

## Executive summary of ITU-T SG9 meeting (Tokyo, 2-10 September 2024)

The fifth Study Group 9 (Broadband cable and TV) meeting in the study period 2022-2024 was held in Tokyo, Japan, from 2 to 10 September 2024 at the kind invitation of Ministry of Internal Affairs and Communications (MIC). The SG9 meeting was chaired by Mr Satoshi Miyaji (KDDI, Japan), who was assisted by Mr Stefano Polidori (TSB Counsellor) and was attended by 78 participants from 14 countries. All sessions were held using [MyMeetings](#) remote participation tool.

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

During the SG9 meeting in September 2024 a total of six (6) draft Recommendations (4 new, 2 revised) were finalized and agreed for AAP Consent.

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

Question	Rec	Version	Title	Final TD	A.5 just.
Q1/9, Q7/9	J.224 (ex <a href="#">J.224-rev</a> )	Rev.	Fifth-generation transmission systems for interactive cable television services - IP cable modems	<a href="#">TD870</a>	<a href="#">TD866</a>
Q1/9, Q7/9	J.225 (ex <a href="#">J.225-rev</a> )	Rev.	Fourth-generation transmission systems for interactive cable television services - IP cable modems	<a href="#">TD871</a>	<a href="#">TD865</a>
Q2/9	J.1040 (ex. <a href="#">J.DRMVA-req</a> )	New	Digital rights management for video and audio content distribution - Requirements	<a href="#">TD886</a>	N/A
Q5/9	J.1207 (ex <a href="#">J.stvos-ct</a> )	New	Smart television operating system - Conformance test	<a href="#">TD893R1</a>	N/A
Q6/9	J.1292 (ex <a href="#">J.STB-UHDVR</a> )	New	Functional requirements for cable set-top box supporting Ultra-High-Definition video and virtual reality services	<a href="#">TD849</a>	N/A
Q9/9	J.1318 ( <a href="#">J.cloud-ow</a> )	New	Requirements of E2E Network Platform for Cloud-based Object Wave Transmissions	<a href="#">TD848R1</a>	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

None at this meeting.

### 1.4 Modification of the category names of J-series Recommendations

It is proposed to establish one new sub-series of J-series Recommendations:

- J.1040-J.1044: Digital rights management for video and audio content distribution

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

### 2.1 Technical Reports/Papers

No Technical Report was proposed for agreement/approval at this meeting

### 2.2 Supplements

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

Q	Approval	Document	Title	Final TD
Q1/9, Q7/9	J Suppl 10 (ex <a href="#">J.Suppl10-rev</a> )	Supplement	Correspondence between CableLabs DOCSIS Specifications and ITU-T J-series Recommendations	<a href="#">TD872</a>

### 2.3 Amendments

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

### 2.4 Corrigenda

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

## 3 New and deleted work items

### 3.1 New work items

According to [SG9-TD776](#), the meeting agreed to start work on the following five (5) new work items.

