

Executive summary of ITU-T SG21 meeting (Geneva, 6-17 July 2026)

The third meeting of ITU-T Study Group 21 (Technologies for multimedia, content delivery and cable television) in the study period 2025-2028 was held in ITU headquarters, Geneva, from 6 to 17 July 2026. The SG21 meeting was chaired by Mr Noah Luo (Huawei Technologies, China), who was assisted by Mr Stefano Polidori (ITU/TSB Counsellor) and was attended by 509 participants from 35 countries. All sessions were held physically and supported by remote participation using [MyMeetings](#) platform.

SG21 was co-located in Geneva with the following events:

- JVET (Joint Video Experts Team), 7-15 July 2026.
- ISO/IEC JTC 1/SC 29 and its MPEG-related WGs (13-17 July 2026), at Crowne Plaza Hotel.
- Second meeting of the Focus Group on Embodied AI for Multimedia Technologies ([FG-EAI](#)), on Saturday 11 July 2026 at the ITU premises
- Joint Coordination Activity on Accessibility and Human Factors, [JCA-AHF](#), on 9 July 2026.
- ITU SG21 and ISO/IEC JTC 1/SC 29 joint Workshop on “[Media Streaming Service – What’s next](#)” on 14 July 2026 at Crowne Plaza Hotel.

In addition, the [AI for Good Global Summit](#) was organized during the first week (7-10 July 2026) at Geneva Palexpo and SG21 contributed to the organization of various workshops during the Summit:

- Solution Stage - [AI and audiovisual accessibility for digital inclusion](#)
(7 July 2026, 16:30-17:00 CEST, @ AI for Good, Geneva Palexpo)
- Workshop on [Embodied AI \(EAI\) for multimedia technologies](#)
(8 July 2026, 09:00-12:15 CEST, @ AI for Good, Geneva Palexpo)
- Symposium [Future Networked Car \(FNC-2026\)](#)
(9 July 2026, 09:00-17:15 , CEST, @ AI for Good, Geneva Palexpo)

1 List of Consented/Determined Recommendations and other finalized deliverables

1.1 List of Consented draft Recommendations using AAP (ITU-T A.8)

#	Question	Rec	Version	Title	Final TD	A.5
1	Q1/21	F.793.1 (ex F.ACC-MV-SD)	New	Requirements of accessible products and services in the metaverse- Part I System design perspective	TD276R1/PLEN	N/A

#	Question	Rec	Version	Title	Final TD	A.5
2	Q1/21	F.793.2 (F.ACC-MV-UP)	New	Requirements of accessible products and services in the metaverse - Part II User perspective	TD272R1/PLEN	N/A
3	Q2/21	F.780.6 (V3)	Rev.	Requirements for colorimetry for telemedicine systems using ultra-high definition imaging	TD308R1/PLEN	N/A
4	Q3/21	F.740.19 (ex F.ARMSOR)	New	Technical requirements of object recognition for digital representation of cultural relics/artworks using augmented reality	TD345R1/PLEN	N/A
5	Q3/21	F.740.20 (ex F.MRCH)	New	Metadata for recording spatial and temporal information of outdoor cultural heritage based on universal scene description format	TD344R1/PLEN	N/A
6	Q3/21	F.740.21 (ex F.LVR-CHS)	New	Requirements and reference framework for large-scale virtual reality system of cultural heritage sites	TD346/PLEN	N/A
7	Q4/21	F.746.28 (ex F.FW-AGQA)	New	Framework for AI-based online games content verification	TD274R1/PLEN	N/A
8	Q5/21	F.748.86 (ex F.AI-RMCDP)	New	Requirements of multimedia composite data pre-processing	TD292R1/PLEN	N/A
9	Q5/21	F.748.87 (ex F.AI-RSRSreqs)	New	Requirements for real-time super-resolution service based on artificial intelligence	TD331R1/PLEN	N/A
10	Q5/21	F.748.89 (ex F.DCHE-Reqs)	New	Requirements for construction of ontology knowledge base of home environment for robot interaction	TD337R1/PLEN	N/A
11	Q5/21	F.748.88 (ex F.DCOR-reqs)	New	Requirements for construction of ontology knowledge base for household service robots	TD336R1/PLEN	N/A
12	Q5/21	F.748.84 (ex F.FML-TS-ARC)	New	Functional architecture of federated machine learning based service in decentralized environments	TD290R3/PLEN	N/A
13	Q5/21	F.748.85 (ex H.FDM-AC-V)	New	Assessment criteria for foundation models – Vision	TD291R2/PLEN	N/A

#	Question	Rec	Version	Title	Final TD	A.5
14	Q5/21	F.746.24 (ex H.AI-MPS)	New	Technical requirements and architecture on artificial intelligence-based media processing service	TD342R2/PLEN	N/A
15	Q5/21	F.748.82 (ex F.FRTVM)	New	Framework for the robustness training of visual model based on deep learning	TD294R2/PLEN	N/A
16	Q5/21	F.748.90 (ex F.TAKEA)	New	Framework and technical requirements for knowledge engineering applications based on foundation models	TD339R2/PLEN	N/A
17	Q5/21	F.748.93 (ex F.AAI)	New	Framework and Requirements for AI Agent Interoperability	TD338R1/PLEN	N/A
18	Q5/21	F.748.91 (ex F.LLMO)	New	Requirements and evaluation metrics for large language model operators	TD332R1/PLEN	N/A
19	Q6/21	T.261 (ex H.BWC)	New	Biomedical and general waveform signal coding	TD280R2/PLEN	TD347/PLEN
20	Q7/21	F.743.41 (ex F.ADSL MV)	New	Requirements and framework for anomaly detection service leveraging machine vision in photovoltaic farms	TD268R1/PLEN	N/A
21	Q7/21	F.743.40 (Ex F.SIVIS)	New	Requirements and framework of substation intelligent visual inspection system	TD271R1/PLEN	N/A
22	Q7/21	H.626.9 (ex H.VSDTAS-Arch)	New	Architecture and metadata of digital twin model assembling and interaction services for video surveillance systems	TD270R1/PLEN	N/A
23	Q7/21	F.747.18 (ex F.MVBIS)	New	Requirements and framework for machine-vision-based inspection services in underground cable channels	TD269/PLEN	N/A
24	Q8/21	H.430.10 (ex H.ILE-3DIT)	New	Functional requirements and frameworks for 3D model-based immersive telepresence services	TD322/PLEN	N/A
25	Q8/21	H.430.11 (ex H.ILE-AR)	New	Requirements and framework of augmented reality for immersive live experience (ILE) services	TD323R1/PLEN	N/A
26	Q9/21	F.740.18 (ex F.HIM)	New	Requirements of holographic interactive multimedia service based on core cloud and edge cloud	TD310R1/PLEN	N/A

#	Question	Rec	Version	Title	Final TD	A.5
27	Q9/21	F.740.16 (ex H.CAR-FA)	New	Functional requirements and detailed framework for cloud-based augmented reality systems	TD311R5/PLEN	N/A
28	Q9/21	F.740.17 (ex H.CVR-OP)	New	Functional requirements for enhanced optimized processing of cloud virtual reality systems	TD313R1/PLEN	N/A
29	Q9/21	H.770.2 (ex H.MV-HIA)	New	High-level interoperability architecture for cross-platform metaverse	TD312/PLEN	N/A
30	Q10/21	F.749.23 (ex F.CAV-RMBEVL)	New	Requirements for bird's-eye view sensor fusion data labelling in connected and automated vehicles	TD287R2/PLEN	N/A
31	Q10/21	F.749.22 (ex F.SDV-Reqts)	New	Functional requirements for software-defined vehicle service based on vehicle gateway platforms	TD286R2/PLEN	N/A
32	Q10/21	F.749.26 (ex F.VGP-PARK)	New	Requirements for automated parking service based on vehicle gateway platform	TD319R1/PLEN	N/A
33	Q10/21	F.749.24 (ex F.CV-AIVVA)	New	Framework and Requirements for AI-enabled Vehicle Voice Assistant	TD285R1/PLEN	TD325/PLEN
34	Q10/21	F.749.25 (ex F.CV-DDDS)	New	Framework, requirements and evaluation methods for driver distraction detection system	TD284R2/PLEN	N/A
35	Q12/21	F.751.34 (ex H.DLT-MMPA)	New	Maturity model of permissioned distributed ledger technology application	TD300R2/PLEN	N/A
36	Q12/21	F.751.29 (ex H.DLT-DMESB)	New	Framework for distributed ledger technology-based data management of energy storage battery system	TD302R2/PLEN	N/A
37	Q12/21	F.751.33 (ex F.DLT-DMPSSC)	New	Framework of distributed ledger technology-based data management for software supply chain	TD298R3/PLEN	N/A
38	Q12/21	F.751.32 (ex F.DLT-DAT)	New	Framework and requirements for tracking of digital assets based on distributed ledger technology	TD297R3/PLEN	N/A

#	Question	Rec	Version	Title	Final TD	A.5
39	Q12/21	F.751.36 (ex F.DLT-DMPTS)	New	Framework and requirement for DLT-based data management of product traceability services	TD303R2/PLEN	N/A
40	Q13/21	H.644.9 (ex H.CDN-MECptl)	New	Mobile/multi-access content delivery network: Protocols	TD306R3/PLEN	N/A
41	Q13/21	F.746.26 (ex H.ILMTS-arch)	New	Functional architecture of interactive low-latency multimedia transmission system	TD307R2/PLEN	N/A
42	Q16/21	J.1293 (ex J.STB-DONGLE)	New	Technical requirements and measurement methods for 4K UHD pluggable mini set-top boxes	TD277R2/PLEN	N/A
43	Q17/21	J.1115 (ex J.1115-rev)	Rev	Functional Requirements for IP-based Smart Digital Audio Service	TD317R1/PLEN	N/A
44	Q17/21	J.1116 (ex J.DAS-SPEC)	New	Specifications for IP-based Smart Digital Audio Service : AI manager and Signalling	TD316R1/PLEN	N/A
45	Q22/21	J.1045 (ex J.ADCP-REQ)	New	Requirements of advanced digital content protection system for digital multimedia interface	TD321R1/PLEN	N/A
46	Q22/21	J.1040 Amendment 1	Amd	Digital rights management for video and audio content distribution – Requirements	TD320/PLEN	N/A

1.2 List of Determined draft Recommendations using TAP (WTSA Resolution 1, section 9)

#	Question	Rec	Version	Title	Final TD	A.5 just.
1	Q5/21	748.92 (ex F.FUCL)	New	Requirements and Framework of Cross-Platform Unified Communication Libraries for Distributed Multimedia AI Systems	TD335R1/PLEN	N/A
2	Q7/21	F.748.83 (ex F.VIS-FML)	New	Requirements and framework of visual inspection system based on federated machine learning in smart grid	TD275R1/PLEN	N/A

#	Question	Rec	Version	Title	Final TD	A.5 just.
3	Q12/21	F.751.30 (ex F.DLT-VPPO)	New	Framework and functional requirements for DLT-based virtual power plant operation platform	TD299R2/PLEN	N/A
4	Q12/21	F.751.35 (ex H.DLT-DEP)	New	Framework and requirements for distributed ledger technology-based digital evidence preservation services	TD301R2/PLEN	N/A

1.3 List of approved draft Recommendations

#	Question	Rec	Version	Title	Final TD	A.5 just.
1	Q5/21	F.748.39 (ex F.AICP-FRRC)	New	Functional requirements and reference architecture of artificial intelligence cloud platform for intelligent power grid facilities maintenance	TD296/PLEN	N/A
2	Q5/21	F.748.75 (ex F.MTTIR)	New	Requirements and framework of computer vision and audition-based transportation tunnel inspection robotic systems	TD289/PLEN	N/A
3	Q5/21	F.748.76 (ex F.AI-RFSSMA)	New	Framework and general requirements of sound signal management and analysis based on artificial intelligence technology for electrical equipment	TD304/PLEN	N/A
4	Q22/21	J.1043 (ex J.DRMVA-rbst)	New	Digital rights management for video and audio content distribution – Compliance and robustness rules	TD343/PLEN	N/A

2 List of agreed draft Supplements, Technical Reports, Technical Papers or other documents

2.1 Technical Reports/Papers

#	Question	Work item	Version	Title	Final TD
1	Q1/21	FSTR.GM-CAP	New	Guiding mechanisms for captioning/subtitles and sign language interpreting interpretation in immersive media	TD273R1/PLEN
2	Q2/21	HSTP-CONF-H872	Revised	Testing of video gameplay devices and/or software for compliance with ITU-T H.872	TD327R1/PLEN

#	Question	Work item	Version	Title	Final TD
3	Q5/21	FSTR.WM	New	Technical framework and essential capabilities of World Models	TD293R2/PLEN
4	Q5/21	FSTR.MIS-AI	New	Methodologies for mitigating misinformation and disinformation with Artificial Intelligence	TD341/PLEN
5	Q6/21	HSTP-MMAuth	New	Multimedia authentication framework, workflows and procedures	TD328/PLEN
6	Q9/21	FSTR.MV-MML	New	Maturity levels for metaverse service and application	TD314R2/PLEN
7	Q10/21	FSTP-SDV	New	Overview of Software-Defined Vehicles	TD288R2/PLEN
8	Q10/21	FSTP-VGP-RDS (ex FSTP.VGP-RDSreqs)	New	Requirements for remote driving service based on vehicle gateway platform	TD283R1/PLEN
9	Q12/21	HSTP.DLT-PE	New	Framework of distributed ledger technology performance enhancement	TD305R2/PLEN

2.2 Supplements

#	Question	Work item	Version	Title	Final TD
1	Q6/21	H Supplement 22 (ex H.Sup.MACVC)	New	Optimization of encoders and receiving systems for machine analysis of coded video content	TD326R1/PLEN
2	Q10/21	F Supplement 5 (ex F.Sup-CUAV-PSEUC)	New	Use cases for communication services of passive sensing equipment based on civilian unmanned aerial vehicles	TD281R1/PLEN
3	Q10/21	F Supplement 6 (ex F.Sup-Overview-FC)	New	Overview of ICT-enabled flying car service platform	TD282R1/PLEN

3 New and deleted work items

3.1 New work items

The meeting agreed to start work on **63** new work items. The number of agreed new work items is reported below:

- WP1 (8 new work items)
- WP2 (12 new work items)
- WP3 (22 new work items)
- WP4 (21 new work items)

The complete list of new work items is available in [Annex 2](#).

