Video SWG Minutes during SA4#113e

## 11.1 Opening of the session

Mr. Gilles Teniou (Tencent, Chairman of Video SWG) opens Video SWG on April 7, 2021 at 0830 CEST.

E-mail discussion started already on Tue, 6 Apr 2021 10:08:49 +0000

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| [VIDEO SWG SA4#113-e meeting - Start of Block A](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=75) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:08:49 +0000 |
| [VIDEO SWG SA4#113-e meeting - Start of Block A](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=24697) | teniou(TeniouGilles) | Tue, 6 Apr 2021 15:30:43 +0000 |
| [Clarifications on Tdoc email agreements and tomorrow's VIDEO SWG session](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=9903) | teniou(TeniouGilles) | Tue, 6 Apr 2021 11:55:43 +0000 |

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| [Video Minutes](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=2731) | Thomas Stockhammer | Thu, 8 Apr 2021 03:53:06 +0000 |

**Schedule:**



Mr. Thomas Stockhammer (Qualcomm) is assigned as scribe.

The minutes are shared [online](https://docs.google.com/document/d/1STSRcWE335nRd7QBfbvxeZJHM46p7h9vt6UbZvHu1Pw/edit?usp=sharing).

All e-mail discussions during the week can be tracked here:

* <https://list.etsi.org/scripts/wa.exe?A1=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO>
* https://list.etsi.org/scripts/wa.exe?A1=ind2104B&L=3GPP\_TSG\_SA\_WG4\_VIDEO

Final Timestamp for e-mail discussions considered in the report: Tue, 13 Apr 2021 13:02:34 +0000

Documented highlighted in cyan will be presented to SA4 plenary.

The agenda and the registration of documents are agreed.

## 11.2 Registration of documents

The following documents were registered before the meeting and assigned to Video SWG:

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| 6.2 | Other 3GPP groups | Plenary | 416 (SA2/5QIs) -> Video SWG |
| 6.3 | Other groups | Plenary | 408 (VRIF/8K VR360) -> Video SWG |

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| 7 | Issues for immediate consideration | Plenary | 421n  539n, 429nwp, 437pp, 438pp, 563nwp,  473 (email), 526, 573 |

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| 11 | Video SWG | - |  |
| 11.1 | Opening of the session | A |  |
| 11.2 | Registration of documents | A |  |
| 11.3 | Reports and liaisons from other groups | A |  |
| 11.4 | CRs to features in Release 16 and earlier | A |  |
| 11.5 | 8K\_VR\_5G (Operation Points for 8K VR 360 Video over 5G) | B | 434, 435, 457 |
| 11.6 | FS\_VR\_CoGui (Feasibility Study on VR Streaming Conformance and Guidelines) | B |  |
| 11.7 | FS\_5GVideo (Feasibility Study on 5G Video Codec Characteristics) | A | 460, 461, 463, 464, 465, 567, 568, 572  458, 459, 462, 520 |
| 11.8 | FS\_XRTraffic (Feasibility Study on Typical Traffic Characteristics for XR Services and other Media) | B | 467, 468, 469  466, ~~502~~ |
| 11.9 | FS\_5GSTAR (Feasibility Study on 5G Glass-type AR/MR Devices) | A | 427, 436, 445, 446, 447, 470, 504, 505, 508, 509, 510, 512, 513  471 |
| 11.10 | New Work / New Work Items and Study Items | B | 8K TV over 5G: 472 |
| 11.11 | Liaisons and Liaison Responses | B |  |
| 11.12 | Any Other Business | B |  |
| 11.13 | Close of the session | B |  |

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| TDoc | Title | Source | Agenda item |
| [S4-210416](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210416.zip) | Reply LS on New Standardized 5QIs for 5G-AIS (Advanced Interactive Services) | 3GPP SA2 | 6.2 |
| [S4-210408](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210408.zip) | Reply Liaison Statement on 8K VR 360 operation points | VRIF | 6.3 |
| [S4-210434](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210434.zip) | Discussion on addition of Hybrid Log-Gamma (HLG) to VR Video Profiles | BBC, Apple, KPN N.V., Sony Corporation, Intel, EBU. | 11.5 |
| [S4-210435](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210435.zip) | Addition of HLG Transfer Characteristics | BBC, Apple, KPN N.V., Sony Corporation, Intel, EBU. | 11.5 |
| [S4-210457](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210457.zip) | [8K\_VR\_5G] Typical Traffic Characteristics | Qualcomm Incorporated | 11.5 |
| [S4-210429](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210429.zip) | Adding AV1 to the 5G Video Study | Apple, ATEME, AT&T, BBC, Facebook Inc., Google, Intel, Samsung | 11.7 |
| [S4-210437](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210437.zip) | Revised SID of 5G Video | Apple, ATEME, AT&T, BBC, Facebook Inc., Google, Intel, Samsung | 11.7 |
| [S4-210438](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210438.zip) | Proposed update to TR 26.955 | Apple, ATEME, AT&T, BBC, Facebook Inc., Google, Intel, Samsung | 11.7 |
| [S4-210458](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210458.zip) | Proposed Updated Work Plan for FS\_5GVideo | Qualcomm Incorporated | 11.7 |
| [S4-210459](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210459.zip) | TR26.955: Proposed Editor's Update | Qualcomm Incorporated | 11.7 |
| [S4-210460](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210460.zip) | pCR26.955: Verification | Qualcomm Incorporated | 11.7 |
| [S4-210461](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210461.zip) | [FS\_5G\_Video] Status | Qualcomm Incorporated | 11.7 |
| [S4-210462](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210462.zip) | pCR26.955: FullHD Streaming | Qualcomm Incorporated | 11.7 |
| [S4-210463](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210463.zip) | pCR26.955: Messaging and Social Sharing | Qualcomm Incorporated | 11.7 |
| [S4-210464](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210464.zip) | pCR26.955: Updates to Reference Sequences | Qualcomm Incorporated | 11.7 |
| [S4-210465](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210465.zip) | [FS\_5G\_Video] Screen Content Sequence | Qualcomm Incorporated | 11.7 |
| S4-210520 | AVC anchor | InterDigital, Europe, Ltd. | 11.7 |
| [S4-210563](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210563.zip) | Concerns related to the proposed update to the FS\_5GVideo Work Item | InterDigital, Europe, Ltd., Qualcomm Incorporated, Fraunhofer-Gesellschaft, Ericsson, Nokia, Dolby, Orange, Sisvel, Philips | 11.7 |
| [S4-210567](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210567.zip) | Updates to 4K-TV scenario | Ericsson LM, Interdigital, ATEME | 11.7 |
| [S4-210568](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210568.zip) | Sequences for social messaging scenario | Ericsson LM, Qualcomm Inc. | 11.7 |
| [S4-210572](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210572.zip) | [FS\_5GVideo] On Messaging and Social Sharing source sequences | Tencent | 11.7 |
| [S4-210466](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210466.zip) | Proposed Updates to Work Plan for FS\_XRTraffic | Qualcomm Incorporated | 11.8 |
| [S4-210467](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210467.zip) | [FS\_XRTraffic] Proposed TR26.9xx | Qualcomm Incorporated | 11.8 |
| [S4-210468](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210468.zip) | [FS\_XRTraffic] SA4 and RAN1 Collaboration Proposal | Qualcomm Incorporated | 11.8 |
| [S4-210469](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210469.zip) | [FS\_XRTraffic] Updates to Quality Evaluation Framework | Qualcomm Incorporated | 11.8 |
| S4-210502 | Discussion on the packet level importance in the XR Services | HUAWEI Technologies Japan K.K. | 11.8 |
| [S4-210427](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210427.zip) | Introduction and overview of ETSI AR Framework Architecture | Perey Research & Consulting | 11.9 |
| [S4-210436](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210436.zip) | [5G\_STAR] Comparison of TR26.998 Architecture and ETSI ISG AR Framework GS 003 | Perey Research & Consulting | 11.9 |
| [S4-210445](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210445.zip) | Proposed Architectures for AR Conversational Services | HUAWEI TECHNOLOGIES Co. Ltd. | 11.9 |
| [S4-210446](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210446.zip) | [5GSTAR] pCR on TR 26.998 to add use case on AR Gaming | China Mobile Com. Corporation | 11.9 |
| [S4-210447](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210447.zip) | Proposed Functionalities of 5G EDGAR | China Mobile Com. Corporation | 11.9 |
| [S4-210470](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210470.zip) | [FS\_5GSTAR] Device Considerations | Qualcomm Incorporated | 11.9 |
| S4-210471 | [FS\_5GSTAR] Proposed Updates to Architectures | Qualcomm Incorporated | 11.9 |
| [S4-210504](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210504.zip) | [5GSTAR] Updated Work Plan | Samsung Guangzhou Mobile R&D | 11.9 |
| [S4-210505](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210505.zip) | [5GSTAR] pCR on Mapping to 5G System Architecture | Samsung Guangzhou Mobile R&D | 11.9 |
| [S4-210508](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210508.zip) | FS\_5GSTAR: Content formats and codecs pCR | Samsung Electronics Czech | 11.9 |
| [S4-210509](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210509.zip) | [5GSTAR] pCR on architecture & media flow for interactive services | Samsung Guangzhou Mobile R&D | 11.9 |
| [S4-210510](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210510.zip) | Draft TR 26.998 | Samsung Guangzhou Mobile R&D | 11.9 |
| [S4-210512](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210512.zip) | [5G\_STAR] 5GMS Immersive downlink streaming procedures for EDGAR UEs | Fraunhofer HHI | 11.9 |
| [S4-210513](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210513.zip) | [5G\_STAR] 5GMS Immersive downlink streaming procedures and architecture for Edge-assisted STAR UEs | Fraunhofer HHI | 11.9 |
| [S4-210472](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210472.zip) | 8K TV over 5G | Qualcomm Incorporated | 11.10 |
| S4-210453 | Information from ITU-T SG 12 on Online Gaming | Qualcomm Incorporated | 11.12 |

## 11.3 Reports and liaisons from other groups

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| [S4-210416](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210416.zip) | Reply LS on New Standardized 5QIs for 5G-AIS (Advanced Interactive Services) | 3GPP SA2 | Jayeeta Saha |

**E-mail Discussion:**

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| [[LSin, 416, Block B, 12th Apr. 0700CEST] Reply LS on New Standardized 5QIs for 5G-AIS (Advanced Interactive Services)](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=19593) | teniou(TeniouGilles) | Fri, 9 Apr 2021 09:38:55 +0000 |
| [[LSin, 416, Block B, 12th Apr. 0700CEST] Reply LS on New Standardized 5QIs for 5G-AIS (Advanced Interactive Services)](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=32523) | Thomas Stockhammer | Sun, 11 Apr 2021 09:47:29 +0000 |

**Presenter:** Gilles Teniou (Chair)

**Online Discussion:**

* Gilles summarizes the discussion.

