

Executive summary of ITU-T SG9 meeting (Beijing, 10-17 June 2015)

A Study Group 9 meeting was held in Beijing, 10-17 June 2015 at the kind invitation of SAPPRFT/China, and was attended by 43 delegates from 11 countries. Along with face-to-face meetings, Q4/9 was supported by remote participation, as requested by SG9 Management. The meeting also hosted one session of the IRG-IBB meeting.

1 Consented Recommendations (ITU-T A.8)

The following table shows 'Consented' draft Recommendations.

#	Question	Recommendation	Status	Title	Final TD GEN	A.5 justification
1	3	ITU-T J.1005 (J.drm-req)	New	Architecture and requirements of DRM for cable television multiscreen	TD 727 (GEN/9)	N/A
2	3	ITU-T J.1004 (J.rcas-ac)	New	Specifications of authorization centre interfaces for renewable conditional access system	TD 726 (GEN/9)	N/A
3	4	ITU-T J.230 (J.cab-mob-req)	New	Requirements for platform functionalities on the integration of cable STB and mobile second screen devices"	TD 719 Rev.1 (GEN/9)	N/A
4	7	ITU-T J.1103 (J.vodoc-trans)	New	Transmission specification for IP-based switched digital video using Data Over Cable Service Interface Specifications	TD 735 (GEN/9)	N/A
5	7	ITU-T J.1102 (J.vodoc-int)	New	Interface specification for IP-based switched digital video using Data Over Cable Service Interface Specifications	TD 734 (GEN/9)	N/A

2 Supplements, Amendments, Corrigenda and Guidelines

2.1 Supplements

No Supplements were proposed for approval at this meeting.

2.2 Amendments

No Supplements were proposed for approval at this meeting.

2.3 Corrigenda

No Supplements were proposed for approval at this meeting.

3. New and deleted work items

3.1 SG9 agreed to start the following new work items

Question	Work item	status	Title	Editor	Timing	Reference
Q1/9	J.tlv-pack	New	Encapsulation of Type-Length-Value (TLV) packet for cable transmission systems	Naoyoshi Nakamura; Yoshitaka Hakamada	2016	TD 731 (GEN/9) and Annex C of TD 701 Rev.1
Q2/9	J.341-rev	Revised	Objective perceptual multimedia video quality measurement of HDTV for digital cable television in the presence of a full reference	Margaret H. Pinson; Silvio Borer	2016	TD 693R1 (GEN/9) and Annex C of TD 702 Rev.1
Q3/9	J.ipvdrm	New	Specification of IP-VOD DRM for cable television multiscreen system in Multi-DRM environment	Kenji Obata Han-Seung Koo	2016	TD 724 (GEN/9) and Annex B of TD 703 Rev.1
Q3/9	J.dmc-d-req	New	Architecture and requirements of downloadable multi-CA/DRM	Han-Seung KOO	2016	TD 725 (GEN/9) and Annex C of TD 703 Rev.1
Q4/9	J.acf-hrm	New	Harmonization of Integrated Broadcast-Broadband DTV application control framework	Masaru Takechi, Aguinaldo Boquimpani	2016	TD 695 (GEN/9) and Annex C of TD 704 Rev.1
Q5/9	J.4kstb	New	Requirements and functional specification of cable set top box for 4K ultra high definition television	Kenji Obata	2016-09	TD 728 (GEN/9) and Annex B of TD 705 Rev.1
Q7/9	J.chswt-req	New	Requirement of channel switching service over Hybrid Fiber and Coaxial based network	TaeKyoong Kim, Joonyoung Jung,	2016-12	Annex C of TD 707 Rev.1
Joint Q1/9 & Q7/9 [Q1 Lead]	J.HiNoC2-req	Revised	Functional Requirements for Second-generation HiNoC	Jingfei Cui, Ouyang Feng	2016-01	TD 754 (GEN/9) and Annex C of TD 755 Rev.1
Joint Q1/9 & Q7/9 [Q7 Lead]	J.C-DOCSIS-req	New	Functional Requirements for Cabinet DOCSIS (C-DOCSIS)	Zhifan Sheng Yanlong Qin Peijiang Zhu	2016-01	TD 752 (GEN/9) and Annex D of TD 755 Rev.1

