Video SWG Minutes during SA4#116e

## 10.1 Opening of the session

Mr. Gilles Teniou (Tencent, Chairman of Video SWG) opens the Video SWG on November 11, 2021 at 07:00 CET.

E-mail discussion started already on Wed, 10 November 2021 07:41:51 +0000

**Schedule:**

| **Start times** |  |  | **Thursday November 11** | **Friday November 12** | **Monday November 15** | **Tuesday November 16** | **Wednesday November 17** | **Thursday November 18** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CET | PT | KST | **Block A** | **Block A** | **Block A/B** | **Block B** | **Block B** | **Block B** |
|  |  |  | **GTM0** | **GTM0** | **GTM0** | **GTM0** | **GTM0** | **GTM0** |
| 6:30:00 AM | 9:30:00 PM | 2:30:00 PM | MBS SWG | Video SWG | MBS SWG | MBS SWG | Video SWG | MBS SWG |
| 7:00:00 AM | 10:00:00 PM | 3:00:00 PM |
| 7:30:00 AM | 10:30:00 PM | 3:30:00 PM | Video SWG | Video SWG |
| 8:00:00 AM | 11:00:00 PM | 4:00:00 PM |  |  |  |  |
| 8:30:00 AM | 11:30:00 PM | 4:30:00 PM | Video SWG | MBS SWG |  | Video SWG | MBS SWG |  |
| 9:00:00 AM | 12:00:00 AM | 5:00:00 PM | **Block A** Plenary (13-24) | **Block B** Plenary (13-24) |

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

The minutes are shared [Video SWG Minutes during SA4#116e](https://docs.google.com/document/d/1ZZ5YqhUUGJhGYwINLuBujmhTctastWwkf5ksdH0QcVo/edit?usp=sharing).

Attendees are listed [here](#kix.je12ybbeksh7), please add attendance ‘Y’.

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

* https://list.etsi.org/scripts/wa.exe?A1=ind2111B&L=3GPP\_TSG\_SA\_WG4\_VIDEO
* https://list.etsi.org/scripts/wa.exe?A1=ind2111C&L=3GPP\_TSG\_SA\_WG4\_VIDEO

Latest Timestamp for e-mail discussions considered in the report: Wed, 17 Nov 2021 07:10:50 +0000.

| [SA4#116-e meeting - Proposed VIDEO SWG agenda + Tdoc allocation + various information](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;9c9e6383.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 17:47:27 +0000 |
| --- | --- | --- |

| [Start of Block A topics](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;91842cf5.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:33:09 +0000 |
| --- | --- | --- |
| [Start of Block B topics - 15th Nov 1am CET.](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;64119e2a.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:25:26 +0000 |

The agenda and the registration of documents are agreed.

## 10.2 Registration of documents

| A.I. # | A.I. Title | Block | Tdoc #s |
| --- | --- | --- | --- |
| 5.1 | SA4 SWG ad hoc meetings | Plenary | Video: 1412app, 1413app, 1414app, 1415app |
| 5.2 | Other 3GPP groups | Plenary |  |
| 5.3 | Other groups | Plenary | 1471 (ISO SC29/WG03) -> Video SWG (invite MBS)  1472 (ATSC/VVC) -> Video SWG  1474 (DVB/CMAF) -> Video SWG |
| 10 | Video SWG | - |  |
| 10.1 | Opening of the session | A |  |
| 10.2 | Registration of documents | A |  |
| 10.3 | Reports and liaisons from other groups | A |  |
| 10.4 | CRs to features in Release 16 and earlier | B | 1358 |
| 10.5 | 8K\_TV\_5G (8K Television over 5G) | B | 1355, 1356, 1357, 1374, 1390,    1543 (n/a) |
| 10.6 | FS\_VR\_CoGui (Feasibility Study on VR Streaming Conformance and Guidelines) | B | 1521, 1522 |
| 10.7 | FS\_5GVideo (Feasibility Study on 5G Video Codec Characteristics) | A | 1359 ,1360, 1361, 1362, 1363, 1364, 1405, 1406, 1429, 1431, 1502, 1504,    1503 (n/a), 1505 (n/a) |
| 10.8 | FS\_XRTraffic (Feasibility Study on Typical Traffic Characteristics for XR Services and other Media) | B | 1366,    1365 (n/a), 1495 (n/a) |
| 10.9 | FS\_5GSTAR (Feasibility Study on 5G Glass-type AR/MR Devices) | A | 1344, 1367, 1368, 1369, 1370, 1371, 1372, 1388, 1400, 1401, 1407, 1408, 1409, 1419, 1423, 1425, 1475, 1481, 1482, 1484, 1497, 1539,    ~~1424~~ |
| 10.10 | New Work / New Work Items and Study Items | B | 1373, 1375, 1402, 1403, 1416, 1417, 1496 |
| 10.11 | Liaisons and Liaison Responses | B |  |
| 10.12 | Any Other Business | B |  |
| 10.13 | Close of the session | B |  |

| TDoc | Title | Source | Agenda item |
| --- | --- | --- | --- |
| [S4-211471](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211471.zip) | Liaison Statement from SC 29/WG 03 to 3GPP SA4 on MPEG Green Metadata [SC 29/WG 03 N 430] | SC 29/WG 03, MPEG systems | 5.3 |
| [S4-211472](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211472.zip) | Liaison Statement from ATSC to SA4 on VVC | ATSC | 5.3 |
| [S4-211474](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211474.zip) | Reply LS regarding alignment on CMAF Media Profiles | DVB Technical Module Ad-Hoc Group on Audio-Visual Content (TM-AVC) | 5.3 |
| [S4-211358](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211358.zip) | Reference Fixes to TV Video Profiles | Qualcomm Incorporated | 10.4 |
| [S4-211355](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211355.zip) | [8K\_TV\_5G] Proposed Updated Work Plan | Qualcomm Incorporated | 10.5 |
| [S4-211356](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211356.zip) | [8K\_TV\_5G] 8K HEVC Operation Point | Qualcomm Incorporated | 10.5 |
| [S4-211357](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211357.zip) | [8K\_TV\_5G] 8K TV Scenario | Qualcomm Incorporated | 10.5 |
| [S4-211374](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211374.zip) | [8K\_TV\_5G] 8K Test Sequences | Qualcomm Incorporated, Fraunhofer HHI, Interdigital | 10.5 |
| [S4-211390](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211390.zip) | [8K\_TV\_5G] 8K TV in 5GMS | Qualcomm CDMA Technologies | 10.5 |
| S4-211543 | CMAF vs 3GPP TV profiles | Tencent | 10.5 |
| [S4-211521](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211521.zip) | Updates to TR 26.999 with viewport-dependent tiled streaming results with usage of head motion-aware margins | Nokia Corporation | 10.6 |
| [S4-211522](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211522.zip) | OMAF 2nd Edition Nokia public source code release | Nokia Corporation | 10.6 |
| [S4-211359](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211359.zip) | Proposed Updated Work Plan for FS\_5GVideo | Qualcomm Incorporated | 10.7 |
| [S4-211360](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211360.zip) | TR26.955: Proposed Editor's Update from Telcos | Qualcomm Incorporated | 10.7 |
| [S4-211361](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211361.zip) | [FS\_5G\_Video] Status after AHG Calls | Qualcomm Incorporated | 10.7 |
| [S4-211362](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211362.zip) | pCR26.955: Multiple Editorial Fixes | Qualcomm Incorporated | 10.7 |
| [S4-211363](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211363.zip) | pCR26.955: Software Updates | Qualcomm Incorporated | 10.7 |
| [S4-211364](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211364.zip) | [FS\_5G\_Video] Metrics and Characterization Updates | Qualcomm Incorporated | 10.7 |
| [S4-211405](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211405.zip) | [FS\_5GVideo] pCR 26.955: Updated EVC software version and HDR configuration files | Samsung Electronics Co. Ltd., Qualcomm Inc. | 10.7 |
| [S4-211406](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211406.zip) | [FS\_5GVideo] EVC bitstreams for Scenarios 1-5 | Samsung Electronics Co. Ltd., Qualcomm Inc. | 10.7 |
| [S4-211429](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211429.zip) | Verification of the HEVC SDR anchors for Scenario 1 and Scenario 2 | Qualcomm Incorporated, Interdigital, Ericsson LM | 10.7 |
| [S4-211431](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211431.zip) | [FS\_5GVideo] H.265/HEVC HDR anchors for Scenarios 1 and 2 | Qualcomm Incorporated, Ericsson LM | 10.7 |
| [S4-211502](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211502.zip) | Verification of HDR HEVC anchors in S1 and S2 | Ericsson LM, Qualcomm Incorporated | 10.7 |
| S4-211503 | Configuration files for HDR metrics | Ericsson LM | 10.7 |
| [S4-211504](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211504.zip) | VTM configuration files for S4 | Ericsson LM | 10.7 |
| S4-211505 | Suplemental results for SDR HEVC anchors in S1 and S2 | Ericsson LM | 10.7 |
| S4-211365 | [FS\_XRTraffic] Proposed Workplan Updates | Qualcomm Incorporated | 10.8 |
| [S4-211366](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211366.zip) | [FS\_XRTraffic] Proposed Updated TR26.926 | Qualcomm Incorporated | 10.8 |
| S4-211495 | [FS\_XRTraffic] Proposed Updated TR26.926 | Qualcomm Incorporated | 10.8 |
| [S4-211344](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211344.zip) | Draft TR 26.998 v1.0.4 | Samsung Guangzhou Mobile R&D | 10.9 |
| [S4-211367](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211367.zip) | [FS\_5GSTAR] Proposes Updates to TR | Qualcomm Incorporated | 10.9 |
| [S4-211368](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211368.zip) | [FS\_5GSTAR] Scenario KPIs and QoS | Qualcomm Incorporated | 10.9 |
| [S4-211369](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211369.zip) | [FS\_5GSTAR] On Spatial Computing | Qualcomm Incorporated | 10.9 |
| [S4-211370](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211370.zip) | [FS\_5GSTAR] Networked AR Latencies | Qualcomm Incorporated | 10.9 |
| [S4-211371](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211371.zip) | [FS\_5GSTAR] Proposed Updated Conclusions | Qualcomm Incorporated | 10.9 |
| [S4-211372](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211372.zip) | [FS\_5GSTAR] Workshop Report | Qualcomm Incorporated | 10.9 |
| [S4-211388](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211388.zip) | QoS considerations for WLAR | Qualcomm Wireless GmbH | 10.9 |
| [S4-211400](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211400.zip) | [FS\_5GSTAR] Text revision to Introduction | Samsung R&D Institute UK | 10.9 |
| [S4-211401](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211401.zip) | [FS\_5GSTAR] 6.3.4 updates | Samsung R&D Institute UK | 10.9 |
| [S4-211407](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211407.zip) | [FS\_5GSTAR] Update on Streaming call flows | Tencent Cloud | 10.9 |
| [S4-211408](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211408.zip) | [FS\_5GSTAR] Updates on the interactive immersive call flows | Tencent Cloud | 10.9 |
| [S4-211409](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211409.zip) | [FS\_5GSTAR] Update on cognitive immersive call flows | Tencent Cloud | 10.9 |
| [S4-211419](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211419.zip) | [FS\_5GSTAR] EDGAR-based Conversational service update | Tencent Cloud | 10.9 |
| [S4-211423](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211423.zip) | [FS\_5GSTAR] pCR on clause 6.5: Editor’s updates on conversational | Samsung Guangzhou Mobile R&D | 10.9 |
| [S4-211424](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211424.zip) | [FS\_5GSTAR] pCR on Potential Normative Works | Samsung Guangzhou Mobile R&D | 10.9 |
| [S4-211425](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211425.zip) | [FS\_5GSTAR] pCR on Conclusions | Samsung Guangzhou Mobile R&D | 10.9 |
| [S4-211475](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211475.zip) | [FS\_5GSTAR] pCR on Spatial computing/cognition scenario | Nokia Corporation, Samsung Electronics Co. Ltd., B<>Com | 10.9 |
| [S4-211481](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211481.zip) | [FS\_5GSTAR] pCR on clause 3.1 Definitions | Samsung R&D Institute India | 10.9 |
| [S4-211482](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211482.zip) | [FS\_5GSTAR] pCR on clause 3.3 Abbreviations | Samsung R&D Institute India | 10.9 |
| [S4-211484](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211484.zip) | [FS\_5GSTAR] pCR for text consistency | Samsung R&D Institute India | 10.9 |
| [S4-211497](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211497.zip) | [FS\_5GSTAR] pCR on Potential Normative Work | Samsung Electronics Co., Ltd., Ericsson LM | 10.9 |
| [S4-211539](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211539.zip) | Proposals for FS\_5STAR TR | Orange | 10.9 |
| [S4-211373](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211373.zip) | 5G Media Service Enablers | Qualcomm Incorporated, Dolby, Orange, Tencent | 10.10 |
| [S4-211375](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211375.zip) | Media Capabilities for Augmented Reality Glasses | Qualcomm Incorporated | 10.10 |
| [S4-211402](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211402.zip) | Discussion on AI/ML | Samsung R&D Institute UK | 10.10 |
| [S4-211403](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211403.zip) | Draft New SID on Media aspects of 5GS Support for AI/ML based services | Samsung R&D Institute UK | 10.10 |
| [S4-211416](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211416.zip) | Draft New Feasibility Study on Artificial Intelligence (AI) and Machine Learning (ML) for Media | Tencent | 10.10 |
| [S4-211417](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211417.zip) | Draft New WID on Augmented Reality (AR) profiles for Streaming | Tencent | 10.10 |
| [S4-211496](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211496.zip) | Media Capabilities for Augmented Reality Glasses | Xiaomi Communications, Qualcomm Incorporated | 10.10 |

