

Executive summary of ITU-T SG9 meeting (fully virtual, 6-14 September 2022)

The first Study Group 9 (Broadband cable and TV) meeting in the study period 2022-2024 was held fully virtual, from 6 to 14 September 2022. The SG9 meeting was chaired by Mr Satoshi Miyaji (KDDI, Japan), who was assisted by Mr Stefano Polidori (TSB Counsellor) and was attended by 67 participants from 14 countries. All sessions were held using [MyMeetings](#) remote participation tool.

Co-located with SG9, a meeting of the Intersector Rapporteur Group on Audiovisual Accessibility (IRG-AVA) was organized on 7 September and was attended by 21 participants. IRG-AVA serves as a collaborative platform to progress the ongoing draft Recommendation of Question 11/9 “Accessibility to cable systems and services”.

1 List of Consented/Determined Recommendations and other deliverables for approval, including eventual modifications to J-series structure

During the SG9 meeting in September 2022 a total of 4 revised draft Recommendations were finalized and agreed for AAP Consent.

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

Question	AAP/TAP	Rec	Status	Title	Final TD	A.5 justification
Q6/9	AAP	ITU-T J.1611 (ex. J.1611-rev)	Revised	Functional requirements for Smart Home Gateway	TD155	TD176
Q1/9, Q7/9	AAP	ITU-T J.224 (ex. J.224-rev)	Revised	Fifth-generation transmission systems for interactive cable television services – IP cable modems	TD181	TD189
Q1/9, Q7/9	AAP	ITU-T J.225 (ex. J.225-rev)	Revised	Fourth-generation transmission systems for interactive cable television services – IP cable modems	TD182	TD190
Q10	AAP	ITU-T J.1 (ex. J.1-rev)	Revised	Terms, definitions and acronyms for television and sound transmission and integrated broadband cable networks	TD192	N/A

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

No Recommendations were Determined at this meeting.

1.3 List of Draft Recommendations for AAP approval

No Recommendations were AAP approved at this meeting.

1.4 Modification of the category names of J-series Recommendations

No changes on the J-series Recommendations were done at this meeting.

2 List of Draft Supplements, Technical Reports/Papers or other documents for agreement

2.1 Technical Papers

No Technical Papers were agreement for publication at this meeting.

2.2 Supplements

The following Supplement was Agreed for publication by SG9 at this meeting.

Question	Approval	Document	Kind of document	Title	Final TD
Q1/9, Q7/9	Agreement	J Supplement 10 (ex. J.sup10-rev)	Supplement	Correspondence between CableLabs DOCSIS Specifications and ITU-T J- series Recommendations	TD183-R1

2.3 Amendments

No Amendment was proposed for agreement/approval at this meeting.

2.4 Corrigenda

No Corrigenda was proposed for agreement/approval at this meeting.

3 New and deleted work items

3.1 New work items

The meeting agreed to start work on the following 15 new work items, among them draft ITU-T J.1 was finalized at this meeting.

#	Q.	Acronym	kind of publication	Status (new/revised)	Title	Editor	TD	A.1 /A.13 Justification template
1	1/9 (jointly with Q4/9)	J.cable-5G	Draft Rec.	New	Functional requirements for cable television services to use 5G radio system	Mr. Ataru Kobayashi a-kobayashi@jllabs.or.jp	TD179	ANNEX C of TD131 (A.1)
2	1/9	J.cable-rf-to-ip	Draft Rec.	New	Requirements of cable television system for migration from RF to IP	Mr. Tasuo Shibata t-shibata@jllabs.or.jp	N/A	ANNEX D of TD131 (A.1)
3	1/9 (jointly with Q7/9)	J.HiNoC3-PHY	Draft Rec.	New	Physical layer specification for third-generation HiNoC	Ms. Cui Zhao zhaocui@abs.ac.cn	TD177	ANNEX E of TD131 (A.1)
4	1/9	J.TR.WiFiTV	Technical Report	New	Secondary distribution of digital television and audiovisual content to portable devices using Wi-Fi	Mr Avinash Agarwal avinash.70@gov.in Mr Pallab Dutta pallab@cdot.in	TD180	ANNEX G (A.13)
5	2/9	J.FSR-REQ	Draft Rec.	New	Factual subscriber-base reporting and protected content delivery in conditional access system - Requirements	Mr Avinash Agarwal, avinash.70@gov.in Mr Rakesh S. Desai, rakesh.desai@gov.in Mr Han-seung Koo koohs@etri.re.kr	TD152	ANNEX C of TD132 (A.1)
6	2/9	TR-FSR	Technical Report	New	Technical report on factual subscriber-base reporting and protected content delivery in conditional access system	Mr Avinash Agarwal, avinash.70@gov.in Mr Rakesh S. Desai, rakesh.desai@gov.in	N/A	ANNEX D of TD132 (A.13)
7	4/9	J.Sup11 (Rev)	Supplement	Revised	Guidelines for installing a digital television service for cable networks based on ITU-T Recommendations	Mr Blaise Mamadou mamadoucoursaireblaise@yahoo.fr Mr Tatsuo Shibata t-shibata@jllabs.or.jp	N/A	ANNEX C of TD134 (A.13)