Question	Work item	status	Title	Editor	Timing	Reference
Joint Q1/9 & Q7/9 [Q7 Lead]	J.C-DOCSIS-spec	New	Cabinet DOCSIS (C-DOCSIS) System Specification	Zhifan Sheng Yanlong Qin Peijiang Zhu	2016-01	TD 753 (GEN/9) and Annex E of TD 755 Rev.1
Q12/9	P.913-rev	Revised	Methods for the subjective assessment of video quality, audio quality and audiovisual quality of Internet video and distribution quality television in any environment	Margaret H. Pinson; Chulhee Lee	2016-11	TD 689 Rev.1 and Annex B of TD 712 Rev.2
Q12/9	J.343-rev	Revised	Hybrid perceptual/bitstream models for objective video quality measurements	Margaret H. Pinson, Silvio Borer, Chulhee Lee	2016-11	Annex C of TD 712 Rev.2

3.2 SG9 agreed to stop working on the following work items at this meeting:

- **Consented J.369.1** – “Residential SIP Telephony Provisioning, Activation, Configuration and Management Specification” (Q8/9) [Decided to withdraw the Consent status]
- **J.iptvappclient** – “Description of the Application Client Interface” (Q8/9)
- **J.iptvcontentclient** – “Description of the IPTV Content Client Interface” (Q8/9)
- **J.rcas-saf.req** – “Requirements for Smart Agricultural Framework over RCAS in CATV network” (Q3/9)
- **J.hadi** – “Harmonization of APIs for device integration” (Q4/9)

4. Questions

Study Group 9 noted that TSAG has endorsed the proposed revisions to the text of Question 9/9 “*Requirements for advanced service capabilities over broadband cable home networks*”. SG9 Plenary approved the revised text according to WTSA Resolution 1.

The latest version of the modified Terms of Reference for Q9/9 is to be found in [TD 526 Rev.1 \(GEN/9\)](#). A circular letter was issued to inform the Membership

[\[See: SG9 Circular 162\]](#)

4.1 Revised SG9 Questions texts in view of WTSA-16

SG9 has developed a draft revised set of Questions texts in view of WTSA-16. These texts are to be found in [TD 668 \(Addendums 1-14\)](#)

Addendum X to TD 668 details the revisions of Question X/9 (e.g. Addendum 3 provides the revisions of Question 3/9). Addendum 14 instead provides the revisions to the extract of Resolution 2 from WTSA-12. These revisions will be further considered at next January 2016 meeting of SG9. It was decided to organize a Rapporteur meeting of Q13/9 in November or December 2016 to discuss in detail each revised Question texts.

5. SG9 Management, Rapporteurs and Associate Rapporteurs

5.1 Rapporteurs and Associate Rapporteurs

- **Q3/9:** Kenji Obata (Japan Cable Laboratories, Japan) is a new Associate rapporteur.
- **Q3/9:** Phisit Pungvora-asn (Office of the national broadcasting and telecommunication commission (NBTC), Thailand) is a new Associate rapporteur.
- **Q8/9:** Sung-kwon Park (Ministry of Information and Communication, Korea) is promoted from Associate Rapporteur to the Rapporteur.

The final list of Rapporteurs and Associate Rapporteurs, is to be found in [TD 596 Rev.4 \(GEN/9\)](#).