## 10.3 Reports and liaisons from other groups

| [S4-211471](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211471.zip) | Liaison Statement from SC 29/WG 03 to 3GPP SA4 on MPEG Green Metadata [SC 29/WG 03 N 430] | SC 29/WG 03, MPEG systems | Jayeeta Saha |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1504, Block A, 12th Nov. 2200CET] S4-211504 VTM configuration files for S4](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fe88314b.2111B&S=) | Thomas Stockhammer | Thu, 11 Nov 2021 13:35:37 +0000 |
| --- | --- | --- |
| [[LS IN, 1471, Block A, 12th Nov. 2200CET] MPEG Green Metadata](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;660d091.2111B&S=) | teniou(TeniouGilles) | Wed, 10 Nov 2021 07:36:10 +0000 |
| [[LS IN, 1471, Block A, 12th Nov. 2200CET] MPEG Green Metadata](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5d443b63.2111B&S=) | Cedric THIENOT | Thu, 11 Nov 2021 16:49:43 +0000 |
| [[LS IN, 1471, Block A, 12th Nov. 2200CET] MPEG Green Metadata](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7866a4f9.2111B&S=) | Srinivas Gudumasu | Thu, 11 Nov 2021 18:23:47 +0000 |
| [[LS IN, 1471, Block A, 12th Nov. 2200CET] MPEG Green Metadata](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;164309dc.2111B&S=) | Thomas Stockhammer | Thu, 11 Nov 2021 18:33:22 +0000 |
| [[LS IN, 1471, Block A, 12th Nov. 2200CET] MPEG Green Metadata](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;63b6266c.2111B&S=) | Srinivas Gudumasu | Thu, 11 Nov 2021 19:03:57 +0000 |
| [[LS IN, 1471, Block A, 12th Nov. 2200CET] MPEG Green Metadata](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c96fcf82.2111B&S=) | Thomas Stockhammer | Thu, 11 Nov 2021 22:13:57 +0000 |

**Revisions**

none

**Online Discussion:**

* Gilles presents
* Srinivas explains the details
* Thomas explains e-mail discussion and proposes to either note or postpone.
* Srinivas agrees and ask for postponing
* Gilles agrees and invites for potential contributions to the video coordinator.

**Decision:**

* postponed

**S4-211471** is postponed.

| [S4-211472](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211472.zip) | Liaison Statement from ATSC to SA4 on VVC | ATSC | Jayeeta Saha |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[LS IN, 1472, Block A, 12th Nov. 2200CET] LS from ATSC to SA4 on VVC](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;eb90e2ba.2111B&S=) | teniou(TeniouGilles) | Wed, 10 Nov 2021 07:38:14 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* Thomas: we can inform on status, Rel-17 and Rel-18 workshop.
  + Gilles: ok

**Decision:**

* We reply - Thomas will create draft.

**S4-211472** is replied to **S4-211556**.

| [S4-211556](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211556.zip) | Draft Reply Liaison Statement to ATSC on VVC | Video SWG | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [Draft Reply LS to ATSC](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;629f96b4.2111B&S=) | Thomas Stockhammer | Sun, 14 Nov 2021 13:02:56 +0000 |
| --- | --- | --- |
| [Draft Reply LS to ATSC](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;914cd35b.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 15:52:10 +0000 |

**Online Discussion:**

* Thomas presents - one typo 2021 -> 2022
* Fabrice: Why only mention VVC?
  + Thomas: ATSC asked for VVC
  + Gilles: remove example
  + Fabrice: ok
  + Thomas: ok

**Decision:**

* Agreed - we need references, but can do later.

**S4-211556** is revised to **S4-211558**.

| [S4-211556](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211556.zip) | Draft Reply Liaison Statement to ATSC on VVC | Video SWG | Thomas Stockhammer |
| --- | --- | --- | --- |

**S4-211558** is agreed and presented to SA4 plenary.

| [S4-211474](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211474.zip) | Reply LS regarding alignment on CMAF Media Profiles | DVB Technical Module Ad-Hoc Group on Audio-Visual Content (TM-AVC) | Jayeeta Saha |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[LS IN, 1474, Block A, 12th Nov. 2200CET] DVB Reply LS regarding alignment on CMAF Media Profiles](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;709bbebe.2111B&S=) | teniou(TeniouGilles) | Wed, 10 Nov 2021 07:38:30 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* Thomas presents
* Thomas comments
  + On 1), DVB completed HEVC anyways, so no need to comment. We should take an action to check their spec when we complete ours
  + On 2), there is no specific action for us except take into account
  + Based on this proposed to note
* Gilles agrees

**Decision:**

* noted

**S4-211474** is noted.

| [S4-211650](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211650.zip) | Liaison Statement from SC 29/WG 07 to 3GPP SA4 on MPEG-I Video-based Point Cloud Compression subjective verification tests [SC 29/WG 07 N 258] | SC 29/WG 07 | Jayeeta Saha |
| --- | --- | --- | --- |

| [LS from MPEG on V-PCC subjective verification](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6311fc2d.2111C&S=) | teniou(TeniouGilles) | Tue, 16 Nov 2021 19:56:13 +0000 |
| --- | --- | --- |

**Online Discussion:**

* Rajan presents
* Thomas: how does V-PCC relate to codecs and how is independent of the core codec.
  + Rajan explains that it is independent of the core codec
  + Thomas it would be good to understand eventually how the codec would fit into the STAR architecture
* Gilles: We may add some of the information to TR26.998.

**Decision:**

* noted

**S4-211474** is noted.

## 10.4 CRs to features in Release 16 and earlier

| [S4-211358](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211358.zip) | Reference Fixes to TV Video Profiles | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**Online Discussion:**

* Thomas presents
* No comments

**Decision:**

* Agreed, we need a formal CR.

**S4-211358** is agreed.

| [S4-211557](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211557.zip) | CR26.116-0017 Reference Fixes to TV Video Profiles (Rel-16) | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**S4-2111557** is presented to SA4 plenary.

## 10.5 8K\_TV\_5G (8K Television over 5G)

WID:[*SP-210382*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_92E_Electronic/Docs/SP-210381.zip) 8K Television over 5G

| [S4-211355](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211355.zip) | [8K\_TV\_5G] Proposed Updated Work Plan | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[8K\_TV\_5G, 1355, Block B, 16th Nov. 0100CET] Proposed Updated Work Plan](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;e8050ef1.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:25:54 +0000 |
| --- | --- | --- |
| [[8K\_TV\_5G, 1355, Block B, 16th Nov. 0100CET] Proposed Updated Work Plan](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a98c37c7.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 10:56:25 +0000 |

| [[8K\_TV\_5G, 1355, Block B, 16th Nov. 0100CET] Proposed Updated Work Plan](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;883425fd.2111C&S=) | Thomas Stockhammer | Tue, 16 Nov 2021 22:07:55 +0000 |
| --- | --- | --- |

**Revisions**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211355r01.doc

**Online Discussion:**

* Revision 01 presented

**Decision:**

* R01 agreed

**S4-211355** is revised to **S4-211561**.

| [S4-211561](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211561.zip) | [8K\_TV\_5G] Proposed Updated Work Plan | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**S4-211561** is agreed.

| [S4-211356](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211356.zip) | [8K\_TV\_5G] 8K HEVC Operation Point | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[8K\_TV\_5G, 1356, Block B, 16th Nov. 0100CET] 8K HEVC Operation point](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b1b19a15.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:26:04 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* none

**Decision:**

* agreed

**S4-2114356** is agreed.

| [S4-211357](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211357.zip) | [8K\_TV\_5G] 8K TV Scenario | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[8K\_TV\_5G, 1357, Block B, 16th Nov. 0100CET] 8K TV scenario](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;cf00231c.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:26:10 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* none

**Decision:**

* agreed

**S4-211357** is agreed.

| [S4-211374](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211374.zip) | [8K\_TV\_5G] 8K Test Sequences | Qualcomm Incorporated, Fraunhofer HHI, Interdigital | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[8K\_TV\_5G, 1374, Block B, 16th Nov. 0100CET] 8K Test Sequences](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1806e0e2.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:26:19 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* Thomas presents
* Gilles: What does upconversion to HDR mean?
  + Thomas. Need to defer to co-authors

**Decision:**

* agreed

**S4-211374** is agreed.

| [S4-211390](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211390.zip) | [8K\_TV\_5G] 8K TV in 5GMS | Qualcomm CDMA Technologies | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[8K\_TV\_5G, 1390, Block B, 16th Nov. 0100CET] 8K TV in 5GMS](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;87cb338b.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:26:25 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* Thomas presents
* Gilles: What about clause 4 on capabilities?
  + Thomas: already covered through 8K VR

**Decision:**

* agreed

**S4-211390** is agreed.

| [S4-211543](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211543.zip) | CMAF vs 3GPP TV profiles | Tencent | Gilles Teniou |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[8K\_TV\_5G, 1543, Block B, 16th Nov. 0100CET] CMAF vs 3GPP TV profiles](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;dd5039e9.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:26:33 +0000 |
| --- | --- | --- |
| [[8K\_TV\_5G, 1543, Block B, 16th Nov. 0100CET] CMAF vs 3GPP TV profiles](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;47421860.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 21:51:14 +0000 |
| [[8K\_TV\_5G, 1543, Block B, 16th Nov. 0100CET] CMAF vs 3GPP TV profiles](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7b5b74b9.2111C&S=) | teniou(TeniouGilles) | Tue, 16 Nov 2021 05:49:54 +0000 |

