Video SWG Minutes during SA4#109

## 10.1 Opening of the session

Mr. Gilles Teniou (Orange, Chairman of Video SWG) opens

* E-mail approval process May 25, 2020 at 21:25 (CEST)
* the online session on May 26, 2020 at 16:30 (CEST).

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

The minutes are shared [online](https://docs.google.com/document/d/1GhzxAh-quFZSfprz1dC1oJzRBURA1hXd0pkoSzyow9E/edit?usp=sharing).

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

* https://list.etsi.org/scripts/wa.exe?A1=ind2005D&L=3GPP\_TSG\_SA\_WG4\_VIDEO

Latest Timestamp for e-mail discussions: Wed, 27 May 2020 06:19:12 +0000

The agenda and the registration of documents are agreed.

## 10.2 Registration of documents

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

|  |  |  |  |
| --- | --- | --- | --- |
| TDOC | Title | Source | Agenda Item |
| [S4-200736](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200736.zip) | LS from SC 29/WG 11 (ISO/IEC JTC 1/SC 29/WG 11) to 3GPP SA WG 4 on CMAF [SC 29/WG 11 N 19266] | ISO/IEC JTC 1/SC 29/WG 11 | 10.3 |
| [S4-200804](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200804.zip) | MPEG-I Video-based Point Cloud Compression [SC 29/WG 11 N 19377] | ISO/IEC JTC 1/SC 29/WG 11 | 10.3 |
| [S4-200852](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200852.zip) | Making some space for new codecs: Take H.263 to rest | Qualcomm Incorporated | 10.4 |
| [S4-200853](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200853.zip) | Removing H.263 | Qualcomm Incorporated | 10.4 |
| [S4-200854](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200854.zip) | Removing H.263 | Qualcomm Incorporated | 10.4 |
| [S4-200855](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200855.zip) | Removing H.263 | Qualcomm Incorporated | 10.4 |
| [S4-200856](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200856.zip) | Removing H.263 | Qualcomm Incorporated | 10.4 |
| [S4-200857](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200857.zip) | Removing H.263 | Qualcomm Incorporated | 10.4 |
| [S4-200762](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200762.zip) | Proposed Updated Work Plan for FS\_5GVideo | Qualcomm Incorporated | 10.6 |
| [S4-200763](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200763.zip) | TR26.955: Proposed Editor's Update | Qualcomm Incorporated | 10.6 |
| [S4-200764](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200764.zip) | pCR26.955: Messaging and Social Sharing Scenario | Qualcomm Incorporated | 10.6 |
| [S4-200765](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200765.zip) | pCR26.955: Gaming and Screen Content Scenario | Qualcomm Incorporated | 10.6 |
| [S4-200766](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200766.zip) | pCR26.955: Consolidated Evaluation Conditions | Qualcomm Incorporated | 10.6 |
| [S4-200767](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200767.zip) | [5G Video] First thoughts on evaluation metrics | Qualcomm Incorporated | 10.6 |
| [S4-200778](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200778.zip) | 4K-TV Scenario fo FS\_5GVideo | ATEME, InterDigital | 10.6 |
| [S4-200846](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200846.zip) | 4K-TV Scenario for FS\_5GVideo | ATEME, InterDigital, Orange, Qualcomm | 10.6 |
| [S4-200768](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200768.zip) | Proposed Updates to Work Plan for FS\_XRTraffic | Qualcomm Incorporated | 10.7 |
| [S4-200769](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200769.zip) | Proposed Skeleton Draft CR for XR Traffic | Qualcomm Incorporated | 10.7 |
| [S4-200770](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200770.zip) | Proposed Updates to Permanent Document | Qualcomm Incorporated | 10.7 |
| [S4-200771](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200771.zip) | [FS\_XRTraffic] System Design Assumptions for Split Rendering | Qualcomm Incorporated | 10.7 |
| [S4-200772](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200772.zip) | [FS\_XRTraffic] Considerations for Traffic Modelling for Split Rendering | Qualcomm Incorporated | 10.7 |
| [S4-200725](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200725.zip) | New SID on 5G Glass-type AR/MR Devices | Samsung Electronics France SA | 10.8 |
| [S4-200776](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200776.zip) | new SID on AR Conversational Services for Terminals | HUAWEI TECHNOLOGIES Co. Ltd. | 10.8 |

