Q1-H03

INTERNATIONAL TELECOMMUNICATION UNION

**TELECOMMUNICATION STANDARDIZATION SECTOR**

STUDY PERIOD 2005-2008

**STUDY GROUP 16**

# TD 503 R1 (PLEN/16)

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**Question(s):** 1, 2, 3, 4, 5, 12, 13, 21, 22, 24, 25, 28, 29/16 Geneva, 22 April - 2 May 2008

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**CONTENTS**




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## 1 Introduction

Working Party 2/16 (Multimedia Systems and Terminals) met from 22 April – 1 May 2008, in Geneva, under chairmanship of Mr Sakae Okubo (Japan).

The Questions currently allocated to WP 2/16 (and respective Rapporteurs) are:

| | |
|---|---|
| Q1/16 | Multimedia Systems, Terminals and Data Conferencing (*Mr Patrick Luthi, Tandberg/Norway*) |
| Q2/16 | Real-Time Audio, Video, and Data Communication over Packet-Switched Networks (*Mr Paul Jones, Cisco/USA*) |
| Q3/16 | Multimedia Gateway Control Architectures and Protocols (*Mr Christian Groves, Australia*) |
| Q4/16 | Advanced multimedia communication service features on top of the ITU-T defined multimedia system platforms (*Mr Sakae Okubo, Japan*) |
| Q5/16 | Control of NAT and Firewall Traversal for H.300-Series Multimedia Systems (*Mr Paul Jones, Cisco/USA*) |
| Q12/16 | Advanced multimedia system for NGN and future packet-switched networks (*Mr Paul Jones, Cisco/USA, Associate Mr Brody Kenrick, Dilithium/USA*) |
| Q13/16 | Multimedia application platforms and end systems for IPTV (*Mr Masahito Kawamori, NTT/Japan*) |
| Q21/16 | Multimedia Architecture (*Mr Yoshinori Goto, NTT/ Japan, Associate Ms Mingjun Sun, CATR/China*) |
| Q22/16 | Multimedia applications and services (*Mr Noah Luo, Huawei/China*) |
| Q24/16 | Quality of Service and End-to-end Performance in Multimedia Systems (*Mr Seong-Ho Jeong, Korea*) |
| Q25/16 | Multimedia Security in Next Generation Networks (*Mr Patrick Luthi, Tandberg/ Norway, a.i.*) |
| Q28/16 | Multimedia framework for e-health applications (*Mr Vicente Traver, Spain*) |
| Q29/16 | Mobility for Multimedia Systems and Services (*Mr Leo Lehmann, OFCOM/ Switzerland*) |

## 2 Organization of work

### 2.1 Documentation

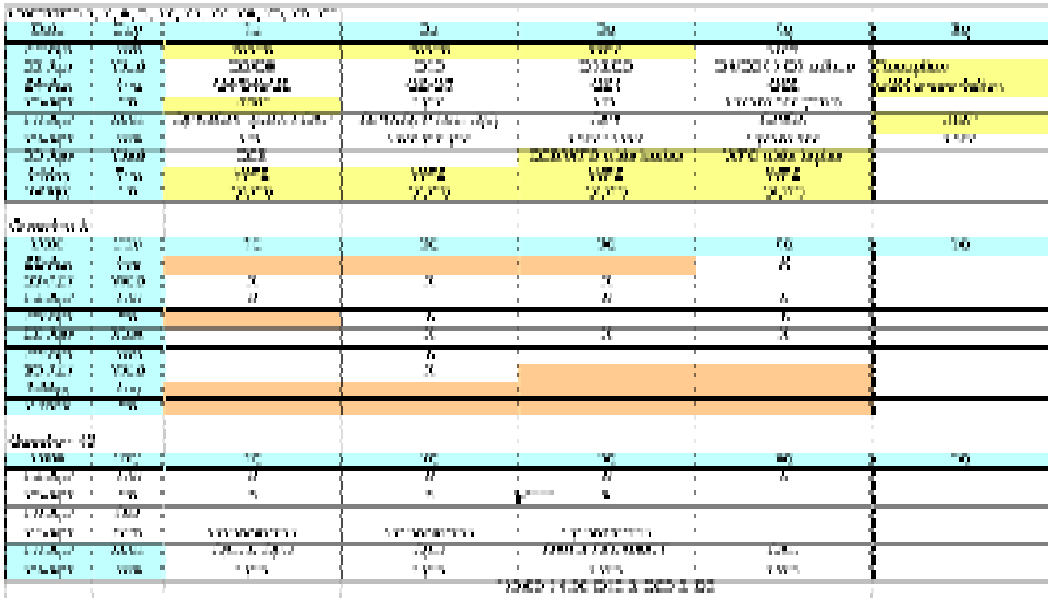
- Contributions: COM16-C.427
- TD/Plen: 441, 442
- TD/Gen: 396, 408, 415, 416, 417, 430, 433, 445, 449, 453, 469, 470, 471, 472, 474, 484, 497, 500, 501, 504

- TD/WP2: 521, 533, 534, 535, 538, 541, 542, 568, 627, 636R1

### 2.2 Allocation of the work

WP 2/16 adopted the agenda provided in TD 521/WP2 and the initial work schedule in Addendum 3 to TD 521/WP2.

WP2 had serial sessions as much as practical as in the following diagram:



## 3 Results

### 3.1 Summary

#### 3.1.1 Recommendations for Approval

No documents were considered under TAP approval at this meeting.

#### 3.1.2 Recommendations proposed for Consent in accordance with Rec. A.8.

The following Recommendations were proposed by WP 2/16 for Consent:

| Description | Type | Documents | Question |
|---|---|---|---|
| ITU-T Rec. H.222.0 (05/2006) \| ISO/IEC 13818-1:2007 Cor.1 "Information technology - Generic coding of moving pictures and associated audio information: Systems: Correction of zero_byte syntax element and stream_id_extension mechanism" | New | TD 472/Plen | 1/16 |
| ITU-T Rec. H.241 Amendment 1 "New Clause on Video Submode Procedure; associated additions to Appendix I and new Appendix II" | New | TD 490/Plen | 1/16 |
| ITU-T Rec. T.128 "Multipoint application sharing" | Rev | TD 471/Plen | 1/16 |
| ITU-T Rec. H.245 “Control protocol for multimedia communication” | Rev | TD 516/Plen | 2/16 |

| Description | Type | Documents | Question |
|---|---|---|---|
| ITU-T Rec. H.248.11 Corrigendum 1 "Gateway Control Protocol: Media gateway overload control package: Clarifying MG_overload event relationship to ADD commands" | New | TD 518/Plen | 3/16 |
| ITU-T Rec. H.248.37 "Gateway control protocol: IP NAPT traversal package: Semantic clarification and address reporting package" | Rev | TD 485/Plen | 3/16 |
| ITU-T Rec. H.248.41 Amendment 1 "Gateway control protocol: IP domain connection package: IP Realm Availability Package" | New | TD 473 R1/Plen (A.5 in TD 495/Plen) | 3/16 |
| ITU-T Rec. H.248.43 "Gateway control protocol: Gate Management Packages" | New | TD 497/Plen | 3/16 |
| ITU-T Rec. H.248.47 "Gateway control protocol: Statistic Conditional Reporting Package" | Rev | TD 475/Plen | 3/16 |
| ITU-T Rec. H.248.52 "Gateway Control Protocol: QoS Support Packages" | New | TD 476/Plen (A.5 in TD 491/Plen) | 3/16 |
| ITU-T Rec. H.248.53 "Gateway Control Protocol: Traffic Management Packages" | New | TD 477/Plen (A.5 in TD 492/Plen) | 3/16 |
| ITU-T Rec. H.248.55 "Gateway Control Protocol: Pull Mode Packages" | New | TD 478/Plen | 3/16 |
| ITU-T Rec. H.248.57 "Gateway Control Protocol: RTP Control Protocol Package" | New | TD 517/Plen (A.5 in TD 493R1/Plen) | 3/16 |
| ITU-T Rec. H.248.58 "Gateway Control Protocol: Packages for Application Level H.248 Statistics" | New | TD 519/Plen (A.5 in TD 494/Plen) | 3/16 |
| ITU-T Rec. H.248.62 "Gateway Control Protocol: Re-Answer Call Support" | New | TD 514/Plen | 3/16 |
| ITU-T Rec. H.351 (ex H.350.WI) "Semantic Web Interface for Multimedia Terminal and System Directories (SWIM-D)" | New | TD 465/Plen (A.5 in TD 464/Plen) | 4/16 |
| ITU-T Rec. T.172 Corrigendum 1 "Application Programming Interface (API) for MHEG-5" | New | TD ~~xxx~~527/Plen | 13/16 |
| ITU-T Rec. H.622 (ex H.ghna) "A generic Home Network architecture with support for multimedia services" | New | TD 537~~xxx~~/Plen (A.5 in TD 463/Plen) | 21/16 |
| ITU-T Rec. H.621 (ex H.mid) "Tag-based ID triggered multimedia information access system architecture" | New | TD 529~~xxx~~/Plen | 21/16 |
| ITU-T Rec. F.771 (ex F.mid) "Service description and requirements for multimedia information access triggered by tag-based identification" | New | TD 520~~xxy~~/Plen | 22/16 |
| ITU-T Rec. H.361 Amendment 1 "End-to-end quality of service (QoS) and service priority signalling in H.323 systems: New Annex A 'IntServ/RSVP support for H.323 Systems', Annex B 'DiffServ Support for H.323 Systems' and Annex C 'Priority Support for H.323 Systems'" | New | TD 525~~xxx~~/Plen (A.5 in TD 469/Plen and 470/Plen) | 24/16 |
| H.235.6 Amendment 1 "H.323 security: Voice encryption profile with native H.235/H.245 key management: Support for 192 and 256 bits AES" | New | TD 515/PLEN | 25/16 |
| H.460.22 Corrigendum 1 "Negotiation of security protocols to protect H.225.0 call signalling messages: Corrections to message flow" | New | TD 513/PLEN | 25/16 |

**Note 1:** H.361 Amendment 1 was originally developed as three separate work items (one for each annexe). The TD indicated is the consolidation of the content found in TDs 637, 638, and 639/WP2.

**Note 2:** There is a dependency in H.621 (ex H.mid) on F.771 (ex F.mid), therefore approval of H.MID is conditional n the approval of F.771.

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### 3.1.3 Other documents for Approval

The following documents were proposed by WP 2/16 for Approval:

| Description | Type | Documents | Question |
|---|---|---|---|
| H.323 System Implementors' Guide | Rev | TD 520/Plen | 2/16 |
| ITU-T Rec. H.248.1v3 Amendment 1 "Gateway Control Protocol"* | New | TD 467/Plen | 3/16 |
| H-Series Supplement 2 "H.248 Sub-Series: Packages Guide Release 10" | Rev | TD 484/Plen | 3/16 |
| H-Series Supplement 7 "Gateway Control Protocol: Establishment Procedures for the H.248 MGC-MG Control Association" | New | TD 480/Plen | 3/16 |
| H-Series Supplement 8 "Guidelines for synchronized time in H.248 domains" | New | TD 479/Plen | 3/16 |
| H-Series Supplement 9 "Operation of H.248 with H.225, SIP, and ISUP in Support of ETS/IEPS" | New | TD 468/Plen | 3/16 |
| H.248 Sub-series Implementors' Guide | Rev | TD 474/Plen | 3/16 |
| H.248 Version 2 Implementors' Guide | Rev | TD 521/Plen | 3/16 |
| Proxy-aided NAT/FW Traversal Scheme for H.323 Multimedia Systems | New | TD 496/Plen | 5/16 |
| Technical Paper TP.MMSM "Service Mobility for new Multimedia Service Architecture" | New | TD ~~xxx~~539/Plen | 29/16 |

*** Note:** This Recommendation was considered under ITU-T Rec.A.8 §5.

### 3.1.4 Question 1/16 Summary

Q1/16 reviewed several matters in relation with H.241, allowing, in particular, for the negotiation of video submodes of H.264 encoding, and H.324 Annex K. T.128 was also revised at this meeting. Question 1 proposed one Recommendation, one Amendment and one Corrigendum for Consent (H.222.0 Cor. 1, H.241 Amd. 1, T.128).

### 3.1.5 Question 2/16 Summary

Question 2/16 had a successful meeting, reaching consensus on a new revised Recommendation H.245, which, among other things, adds new functionality for improved quality of service features for H.323. The experts also made progress on revising Recommendations H.323 and H.225.0, with an intent to publish a new version of H.323 and H.225.0 at the next Study Group meeting. Finally, Question 2 revised the H.323 System Implementors' Guide and agreed to approve a new version at this meeting.

### 3.1.6 Question 3/16 Summary

Q3/16 met for 12 quarters to review some 158 documents. Q3/16 continued work on a number of existing work items which has resulted in 11 Recommendations for Consent: H.248.11 Corrigendum1, Revised H.248.37, H.248.41 Amendment 1, New H.248.43, Revised H.248.47, New H.248.52, New H.248.53, New H.248.55, New H.248.57, New H.248.58 and New H.248.62. In addition to these Recommendations Q.3 prepared 7 documents for approval: H.248.1v3 Amendment 1, Revised H-Series Supplement 2 "Packages Guide", Supplement 7 "Establishment Procedures for H.248 Control Association", Supplement 8 "Synchronized time in H.248", Supplement 9 "H.248 ETS/IEPS operation", H.248 Sub-Series Implementors' Guide, and the H.248.1 version 2 Implementors' Guide. Q.3 started 2 new work items: H.248.PIPA and H.248.TDR. Q.3 prepared 5 liaison statements.

The Rapporteur would like to thank the contributors to the Q.3 work and especially the editors for their work in preparing Recommendations.

### 3.1.7 Question 4/16 Summary

Question 4 has completed work on the draft new Recommendation H.351 (ex H.350.WI) "Semantic Web Interface for Multimedia Terminal and System Directories (SWIM-D)", and it was agreed to move it forward for Consent at this meeting. For enhancements of H.350 directory services, interested parties were encouraged to progress this work. For other new applications, Question 4 is open to proposals and contributions are welcome.

### 3.1.8 Question 5/16 Summary

Question 5/16 continued to make progress to address NAT/FW traversal issues related to H.323. At this meeting, we concluded work on a new H-series ~~supplement~~ Supplement to describe the use of proxy functionality as a means of facilitating the traversal of NAT/FW boundaries. We also made progress on new NAT/FW traversal specifications that will enable media to flow directly between two terminal devices, even if both H.323 devices are located behind NAT/FW devices.

### 3.1.9 Question 12/16 Summary

Question 12 made steady progress toward the development of requirements and architecture for the new Advanced Multimedia System (AMS). The experts of Q12 reviewed incoming liaison statements, reviewed the AMS project description, agreed upon new requirements for AMS, and agreed upon a skeleton framework for the AMS terminal architecture specification. We also initiated communication with other SDOs and ITU-T Study Groups in order to help progress the work and coordinate activities.

### 3.1.10 Question 13/16 Summary

Question 13/16 reviewed all the contributions to the meeting and updated the current draft Recommendation H.IPTV-MAP. It also created four new draft Recommendations, H.IPTV-SDC, H.IPTV-DSMW, H.IPTV-AEH, and H.IPTV-MD. Q13/16 had joint meetings with ISO/IEC JTC 1/ SC 29/WG11 (MPEG) on IPTV-related issues and ISO/IEC JTC 1/SC 29/Maintenance Task Force on ISO/IEC 13522 Series (MHEG) for the maintenance of T.172. It also held joint meetings with Q6/16 and Q23/16 to discuss documents on two FG IPTV deliverables: Toolbox for Content Coding and Application Layer Error Recovery.

### 3.1.11 Question 21/16 Summary

Q.21 discussed architecture aspects of multimedia application. After discussion based on contributions and liaison statements, it was agreed to propose draft new Recommendations H.ghna and H.mid for Consent at this meeting.

Remote management was discussed in the context of multimedia services and it was agreed to start a new study item on remote management (specifically concerning data model and use cases).

Networked ID including IP resolution protocol and Visual Surveillance are discussed jointly with Q.22/16. IPTV related issues were discussed as a part of IPTV-GSI.

### 3.1.12 Question 22/16 Summary

At this SG16 meeting, Q22/16 experts met for 7 sessions including four joint sessions with Q21/16. Question 22/16 discussed service awareness, NID, USN, and visual surveillance. Service awareness is one of the hottest spots for Q22/16, more than ten ~~or so~~ Ceontributions and documents were

received and well discussed. As a result, the initial draft of F.MSATC (*Scenarios and requirements for service awareness and traffic control*) was created incorporating the contents of these Ceontributions. Visual surveillance discussion ended up with an updated version of F.VSreqs produced. Our work on F.771 (ex F.mid) and H.621 (ex H.mid, in coordination with Q21/16) progressed well so that these two draft Rrecommendations are ready for Ceonsent. We also started our work on ID coding schemes and ID resolution protocols serving tag-based ID triggered multimedia information access with two new work items created. In the area of USN middleware, an initial draft for F.USN-MW (*Service description and requirements for USN middleware*) was prepared.

### 3.1.13 Question 24/16 Summary

Question 24 has completed work on the draft new H.361 Amendment 1 "End-to-end quality of service (QoS) and service priority signalling in H.323 systems: New Annex A 'IntServ/RSVP support for H.323 Systems', Annex B 'DiffServ Support for H.323 Systems' and Annex C 'Priority Support for H.323 Systems'". It was agreed to move the H.361 Amendment 1 forward for Consent at this meeting. In addition, Question 24 created new work items including the analysis of existing home network QoS solutions and an adaptive QoE control framework based on variable bit rate codec in wireless networks.

### 3.1.14 Question 25/16 Summary

Q25/16 reviewed some matters in relation with multimedia security and advanced multimedia systems in NGN. In particular, H.235.6 was updated to allow support of 192 and 256 bits AES. Q25 proposed one Amendment and one Corrigendum for Consent (H.235.6 Amd. 1, H.460.22 Cor. 1).

### 3.1.15 Question 28/16 Summary

The goals for this meeting were to review the roadmap for telemedicine and discuss about further activities. It is agreed that the roadmap for telemedicine needs some improvements: basically, a more homogeneous structure and an updated list of standards from other SDOs as CEN, ISO, IEEE, etc. It was observed that those organisations were invited to do it through the eHealth Standardization Coordination Group (eHSCG) but few inputs were received. Two options are proposed: to allocate more resources to improve the roadmap or use one of the new existing roadmaps and start the ITU work from this point.

### 3.1.16 Question 29/16 Summary

In the context of NGN GSI, Question 29/16 has continued its cooperation with Question Q6/13 as well as Questions Q2 and Q5/19 on mobility related issues for NGN. A joint meeting together with Q6/13, Q2/19, and Q5/19 was held in Seoul 17-23 January 2008 (WP2/16 Rapporteur meeting joint with NGN GSI meeting). This cooperation supports Q-29/16 to progress its work on the technical paper TP.MMSM (*Service ~~Mobility~~ mobility for new ~~Multimedia~~ multimedia ~~Service~~ service ~~Architecture~~architecture*), which was approved by SG 16 at its closing Plenary.

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## 3.2 General Working Party topics

### 3.2.1 Reports on interim activities

After the previous meeting of SG 16 (Geneva, 26 June – 6 July 2007) four Rapporteur meetings were held as summarized in the following table:

| Q. | Date | Location/Host | Report |
|---|---|---|---|
| 12, 13, 21, 22 | 11-14 Sep 2007 | Geneva / TSB | TD 534/WP2 |
| 13 | 19-20 Dec 2007 | Malta / Ministry of Malta | TD 535/WP2 |
| 2, 3, 4, 5, 12, 13, 21, 22, 24, 25, 29 | Q13, 21: 15-23 Jan 2008, Others: 17-23 Jan 2008 | Seoul, Korea / MCI | TD 533/WP2 |
| 13 | 28-29 Feb 2008 | Geneva / TSB | TD 538/WP2 |

The respective reports were reviewed by each of the Questions and approved by WP 2/16.

### 3.2.2 Liaison Statements considered by WP 2/16

WP 2/16 took note of the Liaison Statements received from other Study Groups or other standardisation bodies. Where appropriate, responses have been prepared, as listed in the §4. Some of the Liaison Statements had already been reviewed at the interim Rapporteur meetings listed in §3.2.1 and responses had been returned from there as contained in TD 396/Gen.

### 3.2.3 Draft Recommendations consented at the previous meeting in June-July 2007

Except for H.248.1 V3 Amendment 1, all the draft Recommendations were approved on 29 August 2007 with typographical corrections to H.248.9 Amendment 1. H.248.1 V3 Amendment 1 has been referred to the SG approval at this meeting. See TD 568/WP2 for further details.

SG 16 management offered an idea of holding teleconference between the IETF key person and Q3 experts as a possible way forward. This was sought during the two weeks, but not successful due to the schedule conflicts. Q3/16 proposed to approve H.248.1 V3 Amendment 1 without the updated package registration procedures. WP2 agreed on this proposal.

### 3.2.4 Incoming liaison statements of general nature

***TD 415/Gen Reply LS on creation of ITU-T Restructuring Correspondence Group and request for inputs (TSAG-LS 23) [ITU-T SG 4]***

Noted.

***TD 416/Gen LS on SG 4 report and request in its role as Lead SG on Telecommunication Management [ITU-T SG 4]***

Information is requested to update TM&OAM Project Plan. Noted.

***TD 417/Gen LS on re-chartering of the NGN Management Focus Group [ITU-T SG 4]***

Information on related activities is requested. Noted.

***TD 433/Gen LS on the Creation of a Focus Group on "From/In/To Cars Communications II" [ITU-T SG 12]***

***TD 449/Gen LS on transfer of work under "common IMS" [Chairman ITU-T SG 16 (on behalf of 3GPP TSGS SA)]***

***TD 484/Gen LS on 3GPP Schedule for Common IMS [Chairman ITU-T SG 16 (on behalf of 3GPP TSG-SA WG1)]***

It was noted that Q3 has an ongoing work item for H.248.19 (package for MCU decomposition and floor control) has relevance to the common IMS Rel. 8. See Q3 report for more details.

***TD 470/Gen LS on assessment of ITU-T Recommendations in the light of Climate Change [TSAG]***

This was reflected in the texts of Questions in the next study period

***TD 471/Gen LS on improved Geographic Distribution and Coordination of ITU-T Seminars and Workshops [TSAG]***

Noted.

***TD 497/Gen LS on new versions of the Access Network Transport (ANT) Standardization Plan and Work Plan [ITU-T SG 15]***

Q21 reviewed this LS. A liaison reply is in TD 631/WP2.

***TD 500/Gen LS on IEEE OUI assignment for ITU-T (OUI: Organizationally Unique Identifier) [ITU-T SG 15]***

***TD/501/Gen LS on draft SG 15 proposal of new Questions for the next study period of 2009-2012 [ITU-T SG 15]***

Q21 reviewed and noted these two liaison statements from the home network perspective.

***TD 504/Gen LS from IETF MMUSIC WG on ongoing work on RTSP 2.0 and request for information on RTSP extensions [ITU-T SG 16 Chairman (on behalf of IETF)]***

Q3 and Q21 provided responses as in TD 610R1/WP2. It was clarified that both cases do not include extensions.