#	Q.	Acronym	kind of publication	Status (new/revised)	Title	Editor	TD	A.1 /A.13 Justification template
8	6/9	J.1612 (Rev)	Draft Rec.	Revised	The Architecture for Smart Home Gateway”	Mr Changqing Hu huchangqing@skyworth.com	N/A	ANNEX C of TD136 (A.1)
9	7/9	J.FSPEC-DVCS	Draft Rec.	New	Functional Specification for IP-based Digital Video Convergence Service	Mr. TaeKyoon Kim tkkim@etri.re.kr	TD173	ANNEX C of TD137 (A.1)
10	7/9 (jointly with Q1/9)	J.HiNoC3-MAC	Draft Rec.	New	MAC layer specification for third-generation HiNoC	Ms Zhao Cui zhaocui@abs.ac.cn	TD178	ANNEX E of TD137 (A.1)
11	7/9	JSTR.STBN	Technical Report	New	The analysis of standards trends for scalable transmission in broadband network	Mr. TaeKyoon Kim tkkim@etri.re.kr	N/A	ANNEX F of TD137 (A.13)
12	8/9	J.mma-req	Draft Rec.	New	Requirements of microservice architecture for audio-visual media in the converged media cloud	Mr Jia Tao jiatao@abp2003.cn	TD163	ANNEX C of TD138 (A.1)
13	8/9	J.mma-spec	Draft Rec.	New	Specification of microservice architecture for audio-visual media in the converged media cloud	Mr Jia Tao jiatao@abp2003.cn	TD164	ANNEX D of TD138 (A.1)
14	10/9	J.1 (Rev)	Draft Rec.	Revised	Terms, definitions and acronyms for television and sound transmission and integrated broadband cable networks	Jingyi Xue xuejingyi@abp2003.cn	TD192	Annex C of TD140 (A.1)

#	Q.	Acronym	kind of publication	Status (new/revised)	Title	Editor	TD	A.1 /A.13 Justification template
15	11/9	JSTR.LCAP	Technical Report	New	Technical advances, challenges, and best practices in live captioning	Avinash Agarwal avinash.70@gov.in Rajiv Khattar rajivkhattar@gmail.com	TD159	ANNEX C of TD141 (A.13)

3.2 Discontinued work items

The meeting agreed to stop the work on the following work items:

#	Question	Acronym (kind of publication)	Title
1	Q6/9	J.290-corr-amd	Next generation set-top box core architecture

4 SG9 Management for the Study Period 2022-2024

SG9 confirmed the composition of the management of ITU-T Study Group 9.

Role	Name
Chairman	Mr Satoshi MIYAJI (KDDI, Japan)
Vice-chairman	Mr Blaise Corsaire MAMADOU (Central African Rep.)
Vice-chairman	Mr TaeKyoon KIM (ETRI, Korea Rep. of)
Vice-chairman	Mr Zhifan SHENG (ABS, China)
Vice-chairman	Mr Pradipta BISWAS (Indian Administration / Indian Institute of Science, India)
Counsellor	Mr Stefano POLIDORI (TSB, ITU)
Administrative assistant	Ms Hiba Tahawi (TSB, ITU)

5 SG9 Structure for the Study Period 2022-2024

ITU-T SG9 Working Party structure and leadership was confirmed as contained in [SG9-TD3-R1](#), see below:

- **WP1** “*Cable transport and terminals, including video and data*” (Q1, 2, 4, 6 & 7), and

- **WP2 “Cable-related platforms and applications”** (Q3, 5, 8, 9 & 11).