## 10.3 Reports and liaisons from other groups

|  |  |  |
| --- | --- | --- |
| [S4-200736](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200736.zip) | LS from SC 29/WG 11 (ISO/IEC JTC 1/SC 29/WG 11) to 3GPP SA WG 4 on CMAF [SC 29/WG 11 N 19266] | ISO/IEC JTC 1/SC 29/WG 11 |

**E-Mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[10.3, LS, 736, 27MAY 0600 CEST] LS from MPEG on CMAF](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=3506) | Gilles Teniou | Mon, 25 May 2020 21:25:02 +0000 |
| [[10.3, LS, 736, 27MAY 0600 CEST] LS from MPEG on CMAF](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=26340) | Gilles Teniou | Wed, 27 May 2020 05:35:19 +0000 |

**Presenter:**

**Discussion:**



**Decision:**

**S4-200736** is **revised/noted/agreed.**

|  |  |  |
| --- | --- | --- |
| [S4-200804](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200804.zip) | MPEG-I Video-based Point Cloud Compression [SC 29/WG 11 N 19377] | ISO/IEC JTC 1/SC 29/WG 11 |

**Presenter:**

**Discussion:**



**Decision:**

**S4-200804** is **revised/noted/agreed.**

## 10.4 CRs to Features in Release 15 and earlier

|  |  |  |
| --- | --- | --- |
| [S4-200852](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200852.zip) | Making some space for new codecs: Take H.263 to rest | Qualcomm Incorporated |

**E-Mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [[10.4, Maintenance, 852, 27MAY 0600 CEST] Take H.263 out of 3GPP specs](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=4430) | Gilles Teniou | Mon, 25 May 2020 21:26:17 +0000 |
| [[10.4, Maintenance, 852, 27MAY 0600 CEST] Take H.263 out of 3GPP specs](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=27692) | Gilles Teniou | Wed, 27 May 2020 05:37:48 +0000 |

**Decision:**

* A telco is held on June 9, 2020 at 3pm - 5pm cest on this matter.

**S4-200852** is **agreed.**

|  |  |  |
| --- | --- | --- |
| [S4-200853](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200853.zip) | Removing H.263 | Qualcomm Incorporated |

**S4-200853** is **not treated as submitted late.**

|  |  |  |
| --- | --- | --- |
| [S4-200854](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200854.zip) | Removing H.263 | Qualcomm Incorporated |

**S4-200854** is **not treated as submitted late.**

|  |  |  |
| --- | --- | --- |
| [S4-200855](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200855.zip) | Removing H.263 | Qualcomm Incorporated |

**S4-200855** is **not treated as submitted late.**

|  |  |  |
| --- | --- | --- |
| [S4-200856](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200856.zip) | Removing H.263 | Qualcomm Incorporated |

**S4-200856** is **not treated as submitted late.**

|  |  |  |
| --- | --- | --- |
| [S4-200857](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200857.zip) | Removing H.263 | Qualcomm Incorporated |

**S4-200857** is **not treated as submitted late.**

## 10.5 CRs to Features in Release 16

none

## 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)

none

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

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

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| --- | --- | --- |
| [S4-200762](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200762.zip) | Proposed Updated Work Plan for FS\_5GVideo | Qualcomm Incorporated |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Discussion:**

* No changes, but changes in wrong doc

**Decision:**

* Revise - e-mail agreement may be started

**S4-200762** is **revised to S4-200890.**

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| --- | --- | --- |
| [S4-200890](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200890.zip) | Proposed Updated Work Plan for FS\_5GVideo | Qualcomm Incorporated |