#	Q.	Acronym	kind of publication	Version	Title	Editor	TD	A.1 /A.13 Justification template
1	Q1/9	TR.atsc-imatv	Technical Report	New	ATSC 3.0 and 1.0 integrated-MATV system over digital terrestrial television broadcasting	Aldo Cugnini, ( <a href="mailto:acugnini@agcsystems.tv">acugnini@agcsystems.tv</a> )	<a href="#">TD869</a>	Annex D of <a href="#">TD851</a> (A.13)
2	Q6/9	J.cloud-game-trr	Recommendation	New	The capability framework of cloud gaming smart terminal - requirements	Xinkun Tang ( <a href="mailto:tangxinkun@abs.ac.cn">tangxinkun@abs.ac.cn</a> ) Meiling Si ( <a href="mailto:simeiling@migu.cn">simeiling@migu.cn</a> ) Xin Zhang ( <a href="mailto:xin.zhang@skyworth.com">xin.zhang@skyworth.com</a> )	<a href="#">TD850R1</a>	Annex C of <a href="#">TD856</a> (A.1)
3	Q7/9	J.das.req	Recommendation	New	Requirements for IP-based smart digital audio services	Mr TaeKyoon KIM ( <a href="mailto:tkkim@etri.re.kr">tkkim@etri.re.kr</a> )	<a href="#">TD867</a>	Annex C of <a href="#">TD857</a> (A.1)
4	Q8/9	J. Sup.mma-uc	Supplement	New	Use cases of microservices architecture for audiovisual media in the converged media cloud	Mr Jia Tao ( <a href="mailto:jiatao@abp2003.cn">jiatao@abp2003.cn</a> )	<a href="#">TD890R1</a>	Annex C of <a href="#">TD858</a> (A.13)
5	Q9/9	J.cloud-game-sia	Recommendation	New	Cloud gaming service infrastructure architecture	Mr Feng Ouyang ( <a href="mailto:ouyangfeng@abs.ac.cn">ouyangfeng@abs.ac.cn</a> )	<a href="#">TD885</a>	Annex C of <a href="#">TD859</a> (A.1)

### 3.2 Discontinued work items

It was agreed to discontinue the following work item:

Acronym	Title	Editor	Base text
<a href="#">J.cloud-vr-arch</a>	Architecture of E2E Network Platform for Cloud-VR service	<a href="#">Yanbin (Evan) Sun (Huawei Technologies Co., Ltd)</a>	<a href="#">SG9-TD169</a>

## 4 SG9 Management for the Study Period 2022-2024

SG9 confirmed the composition of the management of ITU-T Study Group 9, as contained in [SG9-TD757](#).

Role	Name
Chair	Mr Satoshi MIYAJI (KDDI, Japan)
Vice-chair	Mr Blaise Corsaire MAMADOU (Central African Rep.)
Vice-chair	Mr TaeKyoon KIM (ETRI, Korea Rep. of)
Vice-chair	Mr Zhifan SHENG (ABS, China)
Vice-chair	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-TD756](#):

- **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, **Q10/9** and **IRG-AVA** report to the **SG9 Plenary**.

**Yanbin (Evan) SUN** (Huawei, China) has resigned from SG9 WP2/9 position, his previous support was duly appreciated by the meeting.

	SG9 Structure	Q/IRG	Titles
<b>PLEN</b>	<b>PLENARY of SG9</b> <b>Satoshi MIYAJI</b> <i>(SG9 Chair)</i> <i>(KDDI, Japan)</i>	Q10	Work programme, coordination and planning
		IRG-AVA	Audiovisual Media Accessibility
<b>WP1</b>	<b>WP1/9: Cable transport and terminals, including video and data</b> <b>Zhifan SHENG</b> <i>(WP1/9 Chair)</i> <i>(ABS, China)</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)

	SG9 Structure	Q/IRG	Titles
	<b>Tatsuo SHIBATA</b> <i>(WP1/9 Vice-chair)</i> <i>(Japan)</i> <b>Feng OUYANG</b> <i>(WP1/9 Vice-chair)</i> <i>(ABS, China)</i>	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	<b>WP2/9: Cable-related platforms and applications</b> <b>Taekyoon KIM</b> <i>(WP2/9 Chair)</i> <i>(ETRI, Korea)</i> <b>Pradipta BISWAS</b> <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

## 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-TD758](#).

Mr Evan Sun, who resigned from SG9 has been replaced by Mr Feng Ouyang, ABS China, as Rapporteur for Question 3/9. Mr Sun also resigned as Q7/9 Associate Rapporteur.

## 7 Liaison officers to external groups

SG9 agreed on the list of liaison officers for the Study Period 2022-2024, with the following change as found in [SG9-TD759](#);

Mr Sun has been replaced as the liaison representative for ITU-T SG15, JCA-ML, and SCTE by Mr Miyaji, who is the Chair of SG9. Additionally, with Mr Sheng's retirement from ABS, China, he will no longer serve as the Public Relations representative for SG9. This role was previously shared with the SG9 Chair.