6. Liaison officers

SG9 has slightly revised the list of liaison officers:

- Dong Wang (ZTE Corporation, China) is SG9 representative to ITU-T SG13 and cloud related activities
- Margaret Pinson (NTIA, USA) is a new SG9 representative to ITU-T SG12
- Arthur Webster (NTIA, USA) is the new SG9 representative to ITU-T SG15 on Home networking, IEC (especially IEC TC100), JCA-CIT and interoperability and conformance testing in general, and Public Relations
- Dong Wang (ZTE Corporation, China) and Arthur Webster are the new SG9 representative to JCA-IoT and SG20 (IoT)
- Masaru Takechi is the new SG9 representative to JCA-IPTV and IPTV-GSI
- Thomas Russell (SCTE) is no longer the Representative to Standardization Committee for Vocabulary and Telecommunication for Disaster Relief (TDR) related activities

The final list of liaison officers is to be found in [TD 595 Rev.1 \(GEN/9\)](#).

7. Intersector Rapporteur Groups (IRG-AVQA; IRG-AVA; IRG-IBB)

WTSA Resolution 18 was revised in WTSA-12 to allow for ITU-R experts to jointly develop work with ITU-T experts in a group officially recognized by both ITU-R and ITU-T.

7.1 IRG-IBB

IRG-IBB held its 5th meeting in Beijing, China on 12 June 2015. The report of this meeting can be found in [TD 757 \(GEN/9\)](#).

7.2 IRG-AVQA

There was no meeting of IRG-AVQA during Study Group 9 meeting in Beijing, China.

7.3 IRG-AVA

There was no meeting of IRG-AVA during Study Group 9 meeting in Beijing, China.

8. WTSA-12 Resolution 80 (Dubai, 2012)

TSAG requested SG9 to implement, on a trial basis, their findings on WTSA-12 Resolution 80 “*Acknowledging active involvement of the Membership in the development of ITU-T deliverables*”. Study Group 9 revised the SG9 guidelines “*Implementation details of WTSA-12 Resolution 80 pilot in SG9*” to address

inputs from the ITU Legal Advisor, who informed SG9 that on item 3 of the guidelines some privacy issues do not allow listing persons that are present at meetings on public web pages. Therefore, it was advised to list all persons that have an official role.

The Guidelines were accordingly revised and were approved by SG9 meeting:

#	Status	Title	Final TD GEN	Contact
1	Revised	SG9 guidelines - Implementation details of WTSA-12 Resolution 80 pilot in SG9	TD 748 (GEN/9)	Satoshi Miyaji

9. Outgoing Liaison Statements

The following table shows the list of the 27 agreed outgoing liaison statements.

#	Document	Questions	WP	To	For	Title
1	TD 730 Rev.1 (GEN/9) ls 101	1/9	1	ITU-R WP6B, JCTEA, ARIB, ETSI TC-Cable, SCTE	Information	LS/o on a study for a high speed transmission scheme by channel bonding technology for UHDTV distribution over cable television networks [to ITU-R WP6B, JCTEA, ARIB, ETSI TC-Cable & SCTE]
2	TD 688 Rev.1 (GEN/9) ls 102	2/9	1	ITU-R WP6C	Information	LS/o/r on Draft New Rec. J.q.uhd “Quality measurement methods for UHD services” (reply to ITU-R WP 6C - Document 6C/TEMP/206 -E) [to ITU-R WP6C]
3	TD 687 Rev.1 (GEN/9) ls 103	2/9	1	VQEG	Action	LS/o on Draft New Rec. P.3D-disp-req “Display requirements for 3D video quality assessment” (revised text discussed at SG9 meeting in Beijing 10-17 June 2015) [to VQEG]
4	TD 718 Rev.1 (GEN/9) ls 104	2/9, 12/9	1	ITU-T SG12, ITU-R WP6C, VQEG	Information	LS/o on on-going work items related to video quality [to ITU-T SG12, ITU-R WP6C, VQEG]
5	TD 720 (GEN/9) ls 105	3/9	1	ITU-T SG17, ARIB	Information	LS/o on AAP Consent of draft new Recommendation ITU-T J.1004 (ex. J.rcas-ac) “Specifications of authorization centre interfaces for renewable conditional access system” [to ITU-T SG17, ARIB]