**E-mail Discussion:**

|  |  |  |
| --- | --- | --- |
| [**[10.6, FS\_5GVideo, 890, 28MAY 2000 CEST] FS\_5GVideo timeplan**](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=17531) | **Gilles Teniou** | **Tue, 26 May 2020 20:59:31 +0000** |

**S4-200890** is **revised/agreed/noted.**

|  |  |  |
| --- | --- | --- |
| [S4-200763](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200763.zip) | TR26.955: Proposed Editor's Update | Qualcomm Incorporated |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Discussion:**

* none

**Decision:**

* Agreed as the baseline for future work

**S4-200763** is **agreed and will be added to TR26.955v0.2.0 in S4-200891.**

|  |  |  |
| --- | --- | --- |
| [S4-200891](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200891.zip) | TR26.955v0.2.0 | Qualcomm Incorporated |

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| --- | --- | --- |
| [S4-200764](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200764.zip) | pCR26.955: Messaging and Social Sharing Scenario | Qualcomm Incorporated |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Discussion:**

* Richard: BBC supports the scenario
* Richard: On the permitted distribution, it probably better be said as encoding format
  + Thomas: agree

**Decision:**

* Agreed with the changes

**S4-200764** is **agreed. The content will be added to TR26.955v0.2.0.**

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| --- | --- | --- |
| [S4-200765](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200765.zip) | pCR26.955: Gaming and Screen Content Scenario | Qualcomm Incorporated |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Discussion:**

* No discussion

**Decision:**

* Agreed

**S4-200765** is **agreed. The content will be added to TR26.955v0.2.0.**

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| --- | --- | --- |
| [S4-200766](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200766.zip) | pCR26.955: Consolidated Evaluation Conditions | Qualcomm Incorporated |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Discussion:**

* Gilles: How could this be used
  + Thomas: it would be used in the below scenario
* Rajesh: About GOP size, you could have a GOP size of 4. YOu could use B-frames from the past. We could add this.
  + Gilles: not GOP size matters, but the latency modes
  + Thomas: Agree
  + Kiho: For low-delay, the GOP structure is 4 or 8.
* Gilles: Should we do the HM?
  + Thomas: Sure, looking at the parameter sets will help us to progress the work
* Thomas: Does anyone have relevant documentation for these parameters?
  + Thibaud: JCT-VC will have this. We are happy to contribute to this.
  + Gilles: Fix as many parameters as possible, and only change those to service parameters.
  + Thomas: agree
  + Thibaud: We should also document the settings for other cases.
* Thomas: Two steps are needed
  + Reference software
  + Parameter settings
* Gilles: Document in the Annex
  + Thomas: OK

**Decision:**

* Revision based on the discussion.
* Interested parties: Thibaud, Rajan, Kiho, Sejin, Dmytro

**S4-200766** is **revised to S4-200892.**

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| [S4-200892](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200892.zip) | pCR26.955: Consolidated Evaluation Conditions | Qualcomm Incorporated |

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| --- | --- | --- |
| [S4-200767](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200767.zip) | [5G Video] First thoughts on evaluation metrics | Qualcomm Incorporated |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Discussion:**

* Igor: Would be good to avoid that people with most diverse metrics. Would be good to have restricted set of metrics. Have at least a common basis.
* Igor: specifically on the mentioned metrics
  + VMAF: at the last JVET meeting it was documented that you cheat with this method
  + SSIM: There are multiple variants. Which one are you referring
  + PSNR: We need to go into the details on how to compute this. Different weighting factors may be applied. Also rate-distortion BD-PSNR can be used.
* Thomas: I basically agree on all of this, it is a starting point. Maybe someone wants to even do subjective tests
  + Igor: Yes, there are also different ways for subjecting tests
  + Gilles: If subjective is done, this also needs be document. For all cases reproducibility needs to be ensured.
* Rajan: We should at least consider to at least a few metrics as mandatory.
* Lukasz: Do we want to use different metrics for HDR metrics? A single metric would than be problematic.
  + Gilles: Should we have another metrics for HDR?
  + Lukasz: JVET has a detailed information on how to do documentation. Also bitrate needs to be considered.
  + Gilles: can we create a group for this purpose
  + Thomas: We can create an Annex for this purpose
* Thomas: a group is good, but needs to be greater than 0.
  + Igor: we participate
  + Thibaud: can start this.
* Thomas: proposes to have a github

**Decision:**

* Very good discussion. Thibaud will lead activity on this matter.
* Create placeholder in Annex of TR26.955.