3.2 Discontinued work items

It was agreed to discontinue the following work item:

#	Q.	Acronym (kind of publication)	Title
1	Q5/21	F.AI-AKS	Reference model of AI knowledge sharing for AI computing platform
2	Q5/21	F.AICP-RM	Technical specification for artificial intelligence cloud platform: Resource management
3	Q5/21	F.AIGC-text	Artificial intelligence generated contents: Generative text
4	Q5/21	F.REAIOCR	Requirements and evaluation methods for AI-based optical character recognition service
5	Q5/21	FSTP.FRMPT	Framework for large language model parallel training system
6	Q7/21	F.VIIReqs	Requirements for video supporting system oriented to industrial Internet
7	Q7/21	H.P2PVSProt	Protocols for a point-to-point video surveillance system
8	Q7/21	H.VIIArch	Architecture for video supporting system oriented to industrial Internet

4 SG21 Management for the Study Period 2025-2028

SG21 confirmed the composition of the management of ITU-T Study Group 21, as contained in [SG21-TD238/PLEN](#).

Role	Name
SG21 Chair	Mr Noah LUO (Huawei Technologies, China)
SG21 Vice-chair	Mr Vincent Affleck (DSIT, United Kingdom)
SG21Vice-chair	Mr Avinash AGARWAL (Ministry of Communications, India)
SG21Vice-chair	Mr Shin-Gak KANG (ETRI, Korea Rep. of)
SG21Vice-chair	Mr Kei KAWAMURA (KDDI Corporation, Japan)
SG21Vice-chair	Mr Lukasz LITWIC (Telefon AB - LM Ericsson, Sweden)
SG21Vice-chair	Mr Joseph ONAYA (Communications Authority of Kenya (CA), Kenya)
SG21Vice-chair	Mr Mehmet ÖZDEM (Turk Telekom Group, Turkey)
SG21Vice-chair	Mr Roberto Mitsuake Hirayama (Agência Nacional de Telecomunicações (ANATEL), Brazil)

Role	Name
SG21Vice-chair	Ms Sarra REBHI (National Tunisian Broadcasting Office, Tunisia)
SG21Vice-chair	Mr Justin RIDGE (Nokia Corporation, United States)
SG21Vice-chair	Mr Sirojiddin USMANOV (Ministry of Digital Technologies of the Republic of Uzbekistan, Uzbekistan)
Counsellor	Mr Stefano POLIDORI (TSB, ITU)
Administrative assistant	Ms Hiba TAHAWI (TSB, ITU)

5 SG21 Structure for the Study Period 2025-2028

5.1 Working Party structure

ITU-T SG21 Working Party structure and leadership was approved, with no changes, as contained in [SG21-TD239/PLEN](#). The structure is as follows:

- **WP1 “Integrated broadband and cable television systems”** (Q14, 15, 16, 17, 18, 19, 20, 21, 22).
- **WP2 “Multimedia digital services and human aspects”** (Q1, 2, 3, 4),
- **WP3 “Media authenticity, processing and AI-enabled applications”** (Q5, 6, 7),
- **WP4 “Infrastructure for multimedia systems, services and applications, including metaverse”** (Q8, 9, 10, 11, 12, 13)

Acronym	SG21 Structure	Q/21	Titles
PLEN	PLENARY of SG21 – Noah Luo <i>(SG21 Chair)</i> <i>(Huawei Technologies, China)</i>	Q0/21	Coordination and planning
WP1/21		Q14/21	Guidelines for developing countries to implement and deploy digital cable television networks
		Q15/21	Software frameworks and architectures for advanced content distribution services over integrated broadband cable networks
		Q16/21	Functional requirements for terminal devices of the integrated broadband cable networks

	Integrated broadband and cable television systems – Kei Kawamura (<i>WP1/21 Chair</i>) (KDDI, Japan) – Avinash Agarwal (<i>WP1/21 vice-Chair</i>) (DOT, India) – Ouyang Feng (<i>WP1/21 vice-Chair</i>) (ABS, China)	Q17/21	Transmission control and interfaces (MAC layer) for IP and/or packet-based data over integrated broadband cable networks
		Q18/21	IP-enabled multimedia applications and services for cable television networks enabled by converged platforms
		Q19/21	Requirements, methods, and interfaces of the advanced service platforms to enhance the delivery of audiovisual content, and other multimedia interactive services over integrated broadband cable networks
		Q20/21	AI-enabled enhanced functions over integrated broadband cable network
		Q21/21	Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution
		Q22/21	Methods and practices for conditional access and content protection
WP2/21	Multimedia digital services and human aspects – Hideki Yamamoto (<i>WP2/21 Chair</i>) (OKI, Japan) – Miran Choi (<i>WP2/21 vice-Chair</i>) (ETRI Korea Rep. of) – Wei Kai (<i>WP2/21 vice-Chair</i>) (CAICT, China)	Q1/21	Multimedia system, service and application accessibility for digital inclusion
		Q2/21	Multimedia framework for digital health applications
		Q3/21	Digital culture-related systems and services
		Q4/21	Human factors for intelligent user interfaces and services
WP3/21	Media authenticity, processing and AI-enabled applications – Justin Ridge (<i>WP3/21 co-Chair</i>) (Nokia, USA)	Q5/21	AI-enabled multimedia applications
		Q6/21	Visual, audio and signal coding

	– Yuan Zhang (<i>WP3/21 co-Chair</i>) (China Telecom, China)	Q7/21	Intelligent visual systems and services
WP4/21	Infrastructure for multimedia systems, services and applications, including metaverse – Shin-Gak Kang (<i>WP4/21 co-Chair</i>) (ETRI, Korea) – Hideo Imanaka (<i>WP4/21 co-Chair</i>)	Q8/21	Immersive live experience systems and services
		Q9/21	Multimedia framework, applications and services, and related metaverse aspects
		Q10/21	Vehicular multimedia communications, systems, networks, and applications
		Q11/21	Multimedia systems, terminals, gateways and data conferencing
		Q12/21	Multimedia aspects of distributed ledger technologies and related services
		Q13/21	Multimedia streaming-related systems and services including content delivery, application platforms and end systems

5.2 Ad hoc groups of SG21

- **AHG-FQS:** [SG21-TD315/PLEN](#) is the report of the **ad hoc group on future questions structure** (AHG-FQS) meeting, which took place on 10 July 2026 from 14h30 to 16h15. It provides the updated status on the restructuring efforts under SG21, following the previous AHG-FQS efforts. SG21 closing plenary confirmed the agreements of the AHG-FQS meeting and the following Questions were accordingly merged according to the terms of reference found in annex to the report:
 - Merge of Q15 and Q16 (see ANNEX A of [SG21-TD315/PLEN](#))
 - Merge of Q17 and Q21 (see ANNEX B of [SG21-TD315/PLEN](#))
 - Merge of Q18 and Q19 (see ANNEX C of [SG21-TD315/PLEN](#))

The AHG-FQS will continue supporting restructuring of SG21 until WTSA-28.

- **AHG-EAI:** SG21 opening plenary decided to discontinue AHG-EAI. The purpose of the AHG was considered achieved with the establishment of the [ITU-T Focus Group on Embodied AI for Multimedia Technologies](#) to address embodied AI studies under SG21. The co-chairs of the AHG, Mr Hirayama and Mr Wang were duly thanked for their leadership in achieving such a major milestone.

5.3 Other groups under SG21

5.3.1 [IRG-AVA](#) - ITU Intersector Rapporteur Group on Audiovisual Media Accessibility

IRG-AVA did not meet during SG21 meeting, they planned to have a meeting on 21 September 2026. SG21 acts as a parent study group for IRG-AVA (Audiovisual Media Accessibility), as mentioned in the table below.

IRG	Title	Co-chair from SG21	Parent Groups	Website
IRG-AVA	Audiovisual Media Accessibility	Masahito Kawamori (Tokyo University, Japan)	ITU-T SG21 ITU-R SG6	https://itu.int/en/irg/ava

5.3.2 **JVET** - Joint Video Experts Team

A joint meeting was held of WP3/21 with JVET, MPEG Requirements and MPEG Visual Quality Assessment on issuing a Joint Call for Proposals on video coding technology with capabilities that significantly exceed those of the Versatile Video Coding (VVC) standard (Rec. ITU-T H.266 | ISO/IEC 23090-3) and its current extensions. The preparatory work toward this Call and the associated description of requirements and use cases had been under preparation for several years in JVET, MPEG and the Study Group. This Call for Proposals (CfP) was to be issued by the Joint Video Experts Team (JVET) on behalf of its ITU-T and ISO/IEC parent bodies (ITU-T SG21 WP3/21 and ISO/IEC JTC 1/SC 29). The evaluation of submissions is planned to be conducted during the JVET meeting in January 2027.

See for more information: [SG21-TD348/PLEN](#).

5.3.3 **FG-EAI** - Focus Group on Embodied AI for Multimedia Technologies

SG21 hosted the 2nd meeting of **FG-EAI (Embodied AI for Multimedia Technologies)** on Saturday 11 July, which was very successful, main results:

- Number of Participants: **139** from **20** countries
- Next and **3rd FG-EAI meeting** will be hosted by "The People's Government of Binjiang District" in **Hangzhou, China, 13-16 October 2026**.
- **22** interim e-meetings planned (various WGs) until next FG-EAI Plenary in October.
- **22 new work items** established (**planned deliverables**) covering following key topics regarding Embodied AI:
 - Multimodal data management and acquisition
 - Cloud-edge-end collaborative architecture
 - Multi-agent embodied AI system
 - Embodied AI in Power Grid Facility
 - Multimodal media-based embodied AI services for manufacturing environments
 - Embodied AI in Mobility and Logistics Applications
 - Embodied AI service in the household environment

- Foreign object detection and removal in gas-insulated switchgear compartments
- Considerations for Human-Centred Validation in Embodied AI
- Framework and evaluation methods for human-machine interaction

6 New/revised Questions texts

See item 5.2.

7 SG21 Management, Rapporteurs and Associate Rapporteurs

SG21 agreed on the updated list of Rapporteurs and Associate Rapporteurs for the Study Period 2025-2028 as found in [SG21-TD240R3/PLEN](#), with the following changes:

- Mr Hideki Yamamoto was appointed as Associate rapporteur of Q2/21
- Ms Xiaojun Mu was appointed as Associate rapporteur of Q9/21
- Mr Hideki Yamamoto has resigned from his position as Rapporteur of Q10/21 and was duly thanked for the excellent work that led Q10 to become one of the most active Question in SG21.
- Mr Hongki Cha, previously associate Rapporteur, was appointed as Rapporteur of Q10/21
- Mr Tatsuo Shibata was appointed a Rapporteur of Q14/21, replacing Mr Kei Kawamura who was served as an Acting Rapporteur.

8 Liaison officers to external groups

SG21 agreed on the updated list of liaison officers for the Study Period 2025-2028 as found in [SG21-TD241R3/PLEN](#), the following new representatives were appointed:

- Jörn Erbguth, University of Geneva, is the new Liaison officer for [CEN/CENELEC JTC19](#)

9 Outgoing Liaison Statements

The meeting agreed on **87** outgoing liaison statements, as listed in [Annex 3](#).

10 SG21 results per Question

The results of each Question under SG21 are provided in detail in [Annex 1](#).

11 Work plan for interim Rapporteur meetings and working party meetings

11.1 Working party meetings

WP1/21, WP2/21 and WP4/21 planned to hold collocated interim meetings. At the SG21 closing plenary, the meetings were agreed to be held physically in Geneva on 17 December 2026. The terms of references for these interim meetings are provided below.

WP	Date	Place / Host	Terms of reference	Contact
1/21	17 December 2026	Geneva / ITU	– Consent (AAP) on J.ibs-sa, J.152-rev, J.153-rev, etc. – Review and approve report of interim RGMs including new work items.	Mr Kei Kawamura (ki-kawamura@kddi.com)
2/21	17 December 2026	Geneva / ITU	– Consent (AAP) and determine (TAP) on several WIs that are mature. – Review and approve report of interim RGMs including new work items.	Mr Hideki Yamamoto (yamamoto436@oki.com)
4/21	17 December 2026	Geneva / ITU	– Consent (AAP) on H.ILE-3DINR, H.ILE-QR, F.749.27 (ex. F.VM-SPEECH), F.CAV-MIFS, H.VM-test, F.DVMSF-Edge and other work items that will be mature after RGM interim meetings. – Review and approve report of interim RGMs including new work items	Mr Shin-Gak Kang (sgkang@etri.re.kr) Mr Hideo Imanaka (h.imanaka@nict.go.jp)

WP3/21 plans to meet in Brisbane, Australia, on one day of the week 18-22 January 2027. It is expected that the duration of the meeting will be no more than one day and most probably will be on 22 January. The terms of references for this interim WP3/21 meeting are provided below:

WP	Date	Place / Host	Terms of reference	Contact
3/21	18-22 January 2027	Brisbane, Australia	– Consent (AAP) on items in the Q5/21, Q6/21 and Q7/21 work plan that are submitted for consent at their respective planned RGMs. – Review all results from interim RGMs including approving new work items. – Consider agreement for H. Supplement 21 (V2) Oversight and coordination of JVET parent body-level matters	Mr Justin RIDGE (justin.ridge@nokia.com) Ms Yuan Zhang (zhangy666@chinatelecom.cn)

11.2 Interim Rapporteurs' groups meetings

The following interim Rapporteurs' groups meetings are agreed by SG21. For updates, please see the Rapporteur meetings webpage:

<https://www.itu.int/net/ITU-T/lists/rgm.aspx?Group=21>

Q/SG	Date	Place / Host	Terms of reference	Contact
1/21	22 October 2026 (11h00 - 15h00 Geneva time)	Virtual	– Progress all existing work items of Q1/21 and discuss any new proposal	Mr Avinash Agarwal (avinash.70@gov.in)
2/21	31 August 2026 (14h00-16h00 Geneva time) (TBC)	Virtual	– Progress on H.862.9 (ex F.HR-AP).	Mr Masahito Kawamori (kawamorim@gmail.com)
2/21	Several days in Mid-September 2026 (time) (TBC)	Virtual	– Progress on the on-going work items including SL-AD and SV-DS.	Mr Masahito Kawamori (kawamorim@gmail.com)
2/21	October 2026 (time) (TBC)	Virtual	– Progress on the on-going work items except SL-AD and SV-DS.	Mr Masahito Kawamori (kawamorim@gmail.com)
2/21	19-20 November 2026	Geneva	– Progress on SL-AD and SV-DS	Mr Masahito Kawamori (kawamorim@gmail.com)
2/21	16-17 December 2026	ITU	– Progress on the on-going work items including SL-AD and SV-DS. – Progress on WI especially intended for Consent.	Mr Masahito Kawamori (kawamorim@gmail.com)
2/21	Late January 2027	Virtual	– Progress on on-going work items, except SL-AD and SV-DS.	Mr Masahito Kawamori (kawamorim@gmail.com)
2/21	February 2027	Virtual	– Progress on on-going work items, except SL-AD and SV-DS.	Mr Masahito Kawamori (kawamorim@gmail.com)
3/21	8-9 Dec 2026	Virtual	– Progress on F.AI-LTSM , F.DC-XR-CUAV, F.DC-CRMMS, F.AIE-STGS, F.MRN-CHS, F.DC-AI-LTSMetc. – Continue collaboration with Q2/20 on Y.MetaExpSys	Mr Hong Chen (norman_chen2020@163.com)