**Decision:**

* Note 416
* Add information to PD of XR-Traffic

**S4-210416** is noted.

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| [S4-210408](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210408.zip) | Reply Liaison Statement on 8K VR 360 operation points | VRIF | Jayeeta Saha |

**E-mail Discussion:**

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| [[LSin, 408, Block B, 12th Apr. 0700CEST] VRIF Reply to Liaison Statement on 8K VR 360 operation points](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=20408) | teniou(TeniouGilles) | Fri, 9 Apr 2021 09:39:10 +0000 |
| [[LSin, 408, Block B, 12th Apr. 0700CEST] VRIF Reply to Liaison Statement on 8K VR 360 operation points](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=34772) | Thomas Stockhammer | Sun, 11 Apr 2021 10:41:08 +0000 |

**Presenter:** Gilles Teniou (Chair)

**Online Discussion:**

* Gilles summarizes the e-mail discussion.
  + Postponing is proposed

**Decision:**

* Postponed

**S4-210408** is postponed.

## 11.4 CRs to completed features in Release 16 and earlier

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| [S4-210609](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210609.zip) | dCR26.116: Addition of Chroma Sample Location Type for BT.2020 (Rel-16) | Qualcomm Incorporated | Thomas Stockhammer |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* none

**Decision:**

* Agreed as baseline for future work.
* Tencent co-signs CR
* CR will be provided for SA4#114e.

**S4-210609** is agreed.

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| [S4-210610](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210610.zip) | dCR26.118: Addition of Chroma Sample Location Type for BT.2020 (Rel-16) | Qualcomm Incorporated | Thomas Stockhammer |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* none

**Decision:**

* Agreed as baseline for future work.
* Tencent co-signs CR
* CR will be provided for SA4#114e.

**S4-210610** is agreed.

## 11.5 8K\_VR\_5G (Operation Points for 8K VR 360 Video over 5G)

WID:  [*SP-200667*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGs_89E_Electronic/Docs/SP-200667.zip) New WID on 'Operation Points for 8K VR 360 Video over 5G'

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| [S4-210434](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210434.zip) | Discussion on addition of Hybrid Log-Gamma (HLG) to VR Video Profiles | BBC, Apple, KPN N.V., Sony Corporation, Intel, EBU. | Paul Gorley |

**E-mail Discussion:**

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| --- | --- | --- |
| [[8K\_VR\_5G, 434, Block B, 12th Apr. 0700CEST] Discussion on addition of Hybrid Log-Gamma (HLG) to VR Video Profiles](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=21208) | teniou(TeniouGilles) | Fri, 9 Apr 2021 09:39:29 +0000 |
| [[8K\_VR\_5G, 434, Block B, 12th Apr. 0700CEST] Discussion on addition of Hybrid Log-Gamma (HLG) to VR Video Profiles](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=41847) | Rajan Laxman Joshi | Mon, 12 Apr 2021 04:03:32 +0000 |
| [[8K\_VR\_5G, 434, Block B, 12th Apr. 0700CEST] Discussion on addition of Hybrid Log-Gamma (HLG) to VR Video Profiles](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=33965) | Thomas Stockhammer | Sun, 11 Apr 2021 10:11:57 +0000 |

**Presenter:** Paul Gorley (BBC)

**Online Discussion:**

* Gilles summarizes the e-mail discussion
* Gilles: Why is this done?
  + Paul: Specification alignment, and we also would like to deploy HLG for VR
* Thomas: we need to be clear on what we agree. 8K only for now.
  + Gilles: Yes, this is my understanding

**Decision:**

* We agree to the inclusion of HLG in the scope of this study item, i.e. for 8K Work Item.

**S4-210434** is agreed.

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| [S4-210435](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210435.zip) | Addition of HLG Transfer Characteristics | BBC, Apple, KPN N.V., Sony Corporation, Intel, EBU. | Paul Gorley |

**E-mail Discussion:**

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| [[8K\_VR\_5G, 435, Block B, 12th Apr. 0700CEST] Addition of HLG Transfer Characteristics](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=22021) | teniou(TeniouGilles) | Fri, 9 Apr 2021 09:39:44 +0000 |
| [[8K\_VR\_5G, 435, Block B, 12th Apr. 0700CEST] Addition of HLG Transfer Characteristics](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=33354) | Thomas Stockhammer | Sun, 11 Apr 2021 10:08:33 +0000 |

**Presenter:** Paul Gorley (BBC)

**Online Discussion:**

* Gilles: summarizes the e-mail discussion
* Review of Qualcomm comments:
  + Chroma\_sample\_loc\_type shall be set to 2 is missing
  + Addition of HLG to 4K is a new feature. Can we do this?
  + Paul: we do not get alignment between TV Video Profile. Richard: We could do a new work item
  + Thomas: the main point is the addition of a feature to the same code point. Propose an update to the work item. Agreement to add the HLG also for flexible operation point.
  + Fred: we need a new rapporteur
  + Thomas: I can do this, not so complicated.
  + On the chroma\_sample\_loc\_type, create new CR to Rel-16.

**Decision:**

* Work item update (Thomas will do) => 608
* Revision addressing the issues in the comment
* Thomas as rapporteur
* Thomas offers to provide two draft CRs on chroma loc => 609 (26.116), 610 (26.118)

**S4-210435** is revised to **S4-210607**.

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| [S4-210607](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210607.zip) | Addition of HLG Transfer Characteristics | BBC, Apple, KPN N.V., Sony Corporation, Intel, EBU. | Paul Gorley |

**E-mail Discussion:**

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| [[8K\_VR\_5G, 435->607, Block B, 12th Apr. 0700CEST] Addition of HLG Transfer Characteristics](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=50396) | Richard Bradbury | Mon, 12 Apr 2021 12:44:02 +0100 |

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| --- | --- | --- |
| [[8K\_VR\_5G, 435->607, Block B, 12th Apr. 0700CEST] Addition of HLG Transfer Characteristics](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=58776) | Richard Bradbury | Mon, 12 Apr 2021 21:24:35 +0100 |

**Presenter:** Paul Gorley (BBC)

**Online Discussion:**

* Thomas:
  + we should say earlier Releases
  + We should also add in the receiver that this SEI message needs to be processed

**Decision:**

* Agree as baseline. Expect to take into account the comments above for the next meeting.

**S4-210607** is agreed.

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| [S4-210608](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210608.zip) | Work Item Update for [*SP-200667*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGs_89E_Electronic/Docs/SP-200667.zip) New WID on 'Operation Points for 8K VR 360 Video over 5G' | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

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| [Update of 8K\_VR\_5G Work Item](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=59803) | Thomas Stockhammer | Mon, 12 Apr 2021 20:36:14 +0000 |

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| [S4-210664: Work Item Update for SP-200667 New WID on 'Operation Points for 8K VR 360 Video over 5G'](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=86504) | Thomas Stockhammer | Tue, 13 Apr 2021 13:02:34 +0000 |
| [S4-210664: Work Item Update for SP-200667 New WID on 'Operation Points for 8K VR 360 Video over 5G'](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=85601) | Paul Gorley | Tue, 13 Apr 2021 12:56:54 +0000 |
| [S4-210664: Work Item Update for SP-200667 New WID on 'Operation Points for 8K VR 360 Video over 5G'](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=84033) | Thomas Stockhammer | Tue, 13 Apr 2021 10:42:41 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Gilles: remove initial rapporteur
* Richard: generally ok, we will review

**Decision:**

* Agreed in general, comments above will be taken into account.

**S4-210608** is revised to **S4-210664.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210664](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210664.zip) | Work Item Update for [*SP-200667*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGs_89E_Electronic/Docs/SP-200667.zip) New WID on 'Operation Points for 8K VR 360 Video over 5G' | Qualcomm Incorporated | Thomas Stockhammer |

**S4-210664** is presented SA4 plenary.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210457](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210457.zip) | [8K\_VR\_5G] Typical Traffic Characteristics | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[8K\_VR\_5G, 457, Block B, 12th Apr. 0700CEST]Typical Traffic Characteristics](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=22804) | teniou(TeniouGilles) | Fri, 9 Apr 2021 09:40:15 +0000 |
| [[8K\_VR\_5G, 457, Block B, 12th Apr. 0700CEST]Typical Traffic Characteristics](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=45808) | teniou(TeniouGilles) | Mon, 12 Apr 2021 05:38:02 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* No comments

**Decision:**

* Agreed.
* The formal CR is in **S4-210611**.