ITU-T FG-MV and ITU-T FG-AN concluded their activities so these entries were removed from the document related to liaison officers.

## 8 Intersector Rapporteur Groups (IRG-AVA)

No meetings of IRG-AVA were held during this SG9 meeting. Representatives of IRG-AVA were invited to join the two Q11/9 sessions, which were held with the support of real-time captioning.

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

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-T SG16 ITU-R SG6	<a href="https://itu.int/en/irg/ava">https://itu.int/en/irg/ava</a>

## 9 Outgoing Liaison Statements

The following table shows the list of the 14 agreed outgoing liaison statements, as indicated in [SG9-TD777](#):

#	Q	WP	To	For	Title	TD
1	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 DOCSIS-related work items in ITU-T SG9 (Approval of revised Recommendation ITU-T J.224 and ITU-T J.225, and Agreement on the revised Supplement ITU-T J Suppl. 10)	<a href="#">TD873</a>
2	Q1/9	WP1	ITU-R WP6A and WP6B, ITU-T SG16	Information	LS/o on initiation of the new work item on the draft ITU-T Recommendation J.wtv-req "Functional Requirements for secondary distribution of digital television and audiovisual content to portable devices using the wireless local area network"	<a href="#">TD874R1</a>
3	Q1/9	WP1	ITU-R SG6, ATSC	Information	LS/o on initiation of the new work item on the draft ITU-T Technical Report TR.atsc-imatv "ATSC 3.0 and 1.0 integrated-MATV system over digital terrestrial television broadcasting"	<a href="#">TD875</a>
4	Q2/9	WP1	SG11	Information	LS/o/r on agreement of a draft new ITU-T J Supplement 13 (ex J.FSR-TEST) "Factual subscriber-base reporting and protected content delivery in Conditional Access System - Test Methods" (SG11-LS162)	<a href="#">TD889R1</a>

#	Q	WP	To	For	Title	TD
5	Q4/9	WP1	ITU-D Study Group 1 and 2	Action	LS/o on requests to continue the survey on hybrid cable network and respond to the revised TSB Circular 219	<a href="#">TD881</a>
6	Q5/9	WP2	ITU-T SG11, ITU-T SG16, ITU-R SG6 WP6B	Information	LS/o on AAP consent of draft new Recommendation ITU-T J.1207 (ex J.stvos-ct) "Smart television operating system - Conformance test"	<a href="#">TD894R1</a>
7	6/9	WP1	SG12, SG13, SG16	Information	LS/o on the start of a new work item by Q6/9 on J.cloud-game-trr "The capability framework of cloud gaming smart terminal - requirements"	<a href="#">TD876</a>
8	6/9	WP1	SG16	Information	LS/o on the start by ITU-T SG9 of the approval process (AAP) for ITU-T J.1292 (ex. J.STB-UHDVR)"Functional requirements for cable set-top box supporting Ultra-High-Definition video and virtual reality services"	<a href="#">TD877</a>
9	Q7/9	WP1	ETSI TC Cable, TTA	Information	LS/o on the establishment of a new work item ITU-T J.DAS.req "Requirements for IP-based smart digital audio services"	<a href="#">TD868R1</a>
10	Q8/9	WP2	ITU-T Study Groups 13, Study Groups 16	Information	LS/o on the initiation of new work item supplement to the Recommendations ITU-T J.1305-J.1306 J.Sup.mma-uc "Use cases of microservices architecture for audiovisual media in the converged media cloud"	<a href="#">TD891R2</a>
11	Q9/9	WP2	ITU-T SG16, SG13, ETSI ISG F5G and IEC TC 100	Information	LS/o on AAP Consent of the draft new Recommendation ITU-T J.1318 (ex. J.cloud-ow) "Requirements of E2E Network Platform for Cloud-based Object Wave Transmissions"	<a href="#">TD883R2</a>
12	Q9/9	WP2	ITU-T SG16 and SG13	Information	LS/o on initiation of the new work item ITU-T J.cloud-game-sia "Cloud gaming service infrastructure architecture"	<a href="#">TD884R1</a>
13	Q10/9	PLEN	TSAG	Action	LS/o/r on the resolution of AAP comments (TSAG-LS44)	<a href="#">TD862R1</a>