In addition, **Q10** and **IRG-AVA**, will report to the **SG9 Plenary**.

	SG9 Structure	Q/IRG	Titles
PLEN	PLENARY of SG9 – Satoshi MIYAJI (<i>SG9 Chair</i>) (<i>KDDI, Japan</i>)	Q10	Work programme, coordination and planning
		IRG-AVA	Audiovisual Media Accessibility
WP1	WP1/9: Cable transport and terminals, including video and data – Zhifan SHENG (<i>WP1/9 Chair</i>) (<i>ABS, China</i>) – Tatsuo SHIBATA (<i>WP1/9 Vice-chair</i>) (<i>Japan</i>) – Vacant (<i>WP1/9 Vice-chair</i>)	Q1	Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution
		Q2	Methods and practices for conditional access and content protection
		Q4	Guidelines for implementations and deployment of transmission of multichannel digital television signals over optical access networks and Hybrid Fibre-Coaxial (HFC)
		Q6	Functional requirements for terminal devices of the integrated broadband cable network
		Q7	Transmission control and interfaces (MAC layer) for IP and/or packet-based data over integrated broadband cable networks
WP2	WP2/9: Cable-related platforms and applications – Taekyoon KIM (<i>WP2/9 Chair</i>) (<i>ETRI, Korea</i>) – Eric WANG (<i>WP2/9 Vice-chair</i>) (<i>Huawei, China</i>) – Pradipta BISWAS (<i>WP2/9 Vice-chair</i>) (<i>Indian Institute of Science, India</i>)	Q3	AI-enabled enhanced functions over integrated broadband cable network
		Q5	Software components application programming interfaces (APIs), frameworks and overall software architecture for advanced content distribution services within the scope of Study Group 9
		Q8	The Internet protocol (IP) enabled multimedia applications and services for cable television networks enabled by converged platforms
		Q9	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
		Q11	Accessibility to cable systems and services

NOTE: Mr Tatsuo SHIBATA (Japan Cable Laboratories) will act as WP1 vice-chair on behalf of the Government of Japan.

5.1 SG9 Questions texts:

SG9 adopted the list of Questions and their texts as found in [Contribution 1](#) from WTSA-20. No further changes were proposed.

6 SG9 Management, Rapporteurs and Associate Rapporteurs

SG9 has agreed to the List of SG9 Rapporteurs and Associate Rapporteurs for the Study Period 2022-2024 as found in [SG9-TD5-R6](#).

7 Liaison officers to external groups

SG9 agreed on the list of liaison officers for the Study Period 2022-2024, as found in [SG9-TD6-R3](#).

8 Intersector Rapporteur Groups (IRG-AVA)

A meeting of IRG-AVA was organized on 7 September in co-location with SG9 meeting. IRG-AVA serves as a collaborative platform to progress the ongoing draft Recommendation from Q11/9, which benefit from the collaboration with ITU-T SG16 and ITU-R SG6.

The meeting produced an updated draft new Recommendation ITU-T J.acc-us-prof "Common user profile format for audiovisual content", posted as [SG9-TD153](#) and discussed the establishment of a new Technical Report (JSTR.LCAP) on "Technical advances, challenges, and best practices in live captioning". Both results were confirmed by the following meeting of Question 11/9.

SG9 continues to act as a parent study group for IRG-AVA (Audiovisual Media Accessibility), as mentioned in the table below.

The appointment of the co-chair for IRG-AVA to represent ITU-T SG9 was confirmed as follows.

IRG	Title	Co-chair from SG9	Parent Groups	Website
IRG-AVA	Audiovisual Media Accessibility	Pradipta BISWAS (Indian Institute of Science, India)	ITU-T SG9 ITU-R SG6 ITU-T SG16	https://itu.int/en/irg/ava

9 Outgoing Liaison Statements

The following table shows the list of the 17 agreed outgoing liaison statements, as indicated in [SG9-TD25-R1](#):

#	Q	WP	To	For	Title	TD
1	Q1/9	WP1	JCA-IMT2020, ITU-R SG6, ITU-T SG11 and ITU-T SG13	Information	LS/o on new draft Recommendations J.cable-5G "Functional requirements for cable television services to use 5G radio system"	TD187-R1