**Revisions**

none

**Online Discussion:**

* nonr

**Decision:**

* Agreed as the baseline for the investigation

**S4-211543** is agreed.

## 10.6 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)

| [S4-211521](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211521.zip) | Updates to TR 26.999 with viewport-dependent tiled streaming results with usage of head motion-aware margins | Nokia Corporation | Igor Curcio |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_VR\_CoGui, 1521, Block B, 16th Nov. 0100CET] Updates to TR on viewport dep. tiled streaming...](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;97a2cce5.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:26:42 +0000 |
| --- | --- | --- |
| [[FS\_VR\_CoGui, 1521, Block B, 16th Nov. 0100CET] Updates to TR on viewport dep. tiled streaming...](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3482715d.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:32:58 +0000 |
| [[FS\_VR\_CoGui, 1521, Block B, 16th Nov. 0100CET] Updates to TR on viewport dep. tiled streaming...](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3907390f.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 21:41:37 +0000 |
| [[FS\_VR\_CoGui, 1521, Block B, 16th Nov. 0100CET] Updates to TR on viewport dep. tiled streaming...](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ee45c370.2111C&S=) | Curcio, Igor (Nokia - FI/Tampere) | Mon, 15 Nov 2021 22:14:18 +0000 |

**Revisions**

none

**Online Discussion:**

* Thomas: unclear how this contributes to the work item objectives
  + Igor: lack of input. We just have this information
* Igor: propose to update the introduction
* Gilles: agreeable?
  + Thomas: What about the comments
  + Gilles: can be addressed in a separate doc

**Decision:**

* agreed

**S4-211521** is agreed.

| [S4-211562](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-2115562.zip) | TR 26.999 v0.6.0 | Nokia Corporation | Igor Curcio |
| --- | --- | --- | --- |

| [S4-211522](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211522.zip) | OMAF 2nd Edition Nokia public source code release | Nokia Corporation | Igor Curcio |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_VR\_CoGui, 1522, Block B, 16th Nov. 0100CET] OMAF 2nd Edition Nokia public source code release](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;973c1e57.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:26:45 +0000 |
| --- | --- | --- |
| [[FS\_VR\_CoGui, 1522, Block B, 16th Nov. 0100CET] OMAF 2nd Edition Nokia public source code release](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;98958f86.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:32:35 +0000 |
| [[FS\_VR\_CoGui, 1522, Block B, 16th Nov. 0100CET] OMAF 2nd Edition Nokia public source code release](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;27c80dd7.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 21:35:35 +0000 |
| [[FS\_VR\_CoGui, 1522, Block B, 16th Nov. 0100CET] OMAF 2nd Edition Nokia public source code release](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d22486a8.2111C&S=) | Curcio, Igor (Nokia - FI/Tampere) | Mon, 15 Nov 2021 22:10:11 +0000 |

**Revisions**

none

**Online Discussion:**

* Igor presents
* Thomas: I still do not see the relation to TS 26.118
  + Gilles: suggest to add this information to TR 26.928.
  + Igor: can do so.

**Decision:**

* Document is noted. Create a CR to TR 26.928.

**S4-211522** is noted.

| [S4-211563](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211563.zip) | Draft CR 26.928: OMAF 2nd Edition Nokia public source code release | Nokia Corporation | Igor Curcio |
| --- | --- | --- | --- |

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

WID: [*SP-210378*](https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGs_92E_Electronic_2021_06/Docs/SP-210378.zip) Feasibility Study on 5G Video Codec Characteristics (FS\_5GVideo)

| [S4-211359](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211359.zip) | Proposed Updated Work Plan for FS\_5GVideo | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1359, Block A, 12th Nov. 2200CET] Proposed Updated Work Plan for FS\_5GVideo](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;96d82157.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:58:41 +0000 |
| --- | --- | --- |

**Online Discussion:**

* We need to take into account the guidance from the opening plenary. Remove Dec 21 and Jan 25.

**Decision:**

* Agreed with updates

**S4-211359** is revised to **S4-211555.**

| [S4-211555](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211555.zip) | Work plan for FS\_5GVideo | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**S4-211555** is agreed**.**

| [S4-211360](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211360.zip) | TR26.955: Proposed Editor's Update from Telcos | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1360, Block A, 12th Nov. 2200CET] Proposed Editor's Update from Telcos](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2b2ca121.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:58:54 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* none

**Decision:**

* No comments

**S4-211360** is agreed.

| [S4-211553](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211553.zip) | TR26.955v1.4.0 | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**S4-211553** is presented to SA4 Block A Plenary and was **agreed.**

| [S4-211361](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211361.zip) | [FS\_5G\_Video] Status after AHG Calls | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1361, Block A, 12th Nov. 2200CET] Status after AHG Calls](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;faab9b4f.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:59:16 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* No comments

**Decision:**

* agreed

**S4-211361** is agreed.

| [S4-211554](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211554.zip) | [FS\_5G\_Video] Status Update | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**S4-211554** is presented to SA4 Block A Plenary and was **agreed.**

| [S4-211362](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211362.zip) | pCR26.955: Multiple Editorial Fixes | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1362, Block A, 12th Nov. 2200CET] Multiple Editorial Fixes](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f1d01b13.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:59:28 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* No comments

**Decision:**

* agreed

**S4-211362** is agreed.

| [S4-211363](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211363.zip) | pCR26.955: Software Updates | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1363, Block A, 12th Nov. 2200CET] Software Updates](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;71f4a9.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:59:36 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* No comments

**Decision:**

* agreed

**S4-211363** is agreed.

| [S4-211364](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211364.zip) | [FS\_5G\_Video] Metrics and Characterization Updates | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1364, Block A, 12th Nov. 2200CET] Metrics and Characterization Updates](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4155e565.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:59:48 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* Alexis: Change luminance to luma
  + Thomas: ok
* Dmytro: Can we remove PSNR?
  + Thomas: agree, first 2
* Alexis:
  + A space is missing in "asdefined" in the MS-SSIM line
  + It should also be "component wPSNR(Y)".

**Decision:**

* Agreed with comments

**S4-211364** is agreed.

| [S4-211405](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211405.zip) | [FS\_5GVideo] pCR 26.955: Updated EVC software version and HDR configuration files | Samsung Electronics Co. Ltd., Qualcomm Inc. | Rajan Joshi |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1405, Block A, 12th Nov. 2200CET] Updated EVC software version and HDR configuration files](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;db4240a8.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 23:00:03 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* No comments

**Decision:**

* agreed

**S4-211405** is agreed.

| [S4-211406](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211406.zip) | [FS\_5GVideo] EVC bitstreams for Scenarios 1-5 | Samsung Electronics Co. Ltd., Qualcomm Inc. | Rajan Joshi |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1406, Block A, 12th Nov. 2200CET] EVC bitstreams for Scenarios 1-5](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d8512f96.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 23:00:10 +0000 |
| --- | --- | --- |
| [[FS\_5GVideo, 1406, Block A, 12th Nov. 2200CET] EVC bitstreams for Scenarios 1-5](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b314ec0e.2111B&S=) | Thomas Stockhammer | Thu, 11 Nov 2021 13:35:29 +0000 |

**Revisions**

none

**Online Discussion:**

* Thomas explains the issue
* Thomas: add note that sparks is still missing

**Decision:**

* Agreed with comment

**S4-211406** is agreed.

| [S4-211429](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211429.zip) | Verification of the HEVC SDR anchors for Scenario 1 and Scenario 2 | Qualcomm Incorporated, Interdigital, Ericsson LM | Dmytro Rusanovskyy |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1429, Block A, 12th Nov. 2200CET] Verification of the HEVC SDR anchors for Scenario 1 and Scenario 2](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;9366e698.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 23:00:20 +0000 |
| --- | --- | --- |
| [[FS\_5GVideo, 1429, Block A, 12th Nov. 2200CET] Verification of the HEVC SDR anchors for Scenario 1 and Scenario 2](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;dd9c5648.2111B&S=) | Thomas Stockhammer | Thu, 11 Nov 2021 12:31:14 +0000 |

**Revisions**

none

**Online Discussion:**

* Need to add verification reports

**Decision:**

**S4-211429** is agreed.

| [S4-211431](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211431.zip) | [FS\_5GVideo] H.265/HEVC HDR anchors for Scenarios 1 and 2 | Qualcomm Incorporated, Ericsson LM | Dmytro Rusanovskyy |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1431, Block A, 12th Nov. 2200CET] H.265/HEVC HDR anchors for Scenarios 1 and 2](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fd6e1a6e.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 23:00:29 +0000 |
| --- | --- | --- |
| [[FS\_5GVideo, 1431, Block A, 12th Nov. 2200CET] H.265/HEVC HDR anchors for Scenarios 1 and 2](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;affdd9db.2111B&S=) | Thomas Stockhammer | Thu, 11 Nov 2021 13:35:47 +0000 |

**Revisions**

none

**Online Discussion:**

* Anchors need to be provided.

**Decision:**

**S4-211431** is agreed.

| [S4-211502](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211502.zip) | Verification of HDR HEVC anchors in S1 and S2 | Ericsson LM, Qualcomm Incorporated | Lukasz Litwic |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1502, Block A, 12th Nov. 2200CET] Verification of HDR HEVC anchors in S1 and S2](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;bac0a470.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 23:00:43 +0000 |
| --- | --- | --- |
| [[FS\_5GVideo, 1502, Block A, 12th Nov. 2200CET] Verification of HDR HEVC anchors in S1 and S2](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;284816c.2111B&S=) | Thomas Stockhammer | Thu, 11 Nov 2021 12:30:24 +0000 |

**Revisions**

none

**Online Discussion:**

* Need verification report to be generated.

**Decision:**

**S4-211502** is agreed.

| [S4-211503](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211503.zip) | Configuration files for HDR metrics | Ericsson LM | Lukasz Litwic |
| --- | --- | --- | --- |

**Online Discussion:**

* Lukasz presents

**Decision:**

* agreed

**S4-211503** is agreed.

| [S4-211504](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211504.zip) | VTM configuration files for S4 | Ericsson LM | Lukasz Litwic |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GVideo, 1504, Block A, 12th Nov. 2200CET] S4-211504 VTM configuration files for S4](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7719132e.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 23:00:53 +0000 |
| --- | --- | --- |
| [[FS\_5GVideo, 1504, Block A, 12th Nov. 2200CET] S4-211504 VTM configuration files for S4](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fe88314b.2111B&S=) | Thomas Stockhammer | Thu, 11 Nov 2021 13:35:37 +0000 |

**Revisions**

none

**Online Discussion:**

* No comments

**Decision:**

* agreed

**S4-211504** is agreed.

| S4-211505 | Suplemental results for SDR HEVC anchors in S1 and S2 | Ericsson LM | Lukasz Litwic |
| --- | --- | --- | --- |

**S4-211505** is withdrawn.

## 10.8 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

| S4-211365 | [FS\_XRTraffic] Proposed Workplan Updates | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**Online Discussion:**

* Thomas presents

**Decision:**

* No comments

**S4-211365** is agreed.

| [S4-211366](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211366.zip) | [FS\_XRTraffic] Proposed Updated TR26.926 | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_XRTraffic, 1366, Block B, 16th Nov. 0100CET] Proposed Updated TR26.926](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2033974e.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:26:57 +0000 |
| --- | --- | --- |
| [[FS\_XRTraffic, 1366, Block B, 16th Nov. 0100CET] Proposed Updated TR26.926](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3205207.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:32:14 +0000 |

**Revisions**

none

**Online Discussion:**

* No comments

**Decision:**

**S4-211366** is agreed.

| S4-211495 | [FS\_XRTraffic] Proposed Updated TR26.926 | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**S4-211495** is withdrawn.

