samsung Electronics Co., Ltd | 3.11 | [S4aV230113](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230113.zip) | revised |  |
| [S4aV230106](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230106.zip) | [FS\_HEVC\_Profiles] FS\_HEVC\_Profiles Status, Rel-18/19 outlook | Apple Switzerland AG | 3.8 |  | noted |  |
| [S4aV230107](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230107.zip) | InterDigital's proposals for release 19 | InterDigital, Europe, Ltd. | 3.11 |  | noted |  |
| [S4aV230108](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230108.zip) | Study on 3D Video in 5G Services (FS\_3DV) for Rel-19 | China Mobile Com. Corporation,Qualcomm Germany, ZTE | 3.11 |  | noted |  |
| [S4aV230109](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230109.zip) | Draft Time Plan for the FS\_3DV Study Item | China Mobile Com. Corporation, Qualcomm Germany, ZTE | 3.11 |  | noted |  |
| [S4aV230110](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230110.zip) | Thoughts on Rel. 19 work | Nokia Hungary | 3.11 |  | noted |  |
| [S4aV230111](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230111.zip) | [MeCAR] MeCAR status overview and outlook | Xiaomi Communications | 3.4 |  | noted |  |
| [S4aV230112](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230112.zip) | Proposed agenda for SA4 VIDEO SWG conf. call (December 19th, 2023) | VIDEO SWG Chair (Tencent) | 3.1 |  | approved |  |
| [S4aV230113](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230113.zip) | [AI4Media] AIML Rel 19 planning and rel 18 completion | Samsung Electronics Co., Ltd | 3.11 |  | noted |  |
| [S4aV230114](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230114.zip) | VIDEO SWG telco report 19th December 2023 | VIDEO SWG Chair (Tencent) | 3.2 |  | noted |  |
| S4aV230115 | IVAS Room Acoustics Testing Methodologies | Orange, Philips International B.V., Qualcomm Corporation | 1.4 |  | withdrawn |  |
| [S4aV230116](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230116.zip) | General and Editorial comments on TS 26.119 | Huawei, HiSilicon | 3.4 |  | agreed |  |
| [S4aV230117](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230117.zip) | [FS\_FGS] Permanent Document v1.1.1 | Dolby Germany GmbH | 3.7 |  | noted |  |
| [S4aV230118](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230118.zip) | [FS\_AVATAR]pCR on additional sets of facial landmarks | HUAWEI TECHNOLOGIES Co. Ltd. | 3.9 | [S4aV230124](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230124.zip) | revised |  |
| [S4aV230119](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230119.zip) | Study on 3D Video in 5G Services (FS\_3DV) for Rel-19 | China Mobile Com. Corporation,Qualcomm Germany, ZTE, Xiaomi | 3.11 |  | noted |  |
| S4aV230120 | Draft Time Plan for the FS\_3DV Study Item | China Mobile Com. Corporation, Qualcomm Germany, ZTE,Xiaomi | 3.11 |  | withdrawn |  |
| [S4aV230121](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230121.zip) | [FS\_AI4Media] Permanent Document v1.0.1 | Samsung Electronics Co., Ltd | 3.5 |  | agreed |  |
| [S4aV230122](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230122.zip) | [FS\_AVATAR] pCR on Generic Avatar AR call flows | Nokia Corporation, Huawei | 3.9 |  | noted |  |
| [S4aV230123](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230123.zip) | [FS\_ARMRQoE] pCR on QoE | China Unicom | 3.6 |  | noted |  |
| [S4aV230124](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230124.zip) | [FS\_AVATAR]pCR on additional sets of facial landmarks | HUAWEI TECHNOLOGIES Co. Ltd. | 3.9 |  | agreed |  |
| [S4aV230125](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230125.zip) | [FS\_AI4Media] Update of the bit-incremental transmission scenario | Nokia Corporation | 3.5 |  | agreed |  |
| [S4aV230126](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230126.zip) | [FS\_HEVC\_Profiles] On frame-packing | Apple | 3.8 |  | noted |  |
| S4aV230127 | [FS\_HEVC\_Profiles] MV-HEVC conclusions | Apple | 3.8 |  | withdrawn |  |
| [S4aV230128](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230128.zip) | Feasibility Study - Immersive Visual Media | InterDigital, Europe, Ltd., Nokia, Philips | 3.11 |  | noted |  |
| [S4aV230129](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230129.zip) | [ARMRQoE] EN on accuracy level computation | InterDigital Finland Oy | 3.6 |  | noted |  |
| [S4aV230130](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230130.zip) | Proposed agenda for SA4 VIDEO SWG conf. call (Jan.16th, 2024) | VIDEO SWG Chair (Tencent) | 3.1 |  | approved |  |
| S4aV230131 | VIDEO SWG telco report 16th January 2024 | VIDEO SWG Chair (Tencent) | 3.2 |  | noted |  |
| [S4aV230132](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV230132.zip) | [FS\_FGS] Updated Time and Work Plan | Dolby Germany GmbH | 3.7 |  | agreed |  |

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