6	<u>TD 721</u> <u>(GEN/9)</u> <u>ls 106</u>	3/9	1	ITU-T SG17, ETSI ISG ECI, ARIB	Information	LS/o on AAP Consent of draft new Recommendation ITU-T J.1005 (ex J.drm-req) "Architecture and requirements of DRM for cable television multiscreen" [to ITU-T SG17, ETSI ISG ECI, ARIB]
7	<u>TD 722</u> <u>(GEN/9)</u> <u>ls 107</u>	3/9	1	ITU-T SG17, ISO/IEC JTC1 SC29	Information	LS/o on development of draft new Recommendation "Specification of IP-VOD DRM for cable television multiscreen system in Multi-DRM environment" (J.ipvdrm) [to ITU-T SG17, ISO/IEC JTC1 SC29]
8	<u>TD 723</u> <u>(GEN/9)</u> <u>ls 108</u>	3/9	1	ITU-T SG17, ETSI ISG ECI, ARIB	Information	LS/o on development of draft new Recommendation "Architecture and requirements of downloadable multi-CA/DRM" [to ITU-T SG17, ETSI ISG ECI, ARIB]
9	<u>TD 739</u> <u>Rev.1</u> <u>(GEN/9)</u> <u>ls 109</u>	4/9	2	ITU-R Working Party 6B	Information	LS/o on progress of the work related to Integrated Broadcast-Broadband systems [to ITU-R WP 6B]
10	<u>TD 697</u> <u>Rev.1</u> <u>(GEN/9)</u> <u>ls 110</u>	4/9	2	ITU-T SG16 and ITU-R SG6	Action	LS/o/r on participation of ITU-T Study Group 16 to IRG-IBB (reply to SG16 - LS 148) [to ITU-T SG16 and ITU-R SG6]
11	<u>TD 696</u> <u>(GEN/9)</u> <u>ls 111</u>	4, 5/9	2	ITU-R WP6B	Information	LS/o/r on the new ITU-R Report on closed caption (reply to ITU-R WP 6B - ITU-R WP6B/TEMP/165-E) [to ITU-R WP6B]
12	<u>TD 729</u> <u>(GEN/9)</u> <u>ls 112</u>	5/9	2	ISO/IEC JTC1 SC29 WG11, ITU-T SG16	Information	LS/o on the initiation of draft new Recommendation ITU-T J.4ksth [ISO/IEC JTC1 SC29 WG11 and ITU-T SG16]
13	<u>TD 749</u> <u>(GEN/9)</u> <u>ls 113</u>	1/9 7/9	1, 2	SG15, ETSI TC- Cable, IEC TC100, SCTE, RRA, TTC, IEEE 802.3 Ethernet WG, CCSA	Information	LS/o on new work item for J.C-DOCSIS [to SG15, ETSI TC-Cable, IEC TC100, SCTE, RRA, TTC, IEEE 802.3 Ethernet WG, CCSA]