#	Q	WP	To	For	Title	TD
14	Q10/9	PLEN	SG15	Action	LS/o/r on the new version of the Access Network Transport (ANT) Standards Overview and Work Plan (SG15-LS115)	<a href="#">TD892</a>

## 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-TD851R2](#). It was approved.

#### Executive summary:

Question 1/9 examined 17 contributions and six TDs, including four incoming liaison statements.

Question 1/9 and Question 4/9 jointly examined one contribution and one TD.

Question 1/9 and Question 7/9 jointly decided to reach AAP consent for draft Recommendations ITU-T J.224 (ex J.224-rev), J.225 (ex J.225-rev), and to reach Agreement for the draft revised Supplement ITU-T J suppl. 10 (ex J.sup10-rev), the texts are available in [TD870](#), [TD871](#), and [TD872](#), respectively.

Question 1/9 agreed to output the revised baseline text for the draft Recommendation ITU-T J.wtv-req, as well as to re-issue the revised A.1 justification, the texts are available in [TD863](#) and [Annex C](#) in this report, respectively.

Question 1/9 agreed to initiate the new work item and output the baseline text on the draft ITU-T Technical Report TR.atssc-imatv “ATSC 3.0 and 1.0 integrated-MATV system over digital terrestrial television broadcasting”, the text is available in [TD869](#).

The WP1 Plenary was requested to review the A.13 justification of ITU-T Technical Report TR.atssc-imatv, which was agreed as found in [Annex D](#) in this report.

Question 1/9 reviewed all incoming liaison statements and agreed to send three 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 Recommendations ITU-T J.224 and J.225 as well as agreement of ITU-T J Suppl. 10, as found in [TD873](#).
- to inform ITU-R WP6A and WP6B, and ITU-T SG16 on the initiation of the new work item of J.wtv-req, as found in [TD874](#), and
- to inform ITU-R SG6 and ATSC on the initiation of new work item of ITU-T Technical Report TR.atssc-imatv, as found in [TD875](#).

Question 1/9 kindly requested that SG9 experts provide their migration scenarios to J.cable-rf-to-ip.



Q1/9 is planning one interim Rapporteurs meeting to be held online on 2 Dec 2024.

In addition, Q1/9 discussed whether would be appropriate to include in ITU-T J.224 and J.225 titles the related correspondence of Cablelabs terminology, e.g. (DOCSIS 4.0 and DOCSIS 3.1), which would correspond to the fifth and fourth generations transmission systems. However, it was clarified that in ITU-T we only mention the related generations and do not mention the corresponding Cablelabs terms which are also trademarks. In addition the Supplement 10 provides all related information to clarify the correspondences among ITU-T Recommendations and Cablelabs specifications and related generations.

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

The report of Q2/9 can be found in [SG9-TD852R2](#). It was approved.

### **Executive summary:**

Q2/9 achieved the following results:

- One work item was finalized for AAP consent:
  - Draft new Recommendation ITU-T J.1040 (ex J.DRMVA-REQ) “Digital rights management for video and audio content distribution – Requirements”, the text proposed for consent is available in [TD886](#).
- One outgoing liaison statement was prepared in reply to SG11-LS162 (LS/i/r on agreement of a draft new ITU-T J Supplement 13 (ex J.FSR-TEST) "Factual subscriber-base reporting and protected content delivery in Conditional Access System - Test Methods"), the outgoing LS is available in [TD889](#).
- The group progressed the work on draft new Recommendations ITU-T J.DRMVA-arch and ITU-T J.DRMVA-client. The output drafts are available in [TD887](#) and [TD888](#).
- One interim meeting is planned: 9:30-11:30 (Geneva time) on 20 November 2024 (TBC), e-meeting, to progress the work item J.DRMVA-rbst and to discuss the FSR-series.
- One joint meeting with Q2, Q5 and Q6 is planned on 20 November 2024, 12:00-14:00 (Geneva time), to Discuss the J.FSR series.

