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

**Title: VIDEO SWG telco report 7th May 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 May 7, 2024 at 22:00 CEST.

Thomas Stockhammer (Qualcomm) is assigned as scribe.

The minutes are shared online: [3GPP SA4 Video SWG Telco (May 7, 2024)](https://docs.google.com/document/d/1tVb4XRB2Yq9shQhdLMq75B7fRvCHrqcxku6Uwm_OU3Q/edit?usp=sharing)

Details of the meeting can be found here:

* Overview: https://portal.3gpp.org/Home.aspx#/meeting?MtgId=60697
* TDocs: <https://portal.3gpp.org/ngppapp/TdocList.aspx?meetingId=60697>
* [Download TDoc list (Excel)](https://portal.3gpp.org/ngppapp/GenerateDocumentList.Aspx?meetingId=60697)

### 3.1.2 Registration of Documents

The following documents were registered:

|  |  |  |  |
| --- | --- | --- | --- |
| **TDoc** | **Title** | **Source** | **Agenda item** |
| [**S4aV240006**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240006.zip) | [FS\_Beyond2D] Summary of AR Video Capabilities from TS 26.119 | China Mobile Com. Corporation | 3.8 |
| [**S4aV240007**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240007.zip) | [FS\_Beyond2D] Summary of VR Video Profiles from TS 26.118 | China Mobile Com. Corporation | 3.8 |
| [**S4aV240008**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240008.zip) | [FS\_Beyond2D] Summary of the video capabilities for messaging services defined in TS 26.143 | China Mobile Com. Corporation | 3.8 |
| [**S4aV240011**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240011.zip) | [FS\_Beyond2D] Messaging Scenario | Qualcomm Germany | 3.8 |
| [**S4aV240012**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240012.zip) | [FS\_Beyond2D] On market relevance | Nokia Corporation | 3.8 |
| [**S4aV240013**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240013.zip) | [FS\_AI4Media] NNC results for compression of model data for automatic speech recognition without data-driven tools | Fraunhofer HHI | 3.5 |
| S4aV240015 | VIDEO SWG telco report 7th May 2024 | VIDEO SWG Chair (Tencent) | 3.2 |
| [**S4aV240016**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240016.zip) | [FS\_Beyond2D] Scenario: Beyond2D Live Streaming | China Mobile Com. Corporation | 3.8 |
| [**S4aV240017**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240017.zip) | [FS\_Beyond2D] Simplifying Scenarios | Qualcomm Germany | 3.8 |
| [**S4aV240018**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240018.zip) | Proposed agenda for SA4 VIDEO SWG conf. call (May 7th, 2024) | VIDEO SWG Chair (Tencent) | 3.1 |

### 3.1.3 Approval of Agenda

|  |  |  |  |
| --- | --- | --- | --- |
| [**S4aV240018**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240018.zip) | Proposed agenda for SA4 VIDEO SWG conf. call (May 7th, 2024) | VIDEO SWG Chair (Tencent) | Gilles Teniou |

[S4aV240018](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240018.zip) is **agreed**.

### 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

none

## 3.3 CRs to Features in Release 18 and earlier

No documents

## 3.4 VOPS (Video Operating Points - Harmonization and Stereo MV-HEVC)

*WID:* [*SP-240060*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_103_Maastricht_2024-03/Docs/SP-240060.zip) *New WID on ‘Video Operating Points - Harmonization and Stereo MV-HEVC’*

No documents.

## 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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| [S4aV240013](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240013.zip) | [FS\_AI4Media] NNC results for compression of model data for automatic speech recognition without data-driven tools | Fraunhofer HHI | Gerhard Tech |

## Presenter: Gerhard Tech

## Online Discussion:

* Gilles: What is happening in the 5-10% compression stage?
  + Gerhard: it gets inaccurate
* Imed: good to see more results. Fine tuning?
  + Gerhard: no retraining. Work on this
  + Gilles: Confused about retraining - new model or compressed model? What is the relation to the original model
  + Gerhard: is more fine tuning. Not enabled
  + Imed: Subset of data set and recalibration.
  + Gilles: would understand pruning, but why quantize again?
  + Imed: the finetuning happens in quantized space. No reconversion.
* Iraj: When you do finetuning? How many sample are needed for retraining?
  + Gerhard: no fine-tuning is used
  + Iraj: How do you know whether you need fine tuning or not.
  + Gerhard: no fine-tuning afterwards.