| S4-211564 | TR26.926 v0.4.0 | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

## 10.9 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

| [S4-211344](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211344.zip) | Draft TR 26.998 v1.0.4 | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1344, Block A, 11th Nov. 2200CET] Draft TR 26.998 v1.0.4](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;aab808ae.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:33:28 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1344, Block A, 11th Nov. 2200CET] Draft TR 26.998 v1.0.4](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;dbdec645.2111B&S=) | Fabrice Plante | Tue, 9 Nov 2021 22:57:22 -0800 |
| [[FS\_5GSTAR, 1344, Block A, 11th Nov. 2200CET] Draft TR 26.998 v1.0.4](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;9afabef6.2111B&S=) | Hakju Ryan Lee | Wed, 10 Nov 2021 16:08:42 +0900 |
| [[FS\_5GSTAR, 1344, Block A, 11th Nov. 2200CET] Draft TR 26.998 v1.0.4](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;aab172bc.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 15:01:38 +0000 |

**Revisions**

none

**Online Discussion:**

* Address the one typo

**Decision:**

* Agreed with fix

**S4-211344** is agreed.

| [S4-211545](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211545.zip) | Draft TR 26.998 v1.1.0 | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |
| --- | --- | --- | --- |

| [S4-211367](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211367.zip) | [FS\_5GSTAR] Proposes Updates to TR | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1367, Block A, 11th Nov. 2200CET] Proposes Updates to TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4d2a1df4.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:33:38 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1367, Block A, 11th Nov. 2200CET] Proposes Updates to TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f4648138.2111B&S=) | Hakju Ryan Lee | Wed, 10 Nov 2021 16:23:33 +0900 |
| [[FS\_5GSTAR, 1367, Block A, 11th Nov. 2200CET] Proposes Updates to TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d2021a73.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 07:28:14 +0000 |
| [[FS\_5GSTAR, 1367, Block A, 11th Nov. 2200CET] Proposes Updates to TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;bca0c4fb.2111B&S=) | Hakju Ryan Lee | Wed, 10 Nov 2021 16:50:42 +0900 |
| [[FS\_5GSTAR, 1367, Block A, 11th Nov. 2200CET] Proposes Updates to TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;28e3f4d9.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 08:15:18 +0000 |
| [[FS\_5GSTAR, 1367, Block A, 11th Nov. 2200CET] Proposes Updates to TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fca7a943.2111B&S=) | Hakju Ryan Lee | Wed, 10 Nov 2021 17:20:15 +0900 |
| [[FS\_5GSTAR, 1367, Block A, 11th Nov. 2200CET] Proposes Updates to TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fca7a943.2111B&S=) | Hakju Ryan Lee | Wed, 10 Nov 2021 17:20:15 +0900 |
| [[FS\_5GSTAR, 1367, Block A, 12th Nov. 2200CET] Proposes Updates to TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;99c7e5fd.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 16:14:00 +0000 |

**Revisions**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211367r01.zip

**Online Discussion:**

* none

**Decision:**

* Revision r01 agreed

**S4-211367** is revised to **S4-211559.**

| [S4-211559](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211559.zip) | [FS\_5GSTAR] Proposes Updates to TR | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**S4-211559** is agreed.

| [S4-211368](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211368.zip) | [FS\_5GSTAR] Scenario KPIs and QoS | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1368, Block A, 11th Nov. 2200CET] Scenario KPIs and QoS](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;9d067e81.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:33:44 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1368, Block A, 11th Nov. 2200CET] Scenario KPIs and QoS](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;518fb330.2111B&S=) | Hakju Ryan Lee | Wed, 10 Nov 2021 17:06:32 +0900 |
| [[FS\_5GSTAR, 1368, Block A, 11th Nov. 2200CET] Scenario KPIs and QoS](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;51ec36b3.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 20:53:42 +0000 |
| [[FS\_5GSTAR, 1368, Block A, 11th Nov. 2200CET] Scenario KPIs and QoS](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;e50e6d5e.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 16:10:37 +0000 |

| [[FS\_5GSTAR, 1368, Block A, 11th Nov. 2200CET] Scenario KPIs and QoS](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;cf533d8f.2111B&S=) | Thomas Stockhammer | Sun, 14 Nov 2021 11:57:38 +0000 |
| --- | --- | --- |

**Revisions**

https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211368-scenario-kpis-r01.docx

**Online Discussion:**

* Remove figure and only add reference.

**Decision:**

* Agreed in principle, will be revised

**S4-211368** is revised to **S4-211546**.

| [S4-211546](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211546.zip) | [FS\_5GSTAR] Scenario KPIs and QoS | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**S4-211546** is agreed.

| [S4-211369](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211369.zip) | [FS\_5GSTAR] On Spatial Computing | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1369, Block A, 11th Nov. 2200CET] On Spatial Computing](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ab40b3ca.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:33:55 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1369, Block A, 11th Nov. 2200CET] On Spatial Computing](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7ca5071f.2111B&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Thu, 11 Nov 2021 11:49:10 +0000 |

| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;32a9987b.2111B&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Thu, 11 Nov 2021 11:59:26 +0000 |
| --- | --- | --- |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6968f4ac.2111B&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Thu, 11 Nov 2021 16:33:38 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1fc3d9b9.2111B&S=) | Jérome ROYAN | Thu, 11 Nov 2021 20:47:23 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2bc46c02.2111B&S=) | Iraj Sodagar | Fri, 12 Nov 2021 08:52:06 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a84470bd.2111B&S=) | Jérome ROYAN | Fri, 12 Nov 2021 22:13:36 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;abb0a221.2111B&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Sat, 13 Nov 2021 00:27:46 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;498578a7.2111B&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Sun, 14 Nov 2021 23:53:39 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4fa6fde2.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 05:06:50 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;dc9b970b.2111C&S=) | Jérome ROYAN | Mon, 15 Nov 2021 09:01:31 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a896ac69.2111C&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Mon, 15 Nov 2021 15:39:04 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4e83f728.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 15:54:25 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;97229ad0.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 17:19:51 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8f96b427.2111C&S=) | Thomas Stockhammer | Tue, 16 Nov 2021 05:29:03 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;90c1bbd0.2111C&S=) | Thomas Stockhammer | Tue, 16 Nov 2021 05:55:07 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;da786dbd.2111C&S=) | Thomas Stockhammer | Tue, 16 Nov 2021 07:39:28 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;e6ce1305.2111C&S=) | Thomas Stockhammer | Tue, 16 Nov 2021 17:58:47 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5d6c4c76.2111C&S=) | Thomas Stockhammer | Tue, 16 Nov 2021 19:35:20 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;201d9e01.2111C&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Wed, 17 Nov 2021 05:26:19 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a8a4d4e0.2111C&S=) | Thomas Stockhammer | Wed, 17 Nov 2021 05:47:27 +0000 |
| [5GSTAR - Update on Spatial Computing - 1369 & 1475](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;e979c59e.2111C&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Wed, 17 Nov 2021 06:13:07 +0000 |

| [Offline Spatial Computing](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;e977f3db.2111B&S=) | Thomas Stockhammer | Thu, 11 Nov 2021 08:20:34 +0000 |
| --- | --- | --- |
| [Offline Spatial Computing part 2](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;74fa0492.2111B&S=) | Thomas Stockhammer | Thu, 11 Nov 2021 16:06:15 +0000 |

| [STAR Spatial Compute Offline 3](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fd24472a.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 07:08:25 +0000 |
| --- | --- | --- |
| [STAR: Spatial Compute Offline 4](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;719dd366.2111C&S=) | Thomas Stockhammer | Tue, 16 Nov 2021 08:53:57 +0000 |

**Revisions**

none

**Online Discussion:**

* Thomas quickly presents
* Many offline calls, see progress above

**Decision:**

* Revise and merge

**S4-211369** is revised to **S4-211565**

| [S4-211565](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211565.zip) | [FS\_5GSTAR] On Spatial Computing | Nokia, Qualcomm, Tencent, b<>com, Samsung, Xiaomi | Thomas Stockhammer |
| --- | --- | --- | --- |

**Online Discussion:**

* Thomas presens
* Saba has some additional edits
* Needs some more reviews and updates
* Offline and create another revision

**Decision:**

* Revise and merge

**S4-211565** is revised to **S4-211569**

| [S4-211569](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211569.zip) | [FS\_5GSTAR] On Spatial Computing | Nokia, Qualcomm, Tencent, b<>com, Samsung, Xiaomi | Thomas Stockhammer |
| --- | --- | --- | --- |

| [S4-211370](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211370.zip) | [FS\_5GSTAR] Networked AR Latencies | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1370, Block A, 11th Nov. 2200CET] Networked AR Latencies](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2e1a7c94.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:33:49 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1370, Block A, 11th Nov. 2200CET] Networked AR Latencies](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f4bfb506.2111B&S=) | Sungryeul Rhyu | Wed, 10 Nov 2021 17:11:00 +0900 |
| [[FS\_5GSTAR, 1370, Block A, 11th Nov. 2200CET] Networked AR Latencies](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;dbfc9a45.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 21:09:17 +0000 |
| [[FS\_5GSTAR, 1370, Block A, 11th Nov. 2200CET] Networked AR Latencies](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;abb77e19.2111B&S=) | Sungryeul Rhyu | Thu, 11 Nov 2021 09:55:11 +0900 |
| [[FS\_5GSTAR, 1370, Block A, 11th Nov. 2200CET] Networked AR Latencies](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6cbb8d9.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 15:16:31 +0000 |

| [[FS\_5GSTAR, 1370, Block A, 11th Nov. 2200CET] Networked AR Latencies](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f8273808.2111B&S=) | Thomas Stockhammer | Sun, 14 Nov 2021 12:33:55 +0000 |
| --- | --- | --- |

**Revisions**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/Video/S4-211370r01.docx

**Online Discussion:**

* Ryan: Remove cylinders
  + Thomas: can remove, but this is more correct
  + Ryan: ok keep buffers and explain
  + Thomas: ok can do

**Decision:**

* Agreed with the addition to explain the figures.