***TD 627/WP2 LS on Trusted Service Provider Identity (T-SPID) [ITU-T SG17]***

Mr Tony Rutkowski, SG17 expert, remotely presented this liaison statement and relevant tutorial materials. He also advised in what aspects of T-SPID SG16 may have interest. WP2 Questions will further investigate how we can respond to the request of comments on initial use-cases, requirements and proposed T-SPID identifiers in the light of multimedia systems under our responsibility.

The following were reviewed at the interim Rapporteur meetings:

***TD 408/Gen Reports of the FG-IPTV meetings between July and December 2007 [TSB]***

This was reviewed and noted at the Rapporteur meeting in Jan. 2008

***TD 430/Gen LS on draft Recommendations on countering spam by technical means [SG17]***

This was reviewed and noted at the Rapporteur meeting in Jan. 2008

***TD 445/WP2 LS on report on the sixth FG IPTV meeting (Tokyo, Japan, 15-19 October 2007) [Chairman, ITU-T FG IPTV]***

This was reviewed and noted at the Rapporteur meetings in Dec. 2007 and Jan. 2008

***TD 453/Gen LS on revised Questions 1/9 and 5/9 [ITU-T SG 9]***

This was reviewed and noted at the Rapporteur meetings in Dec. 2007 and Jan. 2008

***TD 469/Gen LS on A.5 justification for normative references to documents of other organizations [TSAG]***

This was reviewed and noted at the Rapporteur meeting in Jan. 2008

***TD 472/Gen LS on availability of Web Conferencing Tools [TSAG]***

This was reviewed and noted at the Rapporteur meeting in Jan. 2008

***TD 474/Gen LS on termination of FG IPTV mandate and beginning of the IPTV-GSI [Chairman, ITU-T FG IPTV]***

This was reviewed and noted at the Rapporteur meeting in Jan. 2008

### 3.2.5 Questions organization toward the next study period

We need a good block of Questions that will be accommodated in an appropriate Study Group. This meeting was charged to finalize the Question texts that would be proposed to WTSA-08. The following materials were considered:

- TD 441/Plen containing the set of Questions produced at the previous SG16 meeting in June-July 2007
- TD 541/WP2 providing proposed updates of WP2 Questions that were the outcome of the Seoul meeting in January 2008
- TD 542/WP2 proposing two new Questions B9 (multimedia functions in the network) and B10 (USN applications and services) as another outcome of the Seoul meeting
- C.427 (ETRI) providing materials helping enhance Question B10
- TSAG guidance for SGs to reflect the climate-change aspects into Question texts (§B.4.3 of TD 442/Plen)
- A common study item addressing mitigation of climate change that was provided by the SG16 management

The meeting agreed on the set of modified Question texts as contained in TD 636R1/WP2.

### 3.2.6 Interim activities

The WP plans to hold five Rapporteur meetings and a WP2/16 meeting as follows:

- Q12: Wednesday 23 – Friday 25 June (tentative) in North Carolina
- Q13, Q21: -Monday 23 - Friday27 June at ITU, as part of IPTV-GSI
- All WP2 Questions (except for Q28): Monday 25 – Friday 29 August at ITU
- Q13, Q21: Monday 1 – Friday 5 September at ITU, as part of IPTV-GSI
- WP2 for Consent of IPTV related draft Recommendations: Friday 5 September at ITU
- Q13, Q21: Monday 1 – Friday 5 December at ITU, as part of IPTV-GSI

## 3.3 Question 1/16 - Multimedia Systems, Terminals and Data Conferencing

Question 1/16 was addressed in three sessions during the SG16 meeting under the chairmanship of Patrick Luthi (Tandberg, Norway). The group adopted the agenda in TD 522/WP2.

The objectives for this meeting were:

– Incorporate results from interim meeting accordingly
– Progress and finalize H.241 topics relative to video submode control
– Review of final text of revised H.320-series, T.120-series and new H.241 Amd. 1
– Review of the items relative to H.320, H.324, T.120, H.310, etc.

### 3.3.1 Documentation

The following documents were examined:

**Contributions:** C.339, C.399, C.408, C.417

**TD/Plenary:** 403R2, 471, 472, 490

**TD/General:** 430, 446, 468, 475, 490, 492, 513

**TD/WP2:** 56, 522, 537, 541, 542, 567, 593, 605, 616R1, 617R2, 621

### 3.3.2 Report of Interim Activities

Question 1 didn't hold any Rapporteur meeting during the interim period from the conclusion of the June-July 2007 SG16 meeting until the beginning of the April-May 2008 SG16 meeting.

### 3.3.3 Discussions

#### 3.3.3.1 Incoming Liaison Statements

– SG17 on draft Recommendations on countering spam by technical means

TD 430/Gen was reviewed and discussed during the Seoul Rapporteur meeting.

– DVB TM Ad Hoc on scalable video coding

TD 446/Gen was reviewed and noted.

– IMTC 3G-324M AG on clarification of H.324 Use of FunctionNotSupported Message

TD 468/Gen was reviewed and discussed during the H.324 session.

– 3GPP TSG-CT WG3 on improved IMS-CS Video Interworking with MONA

TD 475/Gen was reviewed and discussed during the H.324 session.

– JCA-IdM Co-convenors on a three-party query response IdM model

TD 490/Gen was reviewed and discussed during the joint WP2 questions session.

– Q6/17 on work plan for trusted service provider identity (SPID) Recommendations

TD 492/Gen was reviewed and discussed during the joint WP2 questions session.

– Q7/12 on speech and audio coding matters

TD 513/Gen was reviewed and discussed during the joint Question 1 and 2 session.

#### 3.3.3.2 General Q.1 topics

##### 3.3.3.2.1 Video submode control

C.339 and C.408 was presented and discussed during the joint Q1 and 2 session.

#### 3.3.3.3 H.320 session

##### 3.3.3.3.1 Proposed extension to H.300-series far end camera control

C.399 was presented and the experts agreed that the limitation to FECC on the main video stream was no longer sufficient. With H.239 and the possibility of opening multiple logical channels in H.323, there is a need for controlling multiple cameras in different video streams. Experts agreed to the proposed addition of mcuNumber in terminalYouAreSeeingInSubPictureNumber and asked Q2

to add this parameter in H.245 v14. The proposal of adding a 2nd video channel to H.224 had merits, but experts felt that there should be a generic method of allowing FECC in a unlimited number of video streams. One idea presented was to add a video channel/source number parameter to H.281 to allow control of a camera in a particular video stream. Contributions to progress this work in a flexible extensible way are solicited. It was also mentioned that H.282 and H.283 could possibly be deleted to avoid confusing implementers on which FECC standard to use. Proponents of such deletion were asked to poll different Q1 and H.323 mailing lists to ensure that there are no deployed implementations of H.282/H.283 and bring a contribution with results to a future meeting.

#### 3.3.3.4 H.324 session

##### 3.3.3.4.1 LS on clarification of H.324 Use of FunctionNotSupported Message

TD 468/Gen was presented and a discussion followed. Experts agreed that FunctionNotSupported was not the correct reply to terminals that don't support, or have not implemented, procedures of H.245. B.14.11/H.245 describes the use of FunctionNotSupported. A LS reply, shown in TD 617R1/WP2, was prepared and Q1 agreed to send this reply to the IMTC 3G-324m AG.

##### 3.3.3.4.2 Improved IMS-CS Video Interworking with MONA

TD 475/Gen, a LS from 3GPP, and C.417 were presented and a discussion followed. C.417 proposed a modification to the alternative 2 of the LS. Q1 experts thought that this problem needed to be investigated to ensure compatibility and take in account scenario such as when an entity in the "middle" launches 2 calls to 2 endpoints. It was also noted that they may be an inconsistency with the transmission of SPC MOS Request messages which the H.324 Editor will analyze. A LS reply, shown in TD 616R1/WP2, was prepared and Q1 agreed to send this reply to 3GPP with a copy to IMTC.

##### 3.3.3.4.3 Draft revised H.324

TD 567/WP2 shows a draft revised H.324, but because of the open issue that we likely result in changes to Annex K, it was not presented. The revision was only incorporating text from Amd. 1 + 2 and Cor. 1 +2, and Consent was not required at this meeting.

#### 3.3.3.5 T.120 session

##### 3.3.3.5.1 Draft revised T.128

TD 593/WP2 was presented and the Q1 experts accepted the content of this draft. This draft incorporated the changes from TD 56/WP2 proposed by the TSB and the ASN.1 Project Group in November 2004. It was agreed to submit Draft revised T.128 for Consent at the closing Plenary. The final text appears TD 471/Plen.

#### 3.3.3.6 H.310, H.321 session

##### 3.3.3.6.1 Draft new Corrigendum 1 to H.222.0 | ISO/IEC 13818-1

TD 537/WP2 (Correction of zero_byte syntax element and stream_id_extension mechanism) was presented and the Q1 experts accepted the content of this draft. It was agreed to submit Draft Cor. 1 for Consent at the closing Plenary. The final text appears TD 472/Plen.

#### 3.3.3.7 Items considered in joint Q1 & Q2 sessions

##### 3.3.3.7.1 Video submode control

C.339 and C.408 were presented. C.408 contained some comments and a proposal to extend the applicability of submode messages proposed in C.339. The group agreed to create an Ad-hoc Group with the task of finalizing the text proposed and incorporate the comments/feedback received. The report of the AHG with proposed text for a new clause 6.2.5/H.241 and a new Appendix II appeared in TD 605/WP2. Q1 experts agreed with the text proposed in the AHG report and asked the editor to prepare a draft Amendment 1 for review. Draft Amd. 1, shown in TD 621/WP2 was reviewed and accepted. It was agreed to submit Draft Amd. 1 for Consent at the closing Plenary. The final text appears TD 490/Plen.

Regarding the H.230 codepoints mentioned in the draft, Q1 pre-assigned (000)[25] for the <h264SetSubmode> SBE and 0001 1101 for the <H.264Submode-message> MBE. Q1 agreed to add these submode messages to H.230 in the next revision (2009).

#### 3.3.3.7.2 LS from Q7/12 on speech and audio coding matters

TD 513/Gen was reviewed and noted. The answers from the LS sent in July 2007 are still valid and no experts had any statistics on double talk to present. Conferencing systems assume that people tend to talk at the same time and this was already the conclusion of Q1 at the last meeting.

### 3.3.3.8 Items considered in joint Q1 & WP2 sessions

#### 3.3.3.8.1 WP 2/16's Questions for the next study period

TD 541/WP2 and TD 542/WP2 were presented and discussed during the WP2 Questions session. Q1 was asked to add text reflecting climate changes and the following sentence was added: The use of technologies developed in this question, typically audio, video and data conferencing systems, improve communication quality and efficiency and contribute to a reduction of greenhouse gas emission when used as an alternative to travel.

### 3.3.4 Intellectual Property Statements

None at this meeting.

### 3.3.5 Outgoing Liaison statements

TD 616R1/WP2 to 3GPP TSG-CT WG3 and IMTC 3G-324m AG on reply on improved IMS-CS Video Interworking with MONA.

TD 617R1/WP2 to IMTC 3G-324m AG on reply on clarification of H.324 Use of FunctionNotSupported message.

### 3.3.6 Work programme

#### 3.3.6.1 Future work

The currently open work items are as follows:

| Recommendation | Editor | Consent/ Approval | Comment |
|---|---|---|---|
| Revised H.221 | P. Luthi | 2009 | |
| Revised H.230 | P. Luthi | 2009 | |
| Revised H.242 | P. Luthi | 2009 | |
| Revised H.281 | TBD | 2009 | |
| Revised H.324 | B. Kenrick | 2009 | |
| Revised H.241 Appendix II | S. Botzko | 2009 | |

The objectives for the next SG16 meeting (27 January-06 February 2009) are:

– Incorporate results from interim meeting accordingly

– Progress topics relative to multiple video streams FECC

– Progress H.324m topics relative to CS-IMS video interworking and clarifications to responses to messages not understood to the transmitter Review of final text of revised H.324 and H.320-series

– Review of the items relative to H.320, H.324, T.120, H.310, etc.

E-mail correspondences pertaining to the activities of this group are routinely conducted using the e-mail reflector currently hosted by the ITU. Those wishing to subscribe or unsubscribe to this email reflector should visit the ITU web page at:

http://www.itu.int/ITU-T/com16/edh/subscribe.html

E-mails to all subscribed Q1/16 Experts should be sent to t05sg16avd@itu.int.

Those wishing to subscribe or unsubscribe to e-mail reflectors hosted by ITU should follow the instructions at http://www.itu.int/ITU-T/edh/faqs-email.html.

#### 3.3.6.2 Future meetings

Q2-5, 12, 13, 21, 22, 24 , 25, and 29 are planning to hold one Rapporteur meeting before the next SG16 meeting in January 2009. The location and host is still to be determined. Q1 is planning to meet jointly with them if needed.

### 3.4 Question 2/16 - Real-Time Audio, Video, and Data Communication over Packet-Switched Networks

Question 2/16 was addressed in four sessions during the SG 16 meeting under the chairmanship of Paul E. Jones (Cisco, USA). The group adopted the agenda in TD 523/WP2.

The objectives for this meeting were:

- Coordinate with other SDOs, Questions, or Study Groups
- Review items proposed for the H.323 System Implementors' Guide
- Complete work on:
  - H.245v14
- Progress work on:
  - H.323v7

- H.225.0v7
- H.323 Annex I
- H.460.geo
- H.460.presence
- H.460.tm

- Discussion of miscellaneous and new work items
- Discuss plans for future meetings

### 3.4.1 Documentation

The following documents were examined:

- Contributions: COM16-C.319, C.320, C.321, C.322, C.339, C.399, C.408
- TD/Plen: None
- TD/Gen: 468, 490, 492, 504, 514, 515, 524
- TD/WP2: 560, 563, 594, 595, 615, 632

### 3.4.2 Report of Interim Activities

Since the last SG 16 plenary meeting, Question 2/16 held a Rapporteur meeting in January 2008. The report of the Rapporteur meeting (TD 535/WP2) was approved at this SG 16 meeting.

The work also progressed by correspondence using the Question e-mail reflector (itu-sg16@lists.packetizer.com). Documentation is found in external FTP area for WP2/16 Questions at: http://ftp3.itu.ch/av-arch/avc-site/2005-2008/.

The address for e-mails to be sent to all subscribed Q2/16 Experts is itu-sg16@lists.packetizer.com.

### 3.4.3 Discussions

#### 3.4.3.1 Incoming Liaison Statements

***TD 468/Gen – LS on clarification of H.324 Use of FunctionNotSupported Message [IMTC]***

Refer to the Q1 meeting report.

***TD 490/Gen – LS on a three-party query response IdM model [JCA-IdM Co-convenors]***

Noted. H.323 does not have an identity management system, per se, and the Question does not have any input to provide on this topic at the moment. Utilizing an IdM system might be quite useful within H.323 systems (perhaps via a Gatekeeper or H.350-based services).

***TD 492/Gen – LS on work plan for trusted service provider identity (SPID) Recommendations [Rapporteur Q6/17]***

Noted.

***TD 504/Gen – LS from IETF MMUSIC WG on ongoing work on RTSP 2.0 and request for information on RTSP extensions [IETF]***

Noted. None of the Recommendations under the responsibility of Q2 utilize RTSP.

***TD 514 – LS on Question 223-2/8 "Internet protocol applications over mobile systems" [ITU-R SG5]***

It was suggested that we send a liaison statement to inform ITU-R SG5 of the work we are doing on H.323 Annex I and extend an invitation to liaise with them to help support their work. The liaison appeared as TD 608/WP2. A number of editorial corrections were made and the final revised liaison appeared as TD 608R1/WP2.

***TD 524/Gen – LS on countering spam by technical means [SG17]***

Refer to the Q25 meeting report.

**3.4.3.2 H.323 System Implementors' Guide**

***TD 595/WP2 – Draft revised H.323 Implementors' Guide [Editor]***

Reviewed. The Implementors' Guide was revised based on discussion during the meeting and appeared as TD 595R1/WP2.

It was agreed to put this document forward for approval. A revised version of the Implementors' Guide was published as TD 520/Plen.

**3.4.3.3 H.323**

***TD 563/WP2 – Draft revised ITU-T Recommendation H.323 (Version 7) [Editor]***

A few editorial issues were pointed out to the editor. Q25 updated H.235.6 Table 1 to show 192 and 256-bit key lengths for AES. As such, we agreed to update Table J.1 in H.323 to align with H.235.6.

A revised H.323 text appeared in TD 563R1/WP2.

In reviewing TD 563R1, it was noted that "a media streams" should read "media streams" in the definitions section of the document. It was noted in Annex R that there are references to Internet Drafts. We should decide whether those references are essential and, if not, remove them.

***C.322 – Opening Multicast Channels in H.323 - comments on AVD 3299 [Polycom, Cisco]***

It was agreed to add this text to H.323v7 and H.245v15. An issue that was discussed was the fact that the generic multiplex capability could not be used. To address that, it was agreed to use a generic control capability to represent the "single transmitter multicast" capability. The input document was revised and provided as TD 618/WP2 and includes material for H.245v15.

**3.4.3.4 H.225.0**

***TD 515/Gen – LS on H.225.0 editorial observations [TTC]***

It was agreed to accept these changes into H.225.0. Item #26 asked which form of the various representation of <gk id> should be used and it was agreed that we would use "<**gk id**>" for consistency, as it appears at the beginning of the third paragraph in IV.1.1.2.2.2.

The propose change #18 from TTC highlighted the fact that there are several places throughout H.225.0 where the word "reason" is bold and not bold. In places where it is bold, it is because the field name is "reason". However, similar sentences do not have the word bold because the field name is "rejectReason" and there are some places where the field name is "reason", yet the word still has a normal font weight. The H.225.0 editor was asked to make a pass through the document and change all occurrences of "reason" where it is bold to use a normal font weight in the case that the word "reason" is preceded by an article and other places where the field name is being used in bold where (in the editor's view) it ought to have a normal font weight.

***TD 560/WP2 – Comments on H.225.0 [Rapporteur]***

With regard to the first comment in this document, there was general agreement that it could be worded better in H.225.0. However, the proposed wording also left the experts feeling that it was

not as clear as it could be. Further consideration on this should be given and contributions to propose better wording are solicited. The editor is also encouraged to consider how this text might be improved to clarify the text.

The second point highlighted the fact that we introduced a new mandatory element in various messages (Status, Status Inquiry, and Setup Acknowledge) that did not exist prior to H.323v4. It was agreed to add a "Note 2" to tables 14, 15, and 16 for the user-user IE with wording that says, "This element was not present in H.225.0 prior to H.225.0 (2000)".

***TD 594/WP2 – Draft revised ITU-T Recommendation H.225.0 [Editor]***

Presented. An updated draft that contained agreements from the meeting appeared as TD 594R2/WP2.

**3.4.3.5 H.245**

***C.339 – Video Submode Control [Israel]***

Refer to the Q1 meeting report. An OID was added to H.245 based on this contribution.

***C.399 – Proposed extension to H.300-series far end camera control [Huawei]***

It was agreed to accept the proposed change to H.245 at the end of this contribution.

***C.408 – Discussion of Video Submode Control [Tandberg]***

Refer to the Q1 meeting report.

***C.319 – Proposed changes to draft new H.361Annex A "IntServ/RSVP support for H.323 Systems" [Cisco]***

***C.320 – Proposed changes to draft new H.361Annex B "DiffServ Support for H.323 Systems" [Cisco]***

***C.321 – Proposed changes to draft new H.361 Annex C "Priority Support for H.323 Systems" [Cisco]***

The above three documents were reviewed in the Q24 meeting. There were ASN.1 changes agreed to be included in Recommendation H.245.

***TD 632/WP2 - Text for H.245 version 14 [Editor]***

In Table D.1, the "Note from TSB" should be modified to say "a previous entry" or otherwise modified to make it clear that this and the following capability appears a second time because the first two appearances of these capabilities had conflicting OIDs. Should the note be moved to the RFC 3389 table entry? The matter was left to the editor's discretion.

In table VIII.1, the word in the OID "set-submode-capability" should be changed to "set-submode".

Table VIII.1 needs to be updated to include OIDs from TD 478/WP2 (07/2007), which are OIDs related to H.324.

It was agreed to put H.245v14 forward for consent at this meeting. It appeared as TD 516/Plen.

**3.4.3.6 Miscellaneous**

***TD 615/WP2 – Systematic Review Voting Result of ISO/IEC 23289:2002, Information technology - Telecommunications and information exchange between systems - Corporate telecommunication networks -- Signalling interworking between QSIG and H.323 - Basic services [ISO]***

Noted.

### 3.4.4 Intellectual Property Statements

No IPR statements were received at this meeting.

### 3.4.5 Outgoing Liaison statements

It was agreed to send TD 608R1/WP2 to ITU-R SG5.

### 3.4.6 Work programme

#### 3.4.6.1 Future work

E-mail correspondences pertaining to the activities of this group are routinely conducted using the e-mail reflector currently hosted by Packetizer. Those wishing to subscribe or unsubscribe to this email reflector should visit the Packetizer Mailing List web page at:

http://lists.packetizer.com/mailman/listinfo/itu-sg16

E-mails to all subscribed Q2/16 Experts should be sent to itu-sg16@lists.packetizer.com.

The currently open work items are as follows:

| Recommendation | Editor | Consent / Approval | Reference |
|---|---|---|---|
| H.323v7 | R. Even (Polycom) | 2009-01 | TD 563R1/WP2 |
| H.225.0v7 | M. Perumal (Cisco) | 2009-01 | TD 594R2/WP2 |
| H.245v15 | M. Nilsson (BT) | 2009-01 | - |
| H.323 Annex I | A. Li (Hypervision) | 2009-01 | AVD-3379 |
| H.460.geo | P. Jones (Cisco) | 2009-01 | AVD-3200 |
| H.460.tm | P. Jones (Cisco) | 2009-01 | C.298 |
| H.presence | TBD | 2009-01 | - |

#### 3.4.6.2 Future meetings

Question 2 will hold one Rapporteur meeting jointly with other Questions in Working Party 2 before the next SG meeting. The tentative date is August 2008. The location and host are still to be determined.

## 3.5 Question 3/16 - Multimedia Gateway Control Architectures and Protocols

Question 3/16 was addressed in 12 sessions during the SG 16 meeting under the chairmanship of Christian Groves (NTEC Australia, Australia). The group adopted the agenda in TD 524/WP2.

The objectives for this meeting were:

- Coordinate with other SDOs, Questions, or Study Groups-
- Progress work on:
    - H.248.1v3 Appendix IV (ex. H.248.Statistics)
    - H.248.11 Corrigendum 1
    - H.248.19 Amendment 2
    - H.248.37 Amendment 1
    - H.248.41 Amendment 1

- H.248.42 Amendment 1
- H.248.43 (ex H.248.GM)
- H.248.47 Amendment 1
- H.248.48 (ex. H.248.QHR)
- H.248.50 (ex. H.248.NATTT)
- H.248.52 (ex. H.248.QoS)
- H.248.53 (ex. H.248.TMAN)
- H.248.55 (ex. H.248.PLM)
- H.248.57 (ex. H.248.RTCP)
- H.248.58 (ex. RTPAD)
- H.248.60 (ex. H.248.CCI)
- H.248.61 (ex. H.248.IPOCS)
- H.248.62 (ex. H.248.RA)
- H.248.63 (ex. H.248.RESMAN)
- H.248.64 (ex. H.248.IPR)
- H.248.65 (ex. H.248.RSVP)
- H.248.66 (ex. H.248.RTSP)
- H.248.67 (ex. H.248.TrM)
- H.248 Sub Series IG
- H.248.1v2 IG
- H Series Supp 2 Release 11
- H Series Supplement 7 “Control Association”
- H Series Supplement 8 “Time domains”
- H Series Supplement x “ETSIEPS”

- Consider new material.