14	TD 750 (GEN/9) ls 114	1/9 7/9	1, 2	SG15, ETSI TC-Cable, IEC TC100, SCTE, RRA, TTC, IEEE 802.3 Ethernet WG, CCSA	Information	LS/o on new work item for J.HiNoC2 [to SG15, ETSI TC-Cable, IEC TC100, SCTE, RRA, TTC, IEEE 802.3 Ethernet WG, CCSA]
15	TD 751 Rev.1 (GEN/9) ls 115	1/9 7/9	1, 2	ITU-R WP 5B (cc SG5, SG9, SG15)	Information	LS/o/r on co-existence between radiocommunication systems and new wired telecommunication standards (reply to ITU-R WP 5B - 5B/TEMP/372 -E) [to ITU-R WP 5B]
16	TD 737 Rev.1 (GEN/9) ls 116	7/9	2	ISO/IEC TC100, SCTE, ARIB, RRA, TTC	Comment	LS/o on new work item for J.chswt-req "Requirement of channel switching service over HFC based network" [to ISO/IEC TC100, SCTE, ARIB, RRA, TTC]
17	TD 736 Rev.1 (GEN/9) ls 117	7/9	2	ISO/IEC TC100, SCTE, ETSI TC-CABLE, RRA, TTC	Information	LS/o on AAP consent of draft new Recommendation ITU-T J.1102 (J.vodoc-int) "Interface Specification for IP-based switched digital video using Data Over Cable Service Interface Specifications" and ITU-T J.1102 (J.vodoc-trans) "Transmission Specification for IP-based switched digital video using Data Over Cable Service Interface Specifications" [to ISO/IEC TC100, SCTE, ETSI TC-CABLE, RRA, TTC]
18	TD 740 (GEN/9) ls 118	13/9	PLEN	JCA-Res178	Information	LS/o/r on JCA-Res178 requests your further input (reply to JCA-Res178 - LS 8 -E) [to JCA-Res178]
19	TD 741 (GEN/9) ls 119	13/9	PLEN	TU-R WPs 1A, 1C, 3L, 3M, 4C, 5A, 5B, 5C, 5D, 6A, 7C and 7D	Comment	LS/o/r on radio frequency interference and co-existence between wired telecommunication and radiocommunication systems (reply to ITU-R WP 5B - 5B/TEMP/372 -E) [to ITU-R WPs 1A, 1C, 3L, 3M, 4C, 5A, 5B, 5C, 5D, 6A, 7C and 7D]
				SG5	Information	

20	TD 742 (GEN/9) ls 120	13/9	PLEN	SG2	Information	LS/o/r on ITU-T study group responsibilities in WTSA Resolution 67 (Rev. Dubai, 2012) – Terms and Definitions harmonization (reply to SG2 - LS 98 -E) [to SG2]
21	TD 743 (GEN/9) ls 121	13/9	PLEN	SG2	Information	LS/o/r on Telecommunication Management and OAM Project Plan (reply to SG2 - LS 86 -E) [to SG2]
22	TD 744 (GEN/9) ls 122	13/9	PLEN	TSAG	Information	LS/o/r on Candidate topics on working methods for ITU inter-Sector coordination (reply to TSAG - LS 11 -E) [to TSAG]
23	TD 745 Rev.1 (GEN/9) ls 123	13/9	PLEN	TSAG	Information	LS/o/r on material on ITU inter-Sector coordination of mutual interest (reply to TSAG - LS 10 -E) [to TSAG]
24	TD 746 (GEN/9) ls 124	13/9	PLEN	TSAG	Information	LS/o/r on draft Recommendation ITU-T A.5 (revised), draft new Recommendation ITU-T A.25 (A.incorp), and draft Supplement A.collab (reply to TSAG - LS 12) [to TSAG]
25	TD 747 (GEN/9) ls 125	13/9	PLEN	SG11	Information	LS/o/r on approval of SG11 Guidelines on “Testing Laboratories recognition procedure” (ex. Q.TL-rec-pro) and first meeting of ITU-T CASC (reply to SG11 - LS 83 Rev.1 -E) [to SG11]
26	TD 694 Rev.2 (GEN/9) ls 126	13/9	PLEN	TSAG	Action	LS/o on advantages and disadvantages of merging SG9 and SG16 [to TSAG]
				SG16 and RevCom	Information	
27	TD 756 (GEN/9) ls 127	WP2	PLEN	ITU-T SG15	Comment	LS/o/r on new versions of the Access Network Transport (ANT) Standardization Overview and Work Plan (reply to SG15 LS216) [to ITU-T SG15]
				BROADBAND FORUM, ITU-R SG 5, ITU-R SG 4, ATIS WTSC, IEC, ISO/IEC	Information	

				JTC1/SC6, IEEE 802.3 Working Group, ETSI TC ATTM, TIA, ATIS COAST-NAI, IEEE P1904.1, ITU-D Q25/2, SG9, SG12, SG13, SG16, SG17, CENELEC TC 209, ETSI TC Cable, CEPT, IEEE 802.16		
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10. Work plan for interim Rapporteur meetings and Working parties meetings

No interim Working Parties meetings will be held before next SG9 meeting.