Q/SG	Date	Place / Host	Terms of reference	Contact
4/21	23 November 2026 (9h00 – 12h00 Geneva time)	Virtual	– Progress on on-going work items.	Ms Miran Choi (miranc2007@gmail.com)
4/21	22 February 2027 (9h00 – 12h00 Geneva time)	Virtual	– Progress on on-going work items.	Ms Miran Choi (miranc2007@gmail.com)
5/21	20-22 October 2026 (11h00-15h00 Geneva Time)	Virtual	The objectives for this meeting are: – –Discussion on work items that are proposed for Consent, Determination, or Approval. – –Review of ongoing work items. – –Consider new work item and other topics.	Mr Yuntao Wang (wangyuntao@caict.ac.cn) Ms Qing Liu (liuqing6@chinatelecom.cn) Mr Yuwei Wang (ywwang@ict.ac.cn)
7/21	September 2026 (TBD)	Virtual (TBD)	– Progress on ongoing items, Roadmap, Workshop & new proposals.	MS Yuan Zhang (zhangy666@chinatelecom.cn) Mr Haitao Zhang (zht@bupt.edu.cn)
6/21 & JVET	17-23 October 2026	Hangzhou, CN (with JPEG and MPEG)	– Maintenance and extensions of VVC, VSEI, HEVC, AVC, and CICC video coding standards, associated reference software and conformance, and non-normative guidance – Project planning and exploration toward a next generation video coding standard beyond VVC capability – Progress on T.261 biomedical waveform coding reference software, conformance, maintenance and enhancement, and coordination with DICOM	Mr Gary Sullivan (gary.sullivan@dolby.com)

Q/SG	Date	Place / Host	Terms of reference	Contact
			– Oversight of and coordination with the JVET collaborative team – Coordination of work with JTC 1/SC 29 and its JPEG and MPEG working groups – Requirements studies, exploration experiments, and organizational preparations for standardization of new coding technology for video, images, audio, and biomedical and other waveform signals	
6/21 & JVET	13-22 January 2027	Brisbane, AU (with MPEG)	– Continuation of the topics listed above for 6/21 & JVET	Mr Gary Sullivan (gary.sullivan@dolby.com)
8/21	14-16 December 2026 (TBD)	Geneva/ e-meeting (TBD)	– Progress on existing WIs : H.ILE-3DINR, H.ILE-AMR, H.ILE-ISAC-req, H.ILE-exp, H.430.2, H.ILE-PwD-req, H.ILE-SMIIS, and H.ILE-QR – Discuss new proposals – Discuss future plan	Mr Hideo Imanaka (h.imanaka@nict.go.jp)
9/21	19-22 October 2026	Jeju, Korea/e-meeting	– Progress on ongoing work items of Q9/21	Mr Wook Hyun (whyun@etri.re.kr)
10/21	19-20 October 2026 (9h00-18h00 Geneva Time)	Yichuang Int'l. Exhib. Conv. Ctr., Beijing, China (No. 6 Rongchang East Street, Daxing District) / ETRI	– Progress on existing work items, – Proposal of new work items, and – Proposal of future activities.	Mr Hongki CHA (cha8476@etri.re.kr)

Q/SG	Date	Place / Host	Terms of reference	Contact
		- NOTE: Download Apollo Go app to experience robotaxi around Yichuang area.		
10/21	7-9 December 2026 (12h00~15h00 Geneva Time)	Virtual meeting	– Progress on existing work items, – Proposal of new work items, and – Proposal of future activities.	Mr Hongki CHA (cha8476@etri.re.kr)
12/21	November 2026 (12h00~15h00 Geneva Time) (TBD)	Virtual	– New work Item – Progress on the on-going work items	Mr Kai Wei (weikai@caict.ac.cn) Ms Liangliang Zhang (liangliang.zhang@huawei.com)
13/21	December 2026 (TBD)	Virtual (TBD)	– Progress on F.CDN-AINW, H.IPTV-EASarch, H.AMR-ARCH, H.IPTV-TDES.7, F.CDN-SCreqs, F.IMTS-reqs, F.CDHT-reqs, etc., – Consider new work items; – Consider document for consent	Mr Chuanyang Miao (miao.chuanyang@zte.com.cn) Ms Sarra Rebhi (rebhi.sarra@telediffusion.net.tn) Mr Xin Shen (shenxin_sx@migu.chinamobile.com)
15/21+16/21	23 October 2026 (11h00-12h00 Geneva time)	Virtual / ITU	– Progress on: J.STB-OVS J.STB-UHDVRS J.STB-UHDMUVR J.STB-LDI – Revision of ITU-T J.1613 (CCT terminology comments)	Mr Xin Zhang (xin.zhang@skyworth.com)
15/21+16/21	17 December 2026 (TBD)	Geneva / ITU	– Progress on: J.STB-OVS J.STB-UHDVRS	Mr Xin Zhang (xin.zhang@skyworth.com)

Q/SG	Date	Place / Host	Terms of reference	Contact
			J.STB-UHDMUVR J.STB-LDI – Revision of ITU-T J.1613 (CCT terminology comments)	
17/21+21/21	18 November 2026 (12h00-13h00 Geneva time)	Virtual / ITU	– Progress on J.1113-rev and so on	Mr TaeKyoan KIM (tkkim@etri.re.kr)
17/21+21/21	2 February 2027 (12h00-13h00 Geneva time)	Virtual / ITU	– Progress on J.1113-rev and so on	Mr TaeKyoan KIM (tkkim@etri.re.kr)
18/21+19/21	2 December 2026 (11h00-13h00 Geneva time)	Virtual / ITU	– Progress on J.SMS-REQ and J.CIMSP	Ms Yanhua Niu (niuyanhua@abs.ac.cn)
20/21	23 October 2026 (11h00-12h00 Geneva time)	Virtual / ITU	– Progress J.AIID-IBC, JSTR.AIGW-IBC, JSTR.DCD – Discuss new proposals	Mr Feng Ouyang (ouyangfeng@abs.ac.cn)
Joint 14/21 and 17/21+21/21	6-7 October 2026 (12h00-15h00 Geneva time)	Virtual / ITU	– Progress on J.152-rev, J.153-rev, J.ibs-sa, and JSTR-MToN-MLA.	Mr Kei Kawamura (ki-kawamura@kddi.com)
Joint 14/21 and 17/21+21/21,	16 December 2026 (TBC)	Geneva / ITU	– Progress on J.152-rev, J.153-rev, J.ibs-sa, JSTR-MToN-MLA, and DOCSIS.	Mr Kei Kawamura (ki-kawamura@kddi.com)
22/21	3 December 2026 (11h00-12h15 Geneva time)	Virtual / ITU	– Progress on J.ADCP-SPEC and TR.CASDRM-INT	Mr Han-seung Koo (koohs@etri.re.kr)

12 Next Study Group 21 meeting

Next ITU-T SG21 meeting is scheduled to be held from 19 to 30 April 2027 in Geneva, Switzerland, hosted by ITU. More information will be provided on the SG21 website: <https://www.itu.int/en/ITU-T/studygroups/2025-2028/21/Pages/default.aspx>.

13 AOB

Question 5/21 launched an open-source project **ITU-T Recommendation Reviewer** (URL: <https://github.com/OpenITU/itu-t-recommendation-reviewer>), an AI-assisted editorial tool designed to support the modernization of ITU-T standards drafting. The tool automatically reviews draft Recommendations for compliance with ITU-T editorial rules and guidelines, performs multi-pass document checks, and generates structured reports highlighting critical, major, and minor issues with proposed corrections. Implemented in a model-agnostic open Agent Skills format and released under the MIT licence, it can be used with any AI model or agent. It is free to use. SG21 Q5/21 invites experts to evaluate the tool on their draft Recommendations and contribute improvements through the open-source repository, with all contributions reviewed by the Rapporteur and linked to authoritative ITU-T sources.

Annexes: 3

Annex 1 – Results of SG21 meeting per Questions

Annex 2 – List of New Work Items

Annex 3 – List of Outgoing liaison statements

Annex 1 – Results of SG21 meeting per Questions

10.0 Question 0/21 “Coordination and planning”

The report of Q0/21 can be found in [SG21-TD324/PLEN](#). It was approved.

Executive summary:

Question 0/21 " coordination and planning " was addressed in five (05) sessions during the SG21 meeting held in Geneva, 6-17 July 2026, under the chairmanship of Sarra Rebhi (Tunisian Broadcasting Office, Tunisia) and the assistance of Mr Kei Kawamura (KDDI Corporation, Japan). The group adopted the agenda in TD[257/PLEN](#).

The objectives for this meeting were:

- The review of incoming liaison statements
- The coordination and process of some liaison statements
- The establishment of liaison statements reply

In summary: During this SG21 meeting, Q0/21 achieved the following results:

- Eleven (11) liaison statements were drafted and agreed to be sent to TSAG, ITU-T SG11, ITU-T SG13, ITU-T SG17, JCA-IMT2020/IMT2030, SCV/CCT, ITU-D Q3/1,

10.1 Question 1/21 “Multimedia system, service and application accessibility for digital inclusion”

The report of Q1/21 can be found in [SG21-TD271/WP2](#). It was approved.

Executive summary:

Q1/21 achieved the following results:

- Two (2) Recommendations were finalized and are proposed for consent (F.ACC-MV-SD, F.ACC-MV-UP);
- One (1) informative text (e.g. Supplements, technical reports, etc.) was finalized and is proposed for agreement (FSTR.GM-CAP);
- Three (3) draft Recommendations were updated by this meeting for progressing at future meetings (F.ACC-AVSL, F.791(V3), H.ACC-AA-VIU).
- One (1) informative text was updated by this meeting for progressing at future meetings: (FSTR.FR-AcIn-VW);
- One (1) new work item was agreed at Q1/21 level (FSTR-BCI);
- Nine (9) contributions were received and reviewed;

- Twelve (12) incoming liaison statements and two (2) other TDs were reviewed;
- Two (2) outgoing liaison statements were prepared;
- One (1) interim meeting is planned before next SG21 meeting;
- No changes were suggested by Q1/21 for the liaison officers already nominated;
- No changes were suggested by Q1/21 for the associate rapporteur already nominated;
- One (1) change was proposed for editors of ongoing work items. New editors were proposed for the new work item recommended for creation during this meeting.

10.2 Question 2/21 “Multimedia framework for digital health applications”

The report of Q2/21 can be found in [SG21-TD272/WP2](#). It was approved.

Executive summary:

Q2/21 achieved the following results:

- 1 Recommendation was finalized and proposed for consent;
- 1 Technical Paper, “Conformance Testing of Safe-listening egaming”, was finalized and proposed for agreement;
- The following 13 draft Recommendations were updated by this meeting for progressing at future meetings;
H.862.9 (ex F.HR-AP); F.780.6V2; H.SL-AD; H.SV-DS; F.Reg-surgical; F.Med-MTS; H.Med-MGD; F.mMRI-Rural; F.Med-Auth; F.PGHR; F.RoCheck; F.TP-IHA; F.FAST; F.Med-VHN;
- 6 new work items were agreed to be started;
- 8 liaison statements addressed to the following standard bodies were drafted and agreed to be sent (*ITU-T SG12; ITU-T SG11 CASC; ITU-T Q2/20; ITU-T FG-EAI; IEC SyC AAL; ISO/IEC JTC1/SC29/WG1; ISO TC215; ISO TC215 WG12*)
- 7 interim meetings were planned before next SG21 meeting;
- Mr Hideki Yamamoto (OKI, Japan) was nominated as new associate rapporteur;

Q2/21 continued its collaboration with WHO on “Multimedia ICT for Sensory Healthcare”, including “Make Listening Safe” initiative as well as newly established “Safe-viewing” work item. Q2/21 also initiated collaboration with ISO TC215 on a new project on “Telehealth and Virtual Care services”.

10.3 Question 3/21 “Digital culture-related systems and services”

The report of Q3/21 can be found in [SG21-TD273R1/WP2](#). It was approved.

Executive summary:

Q3/21 achieved the following results:

- Three work item was finalized and proposed for consent:
 - F.MRCH
 - F.ARMSOR
 - F.LVR-CHS
- Four draft Recommendations were updated by this meeting for progressing at future meetings:
 - F.DEC-RM
 - F.DCRIIS
 - F.MRN-CHS
 - F.AIE-STGS
- Two new work items were agreed to be started:
 - F.DC-XR-CUAV
 - F.DC-CRMMS
- Two liaison statements was drafted and agreed to be sent and to ITU-T SG13, SG20; ISO/IEC JTC 1/SC 29, ITU-T SG17;
- One interim meeting was planned before next SG21 meeting;

10.4 Question 4/21 “Human factors for intelligent user interfaces and services”

The report of Q4/21 can be found in [SG21-TD274/WP2](#). It was approved.

Executive summary:

Q4/21 achieved the following results:

- The following draft Recommendation was finalized and proposed for consent: F.FW-AGQA
- The following 4 draft Recommendations were updated by this meeting for progressing at future meetings: F.FLDH, H.EMO-MCS, F.UIMD-req, F.GI-WD;
- Q4/21 agreed to establish 3 new work items: F.PUIC-Req, F.UICDH, F.ECHO-FW
- Two interim e-meetings were planned before the next SG21 meeting;
- Q4 and Q5 had a joint meeting to review the work item to consent proposed in Q5: F.TAKEA

10.5 Question 5/21 “AI-enabled multimedia applications”

The report of Q5/21 can be found in [SG21-TD316R1/WP3](#). It was approved.

Executive summary:

During this SG21 meeting, Q5/21 achieved the following results:

- 12 Recommendations were finalized and proposed for consent and for determination;
- 3 Recommendations were finalized and proposed for approval;
- 2 informative texts (e.g. Supplements, technical reports, etc.) were finalized and proposed for agreement;
- 22 draft Recommendations were updated by this meeting for progressing at future meetings;
- 10 new work items were agreed to be started;
- 17 liaison statements were drafted and agreed to be sent and to which standard body are addressed;
- 1 interim meeting was planned before next SG21 meeting.