### 3.5.1 Documentation

The following documents were examined:

- Contributions: 323, 327, 340-364, 370- 375, 380- 396, 445- 454
- TD/Plen: 441, 467, 468, 473, 475, 476, 477, 478, 479, 480, 484, 485, 491, 492, 493r1, 494, 495, 497, 514, 517, 518, 519
- TD/Gen: 421-425, 430, 464, 465, 467, 478, 504, 506-508, 526
- TD/WP2: 524, 535, 543, 544, 545r1, 546r1, 547r1, 548r1, 549, 550r1, 551, 552r1, 553r1, 554, 555r1, 556r1, 568, 569r1, 570, 571r1, 572r1, 573-575, 576r1, 577, 578, 579r1, 580r1, 581, 583r1, 584, 585r1, 586r1, 587r1, 588, 610, 611, 612, 613, 614, 641, 642

### 3.5.2 Report of Interim Activities

Question 3 held one Rapporteur meeting during the interim period from the conclusion of the June 2007 SG 16 meeting until the beginning of the April 2009 SG 16 meeting. The Q.3 interim report is shown in TD 535/WP2.

Documentation is found in external FTP area for WP2/16 Questions at: http://ftp3.itu.ch/av-arch/avc-site/2005-2008/.

### 3.5.3 Discussions

#### 3.5.3.1 Incoming Liaison Statements

| | | |
|---|---|---|
| TD 421/GEN | LS on behaviour of ITU-T Rec. H.248.11 | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN WG3 |

This liaison was discussed (AVD-3178) and a response was generated to the Liaison Statement at the Seoul Rapporteur meeting in TD-53.

| | | |
|---|---|---|
| TD 422/GEN | Reply LS on issues relating to Border Gateway related packages (COM 16-LS 221) | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN WG3 |

This LS was discussed (AVD-3179) and a response was generated to the Liaison Statement at the Seoul Rapporteur meeting in TD-50.

| | | |
|---|---|---|
| TD 423/GEN | Reply LS on H.248.resman (COM 16-LS 222) | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN WG3 |

This LS was discussed (AVD-3180). No action was taken.

| | | |
|---|---|---|
| TD 424/GEN | LS on Semantic on Ignore (for SDP in H.248) | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN WG3 |

This LS was discussed (AVD-3181) and a response was generated to the Liaison Statement at the Seoul Rapporteur meeting in TD-50.

| | | |
|---|---|---|
| TD 425/GEN | LS on provision of values where defaults are defined | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN WG3 |

This LS was discussed (AVD-3182) and a response was generated to the Liaison Statement at the Seoul Rapporteur meeting in TD-50.

| | | |
|---|---|---|
| TD 430/GEN | LS on draft Recommendations on countering spam by technical means | SG17 |

This LS was discussed (AVD-3187). No action was taken.

| | | |
|---|---|---|
| TD 464/GEN | LS on H.248 Extension to enable available IP Realm discovery mechanism | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN WG3 |

This LS was discussed (AVD-3283) and a response was generated to the Liaison Statement at the Seoul Rapporteur meeting in TD-54.

| | | |
|---|---|---|
| TD 465/GEN | LS on rules concerning mandatory/optional package properties in H.248 Profiles | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN WG3 |

This LS was discussed (AVD-3284) and a response was generated to the Liaison Statement at the Seoul Rapporteur meeting in TD-55.

| | | |
|---|---|---|
| TD 467/GEN | LS on interaction between filtering and latching | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN WG3 |

This LS was discussed (AVD-3314) and a response was generated to the Liaison Statement at the Seoul Rapporteur meeting in TD-50.

| | | |
|---|---|---|
| TD 478/GEN | Reply LS on new work item H.248.Resman (COM 16-LS 222) | Chairman ITU-T SG 16 (on behalf of 3GPP TSG- |

| | | |
|---|---|---|
| | | CT WG |

This LS was discussed (AVD-3312) and a response was generated to the Liaison Statement at the Seoul Rapporteur meeting in TD-52.

| | | |
|---|---|---|
| TD 484/GEN | LS on 3GPP Schedule for Common IMS | Chairman ITU-T SG 16 (on behalf of 3GPP TSG-SA WG1 |

Noted. Q3/16 will notify 3GPP of its schedule if it receives a liaison on a particular work item.

| | | |
|---|---|---|
| TD 490/GEN | LS on a three-party query response IdM model | JCA-IdM Co-convenors |

Noted.

| | | |
|---|---|---|
| TD 492/GEN | LS on work plan for trusted service provider identity (SPID) Recommendations | Rapporteur Q6/17 |

Noted.

| | | |
|---|---|---|
| TD 504/GEN | LS from IETF MMUSIC WG on ongoing work on RTSP 2.0 and request for information on RTSP extensions | ITU-T SG 16 Chairman (on behalf of IETF) |

The LS was discussed and a response was generated indicating Q3's work on H.248.66 "RTSP and H.248 Interworking Packages". The liaison response is contained in TD 610/WP2.

| | | |
|---|---|---|
| TD 506/GEN | Reply LS on Latching and Filtering (COM 16 - LS 263 §6) | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN WG3 |

This LS was discussed. It was agreed to further clarify the implicit filtering behaviour of H.248.37 based on TISPANs suggestions. It was also agreed to create a new package containing a statistic to count discarded packets due to latching. It was agreed to reply to TISPAN indicating this. The liaison reply is contained in TD 611/WP2.

| | | |
|---|---|---|
| TD 507/GEN | Reply LS on Rules concerning mandatory/optional package properties in H.248 Profiles | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN |

| | | |
|---|---|---|
| | | WG3 |

This LS was discussed. The delegates agreed that a statistic has the same status as other H.248 Package elements. Therefore the MGC being the master is not compelled to use the statistics any more than it is compelled to use a property/signal/or event. The MGC may turn off all statistics or use a sub-set of them. It was agreed to send a liaison to TISPAN indicating this. The liaison is contained in TD 614/WP2.

| | | |
|---|---|---|
| TD 508/GEN | Reply LS on H.248 extension to enable available IP Realm discovery mechanism (16bTD50, COM 16-LS 267) | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN WG3 |

This LS was discussed. The delegates agreed that there is no restriction in H.248 having local control on the root termination. The syntax allows it and it is not restricted by section 6.2.5 /H.248.1. It was agreed to incorporate the other suggestions into the draft H.248.41 Amendment 1. It was further agreed to send a liaison response to TISPAN. The liaison response is contained in TD 613/WP2.

| | | |
|---|---|---|
| TD 526/GEN | Reply LS on requirements for MSRP support package and for RTP multiplexing package (COM 16-LS 272) | Chairman ITU-T SG 16 (on behalf of ETSI TISPAN WG3 |

This LS was discussed in conjunction with C.373. No liaison response was required.

**3.5.3.2 ITU-T Restructuring and Q.3**

Q3/16 discussed the status of Q3/16 in the next Study Period. It was noted that there have been some proposals to move Q3/16 to a different Study Group. The delegates of Q3/16 expressed a preference to remain in SG16. The reasons given were:

Q.3 has resided in SG16 over the last two Study Periods. Over this time it has been one of the most productive Questions in the ITU-T. Given its productivity it is unclear how a move to another Study Group could be justified on productivity grounds. The principle applied here “if it’s not broken don’t fix it”.

H.248 is used by many different bodies who tailor its use through H.248 profiles to meet their application needs. ETSI Tispan, 3GPP, MSF and ITU-T SG11 all have defined profiles. Q3/16 itself does not define profiles thus the current structuring provides an efficient way to receive requirements from these bodies in order to update the H.248 sub-series.

Given the work load of Q3/16 it would not be appropriate to merge it with another question which would further increase time allocation problems.

Looking into future work it is seen that there are synergies with other questions in SG16. The IPTV work is a potential user of H.248 and work will be required on the interaction between RTSP and H.248. AMS has identified H.248 as a potential protocol for distributed components in AMS. There are synergies with the signal processing questions as there are H.248 sub-series Recommendations

dealing with DCMEs, ECHO control etc. The work in Q11/16 relates also to gateway behaviour and H.248 is assumed to be a key part of this. The potential new question of Vehicle gateways may also benefit from the experience of the media gateway experts.

Conferencing and multimedia remain an integral part of the functionality of H.248. The experts of SG16 have an in depth knowledge on conferencing and multimedia implementations that allows for adhoc discussions at meetings which allows accelerated work. If Q3/16 was moved to another SG these adhoc discussions would then need to be formalised as liaisons which would add overhead and delay the work.

Risk of loss of expertise and increased cost of participation. The current Q3/16 experts also have an interest in other SG16 questions. If the question is moved to another SG then the delegates will face increased costs in having to attend both groups. In this situation the experts may have to prioritise other work and we will lose this expertise.

It was noted that in general the proposals for moving Q3/16 do not come from organisations representing the participants of the Question.

#### 3.5.3.3 Q.3 Question Text in the next Study Period

| | | |
|---|---|---|
| TD 441/PLEN | Draft proposal for SG 16 Questions in the next study period | SG 16 Management |

The proposed Q.3 question text (clause 4.6 of TD 441/PLEN) was discussed and no suggestions for change were made.

#### 3.5.3.4 H.248.1v3 Amendment 1

| | | |
|---|---|---|
| TD 568/WP2 | H.248.1v3: Package Registration Procedures | Q.3 Rapporteur |

This document was discussed. Given the uncertainty of when the procedures would be approved by the IETF it was decided to put forward H.248.1v3 Amendment 1 for approval without the updated package registration procedures.

The revised H.248.1v3 Amendment 1 for approval can be found in TD 467/PLEN.

#### 3.5.3.5 H.248.1v4 Living List

| | | |
|---|---|---|
| TD 570/WP2 | H.248.1v4 Living List | Q.3 Rapporteur |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.374 | Unification of "At-Most-Once" reference timer values of the MG and the MGC | ZTE |

The Contribution was discussed and the proposal was not accepted. The delegates did not agree with the proposed mapping of the Long-Timer with transaction timers.

No output draft was generated as there were no changes as a result of the discussions.

#### 3.5.3.6 H.248 Sub-Series & H.248.1v2 Implementors Guide

| | | |
|---|---|---|
| TD 572/WP2 | Draft revised H.248 Sub-series Implementors' Guide | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| TD 583/WP2 | Editor's input, H.248.1 Version 2 Implementors' Guide ( V7) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.340 | H.248.1 Implementors' Guide - A uniform method for referencing elements of a base package | Juniper Networks |
| C.446 | H.248.1 Usage of Base and Extended PackageIDs | Huawei |

These Contributions were presented and discussed together.

It was agreed to accept the proposal from C.446 on 6.2.3 with the addition of text to describe the case of a descriptor audit and an error descriptor.

It was further agreed to start work on a new work item on the new package. The text provided in C.446 is the baseline for the work item. However it was agreed that the base publishing property text would be removed in favour of an editor's note indicating that the property may be better at a package level to allow different publishing behaviour. An editor's note would also be added to the procedures section to indicate that they have to be updated pending the resolution of the editor's note on the base publishing property.

Mr. Y. Lin kindly volunteered to be the editor.

The output draft H.248.PIPA can be found in TD-641/WP2.

| | | |
|---|---|---|
| C.341 | H.248.1 Implementors' Guide - Allowing a sub-list of length one to be encoded as a simple value | Juniper Networks |
| C.381 | H.248.1 Implementors' Guide – Clarification for clause 12.1.1: Syntax and Semantic of List specifications with just one List Element | Alcatel-Lucent |

These Contributions were presented and discussed together. It was agreed to accept the Juniper proposal. The Alcatel proposal was also accepted with the exception that Note:1 would be replaced with the text "Note 1: A list structure may contain a single list item. See clause (appropriate clause)".

| | | |
|---|---|---|
| C.342 | H.248.8 Implementors' Guide - Allow the MG to issue error #511 | Juniper Networks |

This Contribution was discussed and the proposal was accepted.

| | | |
|---|---|---|
| C.454 | H.248 Sub-series IG Additions | Huawei |

This Contribution was discussed and the proposal was accepted.

| | | |
|---|---|---|
| C.445 | H.248.1&16&29 Unsuccessful match reporting | Huawei |

This Contribution was discussed and the proposal was accepted. Even though it was proposed to start work on Amendment/Corrigenda to H.248.1v3, H.248.16 & H.248.29 it was decided to incorporate these changes into the implementers guide.

| | | |
|---|---|---|
| C.380 | H.248.1 IMG – Typo in Appendix I | Alcatel-Lucent / Nokia Siemens Networks |

See also item 6/ C.454.This Contribution was discussed and the proposal was accepted.

The H.248 Sub-series IG was revised (TD 572/WP2 R1) at the meeting including two new items from the Megaco mailing list. This revision was reviewed and it was agreed to put forward the IG for Approval.

The draft Revised H.248 Sub-series IG for Approval can be found in TD 467/PLEN.

The H.248.1v2 IG was revised (TD 583/WP2 R1) at the meeting including two new items from the Megaco mailing list. This revision was reviewed and it was agreed to put forward the IG for Approval.

The draft Revised H.248.1v2 IG for Approval can be found in TD 521/PLEN.

**3.5.3.7 H.248.1v3 Appendix IV (ex. H.248.STATISTICS)**

| | | |
|---|---|---|
| TD 580/WP2 | Editor's input, H.248.Statistics | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.364 | Input draft H.248.Statistics | Juniper Networks |

This Contribution was discussed and it was accepted as the baseline for the meeting with the following comments:

- It was decided to keep clause IV.1.1.2 “Relation to H.248.47” as the figure shows H.248.47.
- It was agreed to add some text indicating whether the examples assume support of both the base and extended PackageIDs.
- In response to the IV.2 Contributor’s note the following H.248.1 text was noted: 7.1.15 Statistics descriptor states: *“The Statistics Descriptor provides information describing the status and usage of a termination during its existence (ephemeral) or while it is outside the NULL context (physical).”*
- It was agreed to remove “important use-case” from the relevant headings.
- It was agreed to add some text to IV.3.3 to indicate that a subtract will also deactivate statistics.
- The title of clause IV.3.4 should be changed in order to distinguish the example from clause IV.2.3.
- IV.6.3.1 It was agreed to update the proposal to indicate whilst the use of ADD is possible it would most likely result in the return of statistics set to their initial value.

The output draft H.248.1v3 Appendix IV can be found in TD 580/WP2 R1.

It was noted that clause “IV.5.7 Read and Reset Statistics without Disabling” may need to be re-incorporated via Contribution at a subsequent meeting.

### 3.5.3.8 H.248.11 Amendment 1 Media gateway overload control package

| | | |
|---|---|---|
| TD 576/WP2 | Editor's input, H.248.11 (2002) Amd.1 "Gateway control protocol: Media gateway overload control package: Clarifying MG_overload event relationship to ADD commands" | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| TD 575/WP2 | H.248.11 Amd.1 Proposed editorial corrections | Editor |

This document was discussed and the proposal was accepted.

| | | |
|---|---|---|
| C.384 | Draft New H.248.11 Addendum 1 – Performance improvement proposals: Discussion of possible control loop optimizations | Alcatel-Lucent |

This Contribution was discussed. The delegates agreed this may be interesting for future work. On option 2 – it was suggested that a statistic could be defined and that H.248.47 could be used to report when overload occurs. There were some concerns on the stand alone usage of that option 2. It may be better to use this in conjunction with option 1. With respect to Option 1 it was seen that there were multiple ways to enable this behaviour. As there was no proposal there is no impact to the current Amendment.

The draft Amendment 1 to H.248.11 for Consent can be found in TD 518/PLEN.

### 3.5.3.9 H.248.14 Inactivity timer package

| | | |
|---|---|---|
| C.370 | New event parameter in it package of H.248.14 to enhance reliability | ZTE |

This Contribution was discussed. It was highlighted that H.248.1 section 8 states "*Applications should implement an application level timer per transaction. Expiration of the timer should cause a retransmission of the request*." It was thought that the proposed new property duplicates this behaviour. In discussion of previous Contributions related to this topic it was agreed that the timer value could be modified as necessary. The proposal was not agreed. Further Contribution may wish to describe the linkage of H.248.14 to H.248.1 section 8 with regards to retransmission.

### 3.5.3.10 H.248.19 Amendment 2 Decomposed multipoint control unit, audio, video and data conferencing packages

| | | |
|---|---|---|
| TD 584/WP2 | H.248.19 Amendment 2 Editor's Input | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.372 | H.248.19 Amendment 2 - Proposal on adding new data conference types | ZTE |
| C.371 | H.248.19 Amendment 2 - New proposed Conference Whiteboard Package | ZTE |

This C.372 and C.371 were discussed together. There was some concern that according to T.120 that the MCU would not be aware that a white board application is running thus it would not be possible for a MGC to set this indication on an MG. Thus it was questioned if the proposal met the current procedures of T.120. Furthermore it was noted that there currently has been no work on decomposing T.120 to fit with a MGC and MG.

The proposal was not accepted. It was recommended that further Contribution on a T.120 based white boarding solution should examine figure 3 in T.120 and analyse how each part of T.120 adapts to the H.248 model.

| | | |
|---|---|---|
| C.375 | New conference resource management package for H.248.19 | ZTE |

This Contribution was discussed. It was unclear for the delegates how the DSP property actually mapped to physical resources. It was also noted that H.248.resman already contains the ability to reserve certain types of resources and that this proposal would cause duplication.

The proposal was not accepted.

No output draft generated as there were no changes to the input.

It was noted that 3GPP CT3/CT4 are working on requirements for floor control. It is expected that Q.3 will receive these requirements at it next interim meeting. There is a timing dependency between the freezing of 3GPP Release 8 (December 2008) and the scheduled Consent of H.248.19 (January 2009).

#### 3.5.3.11 Revised H.248.37 IP NAPT traversal package

| | | |
|---|---|---|
| TD 555/WP2 | Updated draft of new ITU-T Rec. H.248.37 (2005) Amendment 1 "Gateway control protocol: IP NAPT traversal package: Semantic clarification and address reporting package" (Ed. 0.11) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.343 | Draft H.248.37 Amendment 1 - Change adr package properties' names so that their roles are clearer | Juniper Networks |

This Contribution was discussed and the proposal was accepted with an addition of text to document the symmetry assumption behind the Contribution.

| | | |
|---|---|---|
| C.344 | Draft H.248.37 Amendment 1 - Clarify implicit filtering based on latched transport address | Juniper Networks |

This Contribution was discussed. It was agreed to accept the proposal with the following changes:

- Clause 1.1.1 - Instead of deleting the last sentence move up to support section and change the wording to highlight implicit filter rules.
- Clause 1.1.3 - Re-instate the text, keep first paragraph and note 1 and then make a forward reference to procedural text. Delete the rest of the section.
- Clause 6.6.7.1 – A should be added indicating that the H.248.43 upper layer protocol filter is currently the only filter applied after latching.

| | | |
|---|---|---|
| C.345 | Draft H.248.37 Amendment 1 - Remove requirements for non-default types of ipnapt/latch | Juniper Networks |

This Contribution was discussed and the proposal was not agreed. Instead it was agreed to update clause 1.1.1 Note 1: to indicate that a new parameter in the future may be used for multiple latching cases.

| | | |
|---|---|---|
| C.346 | Draft H.248.37 Amendment 1 - Changes to the adr/rsac ABNF | Juniper |

| | | |
|---|---|---|
| | | Networks |

This Contribution was discussed and the proposal was accepted.

| | | |
|---|---|---|
| C.347 | Draft H.248.37 Amendment 1 - Changes to the syntax of adr/crsa and adr/rsac | Juniper Networks |

This Contribution was discussed and the resolution to the issues highlighted is:

- StreamID – It was agreed that the H.248.1 syntax could be used to return the StreamID thus the proposal was accepted. It was further agreed to add a note indicating this behaviour.
- Group / Instance – It is agreed to keep the "GroupID" however as the "InstanceID" would not result in an address change
- FlowType – The proposal was agreed however the rather than using the "ComponentID", "FlowID" should remain. Also the text regarding profile specification should be removed.
- Sub-list – The proposal was accepted.
- Syntax of adr/crsa – The proposal was accepted.

| | | |
|---|---|---|
| C.348 | Draft H.248.37 Amendment 1 - Change adr/crsa into a statistic | Juniper Networks |

This Contribution was discussed and the proposal was not accepted.

| | | |
|---|---|---|
| C.382 | Draft H.248.37 Amendment 1 - Update of clauses 6.6.2.2 & 6.6.3.1 "Signal Completion" - Multi-Flow-per-Stream Structures: ipnapt vs adr package | Alcatel-Lucent |

This Contribution was discussed. The proposal was accepted with the modification that the headings in 6.6.3.1 should talk about Flow-per-Signal rather than Flow-per-Stream.

| | | |
|---|---|---|
| C.383 | Draft H.248.37 Amendment 1 – Update of clause 7.5.4.2 "*Auditing after latching event*" | Alcatel-Lucent |

C.383 was obsoleted by C.347 and was withdrawn.

Changes were incorporated in the draft to address the Tispan liaison TD 506/GEN.

The draft H.248.37 was revised (TD 555/WP2 R1) at the meeting. This revision was reviewed and it was agreed to put forward the revised Recommendation for Consent.

The draft Revised H.248.37 for Consent can be found in TD 485/PLEN.

### 3.5.3.12 H.248.41 Amendment 1 IP domain connection package

| | | |
|---|---|---|
| TD 579/WP2 | Draft new H.248.41 Amd.1 "Gateway control protocol: IP domain connection package: IP Realm Availability Package" | Editor |

This document was discussed and it was accepted as the baseline for the meeting. There was one comment on the proposed text of clause 5.1.1 that "Must" should be changed to "shall" and "SHOULD" be changed to "should".

| | | |
|---|---|---|
| C.327 | Clarification of AuditCapabilities in H.248.41 Amendment 1 | LM Ericsson |

This Contribution was discussed and the proposal was accepted with two editorial comments:

- Clause 5.6 “real” should be corrected to “realm”
- Clause 6.6.1 the text should be changed to read “.... of the ipdc/realm property on the root termination.”

| | | |
|---|---|---|
| C.349 | Draft H.248.41 Amendment 1 - Sending only deltas in iprap/arc notifications | Juniper Networks |

This Contribution was discussed. It was agreed to accept the proposal, however additional text should be added to describe how the MGC determines the initial value of the list of realms. An audit could provide this function. Further text should be added to indicate that change indicated in the reports are respective to the previous report and if there was no previous report then the report is against the list at the time the event was set.

| | | |
|---|---|---|
| C.385 | Draft H.248.41A1 IP Realm Availability Package – Update of scope section | Alcatel-Lucent |

This Contribution was discussed and whilst the text proposal was not accepted it was agreed to update the scope text to make it clear that there is more than one package is contained in the Recommendation and that the Package allow the allocation of realms and ability to determined the supported and available realms. The editor is to provide appropriate text.