#	Q	WP	To	For	Title	TD
2	Q1/9	WP1	ITU-T SG16	Information	LS/o on start of new draft Recommendations J.cable-rf-to-ip "Requirements of cable television system for migration from RF to IP"	TD186
3	Q1/9, Q7/9	WP1	ITU-T SG15, ETSI TC Cable, IEC TC100, CableLabs, SCTE, TTA, TTC, IEEE 802.3 Ethernet WG, CCSA.	Information	LS/o on Approval of revised Recommendation ITU-T J.224 and ITU-T J.225, and Agreement of revised Supplemental ITU-T J.Sup10.	TD184-R1
4	Q1/9, Q7/9	WP1	ITU-T SG15, ETSI TC Cable, IEC TC100, CableLabs, SCTE, TTA, TTC, IEEE 802.3 Ethernet WG, CCSA.	Action	LS/o on new work items on J.HiNoC3-PHY and J.HiNoC3-MAC	TD185-R1
5	Q1/9	WP1	ITU-R SG6, ITU-T SG16	Action	LS/o on initiation of new work item on the draft ITU-T Technical Report TR.WiFiTV "Secondary distribution of digital television and audiovisual content to portable devices using Wi-Fi"	TD188
6	Q4/9	WP1	ITU-D SG1	Action	LS/o on request of hybrid cable network architecture use cases to update ITU-T J. Supplement 11 "Guidelines for installing a digital television service for cable networks based on ITU-T Recommendations"	TD156-R1
7	Q5/9	WP2	TSAG RG-WM ITU-T SG16	Action Information	LS/o/r on smart TV Operating System	TD172-R1
8	Q6/9	WP1	BROADBAND FORUM	Information	LS/o/r on AAP Consent of draft new Recommendation ITU-T J.1612 "The Architecture for Smart Home Gateway"	TD157
9	Q7/9	WP1	ETSI TC-Cable, TTA	Action	LS/o on the new work item ITU-T J.FSPEC-DVCS "Functional Specification for IP-based Digital Video Convergence Service"	TD174-R1
10	Q8/9	WP2	ITU-T Study Groups 13, Study Groups 16	Information	LS/o on the initiation of new work item ITU-T J.mma-req and J.mma-spec	TD160-R2

#	Q	WP	To	For	Title	TD
11	Q9/9	WP2/9	DVB TM-MCAST, ITU-T SG16 CableLabs	Action Information	LS/o on the final baseline text for J.cable-mabr “Requirements of multicast adaptive bitrate (M- ABR) IP delivery.”	TD168-R1
12	Q3/9, Q9/9	WP2/9	ITU-T SG12, ITU-T SG16, ETSI ISG F5G	Information	LS/o on ITU-T J.pcnp-char: “E2E Network Characteristics Requirement for Video Services”, J.cloud-game-req: “Requirements of E2E Network Platform for Cloud Gaming Service”, and J.cloud- vr-arch: “Architecture of E2E Network Platform for Cloud-VR Service”	TD171-R1
13	Q10/9	Plen	ITU-T SG3	Information	LS/o/r on new appointment of Representative to ITU-T SG3	TD195
14	Q10/9	Plen	SCV	Information	LS/o/r on the appointment of SG9 Vocabulary Rapporteur	TD196
15	Q10/9	Plen	ITU-T SG11	Action	LS/o/r on the new version of updated reference table of ITU standards to be used for conformance and interoperability testing	TD194-R1
16	Q10/9	Plen	ITU-T SG13	Action	LS/o/r on updating information of Artificial Intelligence Standardization Roadmap	TD193-R1
17	Q11/9	WP2	ITU-R SG6; ITU-T SG16 Q26/16, IRG-AVA	Information	LS/o to inform the decision of SG9 to initiate a new work item on proposed new ITU-T Technical Report JSTR.LCAP “Technical advances, challenges, and best practices in live captioning”	TD166

10 SG9 results per Question

10.1 Question 1/9 “Transmission and delivery control of television and sound programme signal for contribution, primary distribution and secondary distribution”

The report of Q1/9 can be found in [SG9-TD131-R2](#). It was approved.

Executive summary:

Question 1/9 discussed 21 contributions and four TDs, including six incoming liaison statements.

Question 1/9 decided to reach AAP consent for draft ITU-T J.224 (ex J.224-rev) and J.225 (ex. J.225-rev) and to reach agreement on the Supplement J Supplement 10 (ex J.Sup10-rev) in this SG9 meeting.