10.6 Question 6/21 “Visual, audio and signal coding”

The report of Q6/21 can be found in [SG21-TD317/WP3](#). It was approved.

Executive summary:

During this SG21 meeting, Q6/21 achieved the following results:

- Finalization of one draft new Recommendation for consent: Rec. ITU-T T.261 “Biomedical and general waveform signal coding”;
- Proposal of one draft new H-series supplement for agreement: H-series Supplement 22 (ex H.Sup-MACVC) "Optimization of encoders and receiving systems for machine analysis of coded video content";
- Proposal of one draft new H-series technical paper for agreement: ITU-T HSTP-MMAuth “Multimedia authentication framework, workflows and procedures”;
- Agreement to start work on three new Recommendations and one revised Recommendation;
- Approval of four liaison statement replies – to ISO/IEC JTC 1/SC 29/WG 1 (JPEG) on JPEG AI and neural network-based video coding, to 3GPP TSG SA WG 4 on HEVC multi-layer profiles, chroma subsampling and bit depth combinations, and to JPEG on JPEG 2000;
- Planning for two interim meetings of Q6/21 and JVET planned before next SG21 meeting.

10.7 Question 7/21 “Intelligent visual systems and services”

The report of Q7/21 can be found in [SG21-TD318R1/WP3](#). It was approved.

Executive summary:

During this SG21 meeting, Q7/21 achieved the following results:

- One draft Recommendation was finalized and proposed for determination: ITU-T F.748.83 (ex F.VIS-FML);
- Four draft Recommendations were finalized and proposed for consent, including ITU-T F.743.41 (ex F.ADSLMMV), ITU-T F.747.18 (ex F.MVBIS), ITU-T H.626.9 (ex H.VSDTAS-Arch) and ITU-T F.743.40 (ex F.SIVIS);
- 17 draft Recommendations were updated by this meeting for progressing at future meeting, including H.MFSV-arch, F.VASO, F.MACVS, F.RFVFMP, H.MGSarch, F.743.2 (V2) , H.626.2 (V2), F.TSSDC, F.IGreqs, H.VSBD-P, H.EV-CCS, H.EV-SYSarch, FSTR.IVADS, F.AIVSSPGC, F.IVSReqs, H.CEC-AP and H.IMV-FRM.
- Seven new work items were agreed to be started, including F.IMPTC, F.IIS-PP, F.VASReqs, F.FM-ODI, F.SIVIS-arch, F.MAC-A, ITU-T F.VMTRP;
- Nine outgoing liaison statements were drafted and agreed to be issued;
- One interim meeting was planned before next SG21 meeting.

10.8 Question 8/21 “Immersive live experience systems and services”

The report of Q8 /21 can be found in [SG21-TD418R1/WP4](#). It was approved.

Executive summary:

During this SG21 meeting, Q8/21 achieved the following results:

- Two (2) Recommendations, H.ILE-AR and H.ILE-3DIT were finalized and proposed for consent;
- No informative texts (e.g Supplements, technical reports, etc.) were finalized and proposed for agreement;
- Six (6), H.ILE-QR, H.ILE-3DINR, H.ILE-SMIIS, H.ILE-AMR, H.ILE-PwD-req, H.ILE-ISAC-req, draft Recommendations were updated by this meeting for progressing at future meetings;
- One (1) new work item, H.430.2(V2) was agreed to be started;
- Four (4) liaison statements were drafted and agreed to be sent and to which standard body are addressed;
- One (1) interim meetings were planned before next SG21 meeting;
- New editor, Mr Homare MURAKAMI (NICT, Japan), was added to draft H.ILE-AMR,

- One existing editor of H.ILE-3DINR, [Ms Jiaqi Zhang](#) has changed the organization to China Mobile.
- One editor of H.ILE-QR, Mr Zhen Xing, was replaced by [Ms Zhenqiao Zhao](#).

10.9 Question 9/21 “Multimedia framework, applications and services, and related metaverse aspects”

The report of Q9/21 can be found in [SG21-TD422R1/WP4](#). It was approved.

Executive summary:

During this SG21 meeting, Q9/21 achieved the following results:

Question 9/21 "Multimedia framework, applications and services, and related metaverse aspects" was addressed in 18 sessions during the SG21 meeting held in Geneva, 6-17 July 2026, under the chairmanship of Miaoqiong Wang (CAICT, China) and Mr Wook Hyun (ETRI, Korea (Rep. of)). The group adopted the agenda in TD339/WP4.

During this SG21 meeting, Q9/21 achieved the following results:

- 4 Recommendations were finalized and proposed for consent, including F.HIM, H.CAR-FA, H.MV-HIA, and H.CVR-OP;
- 1 technical report was finalized and proposed for agreement, FSTR.MV-MML;
- 6 new work items were agreed to be started, including F.CDM-IF, F.EC-RTMS, F.Suppl.mdams, F.DF-RefFram, F.MDLAT, and H.CVR-MP;
- 15 ongoing work items were updated by this meeting for progressing at future meetings, including H.MV-FRAVI, F.MDQA, F.LVR-WSR, F.LAMCP, H.MV-FRADAI, H.LVR, F.AIMMSM-RF, F.ASMNS, H.3DRS-PF, F.MDA-RSM, H.MMAuth, HSTP.IMV-CS, H.CVR-IF, F.MDDSP, and H.OIMSArch;
- 9 liaison statements were drafted and agreed to be sent;
- 1 interim Rapporteur meeting was planned, to be held in Jeju, Korea, from 19 to 22 October 2026;
- Ms. Xiaojun Mu (China Unicom, China) was nominated as the new associate rapporteur for Q9/21.

10.10 Question 10/21 “Vehicular multimedia communications, systems, networks, and applications”

The report of Q10/21 can be found in [SG21-TD421R1/WP4](#). It was approved.

Executive summary:

During this SG21 meeting, Q10/21 achieved the following results:

- Six (6) Recommendations were finalized and proposed for consent;
- Four (4) informative texts (e.g Supplements, technical reports, etc.) were finalized and proposed for agreement;
- Six (6) draft Recommendations were updated by this meeting for progressing at future meetings;

- Six (6) new work items were agreed to be started;
- No liaison statements were drafted and agreed to be sent to ISO and IEC;
- Two (2) interim meetings were planned before next SG21 meeting;
- Seventeen (17) new editors were nominated for the new work item.

10.11 Question 11/21 “Multimedia systems, terminals, gateways and data conferencing”

During this SG21 meeting, there was no Q11/21 meeting due to no contribution received.

10.12 Question 12/21 “Multimedia aspects of distributed ledger technologies and related services”

The report of Q12/21 can be found in [SG21-TD420R2/WP4](#). It was approved.

Executive summary:

During this SG21 meeting, Q12/21 achieved the following results:

- **1** Recommendations were finalized and proposed for determination, including F.751.30 (ex F.DLT-VPPO);
- **6** Recommendations were finalized and proposed for consent, including F.751.32 (ex F.DLT-DAT), F.751.33 (ex F.DLT-DMPSSC), F.751.34 (ex H.DLT-MMPA), H.751.35 (ex H.DLT-DEP), F.751.29 (ex H.DLT-DMESB), F.751.36 (ex F.DLT-DMPTS);
- **1** Technical Paper was finalized and proposed for agreement including HSTP.DLT-PE;
- **3** on-going work items were updated by this meeting for progressing at future meetings, including F.DLT-RECC, F.DLT-CDMCM, F.DLT-SCAI;
- **4** new work items, including F.DLT-DREV, F.DLT-MAS, F.DLT-MA, F.DLT-TTDB;
- **4** liaison statements were drafted and agreed to be sent for informing the Q12’s progress on the four new work items;
- **2** liaison statements were drafted and agreed to be sent: 1 liaison statement is addressed to ITU-T SG17 and SG13, 1 liaison statement is addressed to CEN/CENELEC JTC 19 (WG 3) on privacy-preserving distributed ledger technologies;
- **1** liaison officer was appointed representative from ITU-T SG21 to CEN/CENELEC JTC 19 (WG 3) on privacy-preserving distributed ledger technologies;

10.13 Question 13/21 “Multimedia streaming-related systems and services including content delivery, application platforms and end systems”

The report of Q13/21 can be found in [SG21-TD383R1/WP4](#). It was approved.

Executive summary:

During this SG21 meeting, Q13/21 achieved the following results:

- Two draft Recommendations were finalized and proposed for consent: H.644.9 (ex H.CDN-MECptl), F.746.26 (ex H.ILMTS-arch);
- None of document was proposed for agreement;
- Five draft Recommendations were updated by this meeting for progressing at future meetings: H.IPTV-EASarch, H.IPTV-EDM, H.722(v2), H.IPTV-TDES.7, HSTP.MIHS-guide;
- Four new work items were agreed to be started: F.CDN-ACreqs, H.IPTV-AIeAS, H.SCDVC-arch-mthd, HSTR.IPTV-AITS;
- Six liaison statements were drafted and agreed to be sent and to which standard body are addressed: ITU-T SG2, ITU-T SG3, ITU-T SG11, ITU-T SG12, ITU-T SG13, ITU-T SG20, ETSI ISG ENI, WHO, ISO/IEC JTC 1/SC35, ISO/IEC JTC 1/SC29/WG3, DVB-TM-I;
- One interim meeting was planned before next SG21 meeting;
- Two new editor nominated for H.IPTV-TDES.7: [Pei Zhang](#), China Unicom, [Xin SHEN](#) China Mobile

10.14 Question 14/21 “Guidelines for developing countries to implement and deploy digital cable television networks”

The report of Q14/21 can be found in [SG21-TD155/WP1](#). It was approved.

Executive summary:

During this SG21 meeting, Q14/21 achieved the following results in joint session with Q21/21:

- Titles of Recommendations J.152, J.153, J.154, and J.ibs-sa were aligned to use the plural term "systems" following TSB's advice to ensure grammatical consistency, and agreed.
- Three work items were updated jointly with Q14/21 and Q21/21:
 - Draft new Recommendation ITU-T J.ibs-sa “System architecture for IP broadcast services in cable television that use multiple-input-multiple-output (MIMO) in IMT-2020 systems,” with a new baseline text found in [TD139/WP1](#).
 - Draft revised Recommendation ITU-T J.152-rev “Requirements for cable television services to use IMT-2020 systems,” with a new baseline text found in [TD140/WP1](#).
 - Draft revised Recommendation ITU-T J.153-rev “System architecture for cable television services to use IMT-2020 systems,” with a new baseline text found in [TD141/WP1](#).
- One liaison statement was drafted and transferred to Q0/21.
 - LS/r on the implementation of WTSA-24 Resolution 86 ([TSAG-LS24](#)) [to TSAG]
- Two joint interim meetings between Q14/21 and Q21/21 were planned before interim WP1 meeting.

- Mr Tatsuo Shibata (Japan Cable Laboratories, Japan) was nominated to resume the role of Rapporteur for Q14/21, which was agreed upon at the Question level.
- Mr Tatsuo Shibata (Japan Cable Laboratories, Japan) was also nominated and agreed at the Question level to serve as a Co-Editor for J.152-rev and J.153-rev.

Following the nomination at the Question level, WP1/21 and SG21 endorsed the appointment of Mr Tatsuo Shibata (Japan Cable Laboratories, Japan) as the new Rapporteur for Q14/21.

10.15 Question 15/21 “Software frameworks and architectures for advanced content distribution services over integrated broadband cable networks”

Question 15/21 met jointly with Q16/21 during this meeting. The report related to Q15/21 can be found in the report of Q16/21.

10.16 Question 16/21 “Functional requirements for terminal devices of the integrated broadband cable networks”

The report of Q16/21 can be found in [SG21-TD148R1/WP1](#). It was approved.

Executive summary:

During this SG21 meeting, Q16/21 achieved the following results:

During this SG21 meeting, Q16/21 achieved the following results:

- One draft Recommendation was finalized and proposed for consent:
 - ITU-T J.1293 (ex J.STB-DONGLE) “Technical requirements and measurement methods for 4K UHD pluggable mini set-top boxes”, as found in [TD277R1/PLEN](#).
- One new work item was agreed to be initiated:
 - Draft new Recommendation ITU-T J.STB-LDI “Architecture and functional requirements for set-top boxes with integrated local display”, with the base text found in [TD146/WP1](#).
- Three work items were updated for progressing at future meetings:
 - Draft new Recommendation ITU-T J.STB-OVS, as found in SG21-[TD136/WP1](#).
 - Draft new Recommendation ITU-T J.STB-UHDVRS, as found in SG21-[TD138/WP1](#).
 - Draft new Recommendation ITU-T J.STB-UHDMUVR, as found in SG21-[TD137/WP1](#).
- Three liaison statements were drafted and agreed to be sent, and one coordination input was transferred to Q0/21:
 - LS/r on the relationship between draft new Recommendations ITU-T J.1613, ITU-T J.1312 and cloud computing (reply to SG13-LS152) [to ITU-T SG13], agreed jointly with Q19/21.

- LS on the initiation of draft new Recommendation ITU-T J.STB-LDI [to ITU-T SG20].
- LS on the consent of draft new Recommendation ITU-T J.1293 (ex J.STB-DONGLE) [to ITU-T SG13, SG20].
- Two interim meetings were planned before the next SG21 meeting.

10.17 Question 17/21 “Transmission control and interfaces (MAC layer) for IP and/or packet-based data over integrated broadband cable networks”

The report of Q17/21 can be found in [SG21-TD154R1/WP1](#). It was approved.

Executive summary:

During this SG21 meeting, Q17/21 achieved the following results:

- Two draft Recommendations were finalized and proposed for consent:
 - Recommendation ITU-T J.1116 (ex J.DAS-SPEC) “Specification for IP-based Smart Digital Audio Service,” as found in [TD316R1/PLEN](#).
 - Recommendation ITU-T J.1115-rev “Functional Requirements for IP-based Smart Digital Audio Services,” as found in [TD317R1/PLEN](#).
- One liaison statement was drafted and agreed, as found in [TD152R1/WP1](#):
 - LS on AAP Consent of draft new Recommendation ITU-T J.1116 “Specifications for IP-based Smart Digital Audio Services” and ITU-T J.1115-rev “Functional Requirements for IP-based Smart Digital Audio Services” [to ETSI TC CABLE, TTA, ITU-T SG17, TSAG]
- Two interim meetings were planned.
 - Scheduled for 18 November 2026 to discuss progress on J.1113-rev and so on.
 - Scheduled for 2 February 2027 to discuss progress on J.1113-rev and so on.