The draft H.248.41 Amendment 1was revised (TD 579/WP2 R1) at the meeting. This revision was reviewed and it was agreed to put forward the Amendment for Consent.

The draft new Amendment 1 to H.248.41 for Consent can be found in TD 473/PLEN R1.

The associated A.5 documentation can be found in TD 495/PLEN.

#### 3.5.3.13 H.248.42 Amendment 1 DCME interworking package

| | | |
|---|---|---|
| TD 556/WP2 | Updated draft for new ITU-T Rec. H.248.42 (2006) Amendment 1 "Gateway control protocol: DCME interworking package: Parameters for enhanced event reporting control" (Ed. 0.2) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.388 | Draft H.248.42Amend.1 – Update proposal | Alcatel-Lucent |

The Contribution was discussed and the proposal was accepted.

The output draft H.248.42 Amendment 1 can be found in TD 556/WP2 R1.

#### 3.5.3.14 H.248.43 (ex H.248.GM) Gate Management Packages

| | | |
|---|---|---|
| TD 585/WP2 | H.248.43 (ex H.248.gmgc) Editor's Input | Editor |

This document was discussed and it was accepted as the baseline for the meeting. The last sentence of 6.1 should read “Other pipeline stages may be addressed by other Recommendations”.

| | | |
|---|---|---|
| C.323 | Draft new ITU-T Rec. H.248.43 - Clarification on rules relationships and the combinations of filtering conditions | LM Ericsson, Alcatel-Lucent |

The Contribution was discussed and the proposal was accepted with the following changes:

- Table 3 should read:

| |
|---|
| $H_y$ = value of L4 header field "**source** port" |

- Table 4 should read:

  dapf/dam = "[12.8.3.0]/12", ; NOTE 4

- A Note should be added to III.1.1 indicating that the example should not be taken to be the general case as the Upper Layer Protocol and port may not be equivalent.
- Copy the two paragraphs after the bulleted list in 11.6.1 to section 12.6.1.

| | | |
|---|---|---|
| C.350 | Draft H.248.43 - Behaviour when gm/saf and gm/spf are missing or set to OFF | Juniper Networks |

The Contribution was discussed and the proposal was accepted with the following changes: the two sentences discussing profiles shall be removed.

| | | |
|---|---|---|
| C.351 | Draft H.248.43 - Clarification of error condition when no Remote Source information is present | Juniper Networks |

The Contribution was discussed and the proposal was accepted.

| | | |
|---|---|---|
| C.352 | Draft H.248.43 - Suggesting new names for properties of the dapf package | Juniper Networks |

The Contribution was discussed and the proposal was accepted. The headings of the section in 8.1 needs to be aligned with the property name.

| | | |
|---|---|---|
| C.353 | Draft H.248.43 - Changes to the enabling of destination address/port filtering | Juniper Networks |

The Contribution was discussed and the proposal was accepted with the following changes: the two sentences discussing profiles shall be removed.

| | | |
|---|---|---|
| C.354 | Draft H.248.43 - RTP and RTCP decimal values for the ipf/ulptm and opf/ulptm properties | Juniper Networks |

The Contribution was discussed and the proposal was accepted with the following changes:

An example code point for RTCP should be added.

| | | |
|---|---|---|
| C.355 | Draft H.248.43 - Change the type of the properties of ifb and ofb to enumeration | Juniper Networks |

The Contribution was discussed and the proposal was accepted.

| | | |
|---|---|---|
| C.356 | Draft H.248.43 - Changing the type of several Gate Management properties from sub-list to single value | Juniper Networks |

The Contribution was discussed and the proposal was not accepted. It was agreed to add text indicating that if a MG cannot support a filter condition error code "449 - Unsupported or Unknown Parameter or Property Value" is returned.

| | | |
|---|---|---|
| C.358 | Draft H.248.43 - Removing support for Gate Management properties on the Root termination | Juniper Networks |

The Contribution was discussed and the proposal was not accepted. However it was agreed to:

- Only have filters on Termination State in Root Termination and/or the Local Control Level on Individual Terminations. Filter on TermState on individual Terminations is FFS.
- Packets are processed only after they are admitted by both filters. i.e. pipeline process.
- The Error code case should be described i.e. if the MG detects a error code "473 – Conflicting Property Values" should be returned.
- Realms aren't supported.

The text of the draft was modified to reflect these agreements.

| | | |
|---|---|---|
| C.357 | Draft H.248.43 - Removing the ifb/rr and the ofb/rr properties | Juniper Networks |

This Contribution was discussed and the proposal was not accepted.

| | | |
|---|---|---|
| C.359 | Draft H.248.43 - Removing the ipf and opf packages | Juniper Networks |

This Contribution was discussed and the proposal was not accepted. It was agreed to add a note to section 9 indicating that SDP can be used to provide the information in these packages however if not practical to use this information these packages can be used.

| | | |
|---|---|---|
| C.386 | H.248.43 – Editorial change proposals | Alcatel-Lucent |

This Contribution was discussed and the proposal was accepted with the following comments:

- The change in 6.1 is obsolete.
- 7.1.2 Encoded as = DomainAddress ["/" UINT16]
- 8.1.2 Encoded as = DomainAddress ["/" UINT16]

Changes were incorporated in the draft to address the Tispan liaison TD 506/GEN.

The draft H.248.43 was revised (TD 585/WP2 R1) at the meeting. This revision was reviewed and it was agreed to put forward the Recommendation for Consent.

The draft new H.248.43 for Consent can be found in TD 497/PLEN.

#### 3.5.3.15 H.248.47 Revision 1 Statistic Conditional Reporting Package

| | | |
|---|---|---|
| TD 571/WP2 | Draft new ITU-T Rec. H.248.47 Amendment 1 "Statistic | Editor |

| | | |
|---|---|---|
| | Conditional Reporting Package: Explicit timestamp notification enhancement" | |

Note: TSB have indicated that this may be better as a revision.

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.447 | H.248.47 Amd.1 Clarifications | Huawei |

This Contribution was discussed and the proposal was accepted with the following comments:

- Clause 6.6.3.3 and 6.6.3.4 – is wasn't clear that the maximum or minimum event was only reported once. The text needs to be changes to the effect:

  *If the current value is greater than the previous value and the Maximum, and if the event has not already been reported then the Event with the current value of the statistic shall be reported.*

- General: It was felt the "Resumption" property should be renamed to the "Compliance".
- Clause 6.2.1.1.2: remove last sentence of description.
- Clause 6.2.1.1.7: add note to indicate relation to H.248.59.
- Clause 6.2.1.1.8: Add a Note that the max min values do not relate to properties.

There was a further suggestion that tuples should be used to describe the interactions. However it was decided to maintain the current text.

The draft H.248.47 was revised (TD 571/WP2 R1) at the meeting. This revision was reviewed and it was agreed to put forward the revised Recommendation for Consent.

The draft revised H.248.47 for Consent can be found in TD 475/PLEN.

### 3.5.3.16 H.248.48 (ex H.248.QHR) RTCP HR QoS Statistics Packages

| | | |
|---|---|---|
| TD 577/WP2 | Editor's input, H.248.48 "Gateway control protocol: RTCP HR QoS Statistics Packages" | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| TD 578/WP2 | H.248.48: Status of RTCP HR in IETF and impact on H.248.48 | Editor |

This Contribution was discussed. It was for information only.

There is no output draft from the meeting.

### 3.5.3.17 H.248.50 (ex H.248.NATTT) NAT Traversal Toolkit

| | | |
|---|---|---|
| TD 586/WP2 | H.248.50 Editor's Input | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.448 | H.248.50 Conflict Resolution Mechanism | Huawei |

This Contribution was discussed and the proposal was accepted.

The output draft H.248.50 can be found in TD 586/WP2 R1.

### 3.5.3.18 H.248.52 (ex H.248.QoS) QoS Support Packages

| | | |
|---|---|---|
| TD 543/WP2 | Updated draft of new ITU-T Rec. H.248.52 (ex H.248.QoS) "Gateway control protocol: QoS Support Packages" (Ed. 0.11) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.389 | Draft H.248.52 – Update proposals for Summary and clause 1 | Alcatel-Lucent |

This Contribution was discussed and the proposal was accepted. It was agreed to add a clarification to Clause 1.3: "... It is therefore recommended to use only one package per stream, and not both. *Where both will result in a conflict, error code 473 Conflicting Property Values shall be returned."*

There were some concerns that Appendix III may give implementers the wrong idea that Context Priority is used for bearer level QoS. It was decide to remove the Appendix III text and replace it with the following:

> *The H.248 context attribute priority (see clause 6.1.1 of [ITU-T H.248.1) may not be re-used as codepoint for QoS class signalling, and it therefore does not replace the functionality of the QoS class package.*

H.248.52 was revised (TD 543/WP2 R1) at the meeting. This revision was reviewed and it was agreed to put forward the Recommendation for Consent.

There were some concerns that the *iqo* and *tm* properties were set at a local and remote level and not able to be set on LocalControl. A compromise of supporting both local control and local and remote was offerred how it was decided to keep local and remote only at this stage. The reasoning being that the functionality of local control could be emulated by setting on local and remote. If both local control and local/remote was allowed then the relation of local control and its effect on local and remote would need to be described.

The draft new H.248.52 for Consent can be found in TD 476/PLEN.

The associated A.5 documentation can be found in TD 491/PLEN.

### 3.5.3.19 H.248.53 (ex H.248.TMAN) Traffic Management Packages

| | | |
|---|---|---|
| TD 544/WP2 | Updated draft of new ITU-T Rec. H.248.53 (ex H.248.TMAN) "Gateway control protocol: Traffic management packages" (Ed. 0.11) | Editor |

This document was discussed and it was accepted as the baseline for the meeting. It was agreed to make the following changes to the baseline:

- Clause 9.4.3: Text Change - "The policer algorithm enforces the IP data *volume* to be less than "$rT + b$" (see [IETF RFC 2216]), where:"
- Clause 6.6.3.3: The last sentence of Note 2 should be deleted.
- Fig I.2 – Remove Reference to Annex B in [ITU-T Y.1221]

| | | |
|---|---|---|
| C.360 | Draft H.248.53 - Default values for tman properties | Juniper Networks |

This Contribution was discussed and the proposal was accepted.

| | | |
|---|---|---|
| C.361 | Draft H.248.53 - Calculation of bucket sizes for IP bearer traffic policing | Juniper Networks |

This Contribution was discussed and the proposal was not accepted. However during discussions two new formulas were agreed. These new parameters are to be reflected in the draft. It was agreed for the editor to work with the Contributors in order to reflect the agreement in the text.

| | | |
|---|---|---|
| C.390 | Draft H.248.53 – Update clause 6 “Traffic Management package version 2” | Alcatel-Lucent |

This Contribution was discussed and the proposal was accepted. With regards to the “possible values” it was agreed to have “0” to indicate all packets are policed and to replaced “0xFFFFFFF” with “-1” to indicate that the property was off. It was also questioned what the action should be if the numbers of flows on the termination does not match the sub-list length. It was agreed to add some text indicating that error code “473 – Conflicting Property Values” should be returned.

It was suggested to that as mapping of flows to events has come up in several Recommendations a new work item on mapping reports and flows should be started. Contributions are solicited on this item.

H.248.53 was revised (TD 544/WP2 R1) at the meeting. This revision was reviewed and it was agreed to put forward the Recommendation for Consent.

The draft new H.248.53 for Consent can be found in TD 477/PLEN.

The associated A.5 documentation can be found in TD 492/PLEN.

#### 3.5.3.20 H.248.55 (ex H.248.PLM) Pull Mode Packages

| | | |
|---|---|---|
| TD 545/WP2 Rev. 1 | Updated draft of new ITU-T Rec. H.248.55 (ex H.248.PLM) "Gateway control protocol: Generic pull mode package" (Ed. 0.12) | Editor |

This Contribution was discussed and the proposal was accepted.

It was agreed to put forward the Recommendation for Consent.

The draft new H.248.55 for Consent can be found in TD 478/PLEN.

#### 3.5.3.21 H.248.57 (ex H.248.RTCPH) RTP Control Protocol Package

| | | |
|---|---|---|
| TD 546/WP2 | Updated draft of ITU-T Rec. H.248.57 (ex H.248.RTCP) "Gateway control protocol: RTP Control Protocol Package" (Ed. 0.4) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.362 | Draft H.248.57 - Clarification of the procedures' overview | Juniper Networks |

This Contribution was discussed and the proposal was accepted with the following changes:

- Clause 6.1.1 as per the Contribution should be moved to the scope section.
- Clause 6.1.1 text should be modified as follows:

  This Recommendation deals with functions (1) and (3) only. Other functions are out of the scope of this Recommendation.

In addition, the recommendation assumes that regarding (7), RTP and RTCP flows are always mapped into a single H.248 stream. Other mapping schemes are out of the scope of this recommendation and may make *this Recommendation's* procedures irrelevant.

- Clause 6.6.4 is to remain as per the base line.

| | | |
|---|---|---|
| C.363 | Draft H.248.57 - Change and clarify procedures for indicating whether RTCP is used and allow port allocation using SDP's "a=rtcp:" attribute | Juniper Networks |

This Contribution was discussed and the proposal itself was not accepted. However it was agreed that the use of the SDP RTCP related attributes in the local Descriptor would not be limited by the Package. Furthermore it was agreed that the Recommendation would not prevent address and port being used in SDP RTCP related attributes. It was also agreed that the *rtcph/rsb* property controls whether or not a RTCP is allocated.

It was agreed for the editor to provide a text proposal to incorporate these understandings.

| | | |
|---|---|---|
| C.391 | Draft H.248.57 – Update of open items | Alcatel-Lucent |

This Contribution was discussed and the proposal was accepted with the following comments:

- Clause 3.1.1: Add specific reference to the definition in H.248.1.
- Clause 3.1.3: "RTP Session" Remove second sentence and add reference to RFC3550.
- Remove Clause 6.6.3.3.

H.248.57 was revised (TD 546/WP2 R1) at the meeting. This revision was reviewed and it was agreed to put forward the Recommendation for Consent.

During the discussions it was agreed to update Table 1 and 2 to better describe the interaction between the setting of the rsb property, RFC3605 (a=rtcp) and RFC4566 (Number of ports).

The draft new H.248.57 for Consent can be found in TD 517/PLEN.

The associated A.5 documentation can be found in TD 493 R1/PLEN.

#### 3.5.3.22 H.248.58 (ex H.248.RTPAD) Packages for Application Level H.248 Statistics

| | | |
|---|---|---|
| TD 547/WP2 | Updated draft of new ITU-T Rec. H.248.58 (ex H.248.rtpad) "Gateway control protocol: Packages for application level H.248 statistics" (Ed. 0.5) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.392 | Draft H.248.58 – Update of open items | Alcatel-Lucent |

This Contribution was discussed and the proposal was accepted with the comments that references to H.248.48 should be removed.

H.248.58 was revised (TD 547/WP2 R1) at the meeting. This revision was reviewed and it was agreed to put forward the Recommendation for Consent.

The draft new H.248.58 for Consent can be found in TD 519/PLEN.

The associated A.5 documentation can be found in TD 494/PLEN.

### 3.5.3.23 H.248.60 (ex. H.248.CCI) Content of Communication Identity Package

| | | |
|---|---|---|
| TD 549/WP2 | Updated draft of new ITU-T Rec. H.248.60 (ex H.248.CCI) "Gateway control protocol: Identification of content of communication" (Ed. 0.4) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

No output document was produced as there were no changes to the baseline.

### 3.5.3.24 H.248.61 (ex. H.248.IPOCS) IP Layer Octet Counts Statistics

| | | |
|---|---|---|
| TD 548/WP2 | Updated draft of new ITU-T Rec. H.248.61 (ex H.248.ipocs) "Gateway control protocol: Packages for network level H.248 statistics" (Ed. 0.4) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.393 | Draft H.248.61 – Statistic Semantic for IP Flows – Continuation of Discussion | Alcatel-Lucent |

This Contribution was discussed and the proposal was accepted . It was questioned if the information in the proposal would be relevant for the network statistics? It was clarified that Network statistics was later 4 and above.

The delegates thought that it the text would better focus on a packet to stream assignment function rather than a context to packet assignment function. It was thought these assignment procedures may also relate to other statistics packages.

The delegates were unsure whether gate management properties should be processed after a flow is matched to a stream. It was suggested to explicitly mention that we don't consider H.248.43 to be used for flow identification. Editor to indicate why H.248.43 is not used for flow identification.

The lookup structures were updated to take into considerations:

6.2.2 7) common case 2 layer tuple. Filtering based on protocol type ipv4/v6

Missing local/remote descriptor or wildcarded local/remote descriptor are equivalent.

The output draft H.248.61 can be found in TD 548/WP2 R1.

### 3.5.3.25 H.248.62 (ex. H.248.RA) Re-Answer Call Support

| | | |
|---|---|---|
| TD 581/WP2 | Updated draft of new H.248.62 (ex H.248.RA) "Re-Answer Package" | Editor |

This document was discussed and it was accepted as the baseline for the meeting. It was noted that the Package ID should be updated to 0x00e2.

It was agreed to put forward the Recommendation for Consent.

The draft new H.248.62 for Consent can be found in TD 514/PLEN.

### 3.5.3.26 H.248.63 (ex. H.248.resman) Resource Management

| | | |
|---|---|---|
| TD 587/WP2 | H.248.63 (ex H.248.resman) Editor's Input | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.450 | H.248.RESMAN Additions | Huawei |

This Contribution was discussed and the proposal was accepted with the following comments:

Clause 6: *In cases where the steady state may be determined and the resources may be freed*, used correctly the packages will have little detrimental effect on pooling or dimensioning and enhance resource availability for a particular connection. *In other cases the use of the packages needs to be considered against potential pooling or dimensioning issues as it may lead to an increase in the utilisation of the resources.*

Clause 6 Editor's note to be added "Procedures could be added to discuss how to clear the resources."

Clause 8.1.1 It was agreed to keep the ABNF. It was agreed that the ASN.1 wasn't that helpful due to compiler issues. It could be imagined that a new parameter could be added to the base protocol to indicate a reservation.

Clause 7.1.2 Change the text as below:

**Possible values:** *Each String having the format constprop* according to following ABNF:

Clause 7.1.1: Change name of possible values.

Clause 8.1.1 The "at-most-once" can be removed from the possible values.

The output draft H.248.63 can be found in TD 587/WP2 R1.

### 3.5.3.27 H.248.64 (ex. H.248.IPR) IP Router Package

| | | |
|---|---|---|
| TD 552/WP2 | Updated draft of new ITU-T Rec. H.248.64 (ex H.248.ipr) "Gateway control protocol: IP router package" (Ed. 0.2) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.449 | H.248.IPR Model Enhancements | Huawei |

This Contribution was discussed and the proposal was accepted.

The output draft H.248.64 can be found in TD 552/WP2 R1.

### 3.5.3.28 H.248.65 (ex. H.248.RSVP) Support of the Resource ReSerVation Protocol

| | | |
|---|---|---|
| TD 550/WP2 | Updated draft of new ITU-T Rec. H.248.65 (ex H.248.RSVP) "Gateway control protocol: Support of the resource reservation protocol" (Ed. 0.2) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.452 | H.248.RSVP Scope Updates | Huawei |

This Contribution was discussed and the proposal was accepted.

| | | |
|---|---|---|
| C.451 | H.248.RSVP RSVP and H.248 interaction | Huawei |

This Contribution was discussed and the proposal was accepted. It was questioned if the Session ID was needed. It was clarified that the Session ID is the identifier of the RTP session, given that there multiple RTP the correct one needs to be identified.

The output draft H.248.65 can be found in TD 550/WP2 R1.

### 3.5.3.29 H.248.66 (ex. H.248.RTSP) Packages for RTSP and H.248 interworking

| | | |
|---|---|---|
| TD 588/WP2 | H.248.66 (ex H.248.RTSP) Editor's Input | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

No output draft was produced as there were no changes to the baseline.

### 3.5.3.30 H.248.67 (ex. H.248.TrM) Transport Mode Indication Package

| | | |
|---|---|---|
| TD 551/WP2 | Updated draft of new ITU-T Rec. H.248.67 (ex H.248.TrM) "Gateway control protocol: GCP transport mode indication package" (Ed. 0.2) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

No output draft was produced as there were no changes to the baseline.

### 3.5.3.31 H Series Supplement 2 Release 11

| | | |
|---|---|---|
| TD 569/WP2 | Draft revised H Series Supplement 2, "H.248.x sub-series packages guide" (Release 11) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

H.Supp. 2 was revised (TD 569/WP2 R1) at the meeting. This revision was reviewed and it was agreed to put forward the Supplement for Approval.

The draft revised H.Supp. 2 for Approval can be found in TD 484/PLEN.

### 3.5.3.32 H Series Supplement 7 Control Association

| | | |
|---|---|---|
| TD 553/WP2 | Updated draft ITU-T H.Sup7 "Gateway Control Protocol: Establishment Procedures for the H.248 MGC-MG Control Association" (Ed. 0.15) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.394 | H.Sup7 – Update of clause 8.3 "*Case (c): Failover request*" | Alcatel-Lucent |

This Contribution was discussed and the proposal was accepted.

| | | |
|---|---|---|
| C.395 | Draft H.Sup7 – Update of clause 8.4 "*Case (d): Disconnected H.248 Control Association renewal request*" | Alcatel-Lucent |

This Contribution was discussed and the proposal was accepted.

Clause 8.4 step d3 - is the issue. The Ericsson interpretation is that a Disconnect should be re-issued according to their interpretation of 7.2.8.1.11 "The Media Gateway Controller may return a ServiceChangeMgcID parameter that describes the Media Gateway Controller that should preferably be contacted for further service by the Media Gateway. In this case, the Media Gateway shall reissue the ServiceChange Command to the new Media Gateway Controller."

However other delegates felt that it was not possible to re-issue a Disconnect to a separate MGC because it would constitute a new control association. i.e.7.2.8.1.1 Disconnected: always applied with the Root TerminationID, indicates that the MG lost communication with the MGC, but it was subsequently restored to the same MGC (possibly after trying other MGCs on a pre-provisioned list). Since MG state may have changed, the MGC may wish to use the Audit command to resynchronize its state with the MGs.

Given this majority understanding it was agreed to move forward with the case proposed.

H.Supp. 7 was revised (TD 553/WP2 R1) at the meeting. This revision was reviewed and it was agreed to put forward the Supplement for Approval.

The draft new H.Supp. 7 for Approval can be found in TD 480/PLEN.

#### 3.5.3.33 H Series Supplement 8 (ex. H.supp.sync) Guidelines for synchronized time in H.248 domains

| | | |
|---|---|---|
| TD 554/WP2 | Updated draft of new ITU-T H.Sup8 "Gateway control protocol: Guidelines for synchronized time in H.248 domains" (Ed. 0.6) | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| C.396 | H.Sup8 – Update of references | Alcatel-Lucent |

This Contribution was discussed and the proposal was accepted.

It was agreed to put forward the Supplement for Approval.