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During WP1/9 closing plenary it was discussed how to progress the discussion on FSR SMS requirements.

It was mentioned that:

1. Similar contribution from India was discussed in the previous SG9 meeting in May 2024. At that time, it was agreed to undertake an interim meeting in July 2024 but it was not possible to progress discussion at that meeting. Similar issues were raised again during this Tokyo meeting. The main issue is a lack of clarity from ITU-T SG9 delegates on the detailed FSR structure and especially relations between FSR CAS and FSR SMS.

2. It was mentioned that SMS could be universally applicable and not only related to FSR CAS. In this context it was questioned the relevance to the security and content protection aspects.
  1. Some delegates think that the FSR SMS should be handled in other Questions related to STB (Q6/9) or Operating Systems (Q5/9).
  2. Other delegates think that FSR SMS is very related to CAS and so should be handled under Q2/9.
3. There are different opinions on which structure of SG9 J-series Recommendations should be used to develop FSR SMS (same as FSR or other series). Other delegates believe that the FSR SMS should be part of a revised ITU-T J.1036.
4. In SG9 it was not possible to discuss in detail the technical content of FSR SMS requirements yet, however there was no opposition expressed on the idea to develop FSR SMS requirements in the future, as long as it is clear the framework under which this development should be discussed.

An interim meeting of Joint Q2, Q5 and Q6 was agreed to be organized to clarify all above issues on 20 November 2024, 12:00-14:00 (Geneva time), e-meeting. The terms of reference are:

*Discuss the J.FSR series in view to identify:*

- *What Question should lead the discussion on SMS requirements document*
- *Which structure of the J-series should be adopted*
- *Possibly start the new work item(s) at Rapporteur group level*

The contributors from India agreed to submit input documents to clarify all issues, including submitting a power point presentation to be given during the joint meeting, taking into account the comments in Q2 report (TD852R2) (Annex C).

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

The report of Q3/9 can be found in [SG9-TD853R1](#). It was approved.

#### **Executive summary:**

In this SG9 meeting, Question 3 reviewed 6 incoming liaisons and 3 admin documents:

- TD: [TD792](#), [TD793](#), [TD794](#), [TD816](#), [TD829](#), [TD784](#), [TD774](#), [TD772](#), [TD773](#).

Question 3/9 encourages its Rapporteur and other interested members to do some research on the current work items and responsibilities of Q5/16 and, if appropriate, submit contributions to SGC for possible harmonization among Q3/9 and Q5/16 in view to achieve a balanced workload.

### **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 can be found in [SG9-TD854R1](#). It was approved.

### **Executive summary:**

Question 4 reviewed C161, and TD827 which contained replies to the survey on use cases of Hybrid Cable Network contained in TSB Circular 219. In this regards, Q4/9 identified that an important clarification is needed:

*Hybrid fibre network uses optical fibre cable to some point in the access network, such as curb (FTTC) or sub-centre/node (FTTN), where the fibre is connected to the metallic cable (with VDSL and G.fast) to each individual houses. However, fibre to the building (FTTB) connected to in-building metallic cable is not considered as a hybrid cable network.*

With this, it was agreed to modify the definition of hybrid cable network to exclude in-building metallic connection. The output document [[TD880R1](#)] of revised Supplement 11 reflects the modification. The meeting also agreed to send to ITU-D SG1 and SG2 a liaison statement to foster reply to the survey on hybrid cable network under the revised definition [[TD881](#)].

In addition, a similar clarification was agreed to be included in the revised TSB circular 219, which Question 4/9 is asking TSB to issue with an extended deadline until end of July 2025 [[TD882](#)].