Question 1/9 agreed to initiate five new work items as follows: J.cable-5G ; J.cable-rf-to-ip , J.HiNoC3-PHY , J.HiNoC3-MAC , and J.TR.WiFiTV.

Question 1/9 reviewed all incoming liaison statements and agreed to issue five outgoing liaison statements as follows:

- to inform ITU-T SG15, ETSI TC Cable, IEC TC100, CableLabs, SCTE, TTA, TTC, IEEE 802.3 Ethernet WG and CCSA on the AAP Consent of Recommendation ITU-T J.224 and J.225 as well as agreement of J. Supplement 10,
- to inform ITU-T SG15, ETSI TC Cable, IEC TC100, CableLabs, SCTE, TTA, TTC, IEEE 802.3 Ethernet WG and CCSA on the initiating of new work items J.HiNoC3-PHY and J.HiNoC3-MAC, (one oLS),
- to inform JCA-IMT2020, ITU-R SG6; ITU-T SG11 and ITU-T SG13 on the initiating of a new work item J.cable-5G,
- to inform ITU-T SG16 on the initiation of a new work item J.cable-rf-to-ip, and
- to inform ITU-R SG6 and ITU-T SG16 on the initiation of a new work item J.TR.WiFiFV.

Question 1/9 has a plan to organize three interim meetings in December 2022, one as a standalone Q1 meeting and two jointly with Q7 and Q4 respectively. During the WP1 Plenary the A.13 justification of J.TR.WiFiTV was duly reviewed and approved (this was a pending issue from Q1/9 meeting).

10.2 Question 2/9 “Methods and practices for conditional access and content protection”

The report of Q2/9 can be found in [SG9-TD132-R1](#). It was approved.

Executive summary:

Q2/9 achieved the following results:

- Two new work items were agreed:
 - draft Recommendation ITU-T J.FSR-REQ “Factual subscriber-base reporting and protected content delivery in conditional access system - Requirements”
 - draft Technical Report TR-FSR ” Technical report on factual subscriber-base reporting and protected content delivery in conditional access system”
- One interim meeting is planned: 8 Feb 2023 (TBC), e-meeting
- New associated Rapporteur was nominated: Mr. Rajiv Khattar, India.

10.3 Question 3/9 “AI-enabled enhanced functions over integrated broadband cable network”

The report of Q3/9 can be found in [SG9-TD133-R1](#). It was approved.

Executive summary:

Question 3 meet in two sessions and reviewed one contribution and 12 incoming liaisons.

In particular, Q3/9 reviewed the contribution C40R1, which describes the E2E network characteristics requirement for video services. SG9 management team and some members from Q3 recommended to update the scope and the title, in addition to its overall content, to avoid the overlap of scope with ITU-T SG12. Some members (e.g. Huawei, Ukraine) from Q3/9 committed to submit contributions to advance ITU-T J.pcnp-char (planned J.1630).

Q3/9 reviewed the incoming liaison TD38, which requests to update the Supplement ITU-T Y.sup.aistr ([SG13-TD834/WP2](#)), Supplement on Artificial Intelligence Standardization Roadmap. Q3 will collect the NWIs from SG9 and assess whether is necessary to update the supplement. At this meeting, an outgoing liaison statement to SG13, to update the Supplement, has been prepared by Q10/9.

Q3/9 drafted one outgoing liaison statement to ITU-T SG12, in collaboration with Q9.

Q3/9 planned one interim meeting on 24 November 2022.

10.4 Question 4/9 “Guidelines for implementations and deployment of transmission of multichannel digital television signals over optical access networks and Hybrid Fibre-Coaxial (HFC)”

The report of Q4/9 can be found in [SG9-TD134-R1](#). It was approved.

Executive summary:

Q4/9 received two contributions, C2 from Central African Republic and C27 from Japan Cable Laboratories.

C2 discusses the use of hybrid cable networks which are either HFC or combination of fibre and copper pairs running DOCSIS, ADSL or VDSL, and asks African countries to submit their proposed hybrid cable network architecture to ITU-T Study Group 9 for assistance in the deployment of multichannel digital television services.

The meeting agreed with the proposal, and decided to invite contributions on proposed hybrid cable network architecture from around the world. Submitted use cases will be added to ITU-T J. Supplement 11. An A.13 justification form for this new work item is attached as [Annex J](#).