**S4-211370** is revised to **S4-211550**.

| [S4-211550](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211550.zip) | [FS\_5GSTAR] Networked AR Latencies | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**S4-211550** is agreed.

| [S4-211371](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211371.zip) | [FS\_5GSTAR] Proposed Updated Conclusions | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1371, Block A, 11th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;58f88468.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:34:05 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1371, Block A, 11th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6a4fa138.2111B&S=) | Hakju Ryan Lee | Wed, 10 Nov 2021 17:58:43 +0900 |
| [[FS\_5GSTAR, 1371, Block A, 11th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6a4fa138.2111B&S=) | Hakju Ryan Lee | Wed, 10 Nov 2021 17:58:43 +0900 |

**Revisions**

https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211371\_Conclusions\_Samsung\_Orange2.docx

**Online Discussion:**

* none

**Decision:**

* Merged into **S4-211552.**

**S4-211371** is merged to **S4-211552**.

| [S4-211552](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211552.zip) | [FS\_5GSTAR] Proposed Updated Conclusions | Qualcomm Incorporated, Samsung, Ericsson, others | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1552, Block A, 12th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a85fe070.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 16:05:51 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1552, Block A, 12th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6656a485.2111B&S=) | Hakju Ryan Lee | Fri, 12 Nov 2021 09:33:25 +0900 |
| [[FS\_5GSTAR, 1552, Block A, 12th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ac55c841.2111B&S=) | Fabrice Plante | Thu, 11 Nov 2021 17:38:02 -0800 |

| [[FS\_5GSTAR, 1552, Block A, 12th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;de4fef8f.2111B&S=) | Ali El Essaili | Fri, 12 Nov 2021 17:47:24 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1552, Block A, 12th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4536d2ed.2111B&S=) | Curcio, Igor (Nokia - FI/Tampere) | Fri, 12 Nov 2021 20:41:07 +0000 |
| [[FS\_5GSTAR, 1552, Block A, 12th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;87f2c1d2.2111C&S=) | Hakju Ryan Lee | Mon, 15 Nov 2021 10:00:46 +0900 |
| [[FS\_5GSTAR, 1552, Block A, 12th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6b01426.2111C&S=) | Hakju Ryan Lee | Mon, 15 Nov 2021 10:23:36 +0900 |
| [[FS\_5GSTAR, 1552, Block A, 12th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;bcb3cfb4.2111C&S=) | Hakju Ryan Lee | Mon, 15 Nov 2021 10:34:42 +0900 |
| [[FS\_5GSTAR, 1552, Block A, 12th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;768cba99.2111C&S=) | Hakju Ryan Lee | Mon, 15 Nov 2021 13:34:09 +0900 |
| [[FS\_5GSTAR, 1552, Block A, 12th Nov. 2200CET] Proposed Updated Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;42c06ccc.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 05:09:30 +0000 |

**Online Discussion:**

* Ryan presents
* Thomas: disagree on streaming => communications
* Thomas: Too quickly
* Igor: Rushing to put content here to pre-approve work items.
  + Gilles: Not surprised that this is happening, but we need to extend to block B.
* Gilles: What about timeline?
  + Ryan: We can complete at this meeting
  + Thomas: still lots of work to be done, we need to work very hard.

**Decision:**

**S4-211552** is agreed/noted/revised.

| [S4-211372](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211372.zip) | [FS\_5GSTAR] Workshop Report | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1372, Block A, 11th Nov. 2200CET] Workshop Report](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f5694460.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:34:09 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1372, Block A, 11th Nov. 2200CET] Workshop Report](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;7db41e3b.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 15:01:58 +0000 |

**Revisions**

none

**Online Discussion:**

* none

**Decision:**

* agreed

**S4-211372** is agreed.

| [S4-211388](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211388.zip) | QoS considerations for WLAR | Qualcomm Wireless GmbH | Imed Bouazizi |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1388, Block A, 11th Nov. 2200CET] QoS considerations for WLAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4384f4ba.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:34:13 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1388, Block A, 11th Nov. 2200CET] QoS considerations for WLAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;da0b8fd9.2111B&S=) | Hakju Ryan Lee | Wed, 10 Nov 2021 17:12:16 +0900 |
| [[FS\_5GSTAR, 1388, Block A, 11th Nov. 2200CET] QoS considerations for WLAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6e913805.2111B&S=) | Imed Bouazizi | Wed, 10 Nov 2021 19:42:42 +0000 |
| [[FS\_5GSTAR, 1388, Block A, 11th Nov. 2200CET] QoS considerations for WLAR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;72f0259a.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 15:03:14 +0000 |

**Revisions**

none

**Online Discussion:**

* Ryan: just some technical questions, no requests for changes.

**Decision:**

* agreeable.

**S4-211388** is agreed.

| [S4-211400](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211400.zip) | [FS\_5GSTAR] Text revision to Introduction | Samsung R&D Institute UK | Eric Yip |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1400, Block A, 11th Nov. 2200CET] Text revision to Introduction](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;168f7332.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:34:18 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1400, Block A, 11th Nov. 2200CET] Text revision to Introduction](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;75258d68.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 17:35:50 +0000 |
| [[FS\_5GSTAR, 1400, Block A, 11th Nov. 2200CET] Text revision to Introduction](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a5c50eb5.2111B&S=) | Eric Yip | Thu, 11 Nov 2021 09:53:48 +0900 |

**Revisions**

https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211400r01.docx

**Online Discussion:**

* See revision

**Decision:**

* Revision is agreed

**S4-211400** is revised to **S4-211547.**

| [S4-211547](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211547.zip) | [FS\_5GSTAR] Text revision to Introduction | Samsung R&D Institute UK | Eric Yip |
| --- | --- | --- | --- |

**S4-211547** is agreed.

| [S4-211401](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211401.zip) | [FS\_5GSTAR] 6.3.4 updates | Samsung R&D Institute UK | Eric Yip |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1401&1408, Block A, 11th Nov. 2200CET] 6.3.4 updates](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6a1b54ae.2111B&S=) | Eric Yip | Wed, 10 Nov 2021 15:33:50 +0900 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1401, Block A, 11th Nov. 2200CET] 6.3.4 updates](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f07b2edc.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:34:22 +0000 |
| [[FS\_5GSTAR, 1401, Block A, 11th Nov. 2200CET] 6.3.4 updates](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4d73f9bb.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 18:21:52 +0000 |

**Revisions**

* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_116-e/Inbox/Drafts/VIDEO/S4-211401r01.docx>
* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211401r01\_Tencent.docx
* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211401r02.docx

**Online Discussion:**

* See revisions

**Decision:**

* Revison 2 is agreed

**S4-211401** is merged to **S4-211551.**

| [S4-211551](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211551.zip) | [FS\_5GSTAR] 6.3.4 updates | Samsung R&D Institute UK | Eric Yip |
| --- | --- | --- | --- |

**S4-211551** is agreed**.**

| [S4-211407](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211407.zip) | [FS\_5GSTAR] Update on Streaming call flows | Tencent Cloud | Iraj Sodagar |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1407&1408, Block A, 11th Nov. 2200CET] Update on Streaming call flows/Updates on the interactive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;df48b170.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:34:37 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1407&1408, Block A, 11th Nov. 2200CET] Update on Streaming call flows/Updates on the interactive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;bbbc18d5.2111B&S=) | Eric Yip | Wed, 10 Nov 2021 09:52:27 +0900 |
| [[FS\_5GSTAR, 1407&1408, Block A, 11th Nov. 2200CET] Update on Streaming call flows/Updates on the interactive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;22f69a59.2111B&S=) | Eric Yip | Wed, 10 Nov 2021 14:29:19 +0900 |
| [[FS\_5GSTAR, 1407&1408, Block A, 11th Nov. 2200CET] Update on Streaming call flows/Updates on the interactive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3d7ca1ae.2111B&S=) | teniou(TeniouGilles) | Wed, 10 Nov 2021 06:20:11 +0000 |
| [[FS\_5GSTAR, 1407&1408, Block A, 11th Nov. 2200CET] Update on Streaming call flows/Updates on the interactive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;375189d2.2111B&S=) | Iraj Sodagar | Wed, 10 Nov 2021 18:30:35 +0000 |
| [[FS\_5GSTAR, 1407&1408, Block A, 11th Nov. 2200CET] Update on Streaming call flows/Updates on the interactive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c97fc246.2111B&S=) | Eric Yip | Thu, 11 Nov 2021 09:30:56 +0900 |
| [[FS\_5GSTAR, 1407&1408, Block A, 11th Nov. 2200CET] Update on Streaming call flows/Updates on the interactive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;10e3f089.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 16:12:31 +0000 |

**Revisions**

none

**Online Discussion:**

* Iraj explains the motivation.

**Decision:**

* agreed

**S4-211407** is agreed.

| [S4-211408](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211408.zip) | [FS\_5GSTAR] Updates on the interactive immersive call flows | Tencent Cloud | Iraj Sodagar |
| --- | --- | --- | --- |

**E-mail Discussion:**

See 1407

**Decision:**

* Merge to 1551

**S4-211408** is merged to **S4-211551**.

| [S4-211409](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211409.zip) | [FS\_5GSTAR] Update on cognitive immersive call flows | Tencent Cloud | Iraj Sodagar |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1409&1475, Block A, 11th Nov. 2200CET] pCR on Spatial computing/cognition scenario / Update on cognitive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ee91f362.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:34:46 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1409&1475, Block A, 11th Nov. 2200CET] pCR on Spatial computing/cognition scenario / Update on cognitive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8f9fef0f.2111B&S=) | Iraj Sodagar | Wed, 10 Nov 2021 19:17:35 +0000 |
| [[FS\_5GSTAR, 1409&1475, Block A, 11th Nov. 2200CET] pCR on Spatial computing/cognition scenario / Update on cognitive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b9062157.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 20:26:36 +0000 |
| [[FS\_5GSTAR, 1409&1475, Block A, 11th Nov. 2200CET] pCR on Spatial computing/cognition scenario / Update on cognitive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8be3290d.2111B&S=) | Iraj Sodagar | Wed, 10 Nov 2021 20:41:45 +0000 |
| [[FS\_5GSTAR, 1409&1475, Block A, 11th Nov. 2200CET] pCR on Spatial computing/cognition scenario / Update on cognitive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;96ea0842.2111B&S=) | Hakju Ryan Lee | Thu, 11 Nov 2021 14:13:34 +0900 |
| [[FS\_5GSTAR, 1409&1475, Block A, 11th Nov. 2200CET] pCR on Spatial computing/cognition scenario / Update on cognitive immersive call flows](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b32b58f3.2111B&S=) | Ahsan, Saba (Nokia - FI/Espoo) | Thu, 11 Nov 2021 07:11:01 +0000 |

**Revisions**

none

**Online Discussion:**

* See discussion at 1369

**Decision:**

* merge

**S4-211409** is merged to **S4-211565**

| [S4-211419](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211419.zip) | [FS\_5GSTAR] EDGAR-based Conversational service update | Tencent Cloud | Iraj Sodagar |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1419, Block A, 11th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2bfb7904.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:34:41 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1419, Block A, 11th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;63f19088.2111B&S=) | Imed Bouazizi | Wed, 10 Nov 2021 20:54:59 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 11th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;747446f2.2111B&S=) | Iraj Sodagar | Thu, 11 Nov 2021 00:56:35 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 11th Nov. 2200CET] Proposals for FS\_5STAR TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c9f610e1.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:35:17 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 11th Nov. 2200CET] Proposals for FS\_5STAR TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fdea3c14.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 18:35:12 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fdbf2cb.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 15:38:41 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3ed34a52.2111B&S=) | Iraj Sodagar | Fri, 12 Nov 2021 02:56:59 +0000 |

| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3baec60a.2111B&S=) | Ali El Essaili | Fri, 12 Nov 2021 09:50:35 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5fe2e5c4.2111B&S=) | Thomas Stockhammer | Fri, 12 Nov 2021 13:33:25 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8850e75a.2111B&S=) | Iraj Sodagar | Fri, 12 Nov 2021 18:33:35 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;bc53d7a7.2111B&S=) | Iraj Sodagar | Fri, 12 Nov 2021 18:43:37 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2b46f9ba.2111B&S=) | Thomas Stockhammer | Fri, 12 Nov 2021 19:24:51 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;b80c892e.2111B&S=) | Iraj Sodagar | Fri, 12 Nov 2021 19:45:03 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a6c2bc6a.2111C&S=) | Iraj Sodagar | Mon, 15 Nov 2021 22:11:44 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;42c8c98a.2111C&S=) | Iraj Sodagar | Tue, 16 Nov 2021 04:53:06 +0000 |
| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;43257ca6.2111C&S=) | Ali El Essaili | Tue, 16 Nov 2021 09:23:55 +0000 |

| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;97f85347.2111C&S=) | Iraj Sodagar | Wed, 17 Nov 2021 00:15:55 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1419, Block A, 12th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d686fe9f.2111C&S=) | Iraj Sodagar | Wed, 17 Nov 2021 07:10:50 +0000 |