Question 4 discussed C136 from Haiti, Mali and Central African Republic which explains the technology used for OTT-TV in detail and invite SG9 to study how OTT is used to integrate rural areas, or in the context of emergency communications and universal services. The meeting learned that Haiti had already started to build its own OTT platform to distribute local content, and praised the endeavour.

The meeting also reviewed C169 from Democratic Republic of the Congo, and C132 and C135 from Congo. These contributions discuss functional requirements for terminal devices of the integrated broadband cable network, revenue loss due to fraud in IPTV services, network and terminal device requirements for extended reality (XR) services. Q4/9 noted that those technical issues are already being dealt with by other Questions of SG9, and decided to direct the contributors to each relevant questions.

Question 4 participants appreciated the support and leadership of Mr Shibata as rapporteur of Question 4/9 in this study period and expressed the desire to have Mr Shibata continuing in that capacity to make sure that this important work dedicated to developing countries continues in the consolidated SGC in the next study period

No interim meeting was 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-TD855R1](#). It was approved.

### **Executive summary:**

Q5/9 addressed one contribution.

The group reviewed and updated the text of draft new Recommendation J.1207 (ex J.stvos-ct) and agreed to seek consent of this draft new Recommendation at this Study Group 9 meeting. The text proposed for consent is available in [TD893](#).

The group produced one outgoing liaison statement to inform ITU-T SG11, ITU-T SG16 and ITU-R SG6 WP6B on consent of draft new Recommendation J.1207 (ex J.stvos-ct) “Smart television operating system - Conformance test”, available in [TD894](#).

One joint interim meeting of Q5/9 with Q2/9 and Q6/9 has been planned during WP1/9 plenary to discuss FSR SMS series.

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

The report of Q6 can be found in [SG9-TD856R1](#). It was approved.

##### **Executive summary:**

Q6/9 meeting was held according to the agenda [TD841](#).

- One draft Recommendation J.1292 (ex J.STB-UHDVR) was reviewed and agreed to be proposed for AAP consent. The latest draft for consent is posted as: [TD849](#).
- Three input liaison statements were reviewed.
- Two output liaison statements were created:

[TD876](#): LS/o on the start of a new work item by Q6/9 on J.cloud-game-trr "The capability framework of cloud gaming smart terminal - requirements" [to ITU-T SG12, SG13, SG16]

[TD877](#):LS/o on the start by ITU-T SG9 of the approval process (AAP) for ITU-T J.1292 (ex. J.STB-UHDVR)"Functional requirements for cable set-top box supporting Ultra-High-Definition video and virtual reality services" [to ITU-T SG16]

- One new work item was reviewed and agreed to start. A.1 Justification and baseline text are available in [TD850](#) : Output - Draft new Recommendation ITU-T J.cloud-game-trr "The capability framework of cloud gaming smart terminal - requirements". The related A.1 Justification is found in [Annex E](#).
- Two interim meetings were agreed to be undertaken, planned on 8 and 20 November 2024.

#### **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 can be found in [SG9-TD857R1](#). It was approved.

##### **Executive summary:**

Q7/9 achieved the following results:

- Two outgoing liaison statements were approved;