The meeting also agreed to send a liaison statement to ITU-D SG1 requesting to submit to SG9 information relevant to hybrid cable network, the oLS is available in [TD156-R1](#).

C27 proposes to start a new work item to formulate a new ITU-T Recommendation that defines the requirements for cable television systems that uses 5G radio system in place of wired access lines such as HFC or FTTH. It intends to replace old wiring inside apartment buildings or to extend cable television system into remote areas. This new WI is mainly proposed for Question 1/9 but since the second use case is applicable to developing countries as well, it was presented at Question 4/9 meeting for review.

The meeting agreed to collaborate with Question 1/9 in progressing this new WI.

A joint interim meetings of Q4/9 with Q1/9 is planned.

10.5 Question 5/9 “Software components, application programming interfaces (APIs), frameworks and overall software architecture for advanced content distribution services within the scope of Study Group 9”

The report of Q5/9 can be found in [SG9-TD135-R1](#). It was approved.

Executive summary:

Q5/9 addressed five incoming liaison statements and one meeting report during its meetings.

The group reviewed the five incoming liaison statements, which were noted.

The group produced one outgoing liaison statement as a reply to SG16-LS282 on smart TV Operating System. The outgoing LS is available in [TD172-R1](#).

Q5/9 did not plan interim meetings until next SG9 meeting in 2023.

10.6 Question 6/9 “Functional requirements for terminal devices of the integrated broadband cable network”

The report of Q6/9 can be found in [SG9-TD136-R2](#). It was approved.

Executive summary:

Q6/9 meeting was proceeded according to the agenda [TD129](#):

One Contribution [C37](#) was reviewed and the related output document is revised in [TD151](#).

Two report of interim activities were reviewed: [TD94](#) and [TD96](#) and no comments were received.

- In [TD94](#) the meeting noticed that J.1611-rev was mature for consent.
- In [TD96](#) , which is a report of a joint interim meeting with other Questions, there was a proposal to initiate a new work item 19782-DOC1 (220428): Proposal for a new work item of “Functional requirements for 8K cable STB with VR service”. Some suggestions were made for the new proposal. However, at the present meeting there was no contribution submitted by Skyworth to initiate that work item and the representatives of Skyworth mentioned that contributions will be sent at the next meeting of Question 6.

Seven Incoming Liaison Statements were reviewed: [TD38](#); [TD62](#); [TD63](#); [TD65](#); [TD69](#); [TD70](#); [TD71](#) among them:

- Q6/9 reviewed and noted: [TD38](#); [TD62](#); [TD63](#); [TD65](#) and [TD71](#)
- Q6/9 reviewed [TD69](#) and decided to establish a new work item to revise ITU-T J.1612. The new work item will be called J.1612-rev and the editor will be Mr Hu Changqing. A related ITU-T A.1 justification was drafted and posted as [TD158](#). It was also added in annex to this meeting report. An outgoing liaison statements was drafted to reply to BBF ([TD157](#)).

Q6/9 reviewed [TD70](#) and noted it. Mr Shibata Tatsuo will contact via email BBF and report to the interim meeting of Q6/9 on his finding.

One interim rapporteur meeting of Question 6 was planned on 22 November 2022.

10.7 Question 7/9 “Transmission control and interfaces (MAC layer) for IP and/or packet-based data over integrated broadband cable networks”

The report of Q7/9 can be found in [SG9-TD137-R1](#). It was approved.

Executive summary:

Q7 achieved the following results:

- One outgoing liaison statement was approved; [TD174R1](#) (sent to: ETSI TC Cable, TTA);
- Two revised Recommendations were proposed for consent in joint meeting with Q1/9& Q7/9; ITU-T J.224-Rev “Fifth-generation transmission systems for interactive cable television services - IP cable modems”, ITU-T J.225-Rev “Fourth-generation transmission systems for interactive cable television services - IP cable modems”;
- Four new work item were approved; J.HiNoC3-MAC “MAC layer specification for third-generation HiNoC”, J.HiNoC3-PHY “Physical layer specification for third-generation HiNoC”, J.FSPEC-DVCS “Functional Specification for IP-based Digital Video Convergence Service”, JSTR.STBN “The analysis of standards trends for scalable transmission in broadband network”;
- Three interim meetings of Q7/9 were planned, one of which is a joint meeting with Q1/9;
- During WP1 Plenary, the meeting agreed that the use of the term “convergence” in the title of J.FSPEC-DVCS “Functional Specification for IP-based Digital Video Convergence Service”, should be further clarified.