**S4-200767** is **agreed with the above comments.**

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| [S4-200846](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200846.zip) | 4K-TV Scenario for FS\_5GVideo | ATEME, InterDigital, Orange, Qualcomm |

**Presenter:** Thibaud Biatek (ATEME)

**Discussion:**

* Richard: BBC is broadly supportive to this, please add our name.
* Gilles: Are the interop considerations identical to FullHD?
  + Thibaud: Yes
  + Thomas: I can do this as part of the editing

**Decision:**

* Agreed with the support of BBC

**S4-200846** is **agreed. The content will be added to TR26.955v0.2.0.**

## 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

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| --- | --- | --- |
| [S4-200768](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200768.zip) | Proposed Updates to Work Plan for FS\_XRTraffic | Qualcomm Incorporated |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Discussion:**



**Decision:**

**S4-200768** is **revised/noted/agreed.**

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| --- | --- | --- |
| [S4-200769](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200769.zip) | Proposed Skeleton Draft CR for XR Traffic | Qualcomm Incorporated |

**E-mail Discussion:**

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| --- | --- | --- |
| [[10.7, FS\_XRTraffic, 769 & 770, 27MAY 0600 CEST] 26.925 draft CR & Permanent document](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=5632) | Gilles Teniou | Mon, 25 May 2020 21:27:02 +0000 |
| [[10.7, FS\_XRTraffic, 769 & 770, 27MAY 0600 CEST] 26.925 draft CR & Permanent document](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=7717) | Sejin Oh | Tue, 26 May 2020 15:49:37 +0900 |
| [[10.7, FS\_XRTraffic, 769 & 770, 27MAY 0600 CEST] 26.925 draft CR & Permanent document](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=10036) | Thomas Stockhammer | Tue, 26 May 2020 07:13:55 +0000 |
| [[10.7, FS\_XRTraffic, 769 & 770, 27MAY 0600 CEST] 26.925 draft CR & Permanent document](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=11907) | Sejin Oh | Tue, 26 May 2020 23:06:08 +0900 |
| [[10.7, FS\_XRTraffic, 769 & 770, 27MAY 0600 CEST] 26.925 draft CR & Permanent document](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=12571) | Thomas Stockhammer | Tue, 26 May 2020 14:23:44 +0000 |
| [[10.7, FS\_XRTraffic, 769 & 770, 27MAY 0600 CEST] 26.925 draft CR & Permanent document](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=13336) | Sejin Oh | Wed, 27 May 2020 01:04:19 +0900 |
| [[10.7, FS\_XRTraffic, 769 & 770, 27MAY 0600 CEST] 26.925 draft CR & Permanent document](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=29194) | Gilles Teniou | Wed, 27 May 2020 05:42:17 +0000 |
| [[10.7, FS\_XRTraffic, 769 & 770, 27MAY 0600 CEST] 26.925 draft CR & Permanent document](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=31160) | Gilles Teniou | Wed, 27 May 2020 06:01:06 +0000 |
| [[10.7, FS\_XRTraffic, 769 & 770, 27MAY 0600 CEST] 26.925 draft CR & Permanent document](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=33322) | Thomas Stockhammer | Wed, 27 May 2020 06:19:12 +0000 |

**S4-200769** is **revised to S4-200893.**

|  |  |  |
| --- | --- | --- |
| [S4-200893](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200893.zip) | Proposed Skeleton Draft CR for XR Traffic | Qualcomm Incorporated |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Discussion:**

* Sejin: Not added to cover page
  + Thomas: correct - more aspects on cover page is done
* Gilles: Is the idea to integrate everything into a single CR?
  + Thomas: Yes and no. This first one is needed for the ran work
* Lei: Why is the reason for change like this
  + Thomas: this is is from study item description. Please fix
  + Gilles: Updates Rel-15 and beyond

**Decision:**

* Agreed with the above changes. That will added the later.