**Revisions**

* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_116-e/Inbox/Drafts/VIDEO/S4-211419-5GSTAR-ConversationalEDGAR-r01.docx>
* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_116-e/Inbox/Drafts/VIDEO/S4-211419-5GSTAR-ConversationalEDGAR-r02-Ericsson.docx>
* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_116-e/Inbox/Drafts/VIDEO/S4-211419-5GSTAR-ConversationalEDGAR-r02.docx>
* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211419-5GSTAR-ConversationalEDGAR-r03.docx

**Online Discussion:**

* Ali: What is the purpose of the scene graph generator? Why here on the producer side
  + Iraj: in EDGAR you have capture, hence MRF creates a scene graph.
  + Ali: if specific for EDGAR, should not go into generic architecture.
  + Imed: you would always need a scene or scene generator. The scene is always generator in the network. In default case it is the MRF
  + Iraj: Create a figure where the scene is generated in the MRF
  + Ali: MRF is a specific term, we should generalize
* We have two network entities, one for edge rendering, and one for scene generation.
* New revision r03 uploaded. ALi and Thomas request for more time

**Decision:**

* E-mail discussion will continue

**S4-211419** is noted/agreed/revised.

| [S4-211423](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211423.zip) | [FS\_5GSTAR] pCR on clause 6.5: Editor’s updates on conversational | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1423, Block A, 11th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;562c776c.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:34:56 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1423, Block A, 11th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8bda89f6.2111B&S=) | Imed Bouazizi | Wed, 10 Nov 2021 21:24:14 +0000 |
| [[FS\_5GSTAR, 1423, Block A, 11th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1f2c625c.2111B&S=) | Hakju Ryan Lee | Thu, 11 Nov 2021 06:57:57 +0900 |
| [[FS\_5GSTAR, 1423, Block A, 12th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1edeed46.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 15:38:32 +0000 |
| [[FS\_5GSTAR, 1423, Block A, 12th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6d67503b.2111B&S=) | Hakju Ryan Lee | Fri, 12 Nov 2021 15:51:01 +0900 |

| [[FS\_5GSTAR, 1423, Block A, 12th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;59fd237.2111B&S=) | Ali El Essaili | Fri, 12 Nov 2021 10:01:38 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1423, Block A, 12th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;22599655.2111B&S=) | Ali El Essaili | Fri, 12 Nov 2021 11:14:32 +0000 |
| [[FS\_5GSTAR, 1423, Block A, 12th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;3eb05935.2111B&S=) | Thomas Stockhammer | Fri, 12 Nov 2021 13:43:42 +0000 |
| [[FS\_5GSTAR, 1423, Block A, 12th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;301f4bf6.2111C&S=) | Hakju Ryan Lee | Mon, 15 Nov 2021 14:10:33 +0900 |
| [[FS\_5GSTAR, 1423, Block A, 12th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fca8e17b.2111C&S=) | Ali El Essaili | Mon, 15 Nov 2021 10:09:38 +0000 |
| [[FS\_5GSTAR, 1423, Block A, 12th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;34fab6e7.2111C&S=) | Hakju Ryan Lee | Tue, 16 Nov 2021 02:15:29 +0900 |
| [[FS\_5GSTAR, 1423, Block A, 12th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;af2a04c.2111C&S=) | Eric Yip | Tue, 16 Nov 2021 13:38:02 +0900 |

| [[FS\_5GSTAR, 1423, Block A, 12th Nov. 2200CET] pCR on clause 6.5: Editor’s updates on conversational](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6971b99b.2111C&S=) | Eric Yip | Wed, 17 Nov 2021 13:50:38 +0900 |
| --- | --- | --- |

**Revisions**

* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_116-e/Inbox/Drafts/VIDEO/S4-211423r1%20Editor%20update%20on%20conversational.docx>
* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_116-e/Inbox/Drafts/VIDEO/S4-211423r02%20Editor%20update%20on%20conversational.docx>
* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211423r03%20Editor%20update%20on%20conversational.docx

**Online Discussion:,**

* Thomas: you also need to send data upstream, generally only formats that can be produced on the device. Referring to streaming data formats is not appropriate.
* Continuous discussion - expect to have some information on the data volume and formats in the uplink.
* Review version r03
  + Thomas: ok, but we need consistency.

**Decision:**

* R03 is agreed - create a revision

**S4-211423** is revised to **S4-21570.**

| [S4-211423](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211423.zip) | [FS\_5GSTAR] pCR on clause 6.5: Editor’s updates on conversational | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |
| --- | --- | --- | --- |

**S4-211570** is agreed.

| [S4-211424](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211424.zip) | [FS\_5GSTAR] pCR on Potential Normative Works | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |
| --- | --- | --- | --- |

**S4-211424** is revised to **S4-211497**.

| [S4-211425](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211425.zip) | [FS\_5GSTAR] pCR on Conclusions | Samsung Guangzhou Mobile R&D | Hakju Ryan Lee |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1425, Block A, 11th Nov. 2200CET] pCR on Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5fb9d674.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:34:52 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1425, Block A, 11th Nov. 2200CET] pCR on Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5831db76.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 20:00:24 +0000 |
| [[FS\_5GSTAR, 1425, Block A, 11th Nov. 2200CET] pCR on Conclusions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fc7496f6.2111B&S=) | Hakju Ryan Lee | Thu, 11 Nov 2021 06:08:58 +0900 |

**Revisions**

none

**Online Discussion:**

* See also discussion on 1371.

**Decision:**

* Is merged with 1371

**S4-211425** is merged with **S4-211552**.

| [S4-211475](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211475.zip) | [FS\_5GSTAR] pCR on Spatial computing/cognition scenario | Nokia Corporation, Samsung Electronics Co. Ltd., B<>Com | Saba Ahsan |
| --- | --- | --- | --- |

**E-mail Discussion:**

See discussion for S4-211409.

**Revisions**

none

**Online Discussion:**

* See discussion at 1369

**Decision:**

* merge

**S4-211475** is merged to **S4-211565**

| [S4-211481](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211481.zip) | [FS\_5GSTAR] pCR on clause 3.1 Definitions | Samsung R&D Institute India | Sungryeul Rhyu |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;883ede39.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:35:00 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] EDGAR-based Conversational service update](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6adc215b.2111B&S=) | Iraj Sodagar | Wed, 10 Nov 2021 19:38:35 +0000 |
| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] pCR on clause 3.1 Definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c650295d.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 23:43:10 +0000 |
| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] pCR on clause 3.1 Definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;77247a3e.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 21:20:31 +0000 |
| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] pCR on clause 3.1 Definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;36fdecd0.2111B&S=) | Sungryeul Rhyu | Thu, 11 Nov 2021 09:33:02 +0900 |
| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] pCR on clause 3.1 Definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;377499aa.2111B&S=) | Sungryeul Rhyu | Thu, 11 Nov 2021 09:42:22 +0900 |
| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] pCR on clause 3.1 Definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2115c24f.2111B&S=) | Iraj Sodagar | Thu, 11 Nov 2021 01:08:57 +0000 |
| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] pCR on clause 3.1 Definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;272e81ba.2111B&S=) | Sungryeul Rhyu | Thu, 11 Nov 2021 10:55:33 +0900 |
| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] pCR on clause 3.1 Definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;27b33ef8.2111B&S=) | Iraj Sodagar | Thu, 11 Nov 2021 02:09:13 +0000 |
| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] pCR on clause 3.1 Definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;59388088.2111B&S=) | Sungryeul Rhyu | Thu, 11 Nov 2021 11:20:52 +0900 |
| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] pCR on clause 3.1 Definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;e3610ae.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 15:12:11 +0000 |
| [[FS\_5GSTAR, 1481, Block A, 11th Nov. 2200CET] pCR on clause 3.1 Definitions](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a832c023.2111B&S=) | Sungryeul Rhyu | Fri, 12 Nov 2021 00:12:27 +0900 |

**Revisions**

* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_116-e/Inbox/Drafts/VIDEO/S4-211481_QC.docx>
* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_116-e/Inbox/Drafts/VIDEO/S4-211481r01.docx>
* <https://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_116-e/Inbox/Drafts/VIDEO/S4-211481r01-Tencent.docx>
* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211481r02.docx

**Online Discussion:**

* Review revision 2

**Decision:**

* Revision r02 agreed

**S4-211481** is revised to **S4-211548.**

| [S4-211548](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211548.zip) | [FS\_5GSTAR] pCR on clause 3.1 Definitions | Samsung R&D Institute India | Sungryeul Rhyu |
| --- | --- | --- | --- |

**S4-211548** is agreed.

| [S4-211482](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211482.zip) | [FS\_5GSTAR] pCR on clause 3.3 Abbreviations | Samsung R&D Institute India | Sungryeul Rhyu |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1482, Block A, 11th Nov. 2200CET] pCR on clause 3.3 Abbreviations](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2b7ac327.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:35:05 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1482, Block A, 11th Nov. 2200CET] pCR on clause 3.3 Abbreviations](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f25ab0ca.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 17:56:35 +0000 |
| [[FS\_5GSTAR, 1482, Block A, 11th Nov. 2200CET] pCR on clause 3.3 Abbreviations](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d5fe52dc.2111B&S=) | Sungryeul Rhyu | Thu, 11 Nov 2021 09:46:19 +0900 |
| [[FS\_5GSTAR, 1482, Block A, 11th Nov. 2200CET] pCR on clause 3.3 Abbreviations](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;2642b51e.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 15:14:10 +0000 |
| [[FS\_5GSTAR, 1482, Block A, 11th Nov. 2200CET] pCR on clause 3.3 Abbreviations](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;55e20218.2111B&S=) | Sungryeul Rhyu | Fri, 12 Nov 2021 00:17:25 +0900 |

**Revisions**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211482r01.docx

**Online Discussion:**

* R1 is good. Run one more check

**Decision:**

* Agreed. Run one more check if needed.

**S4-211482** is revised to **S4-211549.**

| [S4-211549](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211549.zip) | [FS\_5GSTAR] pCR on clause 3.3 Abbreviations | Samsung R&D Institute India | Sungryeul Rhyu |
| --- | --- | --- | --- |

**S4-211549** is agreed.

| [S4-211484](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211484.zip) | [FS\_5GSTAR] pCR for text consistency | Samsung R&D Institute India | Sungryeul Rhyu |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1484, Block A, 11th Nov. 2200CET] pCR for text consistency](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4f40c0f5.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:35:09 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1484, Block A, 11th Nov. 2200CET] pCR for text consistency](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;95e9b973.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 18:24:15 +0000 |
| [[FS\_5GSTAR, 1484, Block A, 11th Nov. 2200CET] pCR for text consistency](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;681b81cc.2111B&S=) | teniou(TeniouGilles) | Thu, 11 Nov 2021 15:02:42 +0000 |

**Revisions**

none

**Online Discussion:**

* Thomas: just want to make sure that we do not do this last. Otherwise ok

**Decision:**

* Agreed, but some clauses may be addressed by other contributions

**S4-211484** is agreed.

| [S4-211497](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211497.zip) | [FS\_5GSTAR] pCR on Potential Normative Work | Samsung Electronics Co., Ltd., Ericsson LM | Hyun-Koo Yang |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1497, Block A, 11th Nov. 2200CET] pCR on Potential Normative Work](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;afe9726e.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 22:35:13 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1497, Block A, 11th Nov. 2200CET] pCR on Potential Normative Work](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d3fa76a4.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 19:07:11 +0000 |
| [[FS\_5GSTAR, 1497, Block A, 11th Nov. 2200CET] pCR on Potential Normative Work](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1b485a37.2111B&S=) | Hakju Ryan Lee | Thu, 11 Nov 2021 06:06:32 +0900 |