**S4-210457** is agreed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210611](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210611.zip) | CR 26.925-0001 Typical Traffic Characteristics for 8K VR | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[8K\_VR\_5G, 611, Block B, 14th Apr. 0600CEST] CR to 26.925](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=84928) | teniou(TeniouGilles) | Tue, 13 Apr 2021 10:53:19 +0000 |

**Decision:**

* Agreed/Revised.

**S4-210611** is XXX.

## 11.6 FS\_VR\_CoGui (Feasibility Study on VR Streaming Conformance and Guidelines)

WID:  [*SP-190642*](https://www.3gpp.org/ftp/Meetings_3GPP_SYNC/SA/Docs/SP-190642) New SID on 'VR Streaming Conformance and Guidelines' (FS\_VR\_CoGui)

## 11.7 FS\_5GVideo (Feasibility Study on 5G Video Codec Characteristics)

WID:  [*SP-200052*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_87E_Electronic/Docs/SP-200052.zip) Feasibility Study on 5G Video Codec Characteristics (FS\_5GVideo)

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210429](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210429.zip) | Adding AV1 to the 5G Video Study | Apple, ATEME, AT&T, BBC, Facebook Inc., Google, Intel, Samsung | Fabrice Plante |

**S4-210429** was dealt in opening SA4 plenary under agenda item 7 and is noted without presentation.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210563](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210563.zip) | Concerns related to the proposed update to the FS\_5GVideo Work Item | InterDigital, Europe, Ltd., Qualcomm Incorporated, Fraunhofer-Gesellschaft, Ericsson, Nokia, Dolby, Orange, Sisvel, Philips | Gaelle Martin-Cocher |

**S4-210563** was dealt in opening SA4 plenary under agenda item 7 and is noted without presentation.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210437](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210437.zip) | Revised SID of 5G Video | Apple, ATEME, AT&T, BBC, Facebook Inc., Google, Intel, Samsung | Fabrice Plante |

**S4-210437** was dealt in opening SA4 plenary under agenda item 7 and is postponed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210438](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210438.zip) | Proposed update to TR 26.955 | Apple, ATEME, AT&T, BBC, Facebook Inc., Google, Intel, Samsung | Fabrice Plante |

**S4-210438** was dealt in opening SA4 plenary under agenda item 7 and is postponed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210458](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210458.zip) | Proposed Updated Work Plan for FS\_5GVideo | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_5GVideo, 458, Block A, 7th Apr. 2200CEST] Workplan update](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=17963) | teniou(TeniouGilles) | Tue, 6 Apr 2021 14:26:25 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* No comments

**Decision:**

* agreed

**S4-210458** is agreed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210459](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210459.zip) | TR26.955: Proposed Editor's Update | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_5GVideo, 459, Block A, 7th Apr. 2200CEST] Proposed Editor's updates to TR](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=19461) | teniou(TeniouGilles) | Tue, 6 Apr 2021 14:26:31 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* No comments received

**Decision:**

* Agreed as basis for future work

**S4-210459** is agreed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210460](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210460.zip) | pCR26.955: Verification | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_5GVideo, 460, Block A, 7th Apr. 2200CEST] Verification](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=18707) | teniou(TeniouGilles) | Tue, 6 Apr 2021 14:26:17 +0000 |
| [[FS\_5GVideo, 460, Block A, 7th Apr. 2200CEST] Verification](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=63960) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:29:48 +0000 |
| [[FS\_5GVideo, 460, Block A, 7th Apr. 2200CEST] Verification](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=69389) | Michel Kerdranvat | Wed, 7 Apr 2021 16:51:08 +0000 |
| [[FS\_5GVideo, 460, Block A, 7th Apr. 2200CEST] Verification](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=70057) | Thomas Stockhammer | Wed, 7 Apr 2021 17:31:29 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Gilles summarizes the discussion
  + 4 digits for validation on MS-SSIM
  + Reduce the complexity on metrics by reducing the number of QPs to 2: add at least 2 instead of every.
  + Other comments from Tencent are addressed in the e-mail
* Dmytro: are two verification reports sufficient?
  + Gilles: it is a balance, and the minimum. As everything is publicly available, this is simpler than cross-checking.
* No other comments

**Decision:**

* Agreed taking into account the comments above
* Will be added to an updated version of TR26.955 in S4-210555.

**S4-210460** is agreed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210555](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210555.zip) | TR26.955 v1.1.0 | Qualcomm Incorporated | Thomas Stockhammer |

**S4-210555** is presented to SA4 plenary.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210461](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210461.zip) | [FS\_5G\_Video] Status | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_5GVideo, 461, Block A, 7th Apr. 2200CEST] Status](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=16445) | teniou(TeniouGilles) | Tue, 6 Apr 2021 14:26:14 +0000 |
| [[FS\_5GVideo, 461, Block A, 7th Apr. 2200CEST] Status](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=64769) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:35:53 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Gilles summarizes the document
* No comments

**Decision:**

* It was decided to create a permanent document on status based on this document.

**S4-210461** is agreed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210556](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210556.zip) | Permanent Document on Status and Open Issues on FS\_5GVideo | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [Draft PD for 5G Video](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=36658) | Thomas Stockhammer | Sun, 11 Apr 2021 20:02:04 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Gilles: like the way of processing

**Decision:**

* Agreed as baseline. Updates will be done tracking open issue

**S4-210556** is revised to **S4-210665**.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210665](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210665.zip) | Permanent Document on Status and Open Issues on FS\_5GVideo v0.1.0 | Qualcomm Incorporated | Thomas Stockhammer |

**S4-210665** is presented to SA4 plenary.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210462](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210462.zip) | pCR26.955: FullHD Streaming | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_5GVideo, 462, Block A, 7th Apr. 2200CEST] FullHD streaming sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=21160) | teniou(TeniouGilles) | Tue, 6 Apr 2021 14:31:43 +0000 |
| [[FS\_5GVideo, 462, Block A, 7th Apr. 2200CEST] FullHD streaming sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=65339) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:41:45 +0000 |

|  |  |  |
| --- | --- | --- |
| [[FS\_5GVideo, 462, Block A, 7th Apr. 2200CEST] FullHD streaming sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=1072) | Thomas Stockhammer | Thu, 8 Apr 2021 03:35:01 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Thomas provides the summary
* Rajan: is the convex full for every codec and sequence or for every codec
  + Thomas: I believe if you emulate per title encoding, you do it every sequence and every title. This is important
  + Alexis: Agree on per title, also the metric needs to be taken into account.
  + Thomas: need to agree on the metrics, better just prune the metrics
  + Alexis: yes, reduce metrics - use just one.
  + Thomas: agree
  + Alexis: there is some complexity in how to generate this. If you use different metrics, this may cause some issues. Would suggest just one.
* Lukasz: Do we want to prescribe the resolutions and QP?
  + Thomas: surely for the anchors, not for the tests. This would more for the proponents.
  + Alexis: It is important that you generate the points for interpolation. You need around 6 to 8 points to check the particular aspects of an encoder.
  + Lukasz: How to decide the anchors and bitrates
  + Alexis: in other fora we care about the whole range.
* Gilles: we suggest to use the same sequences for the 4K scenarios.
  + Lukasz: Why would not start from 4K?
  + Gilles: This is the scenario. We had FullHD as an important case
  + Thomas: We could run this for 4K as well and add this to the metrics. Then FullHD would just be a subset.
  + Alexis: we do this as well, so may be a good idea. Also maybe reduce the duration.
* Rajan: Are doing this from FullHD or for 4K?
  + Thomas: Inclined to do for 4K, but use only fullHD in fullHD - more details can start
* Lukasz: Which 4K sequences are we using? Can we change each of the sequences to 3840 or 4096?
  + Thomas: these are details. Let’s agree on the sequences
  + Gilles: agree
* Lukasz: Can we have the Convex Hull optimization?
  + Thomas: Not sure, need to check if it can be shared
  + Alexis: We will try to contribute

**Decision:**

* Agreed in principle
* Revise based on the discussion above

**S4-210462** is revised to **S4-210557**.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210557](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210557.zip) | pCR26.955: FullHD Streaming | Qualcomm Incorporated | Thomas Stockhammer |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Not yet ready

**Decision:**

* Is noted and will be discussed on upcoming telco

**S4-210557** is noted.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210463](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210463.zip) | pCR26.955: Messaging and Social Sharing | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_5GVideo, 463, Block A, 7th Apr. 2200CEST] Messaging and social sharing](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=28527) | Fabrice Plante | Tue, 6 Apr 2021 11:59:03 -0700 |
| [[FS\_5GVideo, 463, Block A, 7th Apr. 2200CEST] Messaging and social sharing](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=17193) | teniou(TeniouGilles) | Tue, 6 Apr 2021 14:26:13 +0000 |

|  |  |  |
| --- | --- | --- |
| [[FS\_5GVideo, 463, Block A, 7th Apr. 2200CEST] Messaging and social sharing](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=37559) | Thomas Stockhammer | Sun, 11 Apr 2021 21:12:30 +0000 |

|  |  |  |
| --- | --- | --- |
| [[VIDEO][FS\_5GVideo, 463->599, Block A, 7th Apr. 2200CEST] Messaging and social sharing](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=72629) | Thomas Stockhammer | Tue, 13 Apr 2021 05:24:04 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Gilles summarizes
  + Comments from Apple
* We need to define the anchors and configs - this can be done offline
* It is orthogonal to 568, only in the implementation it needs to be checked.