**S4-200893** is **agreed.**

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| --- | --- | --- |
| [S4-200770](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200770.zip) | Proposed Updates to Permanent Document | Qualcomm Incorporated |

**E-mail Discussion:**

* See S4-200769

**Decision:**

* agreed

**S4-200770** is **agreed.**

|  |  |  |
| --- | --- | --- |
| [S4-200771](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200771.zip) | [FS\_XRTraffic] System Design Assumptions for Split Rendering | Qualcomm Incorporated |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Discussion:**

* Ryan: Online Gaming and Spectator Mode?
  + Thomas: Not spectator mode, but online gaming

**Decision:**

* No other discussion

**S4-200771** is **agreed. Will be added to the Permanent Document in S4-200895.**

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| --- | --- | --- |
| [S4-200895](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200895.zip) | Proposed Updates to Permanent Document | Qualcomm Incorporated |

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| --- | --- | --- |
| [S4-200772](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200772.zip) | [FS\_XRTraffic] Considerations for Traffic Modelling for Split Rendering | Qualcomm Incorporated |

**Presenter:** Thomas Stockhammer (Qualcomm)

**Discussion:**

* No discussion

**Decision:**

* No other comments

**S4-200772** is **agreed. Will be added to the Permanent Document in S4-200895.**

## 10.9 New Work / New Work Items and Study Items

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| [S4-200725](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200725.zip) | New SID on 5G Glass-type AR/MR Devices | Samsung Electronics France SA |

**Presenter:** Ryan Lee (Samsung)

**Discussion:**

* Thomas: just to mention that AT&T provided their support as well.
* Joe (CMCC): There is a note that Video-see through will not be discussed. The situation is at 5G networks main devices are Video-see through.
* Igor: cannot find conversational
  + Gilles: points to many cases where communication is added
  + Jaeyeon: We believe that we need study first to identify the details
  + Mary-Luc: Not want to repeat my comments, but I want to invite 776 proponents to integrate. One study is clearly better than multiple ones
  + Sejin: Miss discussion from last meeting, but when I read this document, conversational is included. LG supports one study item. And LG wants to co-sign 725.
* Thomas: We support 725. Speaking daily with product people. The holistic approach is very much important as it addresses the complexity of the problem that we are facing. We have conversational in place, but AR devices are very much different in terms of display, power consumption, etc. If note 1 is a blocking, let’s remove it. But it was addressing the issue that the complexity comes from AR Glasses.
* Igor: is already behind this, we are not advocating having a second study. We also support 725, also going with one.
* Iraj: we want this go forward, but we want that the CMCC and Huawei changes are done, but this should minor.

**Decision:**

* 725 is basically agreed. Huawei will provide a proposed update to add some additional aspects that they do not see covered until now. Teng will provide a revised version within 1 hour.

**S4-200725** is **revised to S4-200894.**

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| [S4-200894](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200894.zip) | New SID on 5G Glass-type AR/MR Devices | Samsung Electronics France SA |

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| [S4-200776](http://www.3gpp.org/ftp/tsg_sa/WG4_CODEC/TSGS4_109-e/Docs/S4-200776.zip) | new SID on AR Conversational Services for Terminals | HUAWEI TECHNOLOGIES Co. Ltd. |