- [TD873](#): LS/o on DOCSIS-related work items in ITU-T SG9 (Approval of revised Recommendation ITU-T J.224 and ITU-T J.225, and Agreement on the revised Supplement ITU-T J Suppl. 10) (sent to: ITU-T SG15, ETSI TC Cable, IEC TC100, CableLabs, SCTE, TTA, TTC, IEEE 802.3 Ethernet WG, CCSA) in joint meeting with Q1/9 & Q7/9
- [TD868](#): LS/o on the establishment of a new work item ITU-T J. DAS.req “Requirements for IP-based smart digital audio services” (sent to: ETSI TC Cable, TTA) in Q7/9 meeting;
- Two Recommendations were agreed in joint meeting with Q1/9 & Q7/9 to be proposed to the SG9 Plenary for consent;
  - [SG9-TD870](#): Consent – Draft revised Recommendation ITU-T J.224-rev “Fifth-generation transmission systems for interactive cable television services - IP cable modems”
  - [SG9-TD871](#): Consent – Draft revised Recommendation ITU-T J.225-rev “Fourth-generation transmission systems for interactive cable television services - IP cable modems”;
- One new work item was agreed to initiate as follows: J.DAS.req, the output draft is available in [SG9-TD867](#). A.1 Justification as found in [Annex F](#)
- One Supplement was agreed in Q1 & Q7 joint meeting to be proposed to the SG9 Plenary for agreement:
  - [SG9-TD872](#): Agreement - Draft revised Supplement ITU-T J.Sup.10-rev " Correspondence Between CableLabs DOCSIS Specifications and ITU-T J-series Recommendations”
- One interim meeting was planned on 8 November 2024.

### **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 can be found in [SG9-TD858R3](#). It was approved.

#### **Executive summary:**

Q8/9 achieved the following results:

- One new work item was agreed to start:
  - Draft new supplement to the Recommendations ITU-T J.1305-J.1306 J.sup.mma-uc on "Use cases of microservices architecture for audiovisual media in the converged media cloud", the output is available in [TD890R1](#).
- One outgoing LS on the initiation of new work item ITU-T J.Sup.mma-uc was agreed to be sent to ITU-T SG13 and ITU-T SG16. It's available in [TD891R2](#).

One interim meeting was planned: 26 November 2024, 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-TD859R2](#). It was approved.

#### **Executive summary:**

Q9/9 discussed three contributions and twelve TDs, including six incoming liaison statements.

Q9/9 agreed to reach AAP consent for the draft new Recommendation ITU-T J.1318 (ex. J.cloud-ow) "Requirements of E2E Network Platform for Cloud-based Object Wave Transmissions" from this SG9 meeting. The latest text is available in [TD848R1](#).

Q9/9 agreed to start the new work item J.cloud-game-sia "Cloud gaming service infrastructure architecture". The A.1 justifications for the draft new Recommendation can be found in [Annex C. TD885](#) was adopted as the baseline text of J.cloud-game-sia.

Q9/9 agreed to send two outgoing liaison statements as follows:

- to inform ITU-T SG16, SG13, ETSI ISG F5G and IEC TC 100 on AAP consent of draft new Recommendation ITU-T J.1318 (ex. J.cloud-ow), as found in [TD883R2](#).
- to inform ITU-T SG16 and SG13 on the initiation of new work item on draft new Recommendation J.cloud-game-sia, as found in [TD884R1](#).

Q9/9 agreed to delete J.cloud-vr-arch from the work programme at Q9/9 level.

Q9/9 planned to organize one interim meeting on 8 November 2024.

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

The report of Q10/9 can be found in [SG9-TD860R1](#). It was approved.

#### **Executive summary:**

Question 10/9 reviewed twenty-seven (27) inputs, including twenty-four (24) incoming liaison statements.

- Question 10/9 agreed to send two (2) reply liaison statements as follows:
  - o [SG9-TD862R1](#): LS/o/r on the resolution of AAP comments (TSAG-LS44) [to TSAG]
  - o [SG9-TD892](#): LS/o/r on the new version of the Access Network Transport (ANT) Standards Overview and Work Plan (SG15-LS115) [to SG15]
- Regarding the next update of ITU-T J.1 on terms and definitions, the Rapporteur agreed that a revision of this existing Recommendation should start at the next January 2025 meeting of the consolidated SGC and perhaps completed for consent at the following meeting of SGC which should be held at the end of 2025. China is planning contributions to follow up.

- No interim meetings were planned.

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

The report of Q11/9 can be found in [SG9-TD861R1](#). It was approved.