**Decision:**

* Take offline and define and all of the configs

**S4-210463** is revised to **S4-210599**.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210599](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210599.zip) | pCR26.955: Messaging and Social Sharing | Qualcomm Incorporated | Thomas Stockhammer |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* No comments

**Decision:**

* Agreed
* Track the issues in the PD

**S4-210599** is agreed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210464](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210464.zip) | pCR26.955: Updates to Reference Sequences | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_5GVideo, 464, Block A, 7th Apr. 2200CEST] Updates on reference sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=14102) | teniou(TeniouGilles) | Tue, 6 Apr 2021 14:26:02 +0000 |
| [[FS\_5GVideo, 464, Block A, 7th Apr. 2200CEST] Updates on reference sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=65992) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:46:49 +0000 |
| [[FS\_5GVideo, 464, Block A, 7th Apr. 2200CEST] Updates on reference sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=67585) | Michel Kerdranvat | Wed, 7 Apr 2021 16:25:42 +0000 |
| [[FS\_5GVideo, 464, Block A, 7th Apr. 2200CEST] Updates on reference sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=68558) | Thomas Stockhammer | Wed, 7 Apr 2021 16:32:30 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Together with 567

**Decision:**

* merged

**S4-210464** is merged into **S4-210558**.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210465](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210465.zip) | [FS\_5G\_Video] Screen Content Sequence | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_5GVideo, 465, Block A, 7th Apr. 2200CEST] Screen Content Sequence](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=13337) | teniou(TeniouGilles) | Tue, 6 Apr 2021 14:26:05 +0000 |
| [[FS\_5GVideo, 465, Block A, 7th Apr. 2200CEST] Screen Content Sequence](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=71029) | Fabrice Plante | Wed, 7 Apr 2021 10:56:00 -0700 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Gilles summarizes the discussion
  + Comments from Apple are good, needs offline discussion

**Decision:**

* Needs revision and offline.

**S4-210465** is revised to **S4-210559**.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210559](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210559.zip) | [FS\_5G\_Video] Screen Content Sequence | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [Doc 559](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=39254) | Thomas Stockhammer | Mon, 12 Apr 2021 02:15:26 +0000 |
| [Doc 559](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=42784) | Thomas Stockhammer | Mon, 12 Apr 2021 04:16:18 +0000 |
| [Doc 559](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=35600) | Thomas Stockhammer | Sun, 11 Apr 2021 17:46:13 +0000 |
| [Doc 559](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=38523) | Fabrice Plante | Sun, 11 Apr 2021 18:16:41 -0700 |

|  |  |  |
| --- | --- | --- |
| [Doc 559](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=68846) | Thomas Stockhammer | Tue, 13 Apr 2021 04:02:04 +0000 |
| [Doc 559](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=54200) | Gaëlle Martin-Cocher | Mon, 12 Apr 2021 16:57:14 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Revision had been provided
* Gaelle: Is EPZS consistent with HEVC approach?
  + Fabrice: not the expert for more feedback.
  + Thomas: final comments
* Gaelle: Please add search range 64
* Fabrice: How do you use the 10 bit for 8 bit sequences?
  + Gaelle: We use the method in the paper
  + Thomas: we need to make sure that we do the metrics computation correctly in order to compare
  + Gaelle: are we too complicated?
  + Thomas: we can add this to be checked

**Decision:**

* Agreed with the comments from above - taken into account by the editor in implementation.
* List this as open issues in the updated PD.

**S4-210559** is revised to **S4-210666.**

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210666](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210666.zip) | [FS\_5G\_Video] Screen Content Sequence | Qualcomm Incorporated | Thomas Stockhammer |

**S4-210666** is agreed**.**

|  |  |  |  |
| --- | --- | --- | --- |
| S4-210520 | AVC anchor | InterDigital, Europe, Ltd. | Gaelle Martin-Cocher |

**S4-210520** is withdrawn.

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| [S4-210567](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210567.zip) | Updates to 4K-TV scenario | Ericsson LM, Interdigital, ATEME | Bo Burman |

**E-mail Discussion:**

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| [[FS\_5GVideo, 567, Block A, 7th Apr. 2200CEST] Updates to 4KTV scenario](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=12571) | teniou(TeniouGilles) | Tue, 6 Apr 2021 14:26:08 +0000 |
| [[FS\_5GVideo, 567, Block A, 7th Apr. 2200CEST] Updates to 4KTV scenario](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=50854) | Thomas Stockhammer | Wed, 7 Apr 2021 14:38:50 +0000 |

**Presenter:** Lukasz Litwic (Ericsson)

**Online Discussion:**

* Merged with 464

**Decision:**

* Agreed in principle, but needs merge

**S4-210567** is merged to **S4-210558**.

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| [S4-210558](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210558.zip) | Updates to 4K-TV scenario and Reference Sequences | Ericsson LM, Interdigital, ATEME, Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

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| [Upload of S4-210558](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=13538) | Thomas Stockhammer | Fri, 9 Apr 2021 04:14:38 +0000 |

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| [Config files for S4-210558](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=69696) | Thomas Stockhammer | Tue, 13 Apr 2021 04:19:44 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Thomas explains the situation on reference sequences
  + All good, but Park-Joy sequence is unclear whether 8/10 bit
  + Rajan: new sequences will be uploaded
  + Thomas: yes
* Thomas: explains the situation on anchors
  + Agreements in principle
  + Open issues on VUI, SEI, HDR
  + Chairman suggests to discuss on e-mail

**Decision:**

* Agreed.
* Editorial improvements on configurations needed

**S4-210558** is agreed.

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| [S4-210568](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210568.zip) | Sequences for social messaging scenario | Ericsson LM, Qualcomm Inc. | Bo Burman |

**E-mail Discussion:**

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| [[FS\_5GVideo, 568, Block A, 7th Apr. 2200CEST] Sequences for social messaging scenario](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=15664) | teniou(TeniouGilles) | Tue, 6 Apr 2021 14:26:11 +0000 |

**Presenter:** Lukasz Litwic (Ericsson)

**Online Discussion:**

* No comments received

**Decision:**

* Agreed

**S4-210568** is agreed.

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| [S4-210572](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210572.zip) | [FS\_5GVideo] On Messaging and Social Sharing source sequences | Tencent | Gilles Teniou |

**E-mail Discussion:**

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| [[FS\_5GVideo, 572, Block A, 7th Apr. 2200CEST] On Messaging and Social sharing source sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=14874) | teniou(TeniouGilles) | Tue, 6 Apr 2021 14:26:10 +0000 |
| [[FS\_5GVideo, 572, Block A, 7th Apr. 2200CEST] On Messaging and Social sharing source sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=71614) | Thomas Stockhammer | Wed, 7 Apr 2021 18:34:18 +0000 |
| [[FS\_5GVideo, 572, Block A, 7th Apr. 2200CEST] On Messaging and Social sharing source sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=76042) | teniou(TeniouGilles) | Wed, 7 Apr 2021 20:32:12 +0000 |
| [[FS\_5GVideo, 572, Block A, 7th Apr. 2200CEST] On Messaging and Social sharing source sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=76907) | Thomas Stockhammer | Wed, 7 Apr 2021 21:27:17 +0000 |
| [[FS\_5GVideo, 572, Block A, 7th Apr. 2200CEST] On Messaging and Social sharing source sequences](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=78924) | teniou(TeniouGilles) | Wed, 7 Apr 2021 22:24:23 +0000 |

**Presenter:** Gilles Teniou (Tencent)

**Online Discussion:**

* Gilles summarizes the discussion
* Lukasz: This is mostly for uplink and sharing. So why is re-encoding an issue for this case?
  + Gilles: Then the scenario may be misunderstood.
  + Thomas: support this view, this is more a new scenario
  + Gilles: ok we may have to recheck than scenario

**Decision:**

* Encourage to check the scenario and possible bring updates
* Noted for now

**S4-210572** is noted.

## 11.8 FS\_XRTraffic (Feasibility Study on Typical Traffic Characteristics for XR Services and other Media)

WID: [*SP-200054*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_87E_Electronic/Docs/SP-200054.zip) Feasibility Study on Typical Traffic Characteristics for XR Services and other Media

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| [S4-210466](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210466.zip) | Proposed Updates to Work Plan for FS\_XRTraffic | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

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| [[FS\_XRTraffic, 466, Block B, 12th Apr. 0700CEST] Proposed Updates to Work Plan for FS\_XRTraffic](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=23577) | teniou(TeniouGilles) | Fri, 9 Apr 2021 09:46:15 +0000 |
| [[FS\_XRTraffic, 466, Block B, 12th Apr. 0700CEST] Proposed Updates to Work Plan for FS\_XRTraffic](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=46670) | teniou(TeniouGilles) | Mon, 12 Apr 2021 05:42:24 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* none

**Decision:**

* agreed

**S4-210466** is agreed.

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| [S4-210467](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210467.zip) | [FS\_XRTraffic] Proposed TR26.9xx | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

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| [[FS\_XRTraffic, 467, Block B, 12th Apr. 0700CEST] Proposed TR 26.9xx](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=30382) | teniou(TeniouGilles) | Fri, 9 Apr 2021 22:47:05 +0000 |
| [[FS\_XRTraffic, 467, Block B, 12th Apr. 0700CEST] Proposed TR 26.9xx](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=47600) | teniou(TeniouGilles) | Mon, 12 Apr 2021 05:45:35 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* TR number still missing
* No comments

**Decision:**

* agreed

**S4-210467** is agreed.

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| [S4-210663](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210663.zip) | TR26.926v0.1.0 | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