**E-mail Discussion:**

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| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=6648) | Gilles Teniou | Mon, 25 May 2020 21:27:58 +0000 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=8346) | Thomas Stockhammer | Tue, 26 May 2020 06:51:43 +0000 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=9256) | Hakju Ryan Lee | Tue, 26 May 2020 15:54:58 +0900 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=16824) | champelmary-luc | Tue, 26 May 2020 20:09:53 +0000 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=20163) | tengyidan | Wed, 27 May 2020 02:48:23 +0000 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=22241) | Thomas Stockhammer | Wed, 27 May 2020 05:00:13 +0000 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=22893) | tengyidan | Wed, 27 May 2020 05:07:36 +0000 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=23820) | Thomas Stockhammer | Wed, 27 May 2020 05:08:13 +0000 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=25977) | HU, JAMES | Wed, 27 May 2020 05:30:50 +0000 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=32376) | tengyidan | Wed, 27 May 2020 06:01:44 +0000 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=20940) | [[log in to unmask]](https://list.etsi.org/scripts/wa.exe?LOGON=A1%3Dind2005D%26L%3D3GPP_TSG_SA_WG4_VIDEO%26O%3DD%26H%3D0%26D%3D0%26T%3D1&Y=tsto%40qti.qualcomm.com) | Wed, 27 May 2020 11:37:29 +0800 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=21930) | Kyunghun Jung | Wed, 27 May 2020 13:02:24 +0900 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=24456) | Hakju Ryan Lee | Wed, 27 May 2020 14:17:17 +0900 |
| [[10.8, New Study, 776, 27MAY 0600 CEST] AR conversational services for terminals - New study item proposal](https://list.etsi.org/scripts/wa.exe?A2=ind2005D&L=3GPP_TSG_SA_WG4_VIDEO&O=D&P=28883) | Kyunghun Jung | Wed, 27 May 2020 14:39:29 +0900 |

**Presenter:** Yidan Teng (Huawei)

**Discussion:**

* Teng explains the difference, repeating the e-mail discussion.
* Ryan: Teng has mentioned why 776 is different to 725, but this is not the case
  + 1) No difference on use cases
  + 2) Transport Protocol is described in objective 4
  + 3) Device type of AR glass limited, but not the case
* Teng: We are willing to co-sign 725
* Thomas: Let’s agree 725 and move on
  + Teng: we want some changes in 725
  + Igor: the new work item covers conversational AR, 725 may not.
  + Gilles: 725 is clearly focus on conversational services
  + Igor: let’s cover this
  + Gilles: Does it cover ITT4RT?
  + Teng: No
  + Igor: ITT4RT change to rapporteur, quite limited, only one use case, also study item.

**Decision:**

* Not sufficient support, many concerns. Will be noted.

**S4-200776** is **noted.**

## 10.10 Liaisons and Liaison Responses

**See under 10.3.**

## 10.11 Any Other Business

The report will be made available in **S4-200XXX.**

## 10.12 Close of the session

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

The online session was closed on May 29, 2020 at 09:02 (CEST).

E-mail approval for documents will conclude on May 29, 2020 12:00 (CEST)

## 10.13 Participants

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| **NAME** |  | **COMPANY** | **Attended** |
| Stockhammer | **Thomas** | **Qualcomm Incorporated** |  |
| Teniou | **Gilles** | **Orange** |  |
| Curcio | **Igor** | **Nokia** |  |
| Oh | **Sejin** | **LG Electronics Inc.** |  |
| Lee | **Brian** | **Dolby Laboratories** |  |
| Singh | **Gurdeep** | **Fraunhofer HHI** |  |
| Thienot | **Cedric** | **Expway** |  |
| Tan | **Peng** | **TELUS** |  |
| Champel | **Mary-Luc** | **XiaoMi** |  |
| Yee Sin | **Chan** | **Facebook** |  |
| Iraj | **Sodagar** | **Tencent** |  |
| Richard | **Bradbury** | **BBC R&D** |  |
| Fourdeux | **Henri** | **InterDigital** |  |
| Choi | **Kiho** | **Samsung Electronics** |  |
| Michel | **Kerdranvat** | **InterDigital** |  |
| Ahmed | **Hamza** | **InterDigital** |  |
| Bo | **Burman** | **Ericsson** |  |
| Lee | **Ryan** | **Samsung Electronics** |  |
| Hu | **James** | **AT&T** |  |