The draft new H.Supp. 8 for Approval can be found in TD 479/PLEN.

#### 3.5.3.34 H Series Supplement 9 Operation of H.248 with H.225, SIP, and ISUP in Support of ETS/IEPS

| | | |
|---|---|---|
| TD 573/WP2 | Updated draft new H-Series Supplement 9 (ex H.Sup.IEPS) "Operation of H.248 with H.225, SIP, and ISUP in Support of ETS/IEPS" | Editor |

This document was discussed and it was accepted as the baseline for the meeting.

| | | |
|---|---|---|
| TD 574/WP2 | Editor's comments on draft new H-Series Supplement 9 (ex H.Sup.IEPS) "Operation of H.248 with H.225, SIP, and ISUP in Support of ETS/IEPS" | Editor |

This Contribution was discussed and the proposal was accepted.

It was agreed to put forward Supplement 9 for Approval.

The draft new H.Supp. 9 for Approval can be found in TD 468/PLEN.

#### 3.5.3.35 New Material

| | | |
|---|---|---|
| C.373 | H.248.MSRP - New proposed Package for Message Session Relay Protocol Support | ZTE |

This Contribution was discussed in conjunction with a liaison on the issue (TD 526/GEN). The delegates indicated that they couldn't see any requirements specified in the ITU work. The Contributors replied that there is work ongoing in SG11 in Q.conf and ETSI Tispan in TS 183 005. The delegates also thought that for the MSRP session mode most of control can be done through SDP however for decomposed architecture there may be extra requirements due to the SIMPLE working group. It was agreed that the proposal doesn't provide sufficient background on requirements especially for breaking down into chunks. The proposal was not agreed. It was agreed to investigate a work item on H.248 MSRP support. Contributions are solicited on requirements/architecture in order to develop baseline text.

| | | |
|---|---|---|
| C.387 | New Draft H.SupX – H.248 Filter Specification Language – Overview | Alcatel-Lucent |

This Contribution was discussed. Whilst the information was interesting it was felt that it may be better to postpone work on this item until H.248.43 has settled. The proposal was not agreed at this stage.

| | | |
|---|---|---|
| C.453 | H.248.TDR Tone and Digit removal from media stream | Huawei |

This Contribution was discussed and the proposal was accepted. It was further agreed to add an editor's note to the effect that "*Further enhancement is needed to make the distinction between total and partial removal of tones and what impact this may have on the MG/Network.*".

Mr. Y.Lin (Huawei) kindly volunteered to be the editor.

An ouput draft containing the base line for the new work item H.248.TDR is contained in TD-642/WP2.

### 3.5.4 Intellectual Property Statements

No statements were received.

### 3.5.5 Outgoing Liaison statements

Q3/16 prepared five Liaison Statements:

- to the IETF MMUSIC WG on RTSP2.0 (TD 610/WP2),
- to TISPAN WG3 on filtering and latching (TD 611/WP2),
- to TISPAN WG3 on approval of Recommendations related to gate management (TD 612/WP2),
- to TISPAN WG3 on H.248.41 Amd.1 "Gateway control protocol: IP domain connection package: IP Realm Availability Package" (TD 613/WP2),
- to TISPAN WG3 on rules concerning mandatory/optional package properties in H.248 profiles (TD 614/WP2),

### 3.5.6 Work programme

#### 3.5.6.1 Future work

E-mail correspondences pertaining to H.248 are routinely conducted using the IETF MEGACO e-mail reflector. Those wishing to subscribe or unsubscribe to this email reflector should visit the IETF Megaco Mailing List web page at:

https://www.ietf.org/mailman/listinfo/megaco

The currently open work items are as follows:

| Recommendation | Editor | Consent / Approval | Reference |
|---|---|---|---|
| H.248.1v3 App. IV (ex. H.248.Statistics) | E.Chomsky | 2009 | TD 580/WP2 R1 |
| H.248.19 Amendment 2 | Y.Lin | 2009 | TD 584/WP2 |

| Recommendation | Editor | Consent / Approval | Reference |
|---|---|---|---|
| H.248.42 Amendment 1 | A.Schwarz | 2009 | TD 556/WP2 R1 |
| H.248.48 (ex. H.248.QHR) | G.Hunt | 2009 | TD 577/WP2 |
| H.248.50 (ex. H.248.NATTT) | Y.Lin | 2009 | TD 586/WP2 R1 |
| H.248.60 (ex. H.248.CCI) | A.Schwarz | 2009 | TD 549/WP2 |
| H.248.61 (ex. H.248.IPOCS) | A.Schwarz | 2009 | TD 548/WP2 R1 |
| H.248.63 (ex. H.248.resman) | Y.Lin | 2009 | TD 587/WP2 R1 |
| H.248.64 (ex. H.248.IPR) | A.Schwarz | 2009 | TD 5~~2~~2/WP2 R1 |
| H.248.65 (ex. H.248.RSVP) | A.Schwarz | 2009 | TD 550/WP2 R1 |
| H.248.66 (ex. H.248.RTSP) | Y.Lin | 2009 | TD 588/WP2 |
| H.248.67 (ex. H.248.TrM) | A.Schwarz | 2009 | TD 551/WP2 |
| H.248.PIPA | Y.Lin | 2009 | TD 641/WP2 |
| H.248.TDR | Y.Lin | 2009 | TD 642/WP2 |
| H.248 Sub Series IG | C.Groves | 2009 | TD 474/PLEN |
| H.248.1v2 IG | L.Li | 2009 | TD 521/PLEN |
| H Series Supp. 2 | C.Groves | 2009 | TD 484/PLEN |

#### 3.5.6.2 Future meetings

Q3/16 plans to hold one interim meeting in Geneva, 25-29 August 2008.

### 3.6 Question 4/16 - Advanced MM Communication Service Features on Top of ITU-T defined MM System Platforms

Question 4/16 was addressed in two sessions during the SG 16 meeting under the chairmanship of Seong-Ho Jeong (Korea). The group adopted the agenda in TD 525/WP2.

The objectives for this meeting were:

- Coordinate with other SDOs, Questions, or Study Groups
- Progress work on the following areas:
  - H.350.WI (for Consent)
  - Enhancements of H.350 Sub-series
  - Possible new service features

#### 3.6.1 Documentation

The following documents were examined:

- Contributions: C317, C332, C333, C399, C426, C427, C428, C476
- TD/Plen: 441, 442, 445, 446, 449, 452, 453, 454, 455, 456, 457
- TD/Gen: 396, 398, 399, 401, 402, 403, 408, 415, 416, 417, 427, 433, 445, 449, 469, 470, 471, 472, 474, 484, 490, 497, 500, 501, 504, 514, 516
- TD/WP2: 525, 542, 541, 535, 521

### 3.6.2 Report of Interim Activities

Since the last SG 16 plenary meeting, Question 4/16 held a Rapporteur meeting on 17 – 23 January 2008 in Seoul, Korea. The report of this Rapporteur meeting (TD 535/WP2) was approved at this SG 16 meeting.

Documentation is found in external FTP area for WP2/16 Questions at: http://ftp3.itu.ch/av-arch/avc-site/2005-2008/.

### 3.6.3 Discussions

#### 3.6.3.1 Incoming Liaison Statements

– (TD 427/Gen) Reply LS on baseline text for proposed H.350 web services interface (COM 16-LS 225) [SG 17]

→ This was reviewed, and it was agreed to send a Reply LS to indicate that SG17's comments have been reflected.

The following TDs were reviewed and discussed during the joint Questions session (refer to the WP2 report).

– (TD 516/Gen) Background material on restructuring discussions [Chairman SG 16]

– (TD 514/Gen) LS on Question 223-2/8 "Internet protocol applications over mobile systems [ITU-R SG 5]

– (TD 504/Gen) LS from IETF MMUSIC WG on ongoing work on RTSP 2.0 and request for information on RTSP extensions [ITU-T SG 16 Chairman (on behalf of IETF)]

– (TD 501/Gen) LS on draft SG 15 proposal of new Questions for the next study period of 2009-2012 [SG 15]

– (TD 500/Gen) LS on IEEE OUI assignment for ITU-T [SG 15]

– (TD 497/Gen) LS on new versions of the Access Network Transport (ANT) Standardization Plan and Work Plan [SG 15]

– (TD 484/Gen) LS on 3GPP Schedule for Common IMS [Chairman SG 16]

– (TD 474/Gen) LS on termination of FG IPTV mandate and beginning of the IPTV-GSI [Chairman, ITU-T FG IPTV]

– (TD 472/Gen) LS on availability of Web Conferencing Tools [TSAG]

– (TD 471/Gen) LS on improved Geographic Distribution and Coordination of ITU-T Seminars and Workshops [TSAG]

– (TD 470/Gen) LS on assessment of ITU-T Recommendations in the light of Climate Change [TSAG]

– (TD 469/Gen) LS on A.5 justification for normative references to documents of other organizations [TSAG]

– (TD 449/Gen) LS on transfer of work under "common IMS" [Chairman SG 16]

– (TD 445/Gen) LS on report on the sixth FG IPTV meeting (Tokyo, Japan, 15-19 October 2007) [Chairman, ITU-T FG IPTV]

– (TD 433/Gen) LS on the Creation of a Focus Group on "From/In/To Cars Communications II"[SG 12]

– (TD 417/Gen) LS on re-chartering of the NGN Management Focus Group [SG 4]

– (TD 416/Gen) LS on SG 4 report and request in its role as Lead SG on Telecommunication Management [SG 4]

– (TD 415/Gen) Reply LS on creation of ITU-T Restructuring Correspondence Group and request for inputs (TSAG-LS 23) [SG 4]

– (TD 408/Gen) Reports of the FG-IPTV meetings between July and December 2007 [TSB]

– (TD 403/Gen) Reply LS on collaboration on the activity for IPTV network and middleware (COM 16-LS 205) [Chairman, ITU-T FG-IPTV]

– (TD 402/Gen) Reply LS on Progress on IPTV End Systems (COM 16-LS 227) [Chairman, ITU-T FG-IPTV]

– (TD 401/Gen) LS on Report of FG-IPTV progress and request for comment [Chairman, ITU-T FG-IPTV]

– (TD 399/Gen) LS on activities on standardization for Emergency Telecommunications [ICG-SAT]

– (TD 398/Gen) LS on aspects of common and critical interest to the satellite industry [ICG-SAT]

– (TD 396/Gen) Outgoing LSs produced by the SG 16 management and at Rapporteurs' meetings during the interim period (July 2007 - April 2008) [TSB]

#### 3.6.3.2 H.351 (ex H. 350.WI “Semantic web interface for multimedia terminal and system directories (SWIM-D)”)

– (C 317) Semantic web interface for multimedia terminal and system directories (SWIM-D) [University of North Carolina]

This contribution was presented. It was thought that the document is in good shape, and therefore it was agreed to accept it as the new text for H.351 (ex H.350.WI) and move it forward for Consent at this SG16 meeting (see TD 465/Plen for the text and TD 464/Plen for A.5).

#### 3.6.3.3 New topics

– (C 399) Proposed extension to H.300-series far end camera control [Huawei Technologies]

This was presented and discussed at Q1 meeting. Please refer to the Q1 Report.

### 3.6.4 Intellectual Property Statements

No IPR statements were received at this meeting.

### 3.6.5 Outgoing Liaison statements

Question 4 prepared one LS:

- TD 634/WP2: Reply LS to SG17 on H.350 Web Services Interface

### 3.6.6 Work programme

#### 3.6.6.1 Future work

E-mail correspondences pertaining to the activities of this group are routinely conducted using the e-mail reflector currently hosted by Packetizer. Those wishing to subscribe or unsubscribe to this email reflector should visit the Packetizer Mailing List web page at:

http://lists.packetizer.com/mailman/listinfo/itu-sg16

E-mails to all subscribed Q4/16 Experts should be sent to itu-sg16@lists.packetizer.com.

For enhancements of H.350 directory services, interested parties are encouraged to progress this work. For other new applications, Question 4 is open to proposals and contributions are welcome.

#### 3.6.6.2 Future meetings

Question 4/16 is planning to hold one interim meeting jointly with other WP 2/16 Questions meeting before the next SG 16 meeting in January 2009. See Section 4 for details.

### 3.7 Question 5/16 - Control of NAT and Firewall Traversal for H.300-Series Multimedia Systems

Question 5/16 was addressed in four sessions during the SG 16 meeting under the chairmanship of Paul E. Jones (Cisco, USA). The group adopted the agenda in TD 526/WP2.

The objectives for this meeting were:

- Coordinate with other SDOs, Questions, or Study Groups
- Complete work on H.proxy
- Progress work on:
    - H.460.natdet
    - H.460.p2pnat
    - TP.HNFT
- Discussion of miscellaneous and new work items
- Discuss plans for future meetings

### 3.7.1 Documentation

The following documents were examined:

- Contributions: COM16-C.483
- TD/Plen: None
- TD/Gen: None
- TD/WP2: 590, 591

### 3.7.2 Report of Interim Activities

Since the last SG 16 plenary meeting, Question 5/16 held a Rapporteur meeting in January 2008. The report of the Rapporteur meeting (TD 535/WP2) was approved at this SG 16 meeting.

The work also progressed by correspondence using the Question e-mail reflector (itu-sg16@lists.packetizer.com). Documentation is found in external FTP area for WP2/16 Questions at: http://ftp3.itu.ch/av-arch/avc-site/2005-2008/.

The address for e-mails to be sent to all subscribed Q5/16 Experts is itu-sg16@lists.packetizer.com.

### 3.7.3 Discussions

#### 3.7.3.1 Incoming Liaison Statements

There were no incoming liaison statements for Q5.

#### 3.7.3.2 H.460.natdet

***TD 590/WP2 – Network Address Translator and Firewall Device Determination [Rapporteur]***

It was noted that terms like "cone NAT" need to be defined. There are definitions in the IETF and we have a technical paper published in the ITU that define these, but we need a normative reference and/or a definition within this document. It was agreed to assign the number H.460.23 to this draft Recommendation with intent to consent at the next meeting.

#### 3.7.3.3 H.460.p2pnat

***TD 591/WP2 – Point to Point Media through Network Address Translators [Rapporteur]***

We need to look at the updated work the IETF is doing related to STUN and perhaps reference the newer document if it is published before we put this text forward for consent. We should also make sure that all terms are properly defined or referenced. It was agreed to assign the number H.460.24 to this draft Recommendation with intent to consent at the next meeting.

#### 3.7.3.4 H.proxy

***C.483 – Updated draft for new H.Proxy "Proxy-aided NAT/FW Traversal Scheme for H. 323 Multimedia Systems" [MII, ZTE]***

It was suggested to change the last sentence in the scope section to read "Proxy-aided NAT/FW traversal Scheme highlights potential issues with deploying those H.323 NAT/FW traversal solutions and describes how those solutions are applied in such cases." A revised document was published as TD 622/WP2, though it was noted that the scope section was not modified as intended. With further editorial refinement, it was agreed to put this document forward for approval at this meeting as an H-series supplement. The output document appeared as TD 496/Plen.

### 3.7.4 Intellectual Property Statements

No IPR statements were received at this meeting.

### 3.7.5 Outgoing Liaison statements

No LSs were prepared at this meeting.

### 3.7.6 Work programme

#### 3.7.6.1 Future work

E-mail correspondences pertaining to the activities of this group are routinely conducted using the e-mail reflector currently hosted by Packetizer. Those wishing to subscribe or unsubscribe to this email reflector should visit the Packetizer Mailing List web page at:

http://lists.packetizer.com/mailman/listinfo/itu-sg16

E-mails to all subscribed Q5/16 Experts should be sent to itu-sg16@lists.packetizer.com.

The currently open work items are as follows:

| Recommendation | Editor | Consent / Approval | Reference |
|---|---|---|---|
| TP.HNFT | X. Jiang (MII) | 2009-01 | - |
| H.460.23 (natdet) | P. Jones (Cisco) | 2009-01 | TD 590/WP2 |
| H.460.24 (p2pnat) | P. Jones (Cisco) | 2009-01 | TD 591/WP2 |

#### 3.7.6.2 Future meetings

Question 5 will hold one Rapporteur meeting jointly with other Questions in Working Party 2 before the next SG 16 meeting. The tentative date is August 2008. The location and host are still to be determined.

### 3.8 Question 12/16 – Advanced multimedia system for NGN and future packet based networks

Question 12/16 was addressed in fve sessions during the SG 16 meeting under the chairmanship of Paul E. Jones (Cisco, USA) and Brody Kenrick (Dilithium, USA). The group adopted the agenda in TD 527/WP2.

The objectives for this meeting were:

- Coordinate with other SDOs, Questions, or Study Groups
- Progress work on AMS requirements, architecture and catalogue
- Update AMS project description
- Discussion of other input contributions
- Discuss plans for future meetings

#### 3.8.1 Documentation

The following documents were examined:

- Contributions: COM16-C.316, C.318, C.325, C.326, C.331, C.434
- TD/Plen: None
- TD/Gen: 490, 492, 496, 524
- TD/WP2: 561, 562, 566

#### 3.8.2 Report of Interim Activities

Since the last SG 16 plenary meeting, Question 12/16 held Rapporteur meetings in September 2007 and January 2008. The report of the Rapporteur meetings (TD 534/WP2 and TD 535/WP2) was approved at this SG 16 meeting.

The work also progressed by correspondence using the Question e-mail reflector (itu-sg16@lists.packetizer.com). Documentation is found in external FTP area for WP2/16 Questions at: http://ftp3.itu.ch/av-arch/avc-site/2005-2008/. The address for e-mails to be sent to all subscribed Q12/16 Experts is itu-sg16@lists.packetizer.com. Since the aforementioned list is shared with

other related SG16 Questions, a separate mailing list exists to facilitate detailed design discussions on AMS available at ams-design@lists.packetizer.com.

### 3.8.3 Discussions

#### 3.8.3.1 Incoming Liaison Statements

***TD 490/Gen – LS on a three-party query response IdM model [JCA-IdM Co-convenors]***

It was agreed to send a liaison to IdM. The text of the liaison was reviewed during the Working Party 2 meeting and included in the Working Party 2 report.

***TD 492/Gen – LS on work plan for trusted service provider identity (SPID) Recommendations [Rapporteur Q6/17]***

Noted.

***TD 496/Gen – LS on draft new Recommendation G.hnta - Generic Home Network Transport Architecture [SG15]***

There was a question regarding how QoS might be controlled via this architecture. There was also a question related to how equipment in the home network might interact with a mobile device. The latter is of particular interest to Q12, since an AMS terminal might reside in a mobile device, but might utilize application that sit within the home network and communicate over the broadband connections within the home network. It was suggested that we send a liaison to highlight what we are doing in Q12 and the desire to ensure that mobile aspects are considered within the home network architecture. There was also a question raised regarding how NAT/FW traversal issues might be addressed and where the functions might reside in this architecture. We anticipate from the multimedia perspective that there will be data-generating equipment residing inside the home and transmitting out into the public network. The liaison appeared as TD 609/WP2.

In review of the liaison, a question was raised as to what actionable item we can give them. Perhaps we should request that they consider how AMS might be utilized within the home network and consider AMS as part of their future work plans? It was noted that SG15 experts may not have another meeting until after the WTSA meeting. With additions per the discussion, it was agreed to send this liaison. It appeared as TD 609R1/WP2.

***TD 524/Gen – LS on countering spam by technical means [SG17]***

Refer to the Q25 meeting report.

#### 3.8.3.2 AMS Requirements

***TD 561/WP2 – Summary of AMS Requirements [Editor]***

It was suggested that we need a new section added related to accessibility. It was noted that the introduction of the document says that we're in the requirements gathering phase, but in fact we're now into the architectural specification phase. New requirements are certainly welcome, but perhaps the wording of the introduction should be changed to reflect the current status. This document was updated based on discussion and input contributions and the final text appeared in TD 561R1/WP2.

In review of TD 561R1/WP2, it was noted that the text in section 1 still says that the project is in the requirements gathering phase, but we have moved to an architecture specification phase and the text should reflect that fact. A typo exists in requirement MOBT-101 (quotation mark). It was suggested removing the text "and will receive an appropriate indication of the handoff at the far end" from the end of the second MOBA-100 requirement. It was noted that there are two requirements with the number MOBA-100, so the second should be renumbered.

The final output of the requirements document appeared in TD 561R2/WP2.

***C.325 – Proposed AMS Requirements [Dilithium]***

It was agreed that the word "provide" should be "enable" in SEC-100, since we do not intend to mandate use of security. We had a discussion on application mobility versus terminal mobility. We want all applications to work when terminal mobility occurs, but we do not want introduce too much complexity. It was agreed that we would split the mobility requirements into two sub-sections: application mobility and terminal mobility. The wording of the second proposed mobility requirement seemed a bit confusing, as it was not clear whether it was intended that the AMS terminal have 2G functionality or whether this was strictly a gateway requirement. There was also a desire expressed to notify the user as to why a change occurred (e.g., why video stopped working). The contributor agreed to work with the editor to insert the requirements with clarified wording.

***C.326 – AMS Requirement Situation Discussion [Dilithium]***

We captured some of the comments raised in this contribution above in the review of TD 561/WP2.

***C.434 – Mobility Requirements for AMS [Korea]***

The points raised in this document are valid, but one issue we must be mindful of is the fact that the AMS terminal might transition from one type of network to another (e.g., WiFi to WiMAX), but the micro applications might not transition. For example, if one is receiving a video stream on a video display that has its own network connection, one would not want terminal mobility to negatively impact the video stream on the video display. The requirements were agreed to be added to the requirements summary with the necessary changes regarding applicability to what entity would be informed/affected.

**3.8.3.3 AMS Project Description**

***TD 562/WP2 – AMS Project Description [Editor]***

Reviewed.

**3.8.3.4 AMS Catalogue**

***TD 566/WP2 – AMS Catalogue (Applications/services, scenarios and devices) [Editor]***

We had a discussion in relation to this document to solicit scenarios on accessibility to help influence our requirements and work. Q26 can provide input on the scenarios. It was decided to send a liaison with this document attached to provide information to Q3/2 and get input with respect to human factors. The liaison appeared as TD 648/WP2.

**3.8.3.5 AMS Terminal Architecture**

***C.316 – Proposed skeletal document for AMS Architecture [UNC]***

There were a number of questions regarding leveraging existing technologies, orchestrating communication between various micro applications, etc. It was concluded that we still have a lot of work to do, but this document provided a good framework for progressing that work. It was suggested that, since this document focuses strictly on the "terminal" side of AMS, we should change the scope of the document and diagram to reflect that it is a terminal architecture. It was agreed to accept this as the baseline text for the terminal architecture of AMS. In Figure 1 we should add below the AMS network a connection to the NGN network and other packet switched networks. It was proposed to either remove the other protocols (H.323, SIP, XMPP) or move them such that their usage is less confusing as they are currently presented.

Contributions are solicited to help flesh out each of the sections of the architecture document.

#### 3.8.3.6 Miscellaneous

***C.318 – Liaison with OASIS [UNC]***

There was a brief discussion to understand the scope of the communication and the apparent concentration by OASIS on "web services" (as opposed to SOA). It was agreed to draft a liaison to OASIS as proposed. The liaison appeared in TD 624/WP2. There were a few minor editorial changes made and agreement was reached to send this to OASIS. The final text of the liaison appeared in TD 624R1/WP2.