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| [[FS\_XRTraffic, 467->663, Block B, 12th Apr. 0700CEST] Proposed TR 26.9xx](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=67011) | Thomas Stockhammer | Tue, 13 Apr 2021 02:56:34 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* none

**Decision:**

* agreed

**S4-210663** is agreed and presented to SA4 plenary.

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| [S4-210468](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210468.zip) | [FS\_XRTraffic] SA4 and RAN1 Collaboration Proposal | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

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| [[FS\_XRTraffic, 468, Block B, 12th Apr. 0700CEST] SA4 and RAN1 Collaboration Proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=31083) | teniou(TeniouGilles) | Fri, 9 Apr 2021 22:47:56 +0000 |
| [[FS\_XRTraffic, 468, Block B, 12th Apr. 0700CEST] SA4 and RAN1 Collaboration Proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=40205) | panqi (E) | Mon, 12 Apr 2021 03:01:54 +0000 |
| [[FS\_XRTraffic, 468, Block B, 12th Apr. 0700CEST] SA4 and RAN1 Collaboration Proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=40834) | Thomas Stockhammer | Mon, 12 Apr 2021 03:13:04 +0000 |
| [[FS\_XRTraffic, 468, Block B, 12th Apr. 0700CEST] SA4 and RAN1 Collaboration Proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=43960) | Peter Isberg | Mon, 12 Apr 2021 04:35:46 +0000 |
| [[FS\_XRTraffic, 468, Block B, 12th Apr. 0700CEST] SA4 and RAN1 Collaboration Proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=44760) | Thomas Stockhammer | Mon, 12 Apr 2021 04:41:34 +0000 |

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| [[FS\_XRTraffic, 468->612, Block B, 12th Apr. 0700CEST] SA4 and RAN1 Collaboration Proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=61348) | Thomas Stockhammer | Tue, 13 Apr 2021 02:42:48 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Gilles summarizes the discussion
* Comments from Sony
  + Peter suggests that we make it clear that there is a baseline as well as a an enhancement signaling
  + Thomas: Agree, this is good
* Comments from Huawei
  + Agree in general
  + RAN1 has agreed on the statistical model - why offer to RAN1?
  + RAN1 has agreed on the quality evaluation - why offer to RAN1?
  + Thomas: This is an offer, not a requirement for them, for both of them.
* Would propose to send from this meeting

**Decision:**

* Agree with the comments above
* Send an LS, that this still needs to be agreed -> 613.

**S4-210468** is revised to **S4-210612**.

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| [S4-210612](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210612.zip) | [FS\_XRTraffic] SA4 and RAN1 Collaboration Proposal | Qualcomm Incorporated | Thomas Stockhammer |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* No comments

**Decision:**

* agreed

**S4-210612** is agreed.

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| [S4-210613](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210613.zip) | Draft LS on Status Update on XR Traffic to RAN1 | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

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| [[FS\_XRTraffic, 613, Block B, 14th Apr. 0600CEST] LS out to RAN1](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=82625) | teniou(TeniouGilles) | Tue, 13 Apr 2021 10:38:02 +0000 |

Triggered - add

**Decision:**

**S4-210613** is XXX.

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| [S4-210469](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210469.zip) | [FS\_XRTraffic] Updates to Quality Evaluation Framework | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

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| [[FS\_XRTraffic, 469, Block B, 12th Apr. 0700CEST] Updates to Quality Evaluation Framework](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=31801) | teniou(TeniouGilles) | Fri, 9 Apr 2021 22:48:42 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Qi: Do we change anything?
  + Thomas: we only continue

**Decision:**

* Goes to the PD in 614.

**S4-210469** is agreed.

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| [S4-210614](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210614.zip) | [FS\_XRTraffic] Permanent Document | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

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| [[FS\_XRTraffic, 614, Block B, 14th Apr. 0600CEST] FS\_XRTraffic Permanent Document](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=83327) | teniou(TeniouGilles) | Tue, 13 Apr 2021 10:38:16 +0000 |

Triggered - add

**Decision:**

**S4-210614** is XXX.

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| S4-210502 | Discussion on the packet level importance in the XR Services | HUAWEI Technologies Japan K.K. | Qi Pan |

**S4-210502** is withdrawn.

## 11.9 FS\_5GSTAR (Feasibility Study on 5G Glass-type AR/MR Devices)

WID: [SP\_200399](http://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_88E_Electronic/Docs/SP-200399.zip) New SID on 5G Glass-type AR/MR Devices

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| [S4-210427](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210427.zip) | Introduction and overview of ETSI AR Framework Architecture | Perey Research & Consulting | Christine Perey |

**E-mail Discussion:**

See S4-210436

**Presenter:** Christine Perey (Perey Research & Consulting)

**Online Discussion:**

* See S4-210436

**Decision:**

**S4-210427** is noted.

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| [S4-210436](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210436.zip) | [5G\_STAR] Comparison of TR26.998 Architecture and ETSI ISG AR Framework GS 003 | Perey Research & Consulting | Christine Perey |

**E-mail Discussion:**

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| [[FS\_5GSTAR, 427&436, Block A, 7th Apr. 1200CEST] ETSI ARF](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=750) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:26:20 +0000 |
| [[FS\_5GSTAR, 427&436, Block A, 7th Apr. 1200CEST] ETSI ARF](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=27888) | Christine Perey | Tue, 6 Apr 2021 20:19:13 +0200 |
| [[FS\_5GSTAR, 427&436, Block A, 7th Apr. 1200CEST] ETSI ARF](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=21847) | Hakju Ryan Lee | Tue, 6 Apr 2021 23:34:47 +0900 |
| [[FS\_5GSTAR, 427&436, Block A, 7th Apr. 1200CEST] ETSI ARF](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=39875) | Thomas Stockhammer | Wed, 7 Apr 2021 04:09:25 +0000 |
| [[FS\_5GSTAR, 427&436, Block A, 7th Apr. 1200CEST] ETSI ARF(Internet mail)](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=58674) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:10:40 +0000 |

**Presenter:** Christine Perey (Perey Research & Consulting)

**Online Discussion:**

* Christine:
  + Table 1 is showing where there is correspondence between ETSI and 3GPP.
  + Table 2 shows what is included in ETSI ARF and missing in 3GPP
  + Clause 2 (reasons for proposing alignment) is most important
  + Thomas:
    - I disagree that chipset manufacturers in Khronos do not understand 5G. I would prefer to make this incremental rather changing in principle. Our preference remains that we use Khronos/OpenXR/glTF/Vulkan
    - Some aspects are more application centric
  + Christine: request to analyse Table 2 in an offline work.
  + Ryan: agree with Thomas, would prefer more concrete aspects that need to be done.
* Gilles: our scope may be more focussed. We can add some information to PD
* Jerome:
  + 3D map is a very important function. May need interoperability.
  + Vision Engine includes too many functions, should be broken down
* Mary-Luc: Work from ISG is great, very detailed. But our scope is to focus on 5G specific aspects. We spent time to have a simple architecture.
* Christine: by adopting the ARF architecture, we simplify. Cluster sub-function in logical groups. It simplifies the architecture. We want to do something in a follow-up.
* Frederic: Familiar on the work. Seen that ARF has matured. There are reference points. Will they be specified?
  + Christine: We have published group specifications for architecture. We are now working on reference point requirements. Most work is on world representation and world storage so that we can have more discussion. We also started to look into world capture.
  + Frederic: Which reference points AR-15 and AR-16?
  + Muriel: We are not planning to define specifications for each reference point, and will look at existing specifications developed outside ETSI.
* Gilles:
  + propose to add the information in the permanent document
  + Come back with more input

**Decision:**

* Content is included in permanent document.
* Invited to provide more concrete input for next meeting
* Rapporteur will add to PD.

**S4-210436** is noted.

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| [S4-210445](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210445.zip) | Proposed Architectures for AR Conversational Services | HUAWEI TECHNOLOGIES Co. Ltd. | Yan Liu |

**E-mail Discussion:**

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| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=9183) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:52:56 +0000 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=11669) | Thorsten Lohmar | Tue, 6 Apr 2021 13:39:05 +0000 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=20262) | Liuyan (Scarlett) | Tue, 6 Apr 2021 14:29:37 +0000 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=25485) | Ali El Essaili | Tue, 6 Apr 2021 15:43:01 +0000 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=26456) | Liuyan (Scarlett) | Tue, 6 Apr 2021 16:14:51 +0000 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=27235) | Liuyan (Scarlett) | Tue, 6 Apr 2021 16:26:09 +0000 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=31966) | Imed Bouazizi | Wed, 7 Apr 2021 00:17:28 +0000 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=24022) | Hakju Ryan Lee | Wed, 7 Apr 2021 00:29:25 +0900 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=44155) | Liuyan (Scarlett) | Wed, 7 Apr 2021 05:54:09 +0000 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=48346) | Liuyan (Scarlett) | Wed, 7 Apr 2021 07:59:50 +0000 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=34822) | Hyun-Koo Yang | Wed, 7 Apr 2021 10:11:43 +0900 |
| [[FS\_5GSTAR, 445, Block A, 9th Apr. 0600CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=57710) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:10:30 +0000 |

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| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=7673) | Liuyan (Scarlett) | Thu, 8 Apr 2021 11:09:16 +0000 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=3595) | Hyun-Koo Yang | Thu, 8 Apr 2021 13:42:50 +0900 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=9588) | Ali El Essaili | Thu, 8 Apr 2021 14:44:26 +0000 |
| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=10420) | Thomas Stockhammer | Thu, 8 Apr 2021 14:52:34 +0000 |
| [[FS\_5GSTAR, 445, Block A, 9th Apr. 0600CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=2103) | Liuyan (Scarlett) | Thu, 8 Apr 2021 03:45:27 +0000 |
| [[FS\_5GSTAR, 445, Block A, 9th Apr. 0600CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=3865) | Thorsten Lohmar | Thu, 8 Apr 2021 06:57:23 +0000 |

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| [[FS\_5GSTAR, 445, Block A, 7th Apr. 1200CEST] Proposed Architectures for AR Conversational Services](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=68039) | Liuyan (Scarlett) | Tue, 13 Apr 2021 03:02:45 +0000 |

**Presenter:** Yan Liu (Huawei)

**Online Discussion:**

* Gilles summarizes the discussion
* Chairman invites to take into account
* Thomas: this is a good document for discussion. However, it seems to be unclear that we start from SDP. It is surely not in shape for TR.
* A revision needs to be provided addressing the comments

**Decision:**

* Revise to address comments and we may revisit
* An e-mail agreement may be triggered, once available.