At the WP1/21 closing plenary, it was agreed to include ITU-T SG17 and TSAG as addressees of the outgoing liaison statement. To clarify the rationale for these new recipients, an additional paragraph regarding the handling of AI-generated content was incorporated into the LS before it was finally approved.

10.18 Question 18/21 “IP-enabled multimedia applications and services for cable television networks enabled by converged platforms”

The report of Q18/21 can be found in [SG21-TD145/WP1](#). It was approved.

Executive summary:

During this SG21 meeting, Q18/21 achieved the following results:

- Ten liaison statements were reviewed and noted.
- No work item was discussed, as no ongoing work item was assigned to Q18/21 at this time.

- No new work item was agreed to be started.
- No interim meeting was planned before next SG21 meeting, due to the current absence of active work items.

WP1/21 Chair explained that Q18/21 was currently in a transition phase towards a potential merger with Q19/21. Consequently, most of the relevant activities at this meeting were consolidated and conducted under Q19/21 to ensure operational efficiency. The meeting also noted that the ongoing importance of Q18/21's mandates was strongly reaffirmed during the discussion within AHG-FQS.

10.19 Question 19/21 “Requirements, methods, and interfaces of the advanced service platforms to enhance the delivery of audiovisual content, and other multimedia interactive services over integrated broadband cable networks”

The report of Q19/21 can be found in [SG21-TD161R1/WP1](#). It was approved.

Executive summary:

During this SG21 meeting, Q19/21 achieved the following results:

- One work item was updated by this meeting for progressing at future meetings:
 - J.SMS-REQ "Requirements for Subscriber Management System for subscriber-base reporting in cable networks and other delivery platforms" as found in [SG21-TD144/WP1](#).
- One new work item was agreed to be started:
 - J.CIMSP: Proposed new work item on "Technical requirements and reference architecture for cross-institutional media service platform with permissioned DLT support" as found in [SG21-TD143/WP1](#).
- Two liaison statements were drafted and agreed to be sent:
 - LS on initiation of new work item ITU-T J.CIMSP: "Technical requirements and reference architecture for cross-institutional media service platform with permissioned DLT support" [to ITU-T SG17]
 - LS/r on the relationship between ITU-T J.1613, ITU-T J.1312 and cloud computing (reply to SG13-LS152) [to ITU-T SG 13], agreed jointly with Q16/21 and was processed by Q16/21 for administrative convenience.
- One interim meeting was planned before next SG21 meeting:
 - on 2 December 2026 (Geneva time 10:00) for the purpose of progress on ITU-T J.SMS-REQ and J.CIMSP

10.20 Question 20/21 “AI-enabled enhanced functions over integrated broadband cable network”

The report of Q20/21 can be found in [SG21-TD151/WP1](#). It was approved.

Executive summary:

- One work item was updated for progressing at future meetings:
 - Draft new Recommendation ITU-T J.AIID-IBC "Schema and Taxonomy for AI Incident Databases in Integrated Broadband Cable Networks", with a new baseline text found in [TD149/WP1](#).
- One new work item was agreed to be initiated:
 - Draft new Technical Report ITU-T JSTR.AIGW-IBC "Technical study on AI capability gateway functions for terminal-side AI service invocation over integrated broadband cable networks", as found in TD150/WP1.
- Twenty-five incoming liaison statements were reviewed and noted.
- One interim meeting was planned before the next SG21 meeting

10.21 Question 21/21 “Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution”

The report of Q21/21 can be found in [SG21-TD156/WP1](#). It was approved.

Executive summary:

During this SG21 meeting, Q21/21 achieved the following results:

During this SG21 meeting, Q21/21 achieved the following results:

- Titles of Recommendations J.152, J.153, J.154, and J.ibs-sa were aligned to use the plural term "systems" following TSB's advice to ensure grammatical consistency, and agreed:
 - J.152-rev: Requirements for cable television services to use IMT-2020 systems
 - J.153-rev: System architecture for cable television services to use IMT-2020 systems
 - J.154: Functional requirements for IP broadcast services in cable television that use multiple-input-multiple-output (MIMO) in IMT-2020 systems
 - J.ibs-sa: System architecture for IP broadcast services in cable television that use multiple-input-multiple-output (MIMO) in IMT-2020 systems
- Three work items were updated jointly with Q14/21 and Q21/21:
 - Draft new Recommendation ITU-T J.ibs-sa “System architecture for IP broadcast services in cable television that use multiple-input-multiple-output (MIMO) in IMT-2020 systems,” with a new baseline text found in TD139/WP1.
 - Draft revised Recommendation ITU-T J.152-rev “Requirements for cable television services to use IMT-2020 systems,” with a new baseline text found in TD140/WP1.

- Draft revised Recommendation ITU-T J.153-rev “System architecture for cable television services to use IMT-2020 systems,” with a new baseline text found in TD141/WP1.
- One new work item was agreed to be initiated:
 - Draft new Technical Report ITU-T JSTR-MToN-MLA “Field deployment of media transport overlaid network for mission-critical, latency-sensitive applications,” with a baseline text found in TD142/WP1.
- Three liaison statements were drafted and transferred to Q0/21.
 - LS/r on initiation of new Technical Report ITU-T YSTR.UC-CNB “Use cases of Converged IMT-2020 and beyond networks and broadcasting network technologies for developing countries” ([SG13-LS133](#)) [to SG13]
 - LS/r on call for updates for pilot projects and reference table of ITU-T Recommendations suitable for C&I testing ([SG11-LS63](#)) [to SG11]
 - LS/r on Invitation to update the information in the IMT-2020 and IMT-2030 roadmap ([JCA-IMT2020/IMT2030-LS20](#)) [to JCA-IMT2020/IMT2030]
- Two joint interim meetings between Q14/21 and Q21/21 were planned before interim WP1 meeting.
- No update regarding DOCSIS specifications was received at this meeting.

10.22 Question 22/21 “Methods and practices for conditional access and content protection”

The report of Q22/21 can be found in [SG21-TD159R3/WP1](#). It was approved.

Executive summary:

During this SG21 meeting, Q22/21 achieved the following results:

- One draft new Recommendation was finalized and proposed for approval under TAP: J.1043 (ex J.DRMVA-rbst). The final text is TD343/PLEN
- One draft new Recommendation was finalized and proposed for consent under AAP: J.1045 (ex J.ADCP-REQ). The output is TD321/PLEN.
- One new work item was agreed to be initiated: J.ADCP-SPEC. The output is TD157/WP1. Its A.1 justification is in Annex C.
- Q22/21 requests the creation of the following subseries in the J-series structure: J.1045-J.1049: Advanced digital content protection system for digital multimedia interface.
- J.1040 Amd.1 was started and finalized at this meeting to revise the DRM definition; the amendment was proposed for consent under AAP. The output is TD320/PLEN.
- Q22/21 issued three outgoing liaison statements: one to TSAG on DRM terminology and scope, and two to SG17 on the AAP consent of J.1045 (ex J.ADCP-REQ) and on the start of the J.ADCP-SPEC development. Among the liaison statements addressed to several Questions that Q22/21 reviewed, it provided inputs to Q0/21 on four of them (SG17: TD327, TD345; SCV/CCT: TD423, TD462) for the consolidated reply issued under the name of SG21.

- Liaison focal points were appointed at Q22/21 level: Mr Rajiv Khattar (India) for SG17 liaison statements, and Mr Zhijian Liang (China) for SCV/CCT liaison statements.
- Editors for J.1040 Amd.1 were nominated: Mr Dmitry Cherkosov (Russian Federation) as Editor and Mr Zhijian Liang (China) as co-Editor.
- One interim Rapporteur meeting is planned before the next SG21 meeting (3 DEC. 2026).

The request by the Q22/21 Rapporteur to establish the following subseries in the J-series structure was endorsed by WP1 and SG21 closing plenary:

- J.1045-J.1049: Advanced digital content protection system for digital multimedia interface

Annex 2

List of New Work Items

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
1	Q1/21	FSTR-BCI (Technical Report)	New	Capabilities of Non-invasive Brain-Computer Interface for Multimedia Digital Inclusion	Liyan Liang, CAICT, liangliyan@caict.ac.cn Qian Zhang, CAICT, zhangqian@caict.ac.cn Wenyu Li, CAICT, Wei Ma, ZTE Corporation, ma.wei4@zte.com.cn Qiwei Song, Tsinghua University, sqw19@mails.tsinghua.edu.cn	TD333/PLE N	ANNEX- Q1.A (A.13)
2	Q2/21	F.Nom-HHMB-P: (Draft Rec.)	New	Nomenclature for hierarchical human movement behaviour - Part 1: Pose	Daidi Zhong, Chongqing University, daidi.zhong@cqu.edu.cn Yuanhong Zhong, Chongqing University, zhongyh@cqu.edu.cn Zhiyong Huang, Chongqing University, zyhuang@cqu.edu.cn	TD268/WP2	ANNEX Q2.A (A.1)
3	Q2/21	HSTP-AI_wheelchair (Technical Paper)	New	AI-assisted wheelchair systems for digital healthcare and care support	Sung Hei Kim, ETRI, shkim@etri.re.kr Masahito Kawamori, Univ. of Tokyo, kawamorim@gmail.com	TD260/WP2	ANNEX Q2.B (A.13)
4	Q2/21	F.Ed-HaW (Draft Rec.)	New	Framework for AI-enabled edge platforms for proactive health and well-being services	Hyoungdo Do, Korea (Rep. of), hhdo@healthall.co.kr Kyoungjae Sun, ETRI, kjsun@etri.re.kr Sung Hei Kim, ETRI, shkim@etri.re.kr	TD264/WP2	ANNEX Q2.C (A.1)
5	Q2/21	HSTP.SV-PSA	New	Planning and Situation Analysis for Safe-Viewing”	Shelly Chadha chadhas@who.int Rosa Haghshenaslakanir,	TD270/WP2	ANNEX Q2.D (A.13)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
					haghshenaslakanir@who.int		
6	Q2/21	F.ECG	New	"Requirements for Remote Electrocardiogram Monitoring Service Platform"	Jiuxuan Ren (renjiuxuan@caict.ac.cn), Zhuoran Zhang (zhangzhuoran@caict.ac.cn)	TD249/WP2	ANNEX Q2.E (A.1)
7	Q2/21	F.IMP-MC	New	"Requirements on Information Management Platform for Metabolic Chamber"	Jiuxuan Ren (renjiuxuan@caict.ac.cn), Zhuoran Zhang (zhangzhuoran@caict.ac.cn)	TD248/WP2	ANNEX Q2.F (A.1)
8	Q3/21	F.DC-XR-CUAV	New	Framework and requirements for XR technology to support digital cultural and tourism services using civilian unmanned aerial vehicles	Rongfang Zhang, China Unicom.zhangrf97@chinaunicom.cn ; Xiaojun Mu, China Unicom, muxj@chinaunicom.cn Xia Li, BUPT, lixial@bupt.edu.cn ; Haoyue Zheng, China Mobile, zhenghaoyue@chinamobile.com ; Sunghan Kim, ETRI, sh-kim@etri.re.kr	TD294/WP2	ANNEX Q3.A (A.1)
9	Q3/21	F.DC-CRMMS	New	Technical requirements and functional architecture for semantic content retrieval system in digital culture multimedia services	Jinbo LI, China Unicom, lijb7213@chinaunicom.cn , Wu JIA, China Unicom, jiawu9@chinaunicom.cn , Xiaolong ZHOU, China Unicom, zhoux150@chinaunicom.cn Hong Chen, Beijing University of Posts and Telecommunications (BUPT), norman_chen2020@163.com Hui YAN, China Telecommunications Corporation, yanhui@chinatelecom.cn	TD295/WP2	ANNEX Q3.B (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
					Chuanyang MIAO, ZTE Corporation, miao.chuanyang@zte.com.cn		
10	Q4/21	F.ECHO-FW	New	Framework for Conversation System in a Hybrid Work	Jaime Yoon, Hancom Inc. (jaimeyoon@hancom.com) Miran Choi, Kunsan National University (miranc2007@gmail.com) ByeongHoo Kim, Hancom (bhkim@hancom.com) Sangyoon Lee, Hancom (ranian963@hancom.com) Gwangjung Kim, Hancom (gwangjung.kim@hancom.com)	TD255/WP2	ANNEX Q4.A
11	Q4/21	F.PUIC-Req	New	Framework and Requirements for Personalized User Interface Calibration in Augmented Reality Services	Eunjeong Park, Yonsei University (eunjeong.ej@gmail.com) Taewha Han, Yonsei University (taehwa.han@gmail.com) Miran Choi, Kunsan National University (miranc2007@gmail.com)	TD254R1/W P2	ANNEX Q4.C
12	Q4/21	F.UICDH	New	Framework and requirements for user interface of on-site customer service based on realistic digital human	Seunggeun Baek (seunggeun.baek@klleon.io) Jisu Kang (jisu.kang@klleon.io)	TD258/WP2	ANNEX Q4.B
13	Q5/21	F.DHMGS-TD-FR (Draft Rec.)	New	Framework and requirements for text- driven digital human motion generation system	Lin Li, China Mobile, E-mail: Lilin@migu.chinamobile.com Jianxin Liao, BUPT, E-mail: liaojianxin@bupt.edu.cn	TD321/WP3	ANNEX C (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
					Haoting Liang, China Mobile, E-mail: lianghaoting@migu.chinamobile.com Lei Wang, China Mobile, E-mail: wanglei_wh@migu.chinamobile.com Mei Yan, CAICT, E-mail: yanmei@caict.ac.cn		
14	Q5/21	F.AOGT (Draft Rec.)	New	Requirements and Evaluation Methods for Automatic Operator Generation Tools	Lun Li, lilun@caict.ac.cn Qinyu Bian, bianqinyu@caict.ac.cn Yahan Wang, wangyahan@caict.ac.cn	TD322/WP3	ANNEX D (A.1)
15	Q5/21	F.IUCL (Draft Rec.)	New	Application Programming Interface of Cross-Platform Unified Communication Libraries for Distributed Multimedia AI Systems	Zeyu Gu, zygu@baai.ac.cn Lun Li, lilun@caict.ac.cn Yonghua Lin, yhlin@baai.ac.cn Yuntao Wang, wangyuntao@caict.ac.cn Yuwei Wang, ywwang@ict.ac.cn	TD323/WP3	ANNEX E (A.1)
16	Q5/21	TR.AAI (Technical Report)	New	Technical report for guidance on the technical framework of AI Agent Infrastructure	Xingchen Liu, CAICT, liuxingchen@caict.ac.cn Hao Dong, CAICT, donghao@caict.ac.cn Xinhui Ding, CAICT, dingxinhui@caict.ac.cn	TD324/WP3	ANNEX F (A.13)
17	Q5/21	F.IOMT (Draft Rec.)	New	Technical requirements of intelligent operation and maintenance tools for multimedia applications	Bai Lu, CAICT, bailu@caict.ac.cn Sisi Qin, CAICT, qinsisi@caict.ac.cn Dongwei Yan, CAICT, yandongwei@caict.ac.cn	TD325/WP3	ANNEX G (A.1)
18	Q5/21	FSTR.AINAP (Technical Report)	New	Analysis of artificial intelligence native application platforms	Xiaofei Dong, CAICT, dongxiaofei@caict.ac.cn	TD326/WP3	ANNEX H (A.13)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
					Xueqiang Zhang, NGAI, zhangxueqiang@ngai.ac.cn Jing Zhou, NGAI, zhoujing@ngai.ac.cn QiuYu Tao, NGAI, taoqiuyu@ngai.ac.cn Feng Cao, CAICT, caofeng@caict.ac.cn		
19	Q5/21	F.MRAG (Draft Rec.)	New	Technical requirements and evaluation methods for multimodal retrieval- augmented generation systems	Chao Yan, SGCC, cijan@foxmail.com Yuntao Wang, CAICT, wangyuntao@caict.ac.cn Yuanjun Zuo, SGCC, hjzuoyuanjun@163.com Qing Liu, China Telecom, liuqing6@chinatelecom.cn Jian Xiao, SGCC, xiaojianhn@163.com	TD327/WP3	ANNEX I (A.1)
20	Q5/21	F.MDPP (Draft Rec.)	New	Requirements for AI- assisted multimedia data post-processing platform	Bo Li, China Tower Corporation Limited, libo88872@chinatelecom.cn Siyuan Zhu, China Tower Corporation Limited, zhusy5@chinatelecom.cn Dan Li, China Tower Corporation Limited, lidan6@chinatelecom.cn Hao Dong, CAICT, donghao@caict.ac.cn Yuntao Wang, CAICT, wangyuntao@caict.ac.cn	TD328/WP3	ANNEX J (A.1)
21	Q5/21	F.AI-TMD (Draft Rec.)	New	Requirements for AI- enabled Trustworthy Multimedia in Digital Public Infrastructure (DPI)"	Roberto Mitsuke Hirayama, Brazil, hirayama@anatel.gov.br Andrey Ribeiro Perez Nunes, Brazil, andreyperes@anatel.gov.br	TD329/WP3	ANNEX K (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
					Guilherme Novaes Ramos, Brazil, gnramos@unb.br Eduardo Adilio Pelinson Alchieri, Brazil, alchieri@unb.br Priscila America Solis Mendez, Brazil, pris@unb.br		
22	Q5/21	F.ARSFFS-Reqs (Draft Rec.)	New	Requirements for AI-enabled Multimedia-based Autonomous Response in Smart Forest Firefighting Systems	Roberto Mitsuke Hirayama, Brazil, hirayama@anatel.gov.br Andrey Ribeiro Perez Nunes, Brazil, andreyperes@anatel.gov.br Guilherme Novaes Ramos, Brazil, gnramos@unb.br Eduardo Adilio Pelinson Alchieri, Brazil, alchieri@unb.br Priscila America Solis Mendez, Brazil, pris@unb.br	TD330/WP3	ANNEX L (A.1)
23	Q6/21	T.817 (ex JPEG2000-part18) (Draft Rec.)	-	Information technology — JPEG 2000 image coding system: Profiles	Pierre Lemieux (Sandflow Technologies), Gary J. SULLIVAN (Dolby Laboratories)	ISO/IEC NP 15444-18 Text of ISO/IEC CD 15444-18	Annex O (A.1)
24	Q6/21	H.265.1	Rev.	Conformance specification for ITU-T H.265 high efficiency video coding	Iole Moccagatta (Intel Inc.), T. Fu, S. Paluri (Apple Inc.), Alexis TOURAPIS (Apple Inc.),	JVET-AQ1008	N/A