10.8 Question 8/9 “The Internet protocol (IP) enabled multimedia applications and services for cable television networks enabled by converged platforms”

The report of Q8/9 can be found in [SG9-TD138-R3](#). It was approved.

Executive summary:

Q8/9 achieved the following results:

- Two new work items were agreed to be initiated:
 - draft Recommendation ITU-T J.mma-req on “Requirements of microservice architecture for audio-visual media in the converged media cloud”, the output is available in [TD163](#).
 - draft new Recommendation ITU-T J.mma-spec on “Specification of microservice architecture for audio-visual media in the converged media cloud”, the output is available in [TD164](#).
- One outgoing LS on the initiation of new work item ITU-T J.mma-req and J.mma-spec was agreed to be sent to ITU-T SG13 and ITU-T SG16. It's available in [TD160](#).

One interim meeting of Q8/9 is planned: 23 November 2022, e-meeting.

10.9 Question 9/9 “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 Q9/9 can be found in [SG9-TD139-R1](#). It was approved.

Executive summary:

The Q9/9 sessions operated under WP2, under the chairmanship of Rapporteur Eric Wang, assisted by the Associate Rapporteur Soonchoul Kim.

Q9/9 covers 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.

Q9/9 met for three (3) sessions with about 28 people attending and addressed four (4) contributions and eight (8) incoming liaison statements.

Q9/9 decided not to proceed with AAP consent for J.cable-mabr this time, even if it was planned for consent, because of an unresolved issues that needs a feedback from DVB. An outgoing liaison statement was issued in this regards.

Q9/9 progressed the J.cloud-vr-arch and J.cloud-game-req.

Q9/9 used the “issues list” tool for maintaining the work of Q9/9. The approved “Q9 issues list” is found in [TD175](#).

Q9/9 produced two (2) outgoing liaison statements, available in [TD168-R1](#) and [TD171-R1](#).

One interim meeting of Q9/9 is planned.

10.10 Question 10/9 “Work programme, coordination and planning”

The report of Q10/9 can be found in [SG9-TD140-R1](#). It was approved.

Executive summary:

Question 10/9 reviewed thirty-nine (39) inputs, including thirty-four (34) incoming liaison statements. Question 10/9 appointed Ms Jingyi XUE as SG9 vocabulary rapporteur for the 2022-2024 study period, assisting SCV in fulfilling its responsibilities.

Question 10/9 reviewed (2) contributions, among them [C17](#), Draft revised Recommendation “Terms, definitions and acronyms for television and sound transmission and integrated broadband cable networks”, according to which ITU-T J.1 was agreed to propose for consent as provided in TD192.

Question 10/9 agreed to draft four (4) reply liaison statements as follows:

- 1) LS/o/r on new appointment of Representative to ITU-T SG3 ([SG3-LS12](#)) [to ITU-T SG3], available in TD195.
- 2) LS/o/r on the appointment of SG9 Vocabulary Rapporteur ([SCV-LS1](#)) [to SCV], available in TD196

- 3) LS/o/r on the new version of updated reference table of ITU standards to be used for conformance and interoperability testing ([SG11-LS7](#)) [to ITU-T SG11], available in TD194-R1
- 4) LS/o/r on updating information of Artificial Intelligence Standardization Roadmap ([SG13-LS234](#)) [to ITU-T SG13], available in TD193-R1.

No interim meetings of Q10/9 are planned.

10.11 Question 11/9 “Accessibility to cable systems and services”

The report of Q11/9 can be found in [SG9-TD141](#). It was approved.

Executive summary:

Q11/9 achieved the following results:

- One new work item was agreed:
 - Draft ITU-T Technical Report JSTR.LCAP "Technical advances, challenges, and best practices in live captioning", the output is available in [TD159](#)
- One interim meeting is planned: Between 23 Nov and 07 December 2022 (TBD), E-meeting.
- One outgoing liaison statement to ITU-R SG6, ITU-T SG16, and IRG-AVA was approved, available in [TD166](#).

New Associate Rapporteur was nominated: Mr. Zhao Ming, China.