**S4-210445** is revised to **S4-210600**.

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| [S4-210600](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210600.zip) | Proposed Architectures for AR Conversational Services | HUAWEI TECHNOLOGIES Co. Ltd. | Yan Liu |

**Presenter:** Yan Liu (Huawei)

**Online Discussion:**

* Document not available

**Decision:**

* Will be submitted to telco

**S4-210600** is noted.

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| [S4-210446](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210446.zip) | [5GSTAR] pCR on TR 26.998 to add use case on AR Gaming | China Mobile Com. Corporation | Yujian Yin |

**E-mail Discussion:**

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| [[FS\_5GSTAR, 446, Block A, 7th Apr. 1200CEST] Use case on AR gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=1508) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:28:54 +0000 |
| [[FS\_5GSTAR, 446, Block A, 7th Apr. 1200CEST] Use case on AR gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=33588) | Imed Bouazizi | Wed, 7 Apr 2021 00:49:30 +0000 |
| [[FS\_5GSTAR, 446, Block A, 7th Apr. 1200CEST] Use case on AR gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=36744) | [[log in to unmask]](https://list.etsi.org/scripts/wa.exe?LOGON=A1%3Dind2104A%26L%3D3GPP_TSG_SA_WG4_VIDEO) | Wed, 7 Apr 2021 10:52:07 +0800 |
| [[FS\_5GSTAR, 446, Block A, 7th Apr. 1200CEST] Use case on AR gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=60301) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:10:55 +0000 |

**Presenter:** Yujian Yin (CMCC)

**Online Discussion:**

* Thomas: not clear what the exact what the additional aspects are that need to be added. Could be added to PD with questions
  + Ryan: it is already in PD
* Mary-Luc: it would be good to know how this use case is different from existing ones.

**Decision:**

* Note the document and ask for more information on what additional aspects are new to address this. Analysis on standardization needs may be done.

**S4-210446** is noted.

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| [S4-210447](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210447.zip) | Proposed Functionalities of 5G EDGAR | China Mobile Com. Corporation | Yujian Yin |

**E-mail Discussion:**

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| [[FS\_5GSTAR, 447, Block A, 7th Apr. 1200CEST] 5G\_EDGAR functionalities](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=2194) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:30:46 +0000 |
| [[FS\_5GSTAR, 447, Block A, 7th Apr. 1200CEST] 5G\_EDGAR functionalities](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=22598) | Hakju Ryan Lee | Tue, 6 Apr 2021 23:46:12 +0900 |
| [[FS\_5GSTAR, 447, Block A, 7th Apr. 1200CEST] 5G\_EDGAR functionalities](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=34219) | Imed Bouazizi | Wed, 7 Apr 2021 00:55:18 +0000 |
| [[FS\_5GSTAR, 447, Block A, 7th Apr. 1200CEST] 5G\_EDGAR functionalities](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=35934) | [[log in to unmask]](https://list.etsi.org/scripts/wa.exe?LOGON=A1%3Dind2104A%26L%3D3GPP_TSG_SA_WG4_VIDEO) | Wed, 7 Apr 2021 10:51:29 +0800 |
| [[FS\_5GSTAR, 447, Block A, 7th Apr. 1200CEST] 5G\_EDGAR functionalities](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=40766) | Hakju Ryan Lee | Wed, 7 Apr 2021 13:14:40 +0900 |
| [[FS\_5GSTAR, 447, Block A, 7th Apr. 1200CEST] 5G\_EDGAR functionalities](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=61136) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:11:02 +0000 |
| [[FS\_5GSTAR, 447, Block A, 7th Apr. 1200CEST] 5G\_EDGAR functionalities](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=66777) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:53:21 +0000 |

**Presenter:** Yujian Yin (CMCC)

**Online Discussion:**

* Gilles summarizes the discussion
* Ryan: text is almost identical, what needs to change. Unclear what the proposal is

**Decision:**

* Noted, but invite for revised architecture.

**S4-210447** is noted.

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| [S4-210470](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210470.zip) | [FS\_5GSTAR] Device Considerations | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

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| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=2883) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:32:37 +0000 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=29133) | Sanchez de la Fuente, Yago | Tue, 6 Apr 2021 20:02:34 +0000 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=29807) | Thomas Stockhammer | Tue, 6 Apr 2021 20:11:37 +0000 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=31355) | Champel MaryLuc | Tue, 6 Apr 2021 22:54:49 +0000 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=23205) | Hakju Ryan Lee | Tue, 6 Apr 2021 23:59:33 +0900 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=54916) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:10:04 +0000 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=72403) | Thomas Stockhammer | Wed, 7 Apr 2021 18:57:47 +0000 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=73166) | Sanchez de la Fuente, Yago | Wed, 7 Apr 2021 19:21:20 +0000 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=74079) | Ahmed Hamza | Wed, 7 Apr 2021 20:08:04 +0000 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=74933) | teniou(TeniouGilles) | Wed, 7 Apr 2021 20:14:34 +0000 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=77923) | Champel MaryLuc | Wed, 7 Apr 2021 22:22:15 +0000 |

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| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=51226) | Thomas Stockhammer | Mon, 12 Apr 2021 13:51:07 +0000 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=4718) | Ali El Essaili | Thu, 8 Apr 2021 07:00:47 +0000 |
| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=75) | Hakju Ryan Lee | Thu, 8 Apr 2021 10:07:19 +0900 |

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| [[FS\_5GSTAR, 470, Block A, 7th Apr. 1200CEST] Device considerations](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=60612) | Hakju Ryan Lee | Tue, 13 Apr 2021 11:36:49 +0900 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Thomas: explains the situation
  + Yago: support to clarify the situation

**Decision:**

* Offline discussion on Friday, April 9, 1pm cest

**S4-210470** is revised to **S4-210553**.

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| [S4-210552](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210552.zip) | [FS\_5GSTAR] Permanent Document | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |

**E-mail Discussion:**

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| [[FS\_5GSTAR, 552, Block A-EXT, 13th Apr. 2230CEST] FS\_5GSTAR Permanent Document](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=78356) | teniou(TeniouGilles) | Tue, 13 Apr 2021 08:46:50 +0000 |

**Decision:**

**S4-210552** is XXX.

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| [S4-210554](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210554.zip) | [FS\_5GSTAR] Draft TR26.998 | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |

**E-mail Discussion:**

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| [[FS\_5GSTAR, 554, Block A-EXT, 13th Apr. 2230CEST] FS\_5GSTART Draft TR](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=77587) | teniou(TeniouGilles) | Tue, 13 Apr 2021 08:46:47 +0000 |

**Decision:**

**S4-210554** is XXX.

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| [S4-210553](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210553.zip) | [FS\_5GSTAR] Device Considerations | Qualcomm Incorporated, Fraunhofer HHI | Thomas Stockhammer |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Thomas explains
* Ryan: e-mail comments to re-organize. No new device type
  + Thomas: agreed

**Decision:**

* Agreed with the comments above

**S4-210553** is agreed.

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| S4-210471 | [FS\_5GSTAR] Proposed Updates to Architectures | Qualcomm Incorporated | Thomas Stockhammer |

**S4-210471** is withdrawn.

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| [S4-210504](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210504.zip) | [5GSTAR] Updated Work Plan | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |

**E-mail Discussion:**

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| [[FS\_5GSTAR, 504, Block A, 7th Apr. 1200CEST] Updated Workplan](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=3570) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:34:03 +0000 |
| [[FS\_5GSTAR, 504, Block A, 7th Apr. 1200CEST] Updated Workplan](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=30796) | Thomas Stockhammer | Tue, 6 Apr 2021 20:24:33 +0000 |
| [[FS\_5GSTAR, 504, Block A, 7th Apr. 1200CEST] Updated Workplan](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=32853) | Hakju Ryan Lee | Wed, 7 Apr 2021 09:36:49 +0900 |
| [[FS\_5GSTAR, 504, Block A, 7th Apr. 1200CEST] Updated Workplan](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=49188) | Hakju Ryan Lee | Wed, 7 Apr 2021 17:39:00 +0900 |
| [[FS\_5GSTAR, 504, Block A, 9th Apr. 0600CEST] Updated Workplan](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=56797) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:10:21 +0000 |

**Presenter:** Hakju Ryan Lee (Samsung)

**Online Discussion:**

* Will be revised offline
* Revision 1 is available
* Thomas: Can we add a joint telco on STAR/EMSA
  + Ryan: OK - May 4 only

**Decision:**

* Agreed. Revision will be created.