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
25	Q6/21	T.261 (V2)	Rev	Biomedical and general waveform signal coding	Jonathan PFAFF (Fraunhofer HHI & IIS) , Christof Fersch (Dolby Laboratories)	N/A	N/A
26	Q6/21	T.261.1 (V1) (Draft Rec.)	New	Conformance specification for T.261 Biomedical and general waveform signal coding	Christof Fersch (Dolby Laboratories) Heiko Schwarz (Fraunhofer HHI & IIS) Panji Setiawan ((Dolby Laboratories)	TD334R1/P LEN	Annex M (A.1)
27	Q6/21	T.261.2 (V1) (Draft Rec.)	New	Reference software for T.261 Biomedical and general waveform signal coding	Jonathan PFAFF (Fraunhofer HHI & IIS) Panji Setiawan ((Dolby Laboratories) Sophie Pientka (Fraunhofer HHI & IIS)	TD334R1/P LEN	Annex N (A.1)
28	Q7/21	F.IMPTC (Draft Rec.)	New	Requirements and framework for intelligent monitoring of power transmission corridors based on multimodal visual data	Junwei Kuang, State Grid Corporation of China, (kuangjunwei394@gmail.com); Linghao Zhang, State Grid Corporation of China, (16100178@qq.com); Zhengwei Chang, State Grid Corporation of China, (changzw@ustc.edu); Yuwei Wang, Institute of Computing Technology Chinese Academy of Sciences, (ywwang@ict.ac.cn); Yuan Zhang, China Telecommunications Corporation, (zhangy666@chinatelecom.cn);	TD290/WP3	Annex P (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
29	Q7/21	F.IIS-PP (Draft Rec.)	New	Requirements and framework of vision-based intelligent inspection system for petrochemical plants	Li ZHA, PetroChina (Beijing) Digital Intelligent Research Institute Co. Ltd, zhali@petrochina.com.cn Sheng FU, PetroChina (Beijing) Digital Intelligent Research Institute Co. Ltd, fusheng@petrochina.com.cn Ruoxi WAN, PetroChina (Beijing) Digital Intelligent Research Institute Co. Ltd, wanruoxi@petrochina.com.cn	TD313/WP3	Annex Q (A.1)
30	Q7/21	F.VASReqs (Draft Rec.)	New	Requirements and framework of visual agent system in intelligent video surveillance	Tao Han, China Telecom hant2@chinatelecom.cn Yuan Zhang, China Telecom zhangy666@chinatelecom.cn Zhangru Yan, China Telecom yanzr@chinatelecom.cn	TD291/WP3	Annex R (A.1)
31	Q7/21	F.FM-ODI (Draft Rec.)	New	Foundation model-based intelligent video surveillance systems – Requirements and framework for on-device intelligence	Weisheng Kong, Zhejiang Dahua Technology, kong_weisheng@dahuatech.com Zhiji Deng, Zhejiang University, 12331142@zju.edu.cn Xiangyu Qu, Zhejiang Dahua Technology, qu_xiangyu@dahuatech.com Yuan Zhang, China Telecommunications Corporation, zhangy666@chinatelecom.cn	TD292/WP3	Annex S (A.1)
32	Q7/21	F.SIVIS-arch (Draft Rec.)	New	Functional architecture for substation intelligent visual inspection system	Chao Yuan, State Grid Corporation of China, China E-mail: 18663403521@163.com	TD312/WP3	Annex T (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
					Shuai Zeng, State Grid Corporation of China, China E-mail: zengshuai202508@163.com Yuanlong Liu, State Grid Corporation of China, China E-mail: liuyuanlong2024@163.com Yuan Zhang, China Telecommunications Corporation, China E-mail: zhangy666@chinatelecom.cn Li Zhang, Huawei Technologies Co., Ltd, China Email: zhangli344@huawei.com		
33	Q7/21	F.MAC-A (Draft Rec.)	New	Architecture of multimodal agent collaboration in video surveillance systems	Weisheng Kong, Zhejiang Dahua Technology, kong_weisheng@dahuatech.com Zhiji Deng, Zhejiang University, 12331142@zju.edu.cn Xiangyu Qu, Zhejiang Dahua Technology, qu_xiangyu@dahuatech.com Yuan Zhang, China Telecommunications Corporation, zhangy666@chinatelecom.cn	TD293/WP3	Annex U (A.1)
34	Q7/21	F.VMTRP (Draft Rec.)	New	Requirements and framework of the industrial vision model training and reasoning platform	Chi Zhang Shenzhen SmartMore Technology Co., Ltd chi.zhang@smartmore.com Zekun Wang China Telecommunications Corporation wangzk2@chinatelecom.cn Shu Liu	TD314/WP3	Annex V (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
					Shenzhen SmartMore Technology Co., Ltd slu@smartmore.com Kai Liu Shenzhen SmartMore Technology Co., Ltd, kai.liu@smartmore.com Menghua Tao China Unicom taomenghua@chinaunicom.cn		
35	Q8/21	H.430.2 (V2) (Draft Rec.)	Rev.	Architectural framework for immersive live experience (ILE) services	Xiaozhi YUAN (China Telecommunications Corporation) , Jiro NAGAO (NTT) Zhan LIU (China Telecommunications Corporation) , Guqiao ZHU(China Telecommunications Corporation China)	TD410/WP4	N/A
36	Q9/21	F.CDM-IF (Draft Rec.)	New	Framework and requirements for cross- data matrix interoperability for multimedia services	Rongfang Zhang, China Unicom, zhangrf97@chinaunicom.cn ; Xiaojun Mu, China Unicom, muxj@chinaunicom.cn ; Yinghui Liu, Beijing Jiaotong University, 23115020@bjtu.edu.cn ; Miaoqiong Wang, CAICT, wangmiaoqiong@caict.ac.cn ; Sunghan Kim, ETRI, sh-kim@etri.r	TD385/WP4	ANNEX Q9.C (A.1)
37	Q9/21	F.EC-RTMS (Draft Rec.)	New	Framework and Requirements for Edge Computing Enabled Real- Time Multimedia Services	Sainan Hou, China Unicom, housn@chinaunicom.cn Muzhou Liu, China Unicom, liumz36@chinaunicom.cn Zhan Liu, China Telecommunications Corporation,	TD386/WP4	ANNEX Q9.D (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
				in Low-Altitude Immersive Applications	liuz22@chinatelecom.cn Lanhua Xiang, China Unicom, xianglh16@chinaunicom.cn Jiaxin Zhang, Beijing Universi		
38	Q9/21	F.Suppl.mdamsg (Supplement)	New	Use cases and guidelines for multimedia data asset management in smart grids	GUO Wei, State Grid Corporation of China, guoweidianli@163.com TAO Peng, State Grid Corporation of China, hbdyytp@163.com NAN Kai, State Grid Corporation of China, hebeidianliyx@163.com GUO Shaoyong, Beijing University of Posts and Telecommunications	TD387/WP4	ANNEX Q9.H (A.13)
39	Q9/21	F.DF-RefFram (Draft Rec.)	New	Reference framework for data fabric system in multimedia	Zheng Yin, China Academy of Information and Communications Technology, yinzheng@caict.ac.cn; Chunyu Jiang, China Academy of Information and Communications Technology, jiangchunyu1@caict.ac.cn; Hui Yan, China Telecommunications Corporation, yanhui@chi	TD388/WP4	ANNEX Q9.E (A.1)
40	Q9/21	F.MDLAT (Draft Rec.)	New	Data asset management: Requirements and architecture for multimedia data lineage analysis and traceability system	Wenjing Nie, niewenjing@chinamobile.com Haoyue Zheng, zhenghaoyue@chinamobile.com Zheng Yin, yinzheng@caict.ac.cn Xiaojun Mu, muxj@chinaunicom.cn Hui Yan, yanhui@chinatelecom.cn	TD389R1/WP4	ANNEX Q9.F (A.1)
41	Q9/21	H.CVR-MP (Draft Rec.)	New	Functional requirements for cloud virtual reality systems supporting multi-path transmission	Liuyihui Qian, China Telecommunications Corporation, qianlyh@chinatelecom.cn Rongrong Fu, China Academy of Information and Communications Technology, furongrong@caict.ac.cn Juan Wu, China Telecommunications Corporation, wuj55@chinatelecom.cn Guqiao Z	TD390/WP4	ANNEX Q9.G (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
42	Q10/21	F.VM-VAIADS (Draft Rec.)	New	Framework and requirements of vehicular AI agent development system for vehicular multimedia	Lin Wang, Alibaba China Co., Ltd. China E-mail: zhenling.wl@alibaba-inc.com Zhen Liao, China Academy of Information and Communication Technology (CAICT) China E-mail: liaozen@caict.ac.cn Lulu Hu, Alibaba China Co., Ltd. China E-mail: chudu.hll@alibaba-inc.com	TD358/WP4	ANNEX Q10.A (A.1)
43	Q10/21	F.VG-NS (Draft Rec.)	New	Requirements for navigation services based on vehicle gateway	Junhui Ma, China Tower Corporation Limited, majunhui@chinatelecom.cn Zhen Liao, China Academy of Information and Communications Technology (CAICT), liaozen@caict.ac.cn	TD359/WP4	ANNEX Q10.B (A.1)
44	Q10/21	F.CAV-DSMS (Draft Rec.)	New	Functional Architecture and Requirements for In- Vehicle Driver State Monitoring System	Fengbo Xie, Chongqing Changan Automobile Co., Ltd., China, Email: xiefb@changan.com.cn Xuemei Li, Chongqing Changan Automobile Co., Ltd., China, Email: lixm1@changan.com.cn Zheng Gong, China Academy of Information and Communications Technology (CAICT), China, E-mail: gongzhengl@caict.ac.cn	TD407/WP4	ANNEX Q10.C (A.1)
45	Q10/21	F.GHMI (Draft Rec.)	New	System Architecture and Functional Requirements of In-vehicle Generative Human-Machine Interface for Vehicular Multimedia	Yu Zhang, Chongqing Changan Automobile Co., Ltd., China, Email: zhangyu6@changan.com.cn Chao Wang, Chongqing Changan Automobile Co., Ltd., China, Email: wangchao12@changan.com.cn	TD363R1/W P4	ANNEX Q10.D (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
					Yuming Ge, China Academy of Information and Communications Technology (CAICT), P.R. China, Email: geyuming@caict.ac.cn		
46	Q10/21	F.CAV-E2EAIS (Draft Rec.)	New	Framework and Requirements of Adaptive Interface System for End-to-End Driving Automation System	Rui Li, Chongqing Changan Automobile Co., Ltd., China, Email: lirui4@changan.com.cn Qian Hong, China Academy of Information and Communications Technology(CAICT),China,Email: hongqian@caict.ac.cn Bo Li, Chongqing Changan Automobile Co., Ltd., China, Email: libol6@changan.com.cn	TD408R1/W P4	ANNEX Q10.E (A.1)
47	Q10/21	F.CUAV-ODIM (Draft Rec.)	New	Requirements and framework for on-device intelligent management for civilian unmanned aerial vehicles	Xiaojun Mu, China Unicom, muxj@chinaunicom.cn Yufeng WANG, Beihang University, wufeng@buaa.edu.cn Yuwei WANG, ICT CAS, ywwang@ict.ac.cn	TD409/WP4	ANNEX Q10.F (A.1)
48	Q12/21	F.DLT-DREV (Draft Rec.)	New	Framework for distributed ledger technology (DLT)-based cross-domain settlement of electric vehicle grid-connected reserve services	Jinjie Ma, +86 13851710665, 19472524@qq.com Weiqi Pan, +86 13611597768, njpanwq@163.com Yichen Pi, +86 15190459442, 479441357@qq.com Lifeng Zhang, +86 18865513130, zhanglifeng@caict.ac.cn	TD368/WP4	ANNEX Q12.C (A.1)
49	Q12/21	F.DLT-DIS (Draft Rec.)	New	Framework and requirements for distributed ledger technology supporting decentralized identity	Shaoying WANG, +86 18630103019, 18630103019@163.com Xiufeng LIN, +86 18613886501, linxiufeng2023@ruc.edu.cn Junying WU, +86 18003214129,	TD370/WP4	ANNEX Q12.A (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
				service in multimedia applications	Kkyy237@163.com Xing XU, +86 13819104382, hsuxing@zju.edu.cn Lifeng ZHANG, +86 18865513130, zhanglifeng@caict.ac.cn		
50	Q12/21	F.DLT-TTDB (Draft Rec.)	New	Framework of DLT-based trusted tamper-evident database for supporting multimedia service	Yong Yan, +86 18258136306, 55682381@qq.com Moises Moya Gariazzo, +56 976606505, mmoyag@cge.cl Shangyu Li, +86 13777337665, shangyuli@cge.cl Liangliang Zhang, +86 13810826863, liangliang.zhang@huawei.com Weiwei Pang, +86 13027790289, pangweiwei@caict.ac.cn	TD371/WP4	ANNEX Q12.B (A.1)
51	Q12/21	F.DLT-MAS (Draft Rec.)	New	Reference architecture for data sharing and management in multi- agent multimedia systems based on distributed ledger technology (working title)	Yunchul Choi, +82 42 860 5978, cyc79@etri.re.kr JungSoo Park, +82 42 860 6514, pjs@etri.re.kr	TD369/WP4	ANNEX Q12.D (A.1)
52	Q13/21	F.CDN-ACreqs (Draft Rec.)	New	Requirements for agentic content delivery network	Nijingnan Zhang, China Unicom, (zhangnjn@chinaunicom.cn) Pei Zhang, China Unicom, (zhangp7@chinaunicom.cn) Jiaqi Xu, China Unicom, (xujq25@chinaunicom.cn) Chuanyang Miao, ZTE Corporation, (miao.chuanyang@zte.com.cn)	TD378/WP4	ANNEX Q13.C.1 (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
					Song Guo, China Mobile (guosong@chinamobile.com)		
53	Q13/21	H.IPTV-AIeAS (Draft Rec.)	New	Requirements and Architecture for AI enhanced Accessibility Service over IPTV systems	Hui WANG, China Mobile, wanghuijt@migu.chinamobile.com Bing ZHOU, China Mobile, zhoubing@migu.chinamobile.com Lei WANG, China Mobile, wanglei_wh@migu.chinamobile.com Chuanyang MIAO, ZTE Corporation, miao.chuanyang@zte.com.cn Chao JIANG, China Information Communication Technologies Group, jiangchao@fiberhome.com	TD379/WP4	ANNEX Q13.C.2 (A.1)
54	Q13/21	H.SCDVC-arch- mthd (Draft Rec.)	New	Architecture and method for streaming content delivery over virtual channels	Chulhee Lee (Yonsei Univ., chulhee@yonsei.ac.kr) Shin-Gak Kang (ETRI, sgkang@etri.re.kr) Hong Ik Kim (LG HelloVision, hongik72@gmail.com) Seong Ho Jeong (HUFS, shjeong@hufs.ac.kr) Xin SHEN (China Mobile, shenxin_sx@migu.chinamobile.com)	TD380/WP4	ANNEX Q13.C.3 (A.1)
55	Q13/21	HSTR.IPTV-AITF (draft Technical Report)	New	AI-assisted test automation framework for IPTV systems	Mehmet Özdem, Türk Telekom, mehmet.ozdem@turktelekom.com.tr Ecehan Yıldırım, Türk Telekom, ecehan.yildirim@turktelekom.com.tr	TD381/WP4	ANNEX Q13.D (A.13)
56	Q16/21	J.STB-LDI (Draft Rec.)	New	Architecture and functional requirements	Mr Xin Zhang, (xin.zhang@skyworth.com)	TD146/WP1	ANNEX C (A.1)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
				for set-top boxes with integrated local display	Mr Beibei Yao, (yaobeibei@skyworth.com) Mr Ming Zhao, (zhaoming@abs.ac.cn)		
57	Q16/21	J.1613-rev (Draft Rec.)	Rev	The capability framework and requirements of cloud gaming smart terminals	Mr Xin Zhang, (xin.zhang@skyworth.com)	TD330R1/P LEN	N/A
58	Q17/21	J.1113-rev (Draft Rec.)	Rev	Specifications for IP-based digital video convergence services	Mr TaeKyoon KIM (tkkim@etri.re.kr) Mr Hong-Ik Kim (hongik@lghv.net) Mr. Soonchoul Kim (choulsim@etri.re.kr)	TD330R1/P LEN	N/A
59	Q19/21	J.CIMSP (Draft Rec.)	New	Technical requirements and reference architecture for cross-institutional media service platform with permissioned DLT support	Mr Yuhai Shi, (shiyuhai@abs.ac.cn) Ms Yanhua Niu, (niuyanhua@abs.ac.cn) Shuai Gao, (shgao@bjtu.edu.cn)	TD143/WP1	ANNEX D (A.1)
60	Q20/21	JSTR.AIGW-IBC (Technical Report)	New	Technical study on AI capability gateway functions for terminal-side AI service invocation over integrated broadband cable networks	Mr Qingtong Liu (liuqingtong@abs.ac.cn) Mr Ziyu Xue (xueziyu@abs.ac.cn) Mr Ming Zhao (zhaoming@abs.ac.cn)	TD150/WP1	ANNEX E (A.13)
61	Q21/21	JSTR-MToN-MLA	New	Field deployment of media transport overlaid network for mission-critical, latency-sensitive applications	Mr Umut Keten (umut.keten@turktelekom.com.tr) Mr Birgul Kilic (birgul.kilic@turktelekom.com.tr) Ms Cengizhan Baskaya (cengizhan.baskaya@turktelekom.com.tr)	TD142/WP1	ANNEX F (A.13)