11 Work plan for interim Rapporteur meetings and working party meetings

11.1 Working party meetings

No interim working party meetings will be held before next SG9 meeting, currently planned in March/April 2023 (TBC).

11.2 Interim Rapporteurs’ groups meetings

The following interim Rapporteurs’ groups meetings are agreed by SG9. For updates, please see the Rapporteur meetings webpage:

<https://www.itu.int/net/ITU-T/lists/rgm.aspx?Group=9&type=interim>

Q/SG	Date	Place / Host	Terms of reference	Contact
Joint 1/9 and 7/9	5-6 December 2022 (8h30-10h30 CET)	e-meeting	Progress on J.HiNoC3-PHY, J.HiNoC3-MAC etc.	Mr. TaeKyoon KIM (tkkim@etri.re.kr) Mr. Kei KAWAMURA (ki-kawamura@kddi.com)

Q/SG	Date	Place / Host	Terms of reference	Contact
Joint 1/9 and 4/9	13 December 2022 Session 1: 8h30-9h30 CET	e-meeting	Progress on J.cable-5G (jointly).	Mr. Kei KAWAMURA (ki-kawamura@kddi.com) Mr Tatsuo SHIBATA (t-shibata@jilabs.or.jp)
1/9	13 December 2022 Session 2: 10h00- 11h30 CET	e-meeting	Progress on the following Q1 work items: J.cable-rf-to-ip, J.TR.WiFiTV, and others	Mr. Kei KAWAMURA (ki-kawamura@kddi.com)
2/9	8 February 2023 [TBC]	e-meeting	Progress of ongoing work items: TR-FSR and J.FSR-REQ	Han-seung Koo (koohs@etri.re.kr)
3/9	24 November 2022 (9h00-11h00 CET)	e-meeting	Progress on J.1630 (Balyar Volodimir from Ukraine and Evan Sun from China will prepare the baseline text)	Evan Sun (evan.sun@huawei.com)
6/9	22 November 2022 (09h30-12h30 CET)	e-meeting	Progress on J.1612-rev (The Architecture for Smart Home Gateway) Progress discussion on the possible new work item based on 19782-DOC1 (220428): Proposal for a new work item of “Functional requirements for 8K cable STB with VR service” Discuss possible outgoing liaison statement to BBF, based on SG9-TD70 and inputs from Mr Shibata (TBC) Discuss a possible update to TD151 which is a proposal to start a new ITU-T Recommendation (J.BD2M "Functional requirements for terminal devices of the Broadcast Direct to Mobile (D2M) networks”). The objective is to make sure it is under the scope of SG9.	Xin.zhang (xin.zhang@skyworth.com)
7/9	24 October 2022 (0630-0800 CEST)	e-meeting	Progress on J.UOC, J.FSPEC-DVCS etc. Discuss the use of the word convergence in the title of "Functional Specification for IP-based Digital Video Convergence Service"	Mr. TaeKyoon KIM (tkkim@etri.re.kr)
7/9	2 February 2023 (08h30-10h30 CET)	e-meeting	Progress on J.UOC, J.FSPEC-DVCS etc.	Mr. TaeKyoon KIM (tkkim@etri.re.kr)
8/9	23 November 2022 (2 sessions from 11h30-14h30 CET)	e-meeting	Progress on ongoing work items : J.mma-req, J.mma-spec. Discuss any additional contribution	Rakesh Desai (rakesh.desai@gov.in)
9/9	TBD January 2023	e-meeting	Progress on J.cloud-vr-arch, J.cloud-game-req, J.cable-mabr, etc.	Eric Wang

Q/SG	Date	Place / Host	Terms of reference	Contact
				eric.wangxiang@huawei.com
11/9	Between 23 Nov and 07 December 2022 (TBD)	e-meeting	Progress on J.acc-us-prof, JSTR.LCAP	Avinash Agarwal avinash.70@gov.in

12 A.5 qualification for KHRONOS

SG9 decided to start the A.5 qualification process for Khronos. A presentation given by Khronos at the opening plenary of SG9 was made available in [TD149](#).

13 Next Study Group 9 meeting

Next ITU-T SG9 meeting is currently scheduled to be held in March/April 2023 (TBC). More information will be provided on the SG9 website when available. A co-located workshop on “The Future of TV in the regions” may be organized in collaboration with ITU-R, ITU-D and ITU regional offices (TBC).