The following interim Rapporteurs' groups meetings were agreed by SG9 meeting (Beijing, 10-17 June 2015).

Question/WP	Date	Place / Host	Terms of reference	Rapporteur/Acting
Joint 1/9 & 7/9	15-20 October 2015 (TBC)	Geneva (TBC)	Progress on J.HiNoC2-req, J.C-DOCSIS-req/spec, etc.	tkkim@etri.re.kr sakazawa@kddilabs.jp
Joint 1/9 and 7/9	Nov. 2015 (TBD)	E-meeting	Progress on J.HiNoC2-req, J.C-DOCSIS-req/spec, etc.	tkkim@etri.re.kr sakazawa@kddilabs.jp
Joint 2/9 and 12/9	14-18 September 2015	Glasgow , Scotland	Progress on P.3D-disp-req, P.3D-sam, P-3D-fatigue, J.q-uhd, J.341-rev, J.343-rev	chulhee@yonsei.ac.kr mpinson@its.bldrdoc.gov quan.huynh-thu@cisra.canon.com.au

Question/WP	Date	Place / Host	Terms of reference	Rapporteur/Acting
Joint 2/9 and 12/9	TBC November 2015	E-meeting TBC	Progress on P.3D-disp-req, P.3D-sam, P-3D-fatigue, J.q- uhd, J.341-rev, J.343-rev	chulhee@yonsei.ac.kr mpinson@its.bldrdoc.gov quan.huynh- thu@cisra.canon.com.au
3/9	15-20 October 2015 [TBC]	Geneva	Progress on J.dmc-d-req and J.ipvdrm	koohs@etri.re.kr
4/9	November 2015 (TBD)	e-meeting (TBD)	Progress on J.acf-spec, J.acf-hrm etc.	takechi.m-fa@nhk.or.jp
5/9	15-20 October, 2015 (TBC)	Geneva or e- meeting (TBC)	Progress on J.4kstb, Progress on J.rg-spec.	Wang.dong@zte.com.cn
Joint 5/9, 8/9 & 9/9	15-20 October, 2015 (TBC)	Geneva (TBC)	Progress on J.rg-spec&J.lasdp-req Discussion on common interested topic , such as IoT/M2M, Cloud/Big data, UHDTV, Multi-screen, SmartHome, etc	Wang.dong@zte.com.cn sp2996@hanyang.ac.kr zhangjs@chinabtn.com
7/9	15-20 October (TBC)	Geneva (TBC)	Progress on J.Chswt-req	tkkim@etri.re.kr
7/9	November 2105 (mid, TBC)	E-meeting	Progress on J.Chswt-req	tkkim@etri.re.kr
8/9	15-20 October, 2015 (TBC)	Geneva	Initiation on possible new work item for channel & service selection Progress on J.multi-man.	sp2996@hanyang.ac.kr
9/9	15-20 October 2015 [TBC]	E-meeting	Progress on J.lasdp-req	zhangjs@chinabtn.com
10/9	15-20 October 2015 [TBC]	Geneva	Progress on J.arstv-spec Discussion for new work item	tk-takahashi@kddi.com

Question/WP	Date	Place / Host	Terms of reference	Rapporteur/Acting
13/9	November or December (TBD)	E-meeting	Discussion and coordination on Question texts revisions for SG9	Sa-miyagi@kddi.com

11. Next Study Group 9 meeting

Next SG9 meeting is currently scheduled in Geneva, 21-29 January 2016. SG9 Management may decide to reduce the number of days before issuing the invitation (Collective letter).

The following SG9 meeting is currently scheduled in Geneva, 12-16 September 2016.

12. AOB

The HOST, SAPPRFT/China, was thanked and applauded for the excellent support and facilities in Beijing.