#	Q.	Acronym (kind of publication)	Version	Title	Editor	TD	A.1/A.13 Justification template
					Mr Kei Kawamura (ki-kawamura@kddi.com)		
62	Q22/21	J.ADCP-SPEC (Draft Rec.)	New	Technical specification of advanced digital content protection system for digital multimedia interface	Zhijian Liang (liangzhijian1@hisilicon.com); Xin Zhang (xin.zhang@skyworth.com) Han-seung Koo (koohs@etri.re.kr)	TD157/WP1	ANNEX G (A.13)
63	Q22/21	J.1040 Amd.1 (Amendment)	Amd	ITU-T Recommendation J.1040 (2024) Amendment 1– “Digital rights management for video and audio content distribution – Requirements”	Dmitry Cherkesov (dcherkesov@gmail.com); Zhijian Liang (liangzhijian1@hisilicon.com)	TD320/PLE N	N/A

Annex 3

List of Outgoing liaison statements

#	Questions	WP	To	For	Title	TD
1	Q0/21	PLEN	TSAG	Action	LS/r on lead study group concept and coordination mechanisms	TD309R1/PLEN
2	Q0/21	PLEN	TSAG	Information	LS/r on a checklist for ITU-T deliverables	TD309R1/PLEN
3	Q0/21	PLEN	TSAG	Information	LS/r on request for feedback on the identification of needs to increase the support for the modernization of Study Groups	TD309R1/PLEN
4	Q0/21	PLEN	ITU-TSG11	Action	LS/r on call for updates for pilot projects and reference table of ITU-T Recommendations suitable for C&I testing	TD309R1/PLEN
5	Q0/21	PLEN	TSAG	Information	LS/r on the implementation of WTSA-24 Resolution 86	TD309R1/PLEN
6	Q0/21	PLEN	ITU-TSG13	Information	LS/r on initiation of new Technical Report ITU-T YSTR.UC-CNB “Use cases of Converged IMT-2020 and beyond networks and broadcasting network technologies for developing countries”	TD309R1/PLEN
7	Q0/21	PLEN	JCA- IMT2020/IMT2030	Information	LS/ on Invitation to update the information in the IMT-2020 and IMT-2030 roadmap	TD309R1/PLEN
8	Q0/21	PLEN	ITU-T SG17, SG20 All ITU-T SGs	Action Information	LS/r on coordination for Identity Management	TD309R1/PLEN
9	Q0/21	PLEN	TSAG	Information	LS/r on Follow-up on the development of ITU-T Standards Success Stories (SG17-LS66, SG20-LS110, SG21-LS163)	TD309R1/PLEN
10	Q0/21	PLEN	SCV/CCT, All ITU-T SGs	Information	LS/r on CCT editorial comments on terms and definitions	TD309R1/PLEN
11	Q0/21	PLEN	ITU-D Q3/1	Information	LS/r on request information about disaster resilience work items in telecommunication/ICT area	TD309R1/PLEN
12	Q1/21	WP2	JCA-AHF, ISO/IEC JTC1 SC35	Information	LS on a consultation in relation to F.Acc-AVSL discussed in Q1/21	TD265/WP2

13	Q1/21	WP2	ITU-T SG20, JCA-AHF, IRG-AVA, ISO/IEC JTC1/SC43 and IEC SyC AAL	Information	LS on new work item on FSTR-BCI “Capabilities of non-invasive brain-computer interface (BCI) for multimedia digital inclusion	TD265/WP2
14	Q2/21	WP2	ITU-T FG-EAI	Information	LS on the new work item Technical Paper on AI-assisted wheelchair systems for digital health and care support	TD289R1/WP2
15	Q2/21	WP2	IEC SyC AAL.	Information	LS on “Framework for AI-enabled edge platforms for proactive health and well-being services”	TD289R1/WP2
16	Q2/21	WP2	ISO TC215	Information	LS on Nomenclature	TD289R1/WP2
17	Q2/21	WP2	ITU-T SG12	Information	LS on “Safe-listening” and “Safe-viewing” work items	TD289R1/WP2
18	Q2/21	WP2	ITU-T SG11 CASC	Action	LS on “Proposal to appoint technical experts for H.870/H.872 testing and inform SG11 and CASC via liaison statement”	TD252/WP2
19	Q2/21	WP2	ITU-T Q2/20	Information	LS/r (Ref.: SG20-LS147) on initiation of new draft Recommendation ITU-T Y.IoT-SH “Requirements and capability framework of IoT system for smart hospital”	TD289R1/WP2
20	Q2/21	WP2	ISO/IEC JTC1/SC29/WG1	Information	LS/r (Ref. ISO/IECJTC1/SC29/WG1-N101504(SC29-23509)) on JPEG DNA”	TD289R1/WP2
21	Q2/21	WP2	ISO TC215 WG12	Information	LS on ISO/PWI 13101Project	TD289R1/WP2
22	Q3/21	WP2	ITU-T SG13, SG20; ISO/IEC JTC 1/SC 29	Information	LS on initiation of new work item ITU-T F.DC-XR-CUAV " Framework and requirements for XR technology to support digital cultural and tourism services using civilian unmanned aerial vehicles "	TD296/WP2
23	Q3/21	WP2	ITU-T SG17; ISO/IEC JTC 1/SC 29	Information	LS on initiation of new work item ITU-T F.DC-CRMMS "Technical requirements and functional architecture for semantic content retrieval system in digital culture multimedia services"	TD296/WP2
24	Q4/21	WP2	IEC SyC AAL, ISO TC159/SC 4, IRG-AVA	information	LS on creation of new work item on draft ITU-T Rec F.PUIC-Req " Framework and Requirements for Personalized User Interface Calibration in Augmented Reality Services "	TD267/WP2

25	Q5/21, Q6/21, Q7/21	WP3	ISO/IEC JTC 1/SC 29	Information	LS/o/r on the appointment of the incoming JVET Co-Chair (reply to ISO/IEC JTC 1/SC 29 N 23377)	TD278R1/PLEN
26	Q5/21	WP3	ISO/IEC JTC 1/SC 42, ISO/IEC JTC 1/SC 29	Information	LS on initiation of new work item ITU-T F.DHMGS-TD-FR “Framework and requirements for text-driven digital human motion generation system”	TD353R1/WP3
27	Q5/21	WP3	ISO/IEC JTC 1/SC 42	Information	LS on initiation of new work item ITU-T F.IUCL “Application Programming Interface of Cross-Platform Unified Communication Libraries for Distributed Multimedia AI Systems”	TD353R1/WP3
28	Q5/21	WP3	ITU-T SG13, ITU-T SG17, ITU-T FG TIDA, ISO/IEC JTC1/SC42	Information	LS on initiation of new work item ITU-T TR. AAI “Technical report for guidance on the technical framework of AI Agent Infrastructure”	TD353R1/WP3
29	Q5/21	WP3	ITU-T SG13, ITU-T SG2, ISO/IEC JTC1 SC7, ISO/IEC JTC1 SC42	Information	LS on initiation of new work item ITU-T F.IOMT “Technical requirements of intelligent operation and maintenance tools for multimedia applications”	TD353R1/WP3
30	Q5/21	WP3	ITU-T SG13, ITU-T SG17, ITU-T FG-AINN	Information	LS on initiation of new work item ITU-T FSTR.AINAP “Analysis of artificial intelligence native application platforms”	TD353R1/WP3
31	Q5/21	WP3	ITU-T SG13, SG17, ISO/IEC JTC 1/SC 42, IEEE C/AISC/LLMV WG, IEEE C/SAB/KG WG	Information	LS on initiation of new work item ITU-T F.MRAG “Technical requirements and evaluation methods for multimodal retrieval-augmented generation systems”	TD353R1/WP3
32	Q5/21	WP3	ITU-T SG13, ITU-T SG20	Information	LS on initiation of new work item ITU-T F.MDPP “Proposed new work item on Requirements for AI-assisted multimedia data post-processing platform”	TD353R1/WP3
33	Q5/21	WP3	ITU-T SG13, ITU-T SG17, ITU-T SG 20	Information	LS on initiation of new work item ITU-T F.AI-TMD “Requirements for AI-enabled Trustworthy Multimedia in Digital Public Infrastructure (DPI)”	TD353R1/WP3
34	Q5/21	WP3	ITU-T SG 20	Information	LS on initiation of new work item ITU-T F.ARSFFS-Reqs “Requirements for AI-enabled Multimedia-based	TD353R1/WP3