## Decision:

* Expect revision for SA4#128. Thanks

## [S4aV240013](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240013.zip) is noted.

## 3.6 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*

## No documents

## 3.7 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*

## No documents

## 3.8 FS\_Beyond2D (Study on Beyond 2D Video)

*WID:* [*SP-240479*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_103_Maastricht_2024-03/Docs/SP-240479.zip) *New SID on Feasibility Study on Beyond 2D Video*

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| [**S4aV240006**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240006.zip) | [FS\_Beyond2D] Summary of AR Video Capabilities from TS 26.119 | China Mobile Com. Corporation | Jiayi Xu |

**Presenter**: Jiayi Xu

**Online Discussion**:

* Thomas: do we really need to copy this?
  + Jiayi: Yes, copied and summarized
* Gaelle: What is the purpose? Why not reference?
  + Jiayi: We say we do a capability referencing
* Emmanuel: Maybe the capability tag is not good enough.
  + Jiayi: looked at expanding. But is long
* Madhukar: Confusing to do this context. There is also shall here. This needs to be reworded: An XR Device complying to device type 1 shall support the following encoding capabilities as defined in TS 26.119 [5] clause 7.2 ⇒ to TS 26.119 recommends that ...something.... shall support .... something
  + Gilles: believe we can simplify
  + Fred: no normative statements. TS 26.119 recommends/mandates... is ok at a push
* Gilles recommends to do a table on what exists.

**Decision**:

* Expect revision based on comments for SA4#128

[S4aV240006](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240006.zip) is **noted**.

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| --- | --- | --- | --- |
| [**S4aV240007**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240007.zip) | [FS\_Beyond2D] Summary of VR Video Profiles from TS 26.118 | China Mobile Com. Corporation | Jiayi Xu |

**Presenter**: Jiayi Xu

**Online Discussion**:

* Gaelle: Why remove references?
  + Jiayi: not present

**Decision**: agreed

[S4aV240007](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240007.zip) is **agreed**.

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| [**S4aV240008**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240008.zip) | [FS\_Beyond2D] Summary of the video capabilities for messaging services defined in TS 26.143 | China Mobile Com. Corporation | Jiayi Xu |

**Presenter**: Jiayi Xu

**Online Discussion**:

* Thomas: we should focus on the capabilities and not the support
* Gilles: does not seem to define any beyond 2D capabilities
  + Jiayi: messaging is of interest
  + Gilles: it needs some qualification, that nothing beyond 2D is supported such as a single sentence or a note in the introduction clause.
  + Jiayi: maybe just remove
  + Thomas: just to be clear that for messaging, we have VOPS with the expectation that MV-HEVC is expected to be added in Rel-19 and should done.

**Decision**: noted.

[S4aV240008](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240008.zip) is **noted**.

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| --- | --- | --- | --- |
| [**S4aV240011**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240011.zip) | [FS\_Beyond2D] Messaging Scenario | Qualcomm Germany | Thomas Stockhammer |

**Presenter**: Thomas Stockhammer

**Online Discussion**:

* Jiayi: Propose to have 17 as QP as well
  + Thomas: No problem
* Gaelle: Not ok with the text in 4.X
  + Thomas: can we revise, it can revise to VOPS
* Rufael: Is this generalized evaluation or specific to the scenario?
  + Thomas: It is general, but some aspects are specific specific
* Serhan: Should not say “messaging is focus”
  + Thomas: ok
* Serhan: What is market relevance?
  + Thomas: Re-used from study item description
* Gaelle: What about UE coding
  + Thomas: scenario is whatsapp encoding, no latency, but real-time
* Gilles summarizes the comments.

**Decision**:

* Expect a revision based on the comments

[S4aV240011](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240011.zip) is **noted**.