***C.331 – Consideration Issues for the Networked Robots as an AMS terminal [ETRI]***

It was suggested that we ensure that the AMS Catalogue records some of the networked robot scenarios to help us ensure that we design the system to enable these kinds of capabilities. Experts asked for more information on CAMUS and the desire to use a transport protocol other than TCP.

### 3.8.4 Intellectual Property Statements

No IPR statements were received at this meeting.

### 3.8.5 Outgoing Liaison statements

The meeting agreed to send four liaison statements. One was in response to TD 496/Gen on home networking. Another liaison was sent as proposed in C.318 to OASIS. The third liaison was sent to ITU-T SG2 ITU-T SG2 to solicit input from the human factors perspective on the AMS Catalogue. The final liaison statement was sent to the JCA-IdM to solicit input and collaboration on identity management issues as they might relate to AMS.

### 3.8.6 Work programme

#### 3.8.6.1 Future work

E-mail correspondences pertaining to the activities of this group are routinely conducted using the e-mail reflectors currently hosted by Packetizer. Those wishing to subscribe or unsubscribe to these email reflectors should visit the Packetizer Mailing List web pages at:

http://lists.packetizer.com/mailman/listinfo/itu-sg16

and

http://lists.packetizer.com/mailman/listinfo/ams-design

E-mails to all subscribed Q12/16 Experts on general matters (including meeting announcements and coordination) should be sent to itu-sg16@lists.packetizer.com. E-mails related to technical design issues should be sent to am-design@lissts.packetizer.com.

The currently open work items are as follows:

| Recommendation | Editor | Consent / Approval | Reference |
|---|---|---|---|
| AMS Project Description | T. Johnson | [tbd] | TD 562/WP2 (2008-04) |
| AMS Requirements | S.H. Jeong, X. Jiang | [tbd] | TD 561R2/WP2 (2008-04) |
| AMS Catalogue | B. Kenrick | [tbd] | TD 566/WP2 (2008-04) |
| AMS Terminal Architecture | T. Johnson | [tbd] | C.316 (2008-04) |

#### 3.8.6.2 Future meetings

Question 12 will hold two Rapporteur meetings, one independently and one jointly with other Questions in Working Party 2, before the next SG 16 meeting. The first meeting will be held during the week of June 23, 2008 in North Carolina, USA. The meeting with other WP2 Questions is tentatively planned for August 2008. The locations and hosts are still to be determined.

### 3.9 Question 13/16 - Multimedia application platforms and end systems for IPTV

Question 13/16 was addressed in fifteen sessions during the SG 16 meeting under the chairmanship of Masahito Kawamori (NTT, Japan). The group adopted the agenda in TD 528/WP2.

The objectives for this meeting were:

1. To review relevant documents
2. To discuss contributions related to IPTV.
3. To work on the draft Recommendation H.iptv-map
4. To work on Application Layer Error Recovery mechanism and Content coding documents, jointly with Q6 and Q23.
5. To have a joint meeting with MPEG on middleware
6. To initiate the maintenance of T.170, in harmony with ISO

#### 3.9.1 Documentation

The following documents were examined

- Contributions: COM16-C368, C426, C432, C456, IPTV-GSI-C11, C52, C53, C54, C56, C78
- TD/Plen: None
- TD/Gen: 492, 496, 502, 504, 511, 522, 524
- TD/WP2: 607

#### 3.9.2 Report of Interim Activities

Since the last SG 16 plenary meeting, Question 13/16 held several Rapporteur meetings, as reported in:

- TD 534-WP2 – Report for Joint Rapporteurs Meeting of Questions 12, 13, 21 and 22/16 (Geneva, 11-14 September 2007)
- TD 536-WP2 – Report of the Q13/16 Rapporteur's meeting (Qawra, St. Paul's Bay, Malta, 19-20 December 2007)
- TD 535-WP2 – Report for Joint Rapporteurs' meeting for Questions 2, 3, 4, 5, 12, 13, 21, 24, 25 & 29/16 (Seoul, Korea, 16-22 January 2008)
- TD 538-WP2 – Report of the Questions 4/9, 5/9, 13/16 joint meeting (Geneva, 28-29 February 2008)

Documentation is found in external FTP area for WP2/16 Questions at: http://ftp3.itu.ch/av-arch/avc-site/2005-2008/.

### 3.9.3 Discussions

#### 3.9.3.1 Incoming Liaison Statements

- TD 492 (GEN/16) LS on work plan for trusted service provider identity (SPID) Recommendations, Rapporteur Q6/17
- TD 496 (GEN/16) LS on draft new Recommendation G.hnta - Generic Home Network Transport Architecture, ITU-T SG 15
- TD 502 (GEN/16) LS on information of SG 5 activity related to Home Networking and IPTV, ITU-T SG 5
- TD 504 (GEN/16) LS from IETF MMUSIC WG on ongoing work on RTSP 2.0 and request for information on RTSP extensions, ITU-T SG 16 Chairman (on behalf of IETF)
- TD 511 (GEN/16) LS on progress of J.stb-spec "Component Definition and Interface Specification for Next Generation Set-Top Box" , ITU-T SG 9 Joint Rapporteurs Qs 5 and 9/9
- TD 522 (GEN/16) Reply LS on call for comments on draft new Rec. H.iptv-hn (COM 16 – LS 269) , ITU-T SG 17
- TD 524 (GEN/16) LS on countering spam by technical means, ITU-T SG 17

These incoming Liaison Statements were reviewed and discussed during the Rapporteur meetings. The followings are the discussion and the results.

TD 492 (GEN/16) "LS on work plan for trusted service provider identity (SPID) Recommendations" from Rapporteur Q6/17 reports on a work plan for accelerated development of a set of Trusted Service Provider Identity (SPID) related Recommendations. Four Recommendations will be drafted for accelerated development and approval as part of the SG 17 work plan. It is important to assess this work because it might have a big impact on the actual implementation of IPTV services.

Collaboration and harmonization with the currently widely used identifiers will also have to be carefully evaluated.

TD 496 (GEN/16) "LS on draft new Recommendation G.hnta - Generic Home Network Transport Architecture" from ITU-T SG 15 reports that Study Group 15 produced the attached draft new Recommendation G.hnta - Generic Home Network Transport Architecture. We took note and will try to harmonize with their work.

TD 502 (GEN/16) "LS on information of SG 5 activity related to Home Networking and IPTV" from ITU-T SG 5 informs us that they made progress at their Study Group 5 meeting in Geneva, 25 29 February 2008 and their draft Recommendation K.hnw, "EMC, Resistibility and Safety requirements for Home network devices" was consented and is now proceeding to AAP as draft Recommendation K.74. We take note, and will review their requirements.

TD 504 (GEN/16) "LS from IETF MMUSIC WG on ongoing work on RTSP 2.0 and request for information on RTSP extensions" from ITU-T SG 16 Chairman (on behalf of IETF) informs us of the on-going work on version 2.0 of the Real Time Streaming Protocol (RTSP) in the IETF MMUSIC working group. It emphasizes that any development of protocol extensions and mechanisms related to RTSP would need to occur under the guidelines of RFC 4775. And it is also asking us to let them know if any of us is working on technical specifications that make use of RTSP and if any protocol extensions are being considered. [We can reply that ITU-T Q13/16 is working on specs of IPTV, and RTSP is one of the candidate protocols of IPTV, especially for VoD. But currently Q13/16 is not considering any extension to RTSP. We currently have no requirement for RTSP to be extended.]

TD 511 (GEN/16) "LS on progress of J.stb-spec "Component Definition and Interface Specification for Next Generation Set-Top Box"" from ITU-T SG 9 Joint Rapporteurs Qs 5 and 9/9 informs us of their progress on draft new Recommendation J.stb-spec, which is applicable to enhanced broadcast services over any type of access media. The draft document is planned to consent this at the next SG 9 plenary meeting, 5 - 9 May 2008, in Geneva. (More to be reviewed in detail) Take note and reply an LS.

TD 522 (GEN/16) "Reply LS on call for comments on draft new Rec. H.iptv-hn (COM 16 – LS 269)" from ITU-T SG 17 informs us of their activities relevant to IPTV Home Network Security.

TD 524 (GEN/16) "LS on countering spam by technical means" from ITU-T SG 17 informs of their newly drafted two draft Recommendations on countering Spam during the April 2008 meeting:

- draft ITU-T Recommendation X.fcsip, Technical framework of countering IP multimedia spam
- draft ITU-T Recommendation X.ssf, SMS filtering system based on users' rules

and asks for our comments. We need to review this more in detail, in the meantime, we take note.

**3.9.3.2 Contributions**

- COM16-C368 Proposal for "Web-based IPTV terminal middleware" in SG 16, ETRI
- COM16-C426 Overlap of Work in Questions of Study Group 16 and Study Group 9, BT
- COM16-C432 Proposal for application event on H.iptv-map "Multimedia application platforms and end systems for IPTV", Korea (Republic of)
- COM16-C456 On Application Layer Error Recovery Functions and Architecture for IPTV Service, Huawei Technologies
- IPTV-GSI-C11 Proposal to start the study on the document "Application layer error recovery mechanisms for IPTV services" towards consent, Sumitomo Electric
- IPTV-GSI-C52 Proposal of the scope of the IPTV terminal device fast model document, KDDI Corporation
- IPTV-GSI-C53 Proposal of interactive communication API for IPTV middleware Document TD34, KDDI Corporation
- IPTV-GSI-C54 Proposal on IPTV End System and Terminal Device, China Telecom
- IPTV-GSI-C56 Proposal for technical information on broadcast-centric IPTV terminal middleware, China Telecom
- IPTV-GSI-C78 Proposal of audience measurement API for IPTV middleware Document TD34, OKI

These contributions were reviewed and discussed during the Rapporteur meetings. The followings are the discussion and the results.

COM16-C368 is valid to IPTV. But the service component can be optional in the web-based case. And the figure should reflect this fact and an explanatory text should be given. With those modifications, the contribution will be included in H.IPTV-MAP, as a new clause on "Web-based IPTV terminal middleware".

COM16-C426 states that there is now a clear overlap between Question 13/16 and Question 4/9 on "Application Programme Interfaces". Q13/16 believes there is no overlap. To this contention, Q13/16 will provide a TD describing the technical aspects of Q13/16 activities, making reference to

the LS produced at the Q13/16 Rapporteur's meeting at Malta (this was published subsequently to the meeting as TD 679/WP2).

COM16-C432 from Republic of Korea proposes to update the existing text in the "Application event" section in H.iptv-map so that it has more accuracy and precise scope. It also proposes to make an independent document for Application Event because its characteristics and aspects are different from those of other parts on H.iptv-map. It is generally agreed that such a document is necessary, as part of the Recommendation series. H.IPTV-AEH has been created.

COM16-C456 describes some points of standardization, which includes not only FEC but also retransmission and the combination of both. It also gives examples and explanations of ALER. It also gives some general architectural consideration involving ALER. It does not specifically propose technical solutions. It may supplement the current FG-IPTV deliverable on ALER and may be included in that document. This was discussed with Q23 during the joint meetings. See the details of the discussion at the Joint meeting section.

IPTV-GSI-C11 from Sumitomo Electric proposes to assign a draft Recommendation name on the document "Application layer error recovery mechanisms for IPTV services" to start and accelerate the remaining work items towards consent for a new ITU-T Recommendation. It is agreed that it might be a feasible idea to give it a name such as H.IPTV-ALER to attract more contributions and to accelerate the work on this document. This was further discussed with Q23/16 during the joint meetings. See the details of the discussion at the Joint meeting section.

IPTV-GSI-C52: Which existing IPTV technical specifications that are already defined in each region or country does this contribution refer to? Are there any specifications that are already defined in each region or country?

J.290 and J.292 are not always consistent with each other. (e.g. Table1 in J.290 and Table 1 in J.292 have the same title "Baseline and extended SVD functionalities" but they contain different information. )

They refer to documents that are not publicly available or still under development. It is not consistent with many currently available IPTV systems. (e.g. UPnP remote UI is mentioned in the text, but it is not a standard.)

It is proposed that every IPTV regional specification that has been already established or currently under development should comprehensively be supported, but this is impossible.

IPTV-GSI-C53 states about telephony. Although IPTV should support telephony, it should not replace telephony. These APIs are already defined elsewhere. It is not broadcast-centric. API's should be open enough to allow these services, but they need not be specified. Q13/16 thinks this contribution is not appropriate for inclusion in the document.

IPTV-GSI-C54: The figures have been modified already to differentiate the functional and physical aspects of IPTV terminal architecture.

IPTV-GSI-C56: This is more relevant to terminal device rather than middleware. It is clearly CDN oriented, and not broadcast centric. The flows show clearly non-broadcast centric scenarios. To be included in the terminal device doc.

IPTV-GSI-C78: Metadata document already has audience measurement metadata. Middleware only needs to have APIs for handling metadata. This can be an optional feature of metadata API. Otherwise, we would have to define APIs for each different application.

**3.9.3.3 Temporary documents**

- TD 606 Draft proposal for the document structure of IPTV Related Recommendations, Rapporteur Q13/16

- TD 607(WP 2/16) Discussion materials for H.iptv-map, Rapporteur Q13/16

These temporary documents were reviewed and discussed during the Rapporteur meetings. The followings are the discussion and the results.

TD 606: The proposed structure was agreed in principle. According to the plan, the following four new draft Recommendations were drafted.

1. IPTV Service Discovery and Acquisition [***H.IPTV-SDC*** created from H.IPTV-MAP]
2. Distributed Service Middleware [***H.IPTV-DSMW*** created from H.IPTV-MAP]
3. IPTV Application Events Handling [***H.IPTV-AEH***]
4. IPTV Metadata [***H.IPTV-MD***]

TD 607: It is necessary to clarify the meanings of ○, ---, and an empty box int the table. E.g. in Name Identification (deprecated). At least to add a note explaining. E.g. to say, "○ means supported, or --- means not supported", etc. What is the goal of this table? We need introductions for CE-HTML, Mini-HTML, etc. Before profiles, HTML itself has to be introduced and which version it is, etc. The table is more appropriate in the appendix, because the body of the Recommendation can just refer to the existing specifications, such as defined in CEA-2014. The title of the column "Element" should be named "HTML 4.0 Elements" To make it clearer, a reference to W3C HTML 4.0 should be made. In this table, the distinction between "element" and "attribute" is not clear. It should be clarified. We need more contributions for the rationale or the justification of this Mini-HTML. W3C has already defined a subset of HTML, e.g., "Compact HTML for small information devices". More contributions are called for NCL (Nested Context Language).

This material gives more information concerning NCL and LUA. It is to complement the current subclause 6.11 of the Annex A of H.iptv-map. Q13/16 notices that subclause 6.9 of the Annex A of H.iptv-map is also relevant to this material and is supplanted by it. Q13/16 considers that the current subclause 6.9 of the Annex A of H.iptv-map can be deleted and subclause 6.11 of the Annex A of H.iptv-map can be updated with the material contained in this TD. Since this Annex is derived from an FG IPTV deliverable, Q13/16 proposes this to IPTV-GSI.

#### 3.9.3.4 Joint Activities

##### 3.9.3.4.1 Joint Meeting on Codecs

Questions 6, 13 and 23 of Study Group 16 met under the joint chairmanship of Mr Gary Sullivan (Rapporteur for Q.6), Mr Thomas Wiegand (Associate Rapporteur for Q.6), Mr Masahito Kawamori (Rapporteur for Q.13) and Mr Hervé Taddei (Rapporteur for Q.23).

The meeting discussed the IPTV Toolbox for Content Coding document that was produced by the IPTV Focus Group (TD528/GEN) which has been allocated to Study Group 16 for further consideration. The document was noted to not be a Recommendation or specification of codec technology requirements or signal protocols for IPTV, but rather a collection of some information about various example codec technology that exists in the market and may or may not actually be appropriate for specification in an ITU-T Recommendation. It was remarked by some participants that the current content of the document could need correction of some information, updating, references to additional material, etc.

It was agreed that the responsibility for future evolution of the section of this document on video coding will be allocated to Q.6/16 (*Visual Coding*) and that the responsibility for the remainder of the document, including the speech and audio coding parts, will be allocated to Q.23/16 (*Media Coding*) in consultation with Q.10/16 (*Extension of existing voice coding standards*). It is

anticipated that these Questions will continue into the next Study period with broadly similar remits. Q.6/16 and Q.23/16 will also co-ordinate with Q.13/16.

Q.6/16 and Q.23/16 are requested to review the current text of the IPTV Toolbox for Content Coding with respect to accuracy and completeness, and also in the context of the IPTV Service Requirements document produced by the IPTV Focus Group (now allocated to Q.2/13, see TD 40/IPTV-GSI). ~~Mr Kawamori kindly agreed to publish that requirements document as a SG16 Temporary Document.~~

It is anticipated that this work will take place via correspondence and at interim meetings. Once the Toolbox document has been reviewed and updated by Q.6/16 and Q.23/16, SG16 must determine how to proceed: options include publishing the updated document as an informative document such as a Supplement; using it as the basis for a future Recommendation perhaps similar to the DVB-H specification in ETSI TS 102 005; or both. It is envisaged that this decision will be taken at the next Study Group 16 meeting, or possibly sooner via GSI co-ordination, depending on progress. It was also observed that SG16 must decide whether it needs to address aspects such as media transport in the future of this work.

The WP3/16 Co-Chair (Mr Paul Barrett) commented that he would also seek input from Q.26/16 on how to address the accessibility aspects of the Toolbox document.

**Note:** during the meeting there was a discussion regarding the best way to handle the joint ownership of the Toolbox document by Q.6/16 and Q.23/16, and there was a suggestion to divide the document into separate parts. As a result of subsequent discussions in Q.26/16, it is proposed that the document remain as a single document and Q.6/16 and Q.23/16 co-ordinate to maintain their respective sections. Both Q.6/16 and Q.23/16 are requested to include the accessibility considerations in Appendix II of the Toolbox document in their review work.

#### 3.9.3.4.2 Joint Meeting on Error Recovery

Questions 6, 13 and 23 of Study Group 16 met under the joint chairmanship of Mr Masahito Kawamori (Rapporteur for Q.13) and Mr Hervé Taddei (Rapporteur for Q.23) for discussing IPTV Application Layer Error Recovery document from FG IPTV.

Q13 will have the responsibility for the document (IPTV-FG). Q23 will support the work of Q13. But the work item itself belongs to Q13.

TD-07(application layer error recovery) produced in Seoul and C11 are documents of IPTV-GSI.

Strictly speaking, the GSI meeting is a different meeting from SG16.

An issue was raised concerning the handling of the documents submitted to IPTV-GSI, and their relationship to the discussion within SG16.

Contribution GSI-C11 is in fact a contribution to IPTV GSI, and officially it is supposed to be discussed during the GSI meeting. So this document is reviewed as information, but a decision on the proposal will be made during the GSI meeting.

SG16-C-456 by Huawei

Is ALER the same as AL-FEC? ALER is a generic term, encompassing AL-FEC,etc. Why do we need to “regulate” this? “Regulating” means “standardizing”. Generalizing error recovery mechanism is a better approach.

What is its relation with measurement report? This needs to be clarified, especially within the context of NGN. FG-IPTV document on Traffic management has information on this.

This document can constitute the text of Clause 9 “Quality of Application Layer User Experience” of the draft Recommendation H.IPTV-MAP.

There was a proposal to look at the requirements for such mechanisms more closely within Study Group Questions. An issue was raised about the concern about IPR.

Liasons with other SDOs will be considered at the next meeting.

#### 3.9.3.4.3 Joint Meeting with MPEG

On 27 April, 2008, ITU-T Q13/16 held a joint meeting with ISO SC29/WG11 (MPEG) at ITU, Geneva. Mr.Masahito Kawamori (NTT, Japan) and Mr. Xin Wang (ContentGuard, USA) chaired the meeting. This is the meeting report of that meeting. See TD ~~XXX~~681/WP2 for the details of the presentations. The following is the agenda of the meeting:

I. Opening

II. SG16 Presentations

   a. Introduction to ITU-T and SG16 – Sakae Okubo

   b. Overview of IPTV work at ITU-T Q13/16 - Masahito Kawamori

III. MPEG Presentations

   a. Overview of MPEG technologies - Leonardo Chiariglione

   b. Digital Items (DIs) - Xin Wang

   c. DAC profile of Rights Expression Language (REL) - Taehyun Kim

   d. Digital Media Broadcast Application Format (DMBAF) - Munchurl Kim

   e. Media Streaming Application Format (MSAF) - Tiejun Huang

   f. Binary Format for Scenes (BIFS) - Young Kwon Lim

   g. Multimedia Middleware (M3W) - Olivier Avaro

   h. Lightweight application scene representation (LASeR) - Olivier Avaro

   i. Web, IP and Mobile (WIM) TV - Olivier Avaro

IV. Discussion on future collaboration

Q13/16 thinks and agrees that it is a good idea to initiate a collaborative relationship with MPEG, especially within the area of Advanced Multimedia Framework for IPTV or eXtensible Middleware. The work items Q13/16 is interested in are:

- Access content
  - 3D and other Advanced Presentation Engine
  - IPMP functionality
- Create/edit/parse content
  - Metadata/Digital Items/Licences
  - File Formats
- Stream/consume content
  - Scene
  - Metadata/Digital Items…

- Communicate between devices

The exact nature of the collaboration will be discussed jointly between ITU-T SG16 management and MPEG.

#### 3.9.3.4.4 Joint Meeting with MHEG

On 28 April, 2008, ITU-T Q13/16 held a discussion on T.172 and ISO/IEC JTC 1/SC 29/Maintenance Task Force on ISO/IEC 13522 Series. Mr.Masahito Kawamori (NTT,Japan) chaired the meeting. This is the meeting report of that meeting. See TD/16 for the detailed results.

ISO/IEC JTC 1/SC 29/Maintenance Task Force on ISO/IEC 13522 Series is pleased to join the maintenance work in Q13/16. They suggest that ITU-T also adopts ISO/IEC 13522-5 (1997) Technical Corrigendum 1 (1999) for its twin text counterpart T.172 (02/1998). The maintenance work would be facilitated if some help from the current implementers in the UK, specifically some suggestions for possible enhancement and revision of the standard beyond the corrigendum. ISO SC29 will contact them for help.

Workplan for the maintenance of T.172 (ISO/IEC 13522 Series).

- Corrigendum

- Joint work with ISO/IEC JTC 1/SC 29 on the enhancements of T.172 (ISO/IEC 13522 Series) for IPTV

Q13/16 thanks ISO/IEC JTC 1/SC 29 for the reply LS and the information on Corrigendum, also for offering its help in maintenance and updating of T.172 (ISO/IEC 13522 Series). Since Q13/16 is tasked with recommending specifications for Multimedia application platforms for IPTV, we would like to invite ISO/IEC JTC 1/SC 29 to work jointly on the enhancements of T.172 (ISO/IEC 13522 Series) for IPTV.

It is envisaged that Q13/16 will meet in conjunction with IPTV GSI events, and we propose to have joint meetings, if possible, to discuss those issues relevant to the enhancements of T.172 (ISO/IEC 13522 Series) for IPTV. But the work item itself belongs to Q13.