					Autonomous Response in Smart Forest Firefighting Systems”	
35	Q5/21	WP3	ITU-T SG2	Action	LS on initiation of the ongoing work item ITU-T H.FMLS-QMEM “Quality Metrics and Evaluation Methods for Federated Machine Learning Services”	TD353R1/WP3
36	Q5/21	WP3	ITU-T FG-EAI	Action	LS on ITU-T SG21 Q5 work on embodied artificial intelligence and seek comments on related documents	TD353R1/WP3
37	Q5/21	WP3	ITU-T SG17, FG-TIDA ITU-T SG13	Action Information	LS on consent of Recommendation ITU-T F.AAI “Framework and Requirements for AI Agent Interoperability”	TD353R1/WP3
38	Q5/21	WP3	SCV/CCT	Information	LS/r on the comments on the term "federated machine learning model training dataset" and its definition (SCV-LS101)	TD353R1/WP3
39	Q5/21	WP3	SCV/CCT	Information	LS/r on terms and definitions developed by ITU-T Study Group 21, incorporating editorial suggestions from the CCT (SCV-LS111)	TD353R1/WP3
40	Q5/21	WP3	ITU-T SG11	Action	LS/r on new terms and definitions produced in SG21 (SG11-LS115)	TD353R1/WP3
41	Q5/21 & Q7/21	WP3	ITU-T SG13, SG17	Information	LS/r on invitation to the second and third meetings of Correspondence Group on Cloud Computing Coordination (CG-CC) (SG13-LS191, SG13-LS209)	TD353R1/WP3
42	Q5/21	WP3	ITU-T SG13	Information	LS/r on initiation of new work item ITU-T F.AICP-MIR "General technical requirements and framework for artificial intelligence cloud platform: model iteration requirements" (SG13-LS210)	TD353R1/WP3
43	Q6/21	WP3	ISO/IEC JTC 1/SC 29/WG 1 (JPEG)	Information	LS/r on JPEG AI and explorations on video coding	TD354R1/WP3
44	Q6/21	WP3	3GPP TSG SA WG4	Information	LS/r on HEVC multi-layer profiles, chroma subsampling and bit depth combinations	TD354R1/WP3
45	Q6/21	WP3	ISO/IEC JTC 1/SC 29/WG 1 (JPEG)	Information	LS/r on JPEG 2000	TD354R1/WP3
46	Q6/21	WP3	DICOM WG 32	Information	LS on Rec. ITU-T T.261 Biomedical and general waveform signal coding	TD354R1/WP3

47	Q7/21	WP3	ISO/IEC JTC 1/SC 29/WG 1 (JPEG)	Information	LS on JPEG XE	TD311R2/WP3
48	Q7/21	WP3	ITU-T SG 17	Information	LS/r on identity management relevant Recommendation (reply to SG17-LS108)	TD311R2/WP3
49	Q7/21	WP3	ITU-T SG20, ISO/TC 211, IEC TC 57	Information	LS on initiation of new work item ITU-T F.IMPTC "Requirements and framework for intelligent monitoring of power transmission corridors based on multimodal visual data"	TD311R2/WP3
50	Q7/21	WP3	ITU-T SG20 and ISO/IEC JTC1/SC42	Information	LS on initiation of new work item ITU-T F.FM-ODI "Foundation model-based intelligent video surveillance systems – Requirements and framework for on-device intelligence"	TD311R2/WP3
51	Q7/21	WP3	ITU-T SG2, ITU-T SG11, ITU-T SG20, IEC/TC129	Information	LS on initiation of new work item ITU-T F.SIVIS-arch "Functional architecture for substation intelligent visual inspection system"	TD311R2/WP3
52	Q7/21	WP3	ITU-T SG20, ITU-T SG13, ITU-T SG11, ITU-T SG17, and ISO/IEC JTC1/SC42	Information	LS on initiation of new work item ITU-T F.MAC-A "Architecture of multimodal agent collaboration in video surveillance systems"	TD311R2/WP3
53	Q7/21	WP3	ISO/IEC JTC 1/SC 42	Information	LS on initiation of new work item ITU-T F.VMTRP "Requirements and framework of the industrial vision model training and reasoning platform"	TD311R2/WP3
54	Q7/21	WP3	ISO/IEC JTC 1/SC 42	Information	LS on initiation of new work item ITU-T F.VASReqs "Requirements and framework of visual agent system in intelligent video surveillance"	TD311R2/WP3
55	Q8/21	WP4	ITU-T SGs 12, and 13, ISO/IEC JTC1 SC29, 3GPP SA4	Information	LS on new ITU-T Recommendation H.430.10 "Functional requirements and frameworks for 3D model-based immersive telepresence services" (ex H.ILE-3DIT) [to ITU-T SGs 12, and 13, ISO/IEC JTC1 SC29, 3GPP SA4]	TD417/WP4
56	Q8/21	WP4	ITU-T SGs 11, 12, and 13, ISO/IEC JTC1 SC29, 3GPP SA4, ETSI ISG ARF	Information	LS on new ITU-T Recommendation H.430.11 "Requirements and framework of augmented reality for immersive live experience (ILE) services" (ex H.ILE-AR)	TD417/WP4

			and ISG F5G, W3C, DVB, EBU, VRIF			
57	Q8/21	WP4	ETSI ISG F5G	Information	LS/r on new ITU-T Recommendation H.430.9 (ex H.ILE-FT) "An architectural framework for first-person transfer immersive live experience" (SG21-LS174)	TD417/WP4
58	Q8/21	WP4	ISO/IEC JTC1/SC29/WG1	Information	LS/r on JPEG Pleno point cloud coding (SG21-LS176; SG21-LS175; SG21-LS174)	TD417/WP4
59	Q9/21	WP4	ITU-T SG13, SG20, ISO/IEC JTC 1/SC 38, IEEE C/SABSC	Information	LS on initiation of new work item ITU-T F.CDM-IF "Framework and requirements for cross-data matrix interoperability for multimedia services"	TD405R1/WP4
60	Q9/21	WP4	ITU-T SG13; ISO/IEC JTC 1/SC6	Information	LS on initiation of new work item ITU-T F.EC-RTMS "Framework and Requirements for Ground-Based Edge Collaboration for Low-Altitude Immersive Applications"	TD405R1/WP4
61	Q9/21	WP4	ITU-T SG13, SG20, ISO/IEC JTC1/SC42/WG2, W3C	Information	LS on initiation of new work item ITU-T F.DF-RefFram "Requirements and reference framework for data fabric system in multimedia"	TD405R1/WP4
62	Q9/21	WP4	ITU-T SG2, SG13, SG17; ISO/IEC JTC1/SC24	Information	LS on initiation of new work item ITU-T F.MDLAT "Data asset management: Requirements and framework for multimedia data lineage analysis and traceability system"	TD405R1/WP4
63	Q9/21	WP4	ITU-T SG11; ITU-T SG12; ITU-T SG13; ISO/IEC JTC 1/SC 6; ISO/IEC JTC 1/SC 24; ISO/IEC JTC 1/SC 29; ISO/IEC JTC 1/SC 38; IETF QUIC WG; IETF Media Over QUIC WG	Information	LS on initiation of new work item ITU-T H.CVR-MP "Functional requirements for cloud virtual reality systems supporting multi-path transmission"	TD405R1/WP4
64	Q9/21	WP4	ITU-T SG20	Information	LS/r on response regarding ITU-T HSTP.IMV-CS "Case Studies and Best Practices for Industrial Metaverse" (SG20-LS161)	TD405R1/WP4

65	Q9/21	WP4	ITU-T JCA-MV	Information	LS/r on updated SG21/Q9 work relevant to the metaverse standardization roadmap (JCA-MV-LS2)	TD405R1/WP4
66	Q9/21	WP4	ITU-T SG11	Information	LS/r on initiation of new work item Q.SR-TSM "Signalling requirements for interactions between telepresence suits and avatars in the metaverse" (SG11-LS95)	TD405R1/WP4
67	Q9/21	WP4	ITU-T SG13, SG20, ISO/IEC JTC1/SC42	Information	LS on new Supplement to ITU-T 743.25: ITU-T F.Suppl.mdamsg "Use cases and guidelines for multimedia data asset management in smart grids"	TD405R1/WP4
68	Q12/21	WP4	ITU-T SG17 , SG13	Action	LS on the progress of ITU-T F.DLT-SCAI "interoperability between smart contracts and artificial intelligence based on distributed ledger technology" in Q12/21	TD419R1/WP4
69	Q12/21	WP4	CEN/CENELEC JTC 19	Action	LS on establishing a liaison with CEN/CENELEC JTC 19 WG 3 to collaborate on privacy-preserving blockchain and DLT	TD419R1/WP4
70	Q12/21	WP4	ITU-T SG17, ITU-T SG13, ITU-T SG20, W3C	Information	LS on initiation of new work ITU-T F.DLT-DIS "Framework and requirements for distributed ledger technology supporting decentralized identity service for multimedia applications"	TD419R1/WP4
71	Q12/21	WP4	ITU-T SG17, ITU-T SG20, IEC TC69, IEEE C/BDL	Information	LS on initiation of new work ITU-T F.DLT-DREV "Framework for distributed ledger technology(DLT)-based cross-domain settlement of electric vehicle grid-connected reserve services"	TD419R1/WP4
72	Q12/21	WP4	ITU-T SG17, ISO/TC 307, IEEE C/BDL	Information	LS on initiation of new work item ITU-T F.DLT-TTDB " Framework of DLT-based trusted tamper-evident database for supporting multimedia service "	TD419R1/WP4
73	Q12/21	WP4	ITU-T SG13, SG17, ISO/TC 307, ISO/IEC JTC1 SC42, IETF aipref WG	Information	LS on initiation of new work ITU-T F.DLT-MAS "Reference architecture for data sharing and management in multi-agent multimedia systems based on distributed ledger technology"	TD419R1/WP4
74	Q13/21	WP4	ITU-T SG11	Information	LS/r on draft new Technical Paper HSTP.MIHS-guide and consent of draft new Recommendation ITU-T Q.4106	TD382R1/WP4

75	Q13/21	WP4	ITU-T SG13, ITU-T SG17, SG20, ETSI ISG ENI, FG-TIDA	Information	LS on initiation of draft new Recommendation ITU-T F.CDN-ACreqs "Requirements for agentic content delivery network"	TD382R1/WP4
76	Q13/21	WP4	WHO, ITU-T SG12, ISO/IEC JTC 1/SC 35, DVB-TM-I,	Information	LS on initiation of new draft new Recommendation ITU-T H.IPTV-AleAS "Requirements and architecture for AI enhanced accessibility service over IPTV system"	TD382R1/WP4
77	Q13/21	WP4	ITU-T SG2, ITU-T SG3, ISO/IEC JTC 1/SC29/WG3	Information	LS on initiation of draft new Recommendation ITU-T H.SCDVC-arch-mthd "Architecture and method for streaming content delivery over virtual channels"	TD382R1/WP4
78	Q13/21	WP4	ITU-T SG11, ITU-T SG13	Information	LS on consent of draft new Recommendation ITU-T H.644.9 (ex H.CDN-MECptl) "Mobile/multi-access content delivery network: Protocols"	TD382R1/WP4
79	Q13/21	WP4	ITU-T SG13	Information	LS on consent of draft new Recommendation ITU-T F.746.26 (ex H.ILMTS-arch) "Functional architecture of interactive low-latency multimedia transmission system"	TD382R1/WP4
80	Q16/21 Q19/21	WP1	SG13	Information	LS/r on the relationship between draft new Recommendations ITU-T J.1613, ITU-T J.1312 and cloud computing (reply to SG13-LS152)	TD147R1/WP1
81	Q16/21	WP1	SG20	Information	LS on the initiation of draft new Recommendation ITU-T J.STB-LDI "Architecture and functional requirements for set-top boxes with integrated local display" [to ITU-T SG20]	TD147R1/WP1
82	Q16/21	WP1	SG13 SG20	Information	LS on the consent of draft new Recommendation ITU-T J.1293 (ex J.STB-DONGLE) "Technical requirements and measurement methods for 4K UHD pluggable mini set-top boxes"	TD147R1/WP1
83	Q17/21	WP1	ETSI TC CABLE, TTA, ITU-T SG17, TSAG	Information	LS on AAP Consent of draft new Recommendation ITU-T J.1116 "Specifications for IP-based Smart Digital Audio Services" and revised Recommendation ITU-T J.1115-rev "Functional Requirements for IP-based Smart Digital Audio Services"	TD152R1/WP1
84	Q19/21	WP1	ITU-T SG17	Information	LS on initiation of new work item ITU-T J.CIMSP: "Technical requirements and reference architecture for	TD160R1/WP1

					cross-institutional media service platform with permissioned DLT support" [to ITU-T SG17]	
85	Q22/21	WP1	TSAG, ITU-T SG13, SG17 ITU-T SG11, SG20, SCV	Action Information	Alignment of Digital rights management issues in ITU-T Recommendations between different Study Groups	TD158R1/WP1
86	Q22/21	WP1	ITU-T SG17	Information	LS/i on the consent of draft new Recommendation ITU-T J.1045 (ex J.ADCP-REQ) "Requirements of advanced digital content protection system for digital multimedia interface"	TD158R1/WP1
87	Q22/21	WP1	ITU-T SG17	Information	LS/i on the initiation of draft new Recommendation ITU-T J.ADCP-SPEC "Technical specification of advanced digital content protection system for digital multimedia interface"	TD158R1/WP1