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| --- | --- | --- | --- |
| [**S4aV240012**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240012.zip) | [FS\_Beyond2D] On market relevance | Nokia Corporation | Serhan Gül |

**Presenter**: Serhan Gül

**Online Discussion**:

* Jiayi:
  + We do not need another table
  + Do not agree on market relevance definition
  + Serhan: It is a measure for marking market relevance
* Thomas:
  + We disagree that we objected to anything. We were not agreeing
  + This document is very formalistic and says that 2 companies agreeing determines market relevance. We formally object to this
  + Dimitri: +1 on Thomas comment about 2 companies.
* Rufael: We want to see some forward looking opportunities. Can you provide some guidance on market relevance
  + Thomas: We have brought constructive proposals. We are happy to iterate. We disagree to the proposal defining market relevance based on the proposal in the document.
* Gilles summarizes the discussion: There are not acceptable proposals, however, this contribution puts a proposal on the table. Since day 1, market relevance is a tricky issue. Rather than trying to agree on a common definition, as it means different things to everyone, we shoulf rather focus on the feasibility of the proposed scenarios and the maturity of the proposed solutions considering the end-to-end chain. We shoud be able to list the maturity of the technologies in terms of implementation into devices, system integration products, existing prototypes or services… This would allow every member to assess the market relevance and define their own judgement on whether normative work is needed or not. - encourages more discussion on market relevance.

**Decision**: noted

[S4aV240012](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240012.zip) is **noted**.

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| [**S4aV240016**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240016.zip) | [FS\_Beyond2D] Scenario: Beyond2D Live Streaming | China Mobile Com. Corporation | Jiayi Xu |

**Decision**: noted w/o presentation

[S4aV240016](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240016.zip) is **noted**.

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| [**S4aV240017**](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240017.zip) | [FS\_Beyond2D] Simplifying Scenarios | Qualcomm Germany | Thomas Stockhammer |

**Presenter**: Thomas Stockhammer

**Online Discussion**:

* Gaelle: Many questions
* Gaelle: We should have liaison with AG05
  + Thomas: I talked to AG05, if you wanna do a liaison go for it
  + Gilles: Good to have simplified communication. Any formal decision motivation by AG5 guidance should be based on a formal and documented liaison.
  + Thomas: go for it
  + Igor: also want to formalize the decision. We can also outsource some of the evaluations to
  + Thomas: we may defer some of the evaluation to AG05
* Gaelle: On sequences, there are rights considerations, and it should not be considered as a market relevance issue.
  + Thomas: on the sequences, we should at least try. If we cannot find any sequences, it seems that there is not really market relevance
  + Jiayi: We considered this as well, but
* Gaelle: We do not agree on messaging priority
  + Thomas: see comments below.
* Rufael: Why TR 26.955?
  + Thomas: because it was a systematic approach for evaluation
* Rufael: messaging of no interest
  + Thomas: it is of interest for us and long hanging fruits
  + Rufael: Would prefer to remove messaging proposal
* Gaelle: we agree on the simplified scenario approach

**Decision**:

* Noted, expect revision to take into account the comments.

[S4aV240017](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240017.zip) is **noted**.

## 3.9 Others including TEI

## 3.10 Close of the session

### 3.10.1 Any other business

none

### 3.10.2 Review of the future work plan

This was the last session prior to SA4#128.

### 3.10.3 Report

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| --- | --- | --- | --- |
| [S4aV240015](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240015.zip) | VIDEO SWG telco report 7th May 2024 | VIDEO SWG Chair (Tencent) | Gilles Teniou |

[S4aV240015](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240015.zip) is **noted**.

### 3.10.4 Close of the session

The meeting was closed at 0:05am CEST.