### 3.9.4 Intellectual Property Statements

No IPR statements were received at this meeting.

### 3.9.5 Outgoing Liaison statements

The Question prepared two outgoing LSs:

- Reply LS to MHEG – TD 671/WP2
- Reply LS to MPEG – TD 672WP2

### 3.9.6 Work programme

#### 3.9.6.1 Future work

E-mail correspondences pertaining to the activities of this group are routinely conducted using the e-mail reflector currently hosted by Packetizer. Those wishing to subscribe or unsubscribe to this email reflector should visit the Packetizer Mailing List web page at:

http://lists.packetizer.com/mailman/listinfo/itu-sg16

E-mails to all subscribed Q2/16 Experts should be sent to itu-sg16@lists.packetizer.com.

The Question will also work in the context of the IPTV-GSI, collaborating in particular with Q4/9 and Q5/9. A reflector for that joint work is: sg9and16-iptv@ties.itu.int. Subscription for this mailing list can be requested at http://itu.int/tiesutils/asp/login.asp?pp=/tiesutils/asp/mailinglist.asp (TIES account required).

These are the currently open work items for the Question:

| Recommendation | Editor | Consent / Approval | Reference |
|---|---|---|---|
| H.IPTV-MAP - Multimedia Application platform for IPTV | Masahito Kawamori | 2009 | TD600 |
| H.IPTV-AEH - Application Event Handling for IPTV | Kyunghee Ji | 2009 | TD666 |
| H.IPTV-DSMW - Distributed Service Middleware for IPTV | Damien Alliez | 2009 | TD669 |
| H.IPTV-MD - Metadata for IPTV | Masahito Kawamori | 2009 | TD667 |
| H.IPTV-SDC Mechanisms for Service Discovery up to Consumption for IPTV | Christian Bertin | 2009 | TD668 |

#### 3.9.6.2 Future meetings

Q13/16 plans to have rapporteur meetings collocated with IPTV-GSI:

- June 2008
- September 2008
- December 2008

Additional Rapporteur's meeting or conference call could be organized depending on the workload.

### 3.10 Question 21/16 – Multimedia Architecture

Question 21/16 was addressed in six sessions during the SG 16 meeting under the chairmanship of Yoshinori Goto (NTT, Japan). The group adopted the agenda in TD 529/WP2.

The objectives for this meeting were:

- Coordinate with other SDOs, Questions, or Study Groups
- Consider material to progress work on H.ghna and H.mid (for Consent), H.iptv-hn (as a part of IPTV-GSI), H.VSarch, and other new materials relating to multimedia architecture
- Discussion on new work items
- Future meetings

#### 3.10.1 Documentation

The following documents were examined:

- Contributions: COM16- C329, C330, C369, C376, C377, C378, C420, C421, C422
- TD/Gen: 488, 489, 495, 496, 497, 498, 499, 500, 501, 502, 504, 505, 509, 512, 517, 519, 522, 524
- TD/WP2: 539, 540, 559, 564, 565, 582

### 3.10.2 Report of Interim Activities

Since the last SG 16 plenary meeting, Question 21/16 held Rapporteur meetings in Geneva September 2007 and Seoul January 2008. The reports of these Rapporteur meetings (TD 534/WP2 and TD 535/WP2) were approved at this SG 16 meeting.

The work also progressed by correspondence using the Question e-mail reflector (t05sg16q21@ ties.itu.int). Documentation is found in external FTP area for WP2/16 Questions at: http://ftp3.itu.ch/av-arch/avc-site/2005-2008/.

The address for e-mails to be sent to all subscribed Q21/16 experts is tsg16q21@itu.int.

### 3.10.3 Discussions

#### 3.10.3.1 Incoming Liaison Statements

TD504/GEN informs us the on-gong work on RTSP 2.0 in IETF MMUSIC. RTSP is widely accpected as a session control protocol for, for example VoD service. With respect to the working area of Q.21, H.610 uses the current version of RTSP for VoD session control. In the meantime, the LS also asks information on extensions of RTSP taken placed in other bodies. Q.21 confirmed that these is not technical extension or modification taken placed at Q.21 and that Q.21 mainly uses RTSP as defined in IETF. As a result of the discussion, Q.21 agreed to send a reply liaison statement with information of H.610 and to ask to keep us updated on the future development of RTSP. The reply LS may be combined with the text produced at other Questions.

TD497/GEN informs us the recent update of Access Network Transport (ANT) Standards Overview and Work Plan. In the era of broadband and NGN, it is important for the multimedia experts to know the performance and technnical characteristics of Access Network because the Access Network sometimes becomes the “bottleneck” of multimedia application demanding a more bandwidth than conventional application. From this view point, the current form of ANT Standards Overview can be improved to be more friendly to the multimedia experts, for example putting a short summary or a compact table containing key features of each Access Network technology in this document. The imporved ANT Standards Overview will be more frequently utilized among the multimedia experts and may be referred in the future made docuemnt as an important reference. Also, it was pointed out that H.ghna needs to be included in ANT Standards Overview. Q.21 agreed to send a reply liaison statement incorporating these views to SG16 and to ask further collaboration.

TD500/GEN informs us OUI assignment to ITU-T. This OUI can be used to, for example, Protocol Identifier defined in ITU-T Recommendation. ITU-T SG15 acts as register within ITU-T. Currently, Q.21 has no work item requiring address assignement based on this OUI.

TD524/GEN informs us the development of two new draft Recommendations, X.fcsip and X.ssf, on multimedia spam in ITU-T SG17. In these draft Recommendations, some counter spam measures such as using sender information, communication contents and communcation features are mentioned. Countering spam will be an important consideration of future multimedia systems and will be considered in the future work if necessary.

TD501/GEN contains Questions for the next study period in ITU-SG15. Among Questions in SG15, Q.1, 2 and 4/15 are spcifically related to Q.21 activities. The activities in these Questions are complementary to Q.21 and no overlap is observed in this discussion. Also, it was pointed out that the collaborationw with these Questions is productive and shold be continued in the next study period.

TD522/GEN, which is inputted from ITU-T GS17 and includes their comments on H.iptv-hn, is discussed in IPTV-GSI.

### 3.10.3.2 Home Network

TD540/WP2: This TD contains the updated draft of H.ghna produced at the interim meeting held in January 2008. This document was reviewed with C329.

C329: This contribution contains the proposed text modification of H.ghna. Summary, keywords and introduction that were empty in TD540/WP2 were added. Figure 6.2 that presents transmission aspect of home network architecture is updated, and aligned with G.hnta, which is another Home Network architecture draft recommendation, currently being developed at ITU-T SG15 (see TD499/GEN).

The concept of Primary and Secondary domains/terminals is an essential idea of H.ghna. The explanation of this idea is added in clause 6.3.

Clause 8 of H.ghna describes management mechanism for home network and devices within it. The current text only describes existence of technical solution available in the market, because the use of these solutions needs further study. Also, the explanation of IP address management with some new figures is added in H.ghna.

TD512/GEN: This LS comes from SG9 and requests to make a reference to J.190 in the scope section of H.ghna. The meeting accepted this proposal. Also, the relationship between J.190 and H.ghna was discussed. The meeting agreed that H.ghna has the new concept of Primary and Secondary domains/terminals in its Home Network architecture and that both documents are complementary.

TD499/GEN: This LS provides comments and proposal of Q.1/15 on Home Network architecture. The transmission model of Home Network is discussed and aligned with G. hnta.

TD496/GEN: This LS informs the recent update of G.hnta discussed at ITU-T SG15. The meeting reviewed it and confirmed that H.ghna and G.hnta are well aligned.

TD495/GEN: This LS is mainly sent to ATIS IIF and also copied to SG16 for our consideration. ATIS IIF requested the clarification of “proprietary home network”. In response to this request, SG15 decided to use “non-IP” instead of “proprietary”. Also, SG15 requested the clarification of “U-IF”, which is defined within NT.

TD502/GEN: This LS informs the consent of new Recommendation K.74 (hnw) on EMC impact on Home Network transmission. Also, this LS contains interesting information about EMC problem happening when home network is used with problematic consumer electric device. The meeting concluded that this issue is important in the consideration of quality aspect of Home Network.

C330: This contribution tries to initiate a new study on Home Network QoS. Q.24 will take care of this issue.

TD498/GEN: This LS informs that SG15 has started a new study on Home Network QoS. SG15’s work focuses on transmission aspects rather than service aspect. The meeting concluded that this work is also complementary to our work.

Regarding references, A.5 justification was produced and published as TD463/PLEN.

### 3.10.3.3 Networked ID

Networked ID was discussed jointly with Q.22/16.

See Report of Q.22/16 for details.

### 3.10.3.4 Visual Surveillance

Visual Surveillance was discussed jointly with Q.22/16.

See Report of Q.22/16 for details.

#### 3.10.3.5 IPTV related items

IPTV related item is discussed as a part of IPTV-GSI. Currently, draft new Recommendation H.iptv-hn is being discussed.

#### 3.10.3.6 Remote Management for Multimedia

TD488/GEN, an incoming liaison statement from ATIS IIF, was presented and discussed. The remote management is being discussed in several SDOs, and the use of DSL-F TR-069 based mechanism is the trend of the industry. H.iptv-hn, another Home Network draft Recommendation in the context of IPTV services, includes some descriptions of TR-069 based remote management. However, during the discussion, the possibility that the current data model defined in DSL-F may not cover all the possible use cases of multimedia services was pointed out. This means that current data models defined for some use cases such STB and gateway device need to be carefully examined and that additional objects may be added based on this analysis.

As a result of this discussion, Q.21 agreed to initiate a new study item on remote management, provisionally called H.RM-MM "Remote Management for Multimedia Service". As the case of Home Network QoS study initiated in Q.24, this work item will start from the analysis of use cases as well as existing available solutions. Also, it was pointed out that this study may need to include the service selection and control because of its close proximity to the remote management.

### 3.10.4 Intellectual Property Statements

No IPR statements were received at this meeting.

### 3.10.5 Outgoing Liaison statements

Seven LSs on Home Network, RTSP and NID were prepared at this meeting.

| | | | | |
|---|---|---|---|---|
| Reply LS to IETF MMUSIC WG on RTSP2.0 | IETF MMUSIC WG | Information | TD 610R1/WP2 | Q3, 21 |
| LS to ISO SC29/WG11 (MPEG) on possible collaboration on IPTV | ISO SC29/WG11 (MPEG) | Information | TD 672/WP2 | Q13 |
| Reply LS to ITU-T SG 5 on home network | ITU-T SG 5 | Information | TD 632/WP2 | Q.21, 22 |
| Reply LS to ITU-T SG 9 on Home Network | ITU-T SG 9 | Information | TD 633/WP2 | Q.21, 22 |
| Reply LS to ITU-T SG15 on Home Network | ITU-T SG 15 (cc: JCA-HN) | Action | TD 630/WP2 | Q.21, 22 |
| Reply LS to ATIS IIF on Remote Management | ATIS IPTV Interoperability Forum | Information | TD 629/WP2 | Q.21, 22 |
| Reply LS to SG 15 on the ANT standards overview and work plan | ITU-T SG 15 (Q1/15) | Action | TD 631/WP2 | Q.21 |
| Reply LS to Q2/13 on alignment issues between Y.idserv-reqts and F.MID | ITU-T SG 13 - Q2/13 | Information | TD 628R1/WP2 | Q.21, 22 |
| LS to SG17 on tag-based identification triggered multimedia information access | ITU-T SG17 (CC to: JCA-NID) | Information | TD 660/WP2 | Q21, 22 |

### 3.10.6 Work programme

#### 3.10.6.1 Future work

E-mail correspondences pertaining to the activities of this group are routinely conducted using the e-mail reflector currently hosted by Packetizer. Those wishing to subscribe or unsubscribe to this email reflector should visit the Packetizer Mailing List web page at:

http://lists.packetizer.com/mailman/listinfo/itu-sg16

E-mails to all subscribed Q21/16 Experts should be sent to itu-sg16@lists.packetizer.com.

H.mmarch "NGN multimedia system architecture" was agreed to be deleted since there has been no contribution to this topic at the recent meetings. Also, it should be noted that this item will be recovered if a proposal is made.

The currently open work items are as follows:

| Recommendation | Editor | Consent / Approval | Reference |
|---|---|---|---|
| H.IPTV-HN, Architecture and functional requirements for Home Network supporting IPTV services | Nhut Nguyen | 2008-09 | TD 559/WP2 |
| H.VSarch, Architectural requirements for visual surveillance | D. Wang, M. Sun | 2009 | TD 582/WP2 |
| H.IRP, ID resolution protocols for multimedia information access triggered by tag-based identification | J. S. Lee N. Koshizuka | 2009 | TD 645/WP2 |
| H.IDscheme, ID scheme for multimedia information access triggered by tag-based identification | J. S. Lee N. Koshizuka | 2009 | TD~~xxx~~ 673/WP2 |
| H.RM-MM, Remote Management for Multimedia Services | TBD | 2009 | Not available |

#### 3.10.6.2 Future meetings

As a part of IPTV-GSI, Q.21 is planning to hold three Rapporteur meetings before the next SG meeting in January 2009. Q21 will also join the August 2008 meeting with other Questinos.

### 3.11 Question 22/16 – Multimedia applications and services

Question 22/16 was addressed in seven sessions during the SG 16 meeting under the chairmanship of Noah Luo (Huawei Technologies Co., Ltd., PR China). The group adopted the agenda in TD 530/WP2.

The objectives for this meeting were:

- Coordinate with other SDOs, Questions, or Study Groups
- Consider material to progress work on:
  - F.mid (for consent)
  - H.mid (for consent)
  - F.MSATC

- F.VSreqs
- F.USN-MW
- H.IDscheme
- H.IRP
- Other new materials relating to multimedia applications and services

- Discussion on new work items
- Future meetings

### 3.11.1 Documentation

The following documents were reviewed and discussed:

- Contributions: COM16- C311, C324, C329, C330, C365, C366, C367, C369, C376, C377, C378, C420, C421, C422, C429, C430, C441, C442, C442, C444, C457, C458
- TD/Gen: 489, 490, 505, 509, 517, 519, 523, 530
- TD/WP2: 564, 565, 582

### 3.11.2 Report of Interim Activities

Since the last SG 16 plenary meeting, Question 22/16 held Rapporteur meetings in Geneva September 2007 and Seoul January 2008. The reports of these Rapporteur meetings (TD 534/WP2 and TD 535/WP2) were approved at this SG 16 meeting.

Documentation is found in external FTP area for WP2/16 Questions at: http://ftp3.itu.ch/av-arch/avc-site/2005-2008/.

### 3.11.3 Discussions

#### 3.11.3.1 Incoming Liaison Statements

***TD489/GEN LS on a proposed breakdown of the ITU-T Focus Group on IdM Use Case Gap Analysis (JCA-IdM Co-convenors)***

In this breakdown listing, no particular items are labelled as assigned to SG16. However, as a result of our discussion, it was found out that from SG16 perspective, some security issues like federated security and single-sign-on mechanism may have relations with this proposed breakdown listing. A outgoing LS was drafted which is contained in TD 657/WP2.

***TD490/GEN LS on a three-party query response IdM model (JCA-IdM Co-convenors)***

We discussed this LS and found that for the time being, useful information may not be possible to be given in response from SG16 since we are currently not doing work directly related to IdM functional models. This point was made clear in an outgoing reply LS contained in TD 658/WP2.

***TD505/GEN LS on NID Terms and Definition (JCA-NID Convener)***

Based on our discussion, a LS was made to be sent to JCA-NID to inform them that SG16 would like to see that the two recommendations F.mid and H.mid will be able to provide them with some useful information and proper alignments can be kept between their ongoing work and these two recommendations. The outgoing LS appears in TD 659/WP2.

***TD509/GEN Reply LS on proposal of a collaboration progress between ISO/IEC JTC 1/SC 6 and ITU-T SG 16 (COM 16-LS 271) (ISO/IEC JTC 1/SC 6)***

We discussed this LS with the following conclusions:

[1]Since SG16 is not currently doing any work on USN middleware architecture though it may be one of our future work plan items, we don't think it is likely to develop any common text recommendation with ISO/IEC JTC1/SC6 for the time being as suggested by their LS. But it may be possible in the future at a proper time.

[2]SG16 is quite willing to keep in touch with ISO/IEC JTC1/SC6 to share information on USN and other related topics regularly.

A LS was composed based on the above understanding which appears in TD 664/WP2.

***TD517/GEN LS on directory support for ID-based applications (ITU-T SG 17)***

This LS and its attachment were reviewed jointly by Q21 and Q22. It was pointed out that directory may be a possible technical approach to ID resolution needed by ID-based applications, but it depends on practical implementation to choose the most suitable ID resolution mechanisms for ID-based applications. We drafted an outgoing LS to tell SG17 about our work on F.mid, H.mid, H.IDscheme and H.IRP which is to be found in TD 660/WP2.

***TD519/GEN LS on ITU-T X.668 | ISO/IEC 9834-9 on an OID for ID-based applications and services (ITU-T SG 17)***

Through discussion on this LS, it was found that an OID mechanism provided by X.668 may be useful for the purpose of supporting ID coding and ID resolution for tag-based ID triggered multimedia information access which SG16 have been working on. Our work in ID coding and ID resolution can work with various OID including those defined in X.668. OID making use of compact memory space is more suitable for our work. An outgoing LS was drafted as in TD 660/WP2.

***TD523/GEN LS on USN Security (ITU-T SG 17)***

Our work on USN, for the time being, hasn't brought us to rather deep thoughts on the security of USN in its every aspect. However, in this F.USN-MW, there are still some functional requirements that are relevant to security, for example, those in section 7.1.3. based on above thoughts, a LS was made to be sent back to SG17 which can be found in TD 661/WP2.

***TD530/GEN LS***

Q21 and Q22 jointly discussed this LS from SG13 which requests alignments between F.mid and Y.idserv-reqts. An audioconference was arranged with the help of Mr.Simao Campos to facilitate a joint discussion for SG13 experts to join. All alignement requests were appropriately handled. We reported back to SG13 all these processing outcome in an outgoing LS TD628/WP2.

#### 3.11.3.2 Service awareness

***C365: A Proposal on adding service awareness capability requirements for "Service Awareness and Traffic Control in Multimedia Communications" (China Telecom, Huawei)***

This document proposes adding service awareness capability requirements to F.MSATC. After discussion, it was accepted. Questions were asked. For example, should content protection issues like DRM be taken in account? However, it is unclear at this stage how DRM can be handled by network devices supporting MSATC since DRM is supposed to be an E2E thing. Therefore, further study is needed.

***C366: A Proposal to add policy requirements to "Service Awareness and Traffic Control in Multimedia Communications" (China Telecom, Huawei)***

Discussion found that such requirements are reasonable so the contribution was accepted. It was pointed out by some experts how to define policies and the interface between the operator and the MSATC module will be a problem for study.

***C367: A Proposal to add requirements for policy control and a statistic report capabilities to "Service Awareness and Traffic Control in Multimedia Communications" (China Telecom, Huawei)***

Questions were asked. For example, what statistics are to be collected? can some examples be provided? Some experts pointed out that high-level languages for reporting statistics like TMN need to be considered. The requirements in this contributions partially overlap with those in C 459 so that is was agreed that these overlapping requirements in these two contributions are to be merged when taken into F.MSATC output. Also there are a couple of English problems which were highlighted and corrected when the text was incorporated into the initial draft of F.MSATC.

***C441: Proposal for scenarios concerning differentiated service based on users in F.MSATC (MII China)***

It was agreed that such requirements are necessary for F.MSATC. Questions were asked. One of the questions is if user terminal capabilities should be considered in the situation where such a knowledge will be useful to prevent a server from sending video streams to a user terminal supporting only voice. Experts thought it is a problem for further study in this area.

***C442: Proposed resource management scenario in F.MSATC (MII China)***

It was accepted into F.MSATC based on discussion. It was pointed out by experts that:

[1]Such service level resource management is needed mainly for those networks without a transport resource regulation mechanism like Internet.

[2]Resource considered here is bandwidth and other network side resource. Other resource like the processing power, ability to handle concurrent video streams of a server is not for consideration in the context of this contribution.

***C443: Proposed security protection scenario in F.MSATC (MII China)***

It was pointed out that for protection against DDOS attack, not only user terminal A is needed to be taken care of, but also those other user terminals captured by user terminal A to become its zombies to launch DDOS attack. The contribution was accepted into F.MSATC with this information being added.

***C444: Proposed scenario for personalized service customization in F.MSATC (MII China)***

It was accepted into F.MSATC. It was pointed out that the policies should be pushed by the management platform to the SATC entity as well as pulled by the SATC entity from the management platform. The original text mentions only “transfer” which is supposed to mean only “push”. One question of interest which is to be answered through further study is how advertising as a typical personalized service is to be supported. The expert who raised this issue also said that for F.MSATC those requirements oriented to practical commercial considerations should be encouraged in our subsequent study of F.MSATC.

***C457: Proposed a skeleton for the new work item F.MSATC (Huawei)***

It was discussed and accepted to serve as the structure of the initial draft of F.MSATC.

***C458: Proposed overview chapter for draft new F.MSATC (Huawei)***

It was discussed and accepted. Some English issues were corrected when merged into F.MSATC.

***C459: Proposed the general requirements for multimedia service awareness and traffic control system in F.MSATC (Huawei)***

Some questions were asked. For example, if service awareness on layer 7 in the OSI model is mandatory or optional, if the first requirement and the second one should be merged, if some examples are to be given for so-called mainstream P2P protocols, etc. All these questions were answered when this set of requirements were incorporated into F.MSATC. Also in requirement 11, it was advised by some experts to change the term "periodic" to "automatic" and change the term "non-periodic" to "manual". TD 644/WP2 is the TD that contains this initial draft of F.MSATC.

#### 3.11.3.3 Networked ID

##### 3.11.3.3.1 F.mid and H.mid

***TD564(WP2): Updated draft of new ITU-T Rec. F.MID "Service description and requirements for multimedia information access triggered by tag-based identification" (Editor F.MID)***

***TD565(WP2): Updated draft of new ITU-T Rec. H.MID "Tag-based ID triggered multimedia information access system architecture" (Editor of H.MID)***

The above two TDs were reviewed by the meeting as the starting point to discuss work on F.mid and H.mid. Several editorial changes were proposed and accepted.

***C376: Proposal on editorial enhancements of F.MID (NTT)***

***C377: Proposal on editorial enhancements of H.MID (NTT)***

The above two contributions were examined and accepted. C377 proposes some changes to Fig.1 in H.mid, and during the meeting it is unsettled as to how to change the names of some entities in this figure. Experts including Mr.Kashizuka, Mr.Takashima, Mr.Kim, Mr.Tsukada had done offline work to reach an agreement. Those proposed changes are reflected in the latest versions of F.mid and H.mid to be found in TD564r2(WP2) and TD565r2(WP2) which are the documents for consent by this SG16 meeting. .