**S4-210504** is revised to **S4-210601**.

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| [S4-210601](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210601.zip) | [5GSTAR] Updated Work Plan | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |

**S4-210601** is agreed and presented to Block A closing plenary.

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| [S4-210505](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210505.zip) | [5GSTAR] pCR on Mapping to 5G System Architecture | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |

**E-mail Discussion:**

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| [[FS\_5GSTAR, 505, Block A, 7th Apr. 1200CEST] Mapping to 5GS architecture](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=4253) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:35:16 +0000 |
| [[FS\_5GSTAR, 505, Block A, 7th Apr. 1200CEST] Mapping to 5GS architecture](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=53018) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:09:30 +0000 |

**Presenter:** Hakju Ryan Lee (Samsung)

**Online Discussion:**

* Ali: is this any binding text?
  + Ryan: It is just an introductory text

**Decision:**

* agreed

**S4-210505** is agreed.

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| [S4-210508](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210508.zip) | FS\_5GSTAR: Content formats and codecs pCR | Samsung Electronics Czech | Sungryeul Rhyu |

**E-mail Discussion:**

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| [[FS\_5GSTAR, 508, Block A, 7th Apr. 1200CEST] Content formats and codecs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=4947) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:38:19 +0000 |
| [[FS\_5GSTAR, 508, Block A, 7th Apr. 1200CEST] Content formats and codecs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=38185) | Imed Bouazizi | Wed, 7 Apr 2021 03:20:30 +0000 |
| [**[**FS\_5GSTAR, 508, Block A, 7th Apr. 1200CEST] Content formats and codecs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=43535) | Sungryeul Rhyu | Wed, 7 Apr 2021 13:32:46 +0900 |
| [[FS\_5GSTAR, 508, Block A, 9th Apr. 0600CEST] Content formats and codecs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=55894) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:10:13 +0000 |

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| [[FS\_5GSTAR, 508, Block A, 7th Apr. 1200CEST] Content formats and codecs](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=11184) | Thomas Stockhammer | Fri, 9 Apr 2021 03:24:48 +0000 |
| [[FS\_5GSTAR, 508, Block A, 7th Apr. 1200CEST] Content formats and codecs](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=12557) | Thomas Stockhammer | Fri, 9 Apr 2021 03:34:09 +0000 |
| [[FS\_5GSTAR, 508, Block A, 7th Apr. 1200CEST] Content formats and codecs](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=14275) | Sungryeul Rhyu | Fri, 9 Apr 2021 13:22:09 +0900 |
| [[FS\_5GSTAR, 508, Block A, 7th Apr. 1200CEST] Content formats and codecs](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=6638) | Jérome ROYAN | Thu, 8 Apr 2021 07:44:15 +0000 |

**Presenter:** Sungryeul Rhyu (Samsung)

**Online Discussion:**

* Gilles summarizes the discussion
* Ryan mentions
* Thomas:
  + We are not saying that MPEG Scene Description needs to be added, just general scene
  + We also believe we need well-defined entry point which is a scene description. A 3D object is not an entry point. There needs to be a reference space.
* Jerome: We are looking in ARF in defining some anchors and mappings.
* Offline discussion continues - create revision.
* Revision 1 is provided by Qualcomm
* Christine

**Decision:**

* Revision 1 is agreeable to be added to PD
* SR will produce

**S4-210508** is revised to **S4-210602**.

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| [S4-210602](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210602.zip) | FS\_5GSTAR: Content formats and codecs pCR | Samsung Electronics Czech | Sungryeul Rhyu |

**S4-210602** is agreed to be added to PD.

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| [S4-210509](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210509.zip) | [5GSTAR] pCR on architecture & media flow for interactive services | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |

**E-mail Discussion:**

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| [[FS\_5GSTAR, 509, Block A, 7th Apr. 1200CEST] Architecture and media flow for interactive services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=5640) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:39:12 +0000 |
| [[FS\_5GSTAR, 509, Block A, 7th Apr. 1200CEST] Architecture and media flow for interactive services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=10642) | Thorsten Lohmar | Tue, 6 Apr 2021 13:33:43 +0000 |
| [[FS\_5GSTAR, 509, Block A, 7th Apr. 1200CEST] Architecture and media flow for interactive services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=39005) | Imed Bouazizi | Wed, 7 Apr 2021 03:29:53 +0000 |
| [[FS\_5GSTAR, 509, Block A, 7th Apr. 1200CEST] Architecture and media flow for interactive services](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=35088) | Hakju Ryan Lee | Wed, 7 Apr 2021 10:55:52 +0900 |

**Presenter:** Hakju Ryan Lee (Samsung)

**Online Discussion:**

* Ryan summarizes the discussion
  + Ryan suggests to park the document until the offline discussion is completed

**Decision:**

* Create a revision based on the comments and the offline discussions
* E-mail agreement may be triggered once available

**S4-210509** is revised to **S4-210603**.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210603](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210603.zip) | [5GSTAR] pCR on architecture & media flow for interactive services | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |

**Presenter:** Hakju Ryan Lee (Samsung)

**Online Discussion:**

* No discussion

**Decision:**

* agreed

**S4-210603** is agreed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210510](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210510.zip) | Draft TR 26.998 | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_5GSTAR, 510, Block A, 7th Apr. 1200CEST] Draft TR 26.998](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=6359) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:40:18 +0000 |
| [[FS\_5GSTAR, 510, Block A, 7th Apr. 1200CEST] Draft TR 26.998](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=41569) | Thomas Stockhammer | Wed, 7 Apr 2021 04:25:11 +0000 |
| [[FS\_5GSTAR, 510, Block A, 7th Apr. 1200CEST] Draft TR 26.998](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=42484) | Hakju Ryan Lee | Wed, 7 Apr 2021 13:31:38 +0900 |
| [[FS\_5GSTAR, 510, Block A, 7th Apr. 1200CEST] Draft TR 26.998](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=59501) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:10:47 +0000 |

**Presenter:** Hakju Ryan Lee (Samsung)

**Online Discussion:**

* none

**Decision:**

* agreed

**S4-210510** is agreed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210512](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210512.zip) | [5G\_STAR] 5GMS Immersive downlink streaming procedures for EDGAR UEs | Fraunhofer HHI | Yago Sanchez de la Fuente |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_5GSTAR, 512, Block A, 7th Apr. 1200CEST] Immersive downlink procedures for EDGAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=7041) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:41:13 +0000 |
| [[FS\_5GSTAR, 512, Block A, 7th Apr. 1200CEST] Immersive downlink procedures for EDGAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=37479) | Imed Bouazizi | Wed, 7 Apr 2021 03:03:50 +0000 |
| [[FS\_5GSTAR, 512, Block A, 7th Apr. 1200CEST] Immersive downlink procedures for EDGAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=45797) | Sanchez de la Fuente, Yago | Wed, 7 Apr 2021 06:26:47 +0000 |
| [[FS\_5GSTAR, 512, Block A, 7th Apr. 1200CEST] Immersive downlink procedures for EDGAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=47756) | Sanchez de la Fuente, Yago | Wed, 7 Apr 2021 07:19:33 +0000 |
| [[FS\_5GSTAR, 512, Block A, 9th Apr. 0600CEST] Immersive downlink procedures for EDGAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=53880) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:09:50 +0000 |

|  |  |  |
| --- | --- | --- |
| [[FS\_5GSTAR, 512, Block A, 9th Apr. 0600CEST] Immersive downlink procedures for EDGAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=15412) | Sanchez de la Fuente, Yago | Fri, 9 Apr 2021 04:28:36 +0000 |
| [[FS\_5GSTAR, 512, Block A, 9th Apr. 0600CEST] Immersive downlink procedures for EDGAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=11944) | Hakju Ryan Lee | Fri, 9 Apr 2021 12:28:05 +0900 |
| [[FS\_5GSTAR, 512, Block A, 9th Apr. 0600CEST] Immersive downlink procedures for EDGAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=16118) | Hakju Ryan Lee | Fri, 9 Apr 2021 13:37:41 +0900 |
| [[FS\_5GSTAR, 512, Block A, 9th Apr. 0600CEST] Immersive downlink procedures for EDGAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=8877) | Sanchez de la Fuente, Yago | Thu, 8 Apr 2021 14:43:04 +0000 |
| [[FS\_5GSTAR, 512->604, Block A, 9th Apr. 0600CEST] Immersive downlink procedures for EDGAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=18737) | Sanchez de la Fuente, Yago | Fri, 9 Apr 2021 08:20:47 +0000 |

**Presenter:** Yago Sanchez de la Fuente (Fraunhofer HHI)

**Online Discussion:**

* Yago summarizes the discussion
  + Needs alignment with EMSA
* Thomas:
  + Suggest that we add to PD with a note the the edge call flow needs to be clarified.
  + We have a call on this matter scheduled so this is appropriate time

**Decision:**

* revise and add to PD
* Add note that this will be discussed during joint call.

**S4-210512** is revised to **S4-210604**.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210604](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210604.zip) | [5G\_STAR] 5GMS Immersive downlink streaming procedures for EDGAR UEs | Fraunhofer HHI | Yago Sanchez de la Fuente |

**Presenter:** Yago Sanchez de la Fuente (Fraunhofer HHI)

**Online Discussion:**

* No comments

**Decision:**

* agreed.