Telco Participants

31 participants

|  |  |
| --- | --- |
| **Name** | **Company** |
| **Alexis Tourapis** | **Apple** |
| **Waqar Zia** | **Apple** |
| **Dimitri Podborski** | **Apple** |
| **Jiayi Xu** | **China Mobile** |
| **Brian Lee** | **Dolby** |
| **Simon Gauntlett** | **Dolby** |
| **Frédéric Gabin** | **Dolby (SA4 chair)** |
| **Gerhard Tech** | **Fraunhofer HHI** |
| **Jangwoo Son** | **Fraunhofer HHI** |
| **Huan-Yu Su** | **Huawei** |
| **Elfed Howells** | **Huawei** |
| **Rufael Mekuria** | **Huawei** |
| **Gaëlle Martin-Cocher** | **InterDigital** |
| **Woosuk Kwon** | **LGE** |
| **Lulin Chen** | **Mediatek** |
| **Yousef Abdelmalek** | **Meta** |
| **Serhan Gül** | **Nokia** |
| **Igor Curcio** | **Nokia** |
| **Gazi Illahi** | **Nokia** |
| **Saba Ahsan** | **Nokia** |
| **Igor Curcio** | **Nokia** |
| **Bart Kroon** | **Philips** |
| **Thomas Stockhammer** | **Qualcomm** |
| **Imed Bouazizi** | **Qualcomm** |
| **Muhammed Coban** | **Qualcomm** |
| **Eric Yip** | **Samsung** |
| **Madhukar Budagavi** | **Samsung** |
| **Diego Gibellino** | **Telecom Italia** |
| **Gilles Teniou** | **Tencent (VIDEO SWG Chair)** |
| **Iraj Sodagar** | **Tencent** |
| **Emmanuel Thomas** | **Xiaomi** |

# 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\*** |
| [S4aV240006](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240006.zip) | [FS\_Beyond2D] Summary of AR Video Capabilities from TS 26.119 | China Mobile Com. Corporation | 3.8 |  | noted |  |
| [S4aV240007](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240007.zip) | [FS\_Beyond2D] Summary of VR Video Profiles from TS 26.118 | China Mobile Com. Corporation | 3.8 |  | agreed |  |
| [S4aV240008](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240008.zip) | [FS\_Beyond2D] Summary of the video capabilities for messaging services defined in TS 26.143 | China Mobile Com. Corporation | 3.8 |  | noted |  |
| [S4aV240009](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240009.zip) | [FS\_Beyond2D] Scenario: Beyond2D Live Streaming | China Mobile Com. Corporation | 3.8 | S4aV240016 | revised |  |
| [S4aV240010](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240010.zip) | [FS\_Beyond2D] Simplifying Scenarios | Qualcomm Germany | 3.8 | S4aV240017 | revised |  |
| [S4aV240011](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240011.zip) | [FS\_Beyond2D] Messaging Scenario | Qualcomm Germany | 3.8 |  | noted |  |
| [S4aV240012](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240012.zip) | [FS\_Beyond2D] On market relevance | Nokia Corporation | 3.8 |  | noted |  |
| [S4aV240013](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240013.zip) | [FS\_AI4Media] NNC results for compression of model data for automatic speech recognition without data-driven tools | Fraunhofer HHI | 3.5 |  | noted |  |
| [S4aV240014](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240014.zip) | Proposed agenda for SA4 VIDEO SWG conf. call (May 7th, 2024) | VIDEO SWG Chair (Tencent) | 3.1 | S4aV240018 | revised |  |
| [S4aV240015](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240015.zip) | VIDEO SWG telco report 7th May 2024 | VIDEO SWG Chair (Tencent) | 3.2 |  | noted |  |
| [S4aV240016](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240016.zip) | [FS\_Beyond2D] Scenario: Beyond2D Live Streaming | China Mobile Com. Corporation | 3.8 |  | noted |  |
| [S4aV240017](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240017.zip) | [FS\_Beyond2D] Simplifying Scenarios | Qualcomm Germany | 3.8 |  | noted |  |
| [S4aV240018](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_VIDEO/Docs/S4aV240018.zip) | Proposed agenda for SA4 VIDEO SWG conf. call (May 7th, 2024) | VIDEO SWG Chair (Tencent) | 3.1 |  | approved |  |

1. Gilles TENIOU, Tencent ; teniou@global.tencent.com [↑](#footnote-ref-1)