**Revisions**

none

**Online Discussion:**

* Thomas: not sure why we create a separate clause 8.y. Should be

**Decision:**

* Merge with square brackets

**S4-211497** is merged to **S4-211552.**

| [S4-211539](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211539.zip) | Proposals for FS\_5STAR TR | Orange | Stephane Ragot |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[FS\_5GSTAR, 1539, Block A, 11th Nov. 2200CET] Proposals for FS\_5STAR TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;c257970f.2111B&S=) | teniou(TeniouGilles) | Tue, 9 Nov 2021 23:46:55 +0000 |
| --- | --- | --- |
| [[FS\_5GSTAR, 1539, Block A, 11th Nov. 2200CET] Proposals for FS\_5STAR TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;60bf9f07.2111B&S=) | Thomas Stockhammer | Wed, 10 Nov 2021 21:22:27 +0000 |
| [[FS\_5GSTAR, 1539, Block A, 11th Nov. 2200CET] Proposals for FS\_5STAR TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;581f1709.2111B&S=) | Stephane Ragot | Thu, 11 Nov 2021 07:49:45 +0000 |
| [[FS\_5GSTAR, 1539, Block A, 11th Nov. 2200CET] Proposals for FS\_5STAR TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a7fc062a.2111B&S=) | Stephane Ragot | Thu, 11 Nov 2021 08:04:32 +0000 |
| [[FS\_5GSTAR, 1539, Block A, 11th Nov. 2200CET] Proposals for FS\_5STAR TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;420d343c.2111B&S=) | Rihito Suzuki | Thu, 11 Nov 2021 21:16:24 +0900 |
| [[FS\_5GSTAR, 1539, Block A, 11th Nov. 2200CET] Proposals for FS\_5STAR TR](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;ade66aee.2111B&S=) | Kyunghun Jung | Thu, 11 Nov 2021 16:11:59 +0000 |

**Revisions**

none

**Online Discussion:**

* Merge with 1552.

**Decision:**

* merge

**S4-211539** is merged into **S4-211552.**

| [S4-211560](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211560.zip) | Remaining Proposals for FS\_5STAR TR | Orange | Stephane Ragot |
| --- | --- | --- | --- |

**Online Discussion:**

* Stephane presents
* Thomas: there is a question on how IVAS fits into the framework that is created in this technical report. How for example this is attached to the scene. It would be good to state this in the Technical Report.
  + Stephane: Ok, but this is more a question to the EVS group and may be should have a joint session.
  + Stefan: IVAS was started in 2017.
* Gilles: we can add a note: The integration of IVAS into the architectures developed in this report is for further study

**Decision:**

* Agreed with the note above

**S4-211560** is agreed**.**

## 10.10 New Work / New Work Items and Study Items

| [Comments to new WIDs/SIDs and conclusions of TR 26.998 (373, 402, 403, 416, 375, 417, 496, 552)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;17a280fc.2111C&S=) | Curcio, Igor (Nokia - FI/Tampere) | Mon, 15 Nov 2021 22:51:03 +0000 |
| --- | --- | --- |
| [Comments to new WIDs/SIDs and conclusions of TR 26.998 (373, 402, 403, 416, 375, 417, 496, 552)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1bdd0241.2111C&S=) | Curcio, Igor (Nokia - FI/Tampere) | Mon, 15 Nov 2021 22:52:31 +0000 |
| [Comments to new WIDs/SIDs and conclusions of TR 26.998 (373, 402, 403, 416, 375, 417, 496, 552)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;f6853856.2111C&S=) | Jaeyeon Song | Tue, 16 Nov 2021 18:03:09 +0900 |

| [S4-211373](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211373.zip) | 5G Media Service Enablers | Qualcomm Incorporated, Dolby, Orange, Tencent | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[New WID/SID, 1373, Block B, 17th Nov. 0100CET] 5G Media Service Enablers](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;39aafe93.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:41:52 +0000 |
| --- | --- | --- |

**Revisions**

none

**Online Discussion:**

* Thomas presents
* Kyunghun: Please add Facebook as source company
* Gilles: Building blocks to create services
  + Thomas: examples are XR Spatial compute or Split rendering
* Gilles: Do you want to agree this at this meeting?
  + Thomas: do not wanna hijack the process, but may be good to so so in order kickstart quickly in order to prepare Rel-18 work templates.
* Thomas: Change 95 => 96
* Ryan: Samsung co-signs
* Mary-Luc: Xiaomi co-signs
* Thomas checks offline for more supporters.

**Decision:**

* Revise and agree

**S4-211373** is revised to **S4-211556**.

| [S4-211556](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211556.zip) | 5G Media Service Enablers | Qualcomm Incorporated, Dolby, Orange, Tencent, Facebook, Samsung, Xiaomi | Thomas Stockhammer |
| --- | --- | --- | --- |

**S4-211556** is agreed and will be presented to SA4 plenary for agreement.

| [S4-211375](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211375.zip) | Media Capabilities for Augmented Reality Glasses | Qualcomm Incorporated | Thomas Stockhammer |
| --- | --- | --- | --- |

**E-mail Discussion:**

See S4-211496

**Revisions**

none

**Online Discussion:**

* See S4-211496

**Decision:**

* merge

**S4-211375** is merged to **S4-211571.**

| [S4-211402](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211402.zip) | Discussion on AI/ML | Samsung R&D Institute UK | Eric Yip |
| --- | --- | --- | --- |

**E-mail Discussion:**

See 1416

**Revisions**

none

**Online Discussion:**

* See 1416

**Decision:**

* Note

**S4-211402** is noted.

| [S4-211403](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211403.zip) | Draft New SID on Media aspects of 5GS Support for AI/ML based services | Samsung R&D Institute UK | Eric Yip |
| --- | --- | --- | --- |

**E-mail Discussion:**

See 1416

**Online Discussion:**

* See 1416

**Decision:**

* Merge with 1416

**S4-211403** is merged to **S4-211567**

| [S4-211416](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211416.zip) | Draft New Feasibility Study on Artificial Intelligence (AI) and Machine Learning (ML) for Media | Tencent | Gilles Teniou |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[New WID/SID, 1402&1403&1416, Block B, 17th Nov. 0100CET] AI/ML Discussion and SIDs](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d22efb2b.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:43:20 +0000 |
| --- | --- | --- |
| [[New WID/SID, 1402&1403&1416, Block B, 17th Nov. 0100CET] AI/ML Discussion and SIDs](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;450cf27c.2111C&S=) | Imed Bouazizi | Tue, 16 Nov 2021 05:08:19 +0000 |
| [[New WID/SID, 1402&1403&1416, Block B, 17th Nov. 0100CET] AI/ML Discussion and SIDs](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;4fa404ba.2111C&S=) | Eric Yip | Tue, 16 Nov 2021 14:31:49 +0900 |

| [[New WID/SID, 1402&1403&1416, Block B, 17th Nov. 0100CET] AI/ML Discussion and SIDs](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;fa9be894.2111C&S=) | Thomas Stockhammer | Wed, 17 Nov 2021 08:14:31 +0000 |
| --- | --- | --- |

**Revisions**

* https://www.3gpp.org/ftp/tsg\_sa/WG4\_CODEC/TSGS4\_116-e/Inbox/Drafts/VIDEO/S4-211416-%20New%20SID%20on%20AI-ML%20Merge%20proposal-r01.doc

**Online Discussion:**

* Gilles presents r01
* Qi: on the architecture, do we really want to add 5GS impact here? It is SA2 scope.
  + Gilles: seems correct, probably change to 5GMS
  + Eric: seems ok
* Thomas: seems a bit like, here is a solution, where is the problem? We also have spatial computing, which is concrete. Is this part of the work item
  + Gilles: for me it is included, it is a use case.
  + Eric: Spatial computing can be added here,
  + Thomas: to be clear, we should make sure if it is in or out?
  + Gilles: we can make link, can be a use case
  + Iraj: A media service enabler AI/ML could be used
  + Imed: propose to add TR26.998 to this work item
  + Thomas: ok - we should make it clear how this relates
* Julien: You can add Orange as a supported.
* Fraunhofer HHI can be added as well
* Igor: Is this a combined proposal?
  + Gilles: yes, it was combined
* Thomas: can we not build new use cases, but start from scenarios. The justification should be stronger, and narrow down the subject much more significantly. I propose to remove objective 1 and make this a justification.
* Online edits

**Decision:**

* R01 and online edits are agreed as basis for future work
* Additional comments

**S4-211416** is revised to **S4-211567**.

| [S4-211567](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211567.zip) | Draft New Feasibility Study on Artificial Intelligence (AI) and Machine Learning (ML) for Media | Tencent, Samsung, Qualcomm | Gilles Teniou |
| --- | --- | --- | --- |

| [S4-211417](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211417.zip) | Draft New WID on Augmented Reality (AR) profiles for Streaming | Tencent | Gilles Teniou |
| --- | --- | --- | --- |

**E-mail Discussion:**

See S4-211496

**Online Discussion:**

* See S4-211496

**Decision:**

* merge

**S4-211417** is merged into **S4-211571**.

| [S4-211496](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211496.zip) | Media Capabilities for Augmented Reality Glasses | Xiaomi Communications, Qualcomm Incorporated | Emmanuel Thomas |
| --- | --- | --- | --- |

**E-mail Discussion:**

| [[New WID/SID, 1375&1496&1417, Block B, 17th Nov. 0100CET] AR streaming and Media capabilities for AR Glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;a165ff57.2111B&S=) | teniou(TeniouGilles) | Sun, 14 Nov 2021 17:43:09 +0000 |
| --- | --- | --- |
| [[New WID/SID, 1375&1496&1417, Block B, 17th Nov. 0100CET] AR streaming and Media capabilities for AR Glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;62a32abd.2111C&S=) | Emmanuel Thomas | Mon, 15 Nov 2021 05:50:29 +0000 |
| [[New WID/SID, 1375&1496&1417, Block B, 17th Nov. 0100CET] AR streaming and Media capabilities for AR Glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d758c327.2111C&S=) | Kyunghun Jung | Mon, 15 Nov 2021 15:43:16 +0000 |
| [[New WID/SID, 1375&1496&1417, Block B, 17th Nov. 0100CET] AR streaming and Media capabilities for AR Glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1ce417c7.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 15:55:44 +0000 |
| [[New WID/SID, 1375&1496&1417, Block B, 17th Nov. 0100CET] AR streaming and Media capabilities for AR Glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d5814404.2111C&S=) | teniou(TeniouGilles) | Mon, 15 Nov 2021 17:02:33 +0000 |
| [[New WID/SID, 1375&1496&1417, Block B, 17th Nov. 0100CET] AR streaming and Media capabilities for AR Glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;97ee81f1.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 17:14:27 +0000 |
| [[New WID/SID, 1375&1496&1417, Block B, 17th Nov. 0100CET] AR streaming and Media capabilities for AR Glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;d5a7ca4.2111C&S=) | teniou(TeniouGilles) | Mon, 15 Nov 2021 17:26:47 +0000 |
| [[New WID/SID, 1375&1496&1417, Block B, 17th Nov. 0100CET] AR streaming and Media capabilities for AR Glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;5ac44a0b.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 17:30:15 +0000 |
| [[New WID/SID, 1375&1496&1417, Block B, 17th Nov. 0100CET] AR streaming and Media capabilities for AR Glasses](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;209185cb.2111C&S=) | teniou(TeniouGilles) | Mon, 15 Nov 2021 19:53:11 +0000 |

**Revisions**

none

**Online Discussion:**

* We need an offline, Wednesday 1pm CET.