**S4-210604** is agreed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210513](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210513.zip) | [5G\_STAR] 5GMS Immersive downlink streaming procedures and architecture for Edge-assisted STAR UEs | Fraunhofer HHI | Yago Sanchez de la Fuente |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[FS\_5GSTAR, 513, Block A, 7th Apr. 1200CEST] Immersive downlink procedures for Edge-assisted STAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=7751) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:42:20 +0000 |
| [[FS\_5GSTAR, 513, Block A, 7th Apr. 1200CEST] Immersive downlink procedures for Edge-assisted STAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=45152) | Imed Bouazizi | Wed, 7 Apr 2021 06:08:04 +0000 |
| [[FS\_5GSTAR, 513, Block A, 9th Apr. 0600CEST] Immersive downlink procedures for Edge-assisted STAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=61954) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:11:12 +0000 |
| [[FS\_5GSTAR, 513, Block A, 9th Apr. 0600CEST] Immersive downlink procedures for Edge-assisted STAR UEs](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=62957) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:11:23 +0000 |

**Presenter:** Yago Sanchez de la Fuente (Fraunhofer HHI)

**Online Discussion:**

* Yago summarizes the discussion
  + Similar comments as 512
  + Also dependency on offline for 553

**Decision:**

* We will take this into the offline and merge

**S4-210512** is merged to **S4-210553**.

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

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210472](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210472.zip) | 8K TV over 5G | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[NEW WORK, 472, Block A, 7th Apr. 1200CEST] New Work Item description on 8K TV over 5G](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=8475) | teniou(TeniouGilles) | Tue, 6 Apr 2021 10:50:04 +0000 |
| [[NEW WORK, 472, Block A, 7th Apr. 1200CEST] New Work Item description on 8K TV over 5G](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=46858) | Thomas Stockhammer | Wed, 7 Apr 2021 06:35:57 +0000 |
| [[NEW WORK, 472, Block A, 7th Apr. 1200CEST] New Work Item description on 8K TV over 5G](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=49980) | Thomas Stockhammer | Wed, 7 Apr 2021 12:01:25 +0000 |
| [[NEW WORK, 472, Block A, 7th Apr. 1200CEST] New Work Item description on 8K TV over 5G](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=51447) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:08:16 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Thomas: have revision
* Gilles: 8K association is relevant as well
  + Thomas: not necessarily for CMAF, but we can check
  + Gilles: does not have to be listed.
* Paul: add support from Sony Europe B.V.
* Thomas: just a comment that HFR is not added and will not be. If you have a comment, let me know. This would mean that you can do 4K HFR and 8K regular frame rate.

**Decision:**

* Revised, expect to be agreed for closing plenary block A.

**S4-210472** is revised to **S4-210551**.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210551](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210551.zip) | 8K TV over 5G | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[NEW WORK, 551, Block A, 9th Apr. 0600CEST] New Work Item description on 8K TV over 5G](https://list.etsi.org/scripts/wa.exe?A2=ind2104A&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=52287) | teniou(TeniouGilles) | Wed, 7 Apr 2021 15:08:32 +0000 |

|  |  |  |
| --- | --- | --- |
| [[NEW WORK, 551, Block A, 9th Apr. 0600CEST] New Work Item description on 8K TV over 5G](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=17009) | teniou(TeniouGilles) | Fri, 9 Apr 2021 05:31:14 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

**Decision:**

* agreed

**S4-210551** is agreed and presented to block A plenary.

## 11.11 Liaisons and Liaison Responses

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210606](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210606.zip) | Proposed LS on “CMAF Profile for 8K HEVC” to MPEG and others | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [Proposed LS to MPEG on 8K TV HEVC](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=52393) | Thomas Stockhammer | Mon, 12 Apr 2021 14:48:23 +0000 |

|  |  |  |
| --- | --- | --- |
| [Proposed LS to MPEG on 8K TV HEVC](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=55969) | Thomas Stockhammer | Mon, 12 Apr 2021 19:32:05 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Typos need to be fixed
* Add a statement on publicly available spec

**Decision:**

* Agreed in principle - revise.

**S4-210606** is revised to **S4-210667**.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210667](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210667.zip) | Draft LS on “CMAF Profile for 8K HEVC” to MPEG and others | Qualcomm Incorporated | Thomas Stockhammer |

**S4-210667** is agreed.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210453](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210453.zip) | Information from ITU-T SG 12 on Online Gaming | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[LS out, 453, Block B, 13th Apr. 2230CEST] Information from ITU-T SG 12 on Online Gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=80070) | teniou(TeniouGilles) | Tue, 13 Apr 2021 09:05:53 +0000 |

Triggered - add

**Decision:**

**S4-210453** is XXX.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210662](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210662.zip) | Proposed LS on “Online Gaming Efforts in 3GPP SA4” to ITU-T SG12 | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [S4-210453: Communication with ITU-T SG12 on Online Gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=17978) | Gunnar Heikkilä | Fri, 9 Apr 2021 06:45:35 +0000 |
| [S4-210453: Communication with ITU-T SG12 on Online Gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=53190) | Thomas Stockhammer | Mon, 12 Apr 2021 16:32:19 +0000 |
| [S4-210453: Communication with ITU-T SG12 on Online Gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=5737) | Thomas Stockhammer | Thu, 8 Apr 2021 07:19:03 +0000 |

|  |  |  |
| --- | --- | --- |
| [S4-210453: Communication with ITU-T SG12 on Online Gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=58161) | Peter Isberg | Mon, 12 Apr 2021 19:43:01 +0000 |
| [S4-210453: Communication with ITU-T SG12 on Online Gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=56938) | Fabrice Plante | Mon, 12 Apr 2021 12:37:59 -0700 |
| [S4-210453: Communication with ITU-T SG12 on Online Gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=54857) | Thomas Stockhammer | Mon, 12 Apr 2021 19:31:06 +0000 |
| [S4-210453: Communication with ITU-T SG12 on Online Gaming](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=53190) | Thomas Stockhammer | Mon, 12 Apr 2021 16:32:19 +0000 |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Online Discussion:**

* Comments from Apple
  + Agreed
* Comments from Sony
  + Agreed => change to cloud gaming

**Decision:**

* Revise, do e-mail agreement

**S4-210662** is revised to **S4-210668**.

|  |  |  |  |
| --- | --- | --- | --- |
| [S4-210668](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210668.zip) | Draft LS on “Cloud Gaming Efforts in 3GPP SA4” to ITU-T SG12 | Qualcomm Incorporated | Thomas Stockhammer |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[LS out, 668, Block B, 13th Apr. 2230CEST] Draft LS on “Cloud Gaming Efforts in 3GPP SA4” to ITU-T SG12](https://list.etsi.org/scripts/wa.exe?A2=ind2104B&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=76755) | teniou(TeniouGilles) | Tue, 13 Apr 2021 08:38:42 +0000 |

Triggered - add

**Decision:**

**S4-210668** is XXX.

## 11.12 Any Other Business

Block A Summary is available in [S4-210605](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210605.zip).

The report will be made available in [S4-210669](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_113-e/Docs/S4-210669.zip).

## 11.13 Work Plan

See time plans for the individual Study items.

## 11.14 Close of the session

The chairman thanked the participants. The participants thanked the chairman.

The online session was closed on April 13, 2021 at 8:50 (CEST).

E-mail approval for documents will conclude on April 14, 2021 at 06:00 (CEST)

## 11.15 Participants

|  |  |  |  |
| --- | --- | --- | --- |
| NAME | FIRST | COMPANY | Attended |
| Stockhammer | Thomas | Qualcomm Incorporated | Yes |
| Teniou | Gilles | Tencent |  |
| Curcio | Igor | Nokia |  |
| Lee | Brian | Dolby Laboratories | Yes |
| Singh | Gurdeep | Fraunhofer HHI |  |
| Thienot | Cedric | Expway |  |
| Tan | Peng | TELUS |  |
| Champel | Mary-Luc | XiaoMi |  |
| Yee Sin | Chan | Facebook | yes |
| Iraj | Sodagar | Tencent |  |
| Richard | Bradbury | BBC R&D |  |
| Henri | Fourdeux | InterDigital | Yes |
| Choi | Kiho | Samsung Electronics |  |
| Michel | Kerdranvat | InterDigital |  |
| Ahmed | Hamza | InterDigital | Yes |
| Bo | Burman | Ericsson |  |
| Lee | Ryan | Samsung Electronics | Yes |
| Hu | James | AT&T | Yes |
| Isberg | Peter | Sony | Yes |
| Jung | Kyunghun | Facebook |  |
| Lemotheux | Julien | Orange | Yes |
| Dadas | Mohammed | Orange |  |
| Srinivas | Gudumasu | InterDigital |  |
| Zhang | Zhuoyun | Tencent | Yes |
| Biatek | Thibaud | ATEME |  |
| Jelinek | Milan | VoiceAge Corporation |  |
| Plante | Fabrice | Apple |  |
| Thomas | Emmanuel | KPN N.V. |  |
| Shiferaw | Yonatan | KPN N.V. |  |
| Ahsan | Saba | Nokia Corporation |  |
| Gunkel | Simon | KPN N.V. |  |
| Ali | El Essaili | Ericsson |  |
| Mauricio | Aracena | Ericsson |  |
| Thorsten | Lohmar | Ericsson |  |
| Lukasz | Litwic | Ericsson |  |
| Feiten | Bernhard | Deutsche Telekom AG |  |
| Szucs | Paul | Sony Europe B.V. | Yes |
| Isberg | Peter | Sony | Yes |
| Rhyu | Sungryeul | Samsung Electronics | Yes |
| Dadas | Mohammed | Orange | Yes |
| Yip | Eric | Samsung Electronics | Yes |
| Sanchez | Yago | Fraunhofer HHI | Yes |
| Dawkins | Spencer | Tencent | Yes |
| Pan | Qi | Huawei | Yes |
| Deschanel | Muriel | IRT b<>com | Yes |
| Royan | Jérôme | IRT b<>com | Yes |
| Perey | Christine | PEREY Research & Consulting | Yes |