#### Executive summary:

Q11/9 achieved the following results:

- Reviewed one contribution on draft new Recommendation J.CLE-ARVR "Terminology, Metrics and Functional requirements for Cognitive Load Estimation for Augmented and Virtual Reality (AR/VR) services” and updated its baseline text which is available in [TD879](#).
- Reviewed the output document of the previous RGM meeting of Q11/9 on the draft new Recommendation J.acc-us-prof "Requirements for the semantics of a Common User Profile used to personalize audiovisual media " and updated its clean baseline text which is available in [TD878](#).
- Reviewed the various LS/i/r and other TDs.
- No interim meeting is planned. It was discussed the possibility to hold next IRG-AVA meeting in co-location with ITU-R SG6 in November 2024.

No outgoing liaison statement was developed.

## 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 consolidated SGC meeting, currently planned in Geneva, Switzerland, 13-24 January 2025.

### 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
1/9	2 December 2024 (14:00-16:00 CET)	E-meeting	Progress on TR.atssc-imatv	Kei Kawamura ( <a href="mailto:ki-kawamura@kddi.com">ki-kawamura@kddi.com</a> )
2/9	20 November 2024 (9:30-11:30 CET)	E-meeting	Progress on J.DRMVA-rbst,	Han-seung KOO ( <a href="mailto:koohs@etri.re.kr">koohs@etri.re.kr</a> )

Q/SG	Date	Place / Host	Terms of reference	Contact
<b>Joint 2/9, 5/9, 6/9</b>	20 November 2024 (12:00-14:00 CET)	E-meeting	Discuss the J.FSR series in view to identify: - What Question should lead the discussion on SMS requirements document - Which structure of the J-series should be adopted  Possibly start the new work item(s) at Rapporteur group level	Han-seung KOO ( <a href="mailto:koohs@etri.re.kr">koohs@etri.re.kr</a> )  Haifeng Yan ( <a href="mailto:yanhaifeng@hisilicon.com">yanhaifeng@hisilicon.com</a> )  Xin Zhang ( <a href="mailto:xin.zhang@skyworth.com">xin.zhang@skyworth.com</a> )
<b>6/9</b>	8 Nov 2024 (10:00-11:00 CET)	E-meeting	Review progress for J.cloud-game-trr Review any additional contributions on any topic	Xin Zhang ( <a href="mailto:xin.zhang@skyworth.com">xin.zhang@skyworth.com</a> )
<b>7/9</b>	8 November 2024 (10:30-11:45 CET)	E-meeting	Progress on J.DVCS.spec Progress on JSTR-STBN	TaeKyoon Kim ( <a href="mailto:tkkim@etri.re.kr">tkkim@etri.re.kr</a> )
<b>8/9</b>	26 November 2024 (2 sessions from 11:30-14:30 CET)	E-meeting	Progress ongoing work item J.Sup.mma-uc.  Discuss any additional contribution	Rakesh Desai ( <a href="mailto:rakesh.desai@gov.in">rakesh.desai@gov.in</a> )
<b>9/9</b>	8 November 2024 (09:00-10:15 CET)	E-meeting	Progress on J.cloud-game-sia	Yanhua Niu ( <a href="mailto:niuyanhua@abs.ac.cn">niuyanhua@abs.ac.cn</a> )
<b>11/9</b>	Q11/9 plans to meet under the framework of IRG-AVA, whose meeting is to be planned by IRG-AVA management in November 2024, in co-location with ITU-R SG6 meeting. The terms of reference include reviewing Q11/9 work items with IRG-AVA experts.			

## 12 Actions agreed

It was agreed to request TSB to issue a revised TSB Circular 219, including some clarifications on the technical requirements and an extended deadline [[SG9-TD882](#)].

## 13 Next Study Group 9 meeting

Next ITU-T SG9 meeting is scheduled to be held in the framework of the consolidated SGC (pending WTSA-24 deliberations) from 13 to 24 January 2025 in Geneva, Switzerland, hosted by ITU. More information will be provided on the SGC website (to be created after WTSA-24).