**Decision:**

* Offline and revise

**S4-211496** is revised to **S4-211571.**

| [S4-211571](https://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/TSGS4_116-e/Docs/S4-211571.zip) | Media Capabilities for Augmented Reality Glasses | Xiaomi Communications, Qualcomm Incorporated, Tencent | Emmanuel Thomas |
| --- | --- | --- | --- |

## 10.11 Liaisons and Liaison Responses

See 10.3.

## 10.12 Any Other Business

The report will be made available.

Output documents

**AHG Telcos**

| [3GPP SA4 Video SWG Telco (Dec 14, 2021)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;6581cfed.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 08:47:58 +0000 |
| --- | --- | --- |
| [3GPP SA4 Video SWG Telco (Feb 1, 2022)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8538cd54.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 08:48:23 +0000 |
| [3GPP SA4 Video SWG Telco (Jan 11, 2022)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;1a44042f.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 08:48:15 +0000 |
| [3GPP SA4 Video SWG Telco (Nov 30, 2021)](https://list.etsi.org/scripts/wa.exe?A2=3GPP_TSG_SA_WG4_VIDEO;8cf342c0.2111C&S=) | Thomas Stockhammer | Mon, 15 Nov 2021 08:47:54 +0000 |

## 10.13 Close of the session

The chairman thanked the participants. Thomas Stockhammer thanked the chairman on behalf of the delegates.

The online session was closed on August 26, 2021 at 16:26 (CEST).

No more e-mail approval is pending.

## 10.14 Attendees

| **TITLE** | **Family Name** | **Given Name** | **Organization Represented** | **Present** |
| --- | --- | --- | --- | --- |
| Dr. | Abhishek | Rohit | Tencent |  |
| Mr. | Aghili | Behrouz | InterDigital, Inc. |  |
| Dr. | Ahsan | Saba | Nokia Belgium |  |
| Mr. | Aracena | Mauricio | Ericsson LM |  |
| Mr. | AUMONT | FRANCK | InterDigital France R&D, SAS |  |
| Dr. | Bouazizi | Imed | Qualcomm Wireless GmbH |  |
| Ing. | Bouchmal | Faiza | Casa Systems Inc. |  |
| Dr. | Bradbury | Richard | BBC |  |
| Mr. | Bross | Benjamin | Fraunhofer HHI | yes |
| Dr. | Bruhn | Stefan | Dolby Laboratories Inc. |  |
| Dr. | Budagavi | Madhukar | Samsung Electronics GmbH |  |
| Mr. | Burdinat | Christophe | ATEME |  |
| Mr. | Burman | Bo | Ericsson France S.A.S |  |
| Mr. | Champel | Mary-Luc | Beijing Xiaomi Electronics | yes |
| Dr. | Chan | Yee Sin | Facebook |  |
| Dr. | Chen | Lulin | MediaTek Inc. | Yes |
| Mr. | Choi | Hyung-Nam | Motorola Mobility UK Ltd. |  |
| Dr. | Curcio | Igor | Nokia Corporation |  |
| Mr. | Curti | Alain | Orange UK |  |
| Mr. | Dadas | Mohammed | Orange |  |
| Mr. | Dawkins | Spencer | Tencent |  |
| Mr. | De Bont | Frans | Philips International B.V. |  |
| Mr. | Diaz | Edward | Verizon Spain |  |
| Mr. | Doehla | Stefan | Fraunhofer IIS |  |
| Dr. | Ehara | Hiroyuki | Panasonic Corporation |  |
| Miss | Eitoku | Haruka | NTT corporation |  |
| Dr. | El Essaili | Ali | Ericsson Telecomunicazioni SpA |  |
| Dr. | Feiten | Bernhard | Deutsche Telekom AG |  |
| Mr. | Fogg | Chad | Google Inc. |  |
| Dr. | Francois | Edouard | InterDigital France R&D, SAS |  |
| Mr. | Gabin | Frederic | Dolby Laboratories Inc. | yes |
| Mr. | Gao | Yuan | Huawei Technologies France |  |
| Mr. | Gibellino | Diego | TELECOM ITALIA S.p.A. |  |
| Dr. | Gierlich | Hans Wilhelm | HEAD acoustics GmbH |  |
| Dr. | Giménez | Jordi | 5G MAG |  |
| Dr. | Gorley | Paul | BBC |  |
| Mr. | Gu | Xiaojun | Huawei Technologies R&D UK |  |
| Prof. | Guan | Ke | BJTU |  |
| Mr. | Gudumasu | Srinivas | InterDigital Communications | Yes |
| Mr. | Gunkel | Simon | KPN N.V. |  |
| Dr. | Hamza | Ahmed | InterDigital Communications | Yes |
| Dr. | Han | Jae-Shin | LG Electronics Deutschland |  |
| Dr. | He | Xuan (Shane) | Nokia Germany |  |
| Dr. | He | Yong | Qualcomm Incorporated |  |
| Mr. | Heikkilä | Gunnar | Ericsson Japan K.K. |  |
| Dr. | Holub | Jan | Mesaqin.com s.r.o (Ltd.) |  |
| Mr. | Homkar | Ajay | Cadence Design Systems Inc. |  |
| Mr. | Howells | Elfed | Huawei Device Co., Ltd | Yes |
| Dr. | Hu | James | AT&T GNS Belgium SPRL |  |
| Mr. | Inoue | Yoshihiro | NTT | Yes |
| Dr. | Isabelle | Scott | Amazon |  |
| Mr. | Jansson Toftgård | Tomas | Ericsson LM |  |
| Dr. | Jelinek | Milan | VoiceAge Corporation |  |
| Dr. | Joshi | Rajan | Samsung Electronics France SA |  |
| Dr. | Jung | Kyunghun | Facebook |  |
| Dr. | Kim | Wuk | Harman GmbH |  |
| Dr. | Kolan | Prakash | Samsung Electronics Polska |  |
| Dr. | Kroon | Peter | Apple Benelux B.V. |  |
| Mr. | Kwon | WooSuk | LG Electronics Inc. | Yes |
| Mr. | Laaksonen | Lasse | Nokia France |  |
| Dr. | Lee | Brian | Dolby Technology India Pvt Ltd | Yes |
| Dr. | Lee | Hakju Ryan | Samsung Guangzhou Mobile R&D |  |
| Dr. | Lei | Yixue | Tencent |  |
| Mr. | Lemotheux | Julien | Orange Spain | Yes |
| Mr. | Leung | Nikolai | Qualcomm Incorporated |  |
| Miss | LI | QIUTING | ZTE Corporation |  |
| Dr. | Litwic | Lukasz | Ericsson LM |  |
| Mr. | Liu | Dan | ZTE Corporation |  |
| Mr. | LIU | Jianning(Carry) | Beijing Xiaomi Software Tech |  |
| Mrs. | Liu | Yan | HUAWEI TECHNOLOGIES Co. Ltd. | Yes |
| Mr. | Lo | Charles | Qualcomm Technologies Ireland |  |
| Dr. | Lohmar | Thorsten | Ericsson GmbH, Eurolab |  |
| Mr. | Ma | Liangping | QUALCOMM Europe Inc. - Italy | Yes |
| Dr. | Mccarthy | Sean | Dolby Laboratories Inc. |  |
| Mr. | Morita | Naotaka | NTT corporation |  |
| Dr. | Moriya | Takehiro | NTT |  |
| Mr. | Multrus | Markus | Fraunhofer IIS |  |
| Mr. | Nangia | Vijay | Motorola Mobility UK Ltd. |  |
| Dr. | Ni | Hui | HiSilicon Technologies Co. Ltd |  |
| Mr. | Nikitin | Pavel | InterDigital France R&D, SAS |  |
| Mr. | Norvell | Erik | Ericsson LM |  |
| Mr. | O'Leary | Edward | Rogers Communications Canada |  |
| Dr. | Pan | Qi | Huawei Tech.(UK) Co.. Ltd | Yes |
| Mr. | Patry | Frank | Omnispace |  |
| Mr. | Pazos | Marcelo | Qualcomm Europe Inc. Sweden |  |
| Dr. | Peng | Ke | OPPO |  |
| Ms. | Perey | Christine | Perey Research & Consulting |  |
| Mr. | Plante | Fabrice | Apple Italia S.R.L. | Yes |
| Mr. | Pousi | Timo | Oy LM Ericsson AB |  |
| Mr. | Ragot | Stephane | Orange Romania | Yes |
| Mr. | Rämö | Anssi | Nokia Germany |  |
| Mr. | Reimes | Jan | HEAD acoustics GmbH |  |
| Mr. | Rhyu | Sungryeul | Samsung R&D Institute India |  |
| Mr. | Rigolage | Thomas | PCTEST Engineering Lab |  |
| Mr. | Royan | Jerome | B-Com |  |
| Dr. | Rusanovskyy | Dmytro | Qualcomm India Pvt Ltd |  |
| Mr. | Sanchez de la Fuente | Yago | Fraunhofer HHI | Yes |
| Mr. | Schevciw | Andre | Qualcomm Technologies Int |  |
| Ms. | Shen | Yang | Beijing Xiaomi Mobile Software |  |
| Mr. | Simmons | John | Google Inc. |  |
| Mr. | Singer | David | Apple (UK) Limited |  |
| Mr. | Smith | David K. | AT&T |  |
| Dr. | Sodagar | Iraj | Tencent Cloud |  |
| Dr. | Song | Jaeyeon | Samsung Electronics Co., Ltd |  |
| Mr. | Steck | Chris | Cisco Systems France |  |
| Mr. | Stegenborg-Andersen | Tore | FORCE Technology |  |
| Dr. | Stockhammer | Thomas | Qualcomm CDMA Technologies | Yes |
| Dr. | Su | Huan-yu | HuaWei Technologies Co., Ltd | Yes |
| Mr. | Suzuki | Rihito | NTT |  |
| Dr. | Szczerba | Marek | Philips International B.V. |  |
| Mr. | Szucs | Paul | Sony Europe B.V. | Yes |
| Dr. | TAN | PENG | TELUS |  |
| Dr. | Tech | Gerhard | Fraunhofer HHI |  |
| Mr. | Teniou | Gilles | Tencent |  |
| Mr. | THIENOT | Cedric | ENENSYS | Yes |
| Mr. | Thomas | Emmanuel | Xiaomi Communications | Yes |
| Mr. | Tokel | Baris | ASELSAN |  |
| Dr. | Tossavainen | Antero | Huawei Telecommunication India |  |
| Dr. | Tourapis | Alexandros | Apple GmbH | Yes |
| Mr. | Tsujikawa | Toru | NTT corporation |  |
| Miss | tunali | aysegul | ASELSAN |  |
| Mr. | Varga | Imre | Qualcomm Austria RFFE GmbH |  |
| Mr. | Wang | Bin | Xiaomi Technology |  |
| Mr. | Wang | Dong | OPPO |  |
| Dr. | Wang | Xin | MediaTek Inc. | Yes |
| Dr. | Wey | Jun Shan | Verizon Switzerland AG |  |
| Ms. | WU | Jinhua | Beijing Xiaomi Mobile Software |  |
| Dr. | Xie | Minjie | OPPO |  |
| Mr. | yan | hua | ZTE Corporation |  |
| Dr. | Yang | Hyun-Koo | BEIJING SAMSUNG TELECOM R&D |  |
| Mrs. | Yeltekin | Yasemin | ETSI |  |
| Mrs. | Yin | Yujian | China Mobile Com. Corporation |  |
| Mr. | Yip | Eric | Samsung R&D Institute UK | Yes |
| Dr. | Zhang | Zhuoyun | Tencent Cloud |  |