##### 3.11.3.3.2 ID coding schemes

***C420: Proposal of draft new Recommendation H. IDscheme on "ID schemes for multimedia information access triggered by tag-based identification" (ETRI and SCAT)***

This is a piece of joint work by ETRI, Korea and SCAT, Japan in order to build some ID coding schemes for multimedia information access triggered by tag-based ID. The basic idea is to provide two ID coding schemes to be chosen depending on practical application context and implementation. The mainbody of the document provides only some basic framework thing, while there are two annexes containing two different ID coding schemes: xCode in Annex A and uCode in Annex B. Experts questioned if the OID mentioned in this document is consistent with X.668 and the answer is positive. It was found by the meeting such a structure is good for combining the work from different parties and give the potential implementor the flexibility of making choice. It was accepted and used to produce the initial draft to a new work item H.IDscheme. Mr.Koshizuka from Japan and Mr.Lee from Korea were appointed co-editors for this new work item. TD 673~~xxx~~/WP2 is the initial draft of H.IDscheme P for more study.

##### 3.11.3.3.3 ID resolution protocols

***C421: Proposal of draft new Recommendation H.IRP on "ID resolution protocols for multimedia information access triggered by tag-based identification" - Annex B (ETRI)***

***C422: Proposal of draft new Recommendation H.IRP on "ID resolution protocols for multimedia information access triggered by tag-based identification" - Annex B (SCAT)***

The above two contributions provided two different ID resolution protocols for multimedia information access triggered by tag-based ID. Annex A is for the Korean method, and Annex B is for the Japanese method. They are both multi-stage methods which first (optionally) resolve OID and then resolve ID based on OID resolution result. They all can work with different OID systems including X.668. The Korean method makes use of existing technique such as DNS for ID resolution, in contrast, the Japanese method has its own ID resolution approach. It was pointed out by the rapporteur that if it is possible, a better acronym can be used to replace "FFT" meaning Fixed Form Type in the context since FFT has a much better known meaning for those working in communications and signal processing. They were accepted to be combined to build the initial draft for H.IRP, a new work item for which Mr.Koshizuka from Japan and Mr.Lee from Korea were appointed co-editors. TD 645/WP2 is the initial draft of H.IRP for more study.

### 3.11.3.4 Visual Surveillance

***TD582(WP2): Updated draft of new ITU-T Rec. H.VSarch "Architectural requirements for visual surveillance" (Editor H.VSarch)***

This document contains the latest version of H.VSarch.

***C369: Proposed update on requirements and services description for visual surveillance (F.VSreqs) (ZTE, CATR)***

This document provides an updated version for F.VSreqs and was accepted as a result of our discussion. Some questions were asked for clarification, like does storage mentioned mean both local and remote storage? Can we replace the term "storage space" with "storage capacity"? They were addressed with corresponding changes incorporated. The editor produced an updated output document for F.VSreqs as in TD643/WP2.

***C378: Proposed Visual Surveillance Requirements for F.VSreqs (CATR, MII of P. R. China)***

This document provides sections 5 and 8 for F.VSreqs for prose description of visual surveillance service and its convergence with other services. Some changes were proposed from the floor like some improvments to Fig.1 and were accepted. It was accepted with these proposed changes into an updated draft of F.VSreqs TD643/WP2.

### 3.11.3.5 USN middleware

***C324: Initial draft Recommendation on service description and requirements for USN middleware (F.USN-MW) (ETRI)***

This document provides an initial draft for F.usn-mw. It was discussed during one of Q21/16 and Q22/16 joint sessions. Several questions were recorded as follows:

[1]Shall we use the structure of some stable work like F.mid for this F.usn-mw?

[2]If there are some business names used in this document? If so, it may needs checking and usually such things require careful handling.

[3]What is the relation between USN node and RFID tags/readers in the second scenario called cold chain?

It was reported by the author that there isn't any business name in the document. The editor thinks it is good to borrow some good ideas from the structures of F.mid and F.741. The relation between USN nodes and RFID tags/readers is somehow complex, in this particular case of cold chain, USN nodes are just RFID tags.

It was accepted as the baseline for building the initial draft of F.usn-mw. The output can be found in TD 640/WP2.

***C429: Proposal on light-weight realtime transport protocol for audio on USN (Korea (Republic of))***

***C430: Proposal on light-weight realtime transport protocol for video on USN (Korea (Republic of))***

The above two contributions propose light-weight transport protocols for video and audio respectively to be used for data transmission from USN nodes to USN routers. It was found that this piece of work may have some relations with IETF RFC 3095 which defines a method for the transport of audio and video data in a light-weight manner through using header compression. The authors were told to carry out further study regarding this RFC 3095. Judging from other aspects, these two contributions are not mature enough either. Q21/16, Q22/16 would like to point out that for the time being, we are just doing work related to USN-middleware service descriptions and requirements, while architecture and protocols may be dealt with in the future. Therefore we need an architecture first to provide us with guidance as to what needs to be studied for audio and video transport. The conclusion is that further study is needed in the hope that the authors may be able to bring in more contributions in this area for our future meetings.

#### 3.11.3.6 Home network

**C329: Proposed text modifications for draft ITU-T Recommendation H.ghna (NTT)**

**C330: Initiation of a study for home network QoS in SG 16 (NTT)**

About the above two contributions, please see Q21/16 report for discussion details.

#### 3.11.3.7 Others

***C 311: Proposed new appendix for F.700 on Multimedia Services Classification (Russian Federation Telecommunications Administration)***

This contribution tries to introduce some new taxonomy principles for multimedia services by extending F.700 defined attributes. However, since the authors wasn't able to be present during the discussion, SG16 experts found many questions that couldn't be answered through the discussion. What is concluded by the meeting is that we 'd like to solicit further contributions and request the presence of the authors in person to facilitate future discussion.

### 3.11.4 Intellectual Property Statements

No IPR statements were received at this meeting.

### 3.11.5 Outgoing Liaison statements

The following LSs were prepared at this meeting:

[1] Reply LS to Q2/13 on alignment issues between Y.idserv-reqts and F.MID

[2] LS to SG17 on tag-based identification triggered multimedia information access

[3] Reply LS to SG17 on USN security [4] Reply LS on NID Terms and Definition

[4] Reply LS to JCA-NID on NID Terms and Definition

[5] Reply LS JCA-IdM on a proposed breakdown of the ITU-T Focus Group on IdM Use Case Gap Analysis

[6] Reply LS to JCA-IdM on a three party query response IdM model

[7] Reply LS to ISO/IEC JTC1/SC6 on proposal of a collaboration progress between ISO/IEC JTC 1/SC 6 and ITU-T SG 16

### 3.11.6 Work programme

#### 3.11.6.1 Future work

E-mail correspondences pertaining to the activities of this group are routinely conducted using the e-mail reflector currently hosted by Packetizer. Those wishing to subscribe or unsubscribe to this email reflector should visit the Packetizer Mailing List web page at:

http://lists.packetizer.com/mailman/listinfo/itu-sg16

E-mails to all subscribed Q22/16 Experts should be sent to itu-sg16@lists.packetizer.com.

The currently open work items are as follows:

| Recommendation | Editor | Consent / Approval | Reference |
|---|---|---|---|
| F.VSreqs *Requirements and services description for visual surveillance* | Mr.Wang, Mr.Lu | 2009 | TD643/WP2 |
| F.MSATC *Scenarios and requirements for service awareness and traffic control* | Mr.Yang, Mr.Ma | TBD | TD644/WP2 |
| F.usn-mw *Service description and requirements for USN middleware* | Ms. Kim and Mr.Yoo | TBD | TD640/WP2 |
| F.mid *Service description and requirements for multimedia information access triggered by tag-based identification* | Mr.Takashima | 2008-05 | TD564r2/WP2 |

#### 3.11.6.2 Future meetings

Q22/16 is planning to have one rapporteur meeting before the next SG 16 meeting in January 2009.

## 3.12 Question 24/16 – Quality of Service and End-to-end Performance in Multimedia Systems

Question 24/16 was addressed in two sessions during the SG 16 meeting under the chairmanship of Seong-Ho Jeong (Korea). The group adopted the agenda in TD 531/WP2.

The objectives for this meeting were:

- Coordinate with other SDOs, Questions, or Study Groups
- Progress work on the following areas:
  - H.361 Annex A (for Consent)
  - H.361 Annex B (for Consent)
  - H.361 Annex C (for Consent)
  - H.trans.control

- Discussion of miscellaneous and new work items regarding end-to-end QoS and AMS QoS

### 3.12.1 Documentation

The following documents were examined:

- Contributions: C319, C320, C321, C330, C332, C333, C426, C427, C428, C431, C476
- TD/Plen: 441, 442, 445, 446, 449, 452, 453, 454, 455, 456, 457
- TD/Gen: 396, 398, 399, 401, 402, 403, 408, 415, 416, 417, 430, 433, 445, 449, 469, 470, 471, 472, 474, 484, 497, 498, 500, 501, 504, 514, 516
- TD/WP2: 521, 531, 535, 541, 542

### 3.12.2 Report of Interim Activities

Since the last SG 16 plenary meeting, Question 24/16 held a Rapporteur meeting on 17 – 23 January 2008 in Seoul, Korea. The report of this Rapporteur meeting (TD 535/WP2) was approved at this SG 16 meeting.

Documentation is found in external FTP area for WP2/16 Questions at: http://ftp3.itu.ch/av-arch/avc-site/2005-2008/.

### 3.12.3 Discussions

#### 3.12.3.1 Incoming Liaison Statements

– (TD 498/Gen) LS on collection of information of QoS architecture and mapping [SG 15]

→ This was reviewed, and it was agreed to send a Reply LS which provides information on the mapping guideline between multimedia QoS classes and QoS specifications.

The following TDs were reviewed and discussed during the joint Questions session (refer to the WP2 report).

– (TD 516/Gen) Background material on restructuring discussions [Chairman SG 16]

– (TD 514/Gen) LS on Question 223-2/8 "Internet protocol applications over mobile systems [ITU-R SG 5]

– (TD 504/Gen) LS from IETF MMUSIC WG on ongoing work on RTSP 2.0 and request for information on RTSP extensions [ITU-T SG 16 Chairman (on behalf of IETF)]

– (TD 501/Gen) LS on draft SG 15 proposal of new Questions for the next study period of 2009-2012 [SG 15]

– (TD 500/Gen) LS on IEEE OUI assignment for ITU-T [SG 15]

– (TD 497/Gen) LS on new versions of the Access Network Transport (ANT) Standardization Plan and Work Plan [SG 15]

– (TD 484/Gen) LS on 3GPP Schedule for Common IMS [Chairman SG 16]

– (TD 474/Gen) LS on termination of FG IPTV mandate and beginning of the IPTV-GSI [Chairman, ITU-T FG IPTV]

– (TD 472/Gen) LS on availability of Web Conferencing Tools [TSAG]

– (TD 471/Gen) LS on improved Geographic Distribution and Coordination of ITU-T Seminars and Workshops [TSAG]

– (TD 470/Gen) LS on assessment of ITU-T Recommendations in the light of Climate Change [TSAG]

– (TD 469/Gen) LS on A.5 justification for normative references to documents of other organizations [TSAG]

– (TD 449/Gen) LS on transfer of work under "common IMS" [Chairman SG 16]

– (TD 445/Gen) LS on report on the sixth FG IPTV meeting (Tokyo, Japan, 15-19 October 2007) [Chairman, ITU-T FG IPTV]

– (TD 433/Gen) LS on the Creation of a Focus Group on "From/In/To Cars Communications II"[SG 12]

– (TD 430/Gen) LS on draft Recommendations on countering spam by technical means [SG 17]

– (TD 417/Gen) LS on re-chartering of the NGN Management Focus Group [SG 4]

– (TD 416/Gen) LS on SG 4 report and request in its role as Lead SG on Telecommunication Management [SG 4]

– (TD 415/Gen) Reply LS on creation of ITU-T Restructuring Correspondence Group and request for inputs (TSAG-LS 23) [SG 4]

– (TD 408/Gen) Reports of the FG-IPTV meetings between July and December 2007 [TSB]

– (TD 403/Gen) Reply LS on collaboration on the activity for IPTV network and middleware (COM 16-LS 205) [Chairman, ITU-T FG-IPTV]

– (TD 402/Gen) Reply LS on Progress on IPTV End Systems (COM 16-LS 227) [Chairman, ITU-T FG-IPTV]

– (TD 401/Gen) LS on Report of FG-IPTV progress and request for comment [Chairman, ITU-T FG-IPTV]

– (TD 399/Gen) LS on activities on standardization for Emergency Telecommunications [ICG-SAT]

– (TD 398/Gen) LS on aspects of common and critical interest to the satellite industry [ICG-SAT]

– (TD 396/Gen) Outgoing LSs produced by the SG 16 management and at Rapporteurs' meetings during the interim period (July 2007 - April 2008) [TSB]

#### 3.12.3.2 H.361 Annex A (IntServ/RSVP Support for H.323 Systems)

– (C 319) Proposed changes to draft new H.361Annex A "IntServ/RSVP support for H.323 Systems" [Cisco Systems]

This contribution was presented. There was a concern expressed about the newly added text , but it was felt that the text was added within the boundary of the discussion at the previous meeting. The editor was requested to make necessary editorial changes and revise ASN.1 changes. It was agreed to accept the document as the new text for H.361 Annex A (as a part of H.361 Amendment 1) and move it forward for Consent at this meeting, consolidated with Annexes B and C (see TD ~~***~~525/Plen for the text and TD 470/Plen for A.5).

### 3.12.3.3 H.361 Annex B (DiffServ Support for H.323 Systems)

– (C 320) Proposed changes to draft new H.361Annex B "DiffServ Support for H.323 Systems" [Cisco Systems]

This contribution was presented. The editor was requested to make necessary editorial changes. It was agreed to accept the document as the new text for H.361 Annex B (as a part of H.361 Amendment 1) and move it forward for Consent at this meeting, consolidated with Annexes A and C (see TD ~~xxx~~525/Plen for the text and TD 469/Plen for A.5).

### 3.12.3.4 H.361 Annex C (Priority Support for H.323 Systems)

– (C 321) Proposed changes to draft new H.361Annex C "Priority Support for H.323 Systems" [Cisco Systems]

This contribution was presented. It was thought that the text itself is in good shape. There was a concern expressed about the ASN.1 changes. The editor was requested to make necessary editorial changes and revise ASN.1 changes. It was agreed to accept the document as the new text for H.361 Annex C (as a part of H.361 Amendment 1) after checking ASN.1 syntax and move it forward for Consent at this meeting, consolidated with Annexes A and B (see TD ~~xxx~~525/Plen).

### 3.12.3.5 New topics

– (C 431) Adaptive end-to-end QoS control based on variable bit rate codec in wireless networks [Korea]

This contribution was presented. There was a question about how to obtain the path information for QoS control and it was answered that the path information can be collected in an end-to-end basis for optimal QoS control. It was also asked whether the signaling delay is significant and it was answered that the signaling delay is not long according to simulation results. It was mentioned that the signaling traffic should be given a high priority for fast delivery. In addition, there was a suggestion that 'QoE' should be used instead of 'QoS'. It was agreed to create a new work item "An adaptive QoE control framework based on variable bit rate codec in wireless networks" based on this contribution, and Mr. Ki-Jong Koo agreed to be the editor of this new work item.

– (C 330) Initiation of a study for home network QoS in SG 16 [NTT]

This contribution was presented. It was decided to initiate a study on Home Network QoS. Specifically, it was agreed to create a new work item "Analysis of Home Network QoS Solutions" and Mr. Yoshinori Goto agreed to be the editor of this new work item.

## 3.12.4 Intellectual Property Statements

No IPR statements were received at this meeting.

## 3.12.5 Outgoing Liaison statements

Question 24 prepared one LS:

- TD 653/WP2: Reply LS to SG15 on collection of information of QoS architecture and mapping

## 3.12.6 Work programme

### 3.12.6.1 Future work

E-mail correspondences pertaining to the activities of this group are routinely conducted using the e-mail reflector currently hosted by Packetizer. Those wishing to subscribe or unsubscribe to this email reflector should visit the Packetizer Mailing List web page at:

http://lists.packetizer.com/mailman/listinfo/itu-sg16

E-mails to all subscribed Q24/16 Experts should be sent to itu-sg16@lists.packetizer.com.

The currently open work items are as follows:

| Recommendation | Editor | Consent / Approval | Reference |
|---|---|---|---|
| H.trans.control (QoS Signalling to Network Operator Domains) | S. H. Jeong | 2009 | TD 497/WP2 (2007-06) |
| H.hnqos.analysis (Analysis of Home Network QoS Solutions) | Y. Goto | 2009 | TBD (New work item) |
| H.codec.qoe (An Adaptive QoE Control Framework based on Variable Bit Rate Codec in Wireless Networks) | K.-J. Koo | 2009 | TBD (New work item) |

#### 3.12.6.2 Future meetings

Question 24/16 is planning to hold one interim meeting jointly with other WP 2/16 Questions meeting before the next SG 16 meeting in January 2009. See Section 4 for details.

### 3.13 Question 25/16 – Multimedia Security in Next-Generation Networks

Question 25/16 was addressed in one session during the SG16 meeting under the chairmanship of Patrick Luthi (Tandberg, Norway). The group adopted the agenda in TD 596/WP2.

The objectives for this meeting were:

– Incorporate results from interim meeting accordingly

– Review of final text of new H.235.6 Amd. 1 and H.460.22 Cor. 1

– Progress study of NGN-MM-SEC issues

– Review of the items relative to H.235-series, H.460.22, etc.

#### 3.13.1 Documentation

The following documents were examined:

- **Contributions:** C.407
- **TD/Plenary:** 513, 515
- **TD/General:** 430, 440, 490, 492, 520, 524
- **TD/WP2:** 535, 541, 542, 589, 592, 596

#### 3.13.2 Report of Interim Activities

Question 25 held one Rapporteur meeting during the interim period from the conclusion of the July-August 2007 SG16 meeting until the beginning of the April-May 2008 SG16 meeting. The Q25 meeting report is shown in TD 535/WP2.

#### 3.13.3 Discussions

##### 3.13.3.1 Incoming Liaison Statements

– SG17 on draft Recommendations on countering spam by technical means

TD 430/Gen was reviewed and discussed during the Seoul Rapporteur meeting.

– SG17 on report to TSAG on Achievements of SG 17 as the Lead Study Group on Telecommunication Security since its meeting on 6-18 December 2006

TD 440/Gen was reviewed and discussed during the Seoul Rapporteur meeting.

– JCA-IdM Co-convenors on a three-party query response IdM model

TD 490/Gen was reviewed and discussed during the joint WP2 Questions sessions.

– Q6/17 on work plan for trusted service provider identity (SPID) Recommendations

TD 492/Gen was reviewed and discussed during the joint WP2 Questions sessions.

– SG17 on update on SG 17 security outreach activities

TD 520/Gen was reviewed and discussed during the Q25 session.

– SG17 on countering spam by technical means

TD 524/Gen was reviewed and discussed during the Q25 session.

#### 3.13.3.2 General Q25 topics

##### 3.13.3.2.1 New Amendment 1/H.235

C.407 was presented and the experts accepted the proposal with a change to clause 6.1 (replacement of "shall prefer to" by "should" in the 7th paragraph).

TD 592/WP2 was presented and the Q25 experts accepted the content of this draft. It was agreed to submit Draft Amd. 1, with the change mentioned above, for Consent at the closing Plenary. The final text appears TD 515/Plen.

##### 3.13.3.2.2 New Corrigendum 1/H.460.22

TD 589/WP2 was presented and the Q25 experts accepted the content of this draft. It was agreed to submit Draft Amd. 1, with some small changes of editorial nature, for Consent at the closing Plenary. The final text appears TD 513/Plen.

##### 3.13.3.2.3 LS on a three-party query response IdM model

TD 490/Gen was presented and noted. Additional discussion took place in the WP2 Questions session.

#### 3.13.3.3 Items considered in joint Q25 & WP2 Questions sessions

##### 3.13.3.3.1 LS on work plan for trusted service provider identity (SPID) Recommendations

TD 492/Gen was presented. Details can be found in the W2 meeting report.

##### 3.13.3.3.2 WP 2/16's Questions for the next study period

TD 541/WP2 and TD 542/WP2 were presented. Details can be found in the W2 meeting report.

### 3.13.4 Intellectual Property Statements

None at this meeting.

### 3.13.5 Outgoing Liaison statements

None at this meeting.

### 3.13.6 Work programme

#### 3.13.6.1 Future work

There are currently no open work items.

The objectives for the next SG16 meeting (27 January-06 February 2009) are:

– Incorporate results from interim meeting accordingly

– Progress study of NGN-MM-SEC issues

– Review of the items relative to H.235-series, H.460.22, etc.

#### 3.13.6.2 Future meetings

Q.2-5, 12, 13, 21, 22, 24 , 25, and 29 are planning to hold one Rapporteur meeting before the next SG16 meeting in January 2009. The location and host is still to be determined.

## 3.14 Question 28/16 – Multimedia framework for e-health applications

Question 28/16 was addressed in one session during the SG 16 meeting under the chairmanship of Vicente Traver (ITACA-Universidad Politécnica de Valencia, Spain). The group adopted the agenda in TD 532/WP2.

The objectives for this meeting were:

- Review feedback on the first version of Technical Paper on the telemedicine Standardization Roadmap
- Discuss future activities

### 3.14.1 Documentation

The following documents were examined

- TD/Gen: 409, 521
- TD/WP2: 521, 532, 649

### 3.14.2 Report of Interim Activities

Since the last SG 16 plenary meeting, Question 28/16 has not held any Rapporteur meeting.

The work also progressed by correspondence using the Question e-mail reflector (t05sg16ehmmf@itu.int).

### 3.14.3 Discussions

#### 3.14.3.1 Incoming Liaison Statements

A LS on comments from ISO TC 215 on COM 16/TD 318 concerning the development of Telemedicine work was presented (TD 521/Gen).

Another LS commenting on the Roadmap Technical Paper was received from ITU-R Working Party 8A (TD 409/Gen).

#### 3.14.3.2 Status of the roadmap

After presenting the documents for consideration, it is agreed that the roadmap for telemedicine needs some improvements: basically, a more homogeneous structure and an updated list of standards from other SDOs as CEN, ISO, IEEE, etc. The Rapporteur observed that those organisations were invited to do it through the eHealth Standardization Coordination Group (eHSCG) but few inputs were received.

Regarding the roadmap, two options are proposed to be discussed by the SG16 management:

1) Improve the roadmap, appointing an editor and some resources to promote also cooperation with other SDOs. This option needs a stronger commitment from ITU.
2) When this roadmap was started, no studies were available. However, some roadmaps and 'state of the art' studies in the standardization e-health field have appeared with EU funds and strong involvement from specific e-health standardization bodies. Therefore, the other option is to optimise resources, select one of the existing roadmaps and analyse how ITU can be an active stakeholder in the identified topics.

During the discussion, it was mentioned that organizing another e-health workshop would help progressing the Q28 work.

### 3.14.4 Intellectual Property Statements

No IPR statements were received at this meeting.

### 3.14.5 Outgoing Liaison statements

No LSs were prepared at this meeting.

### 3.14.6 Work programme

#### 3.14.6.1 Future work

E-mail correspondences pertaining to the activities of this group are routinely conducted using the e-mail reflector currently hosted by the ITU. Those wishing to subscribe or unsubscribe to this email reflector should visit the ITU web page at:

http://www.itu.int/ITU-T/com16/edh/subscribe.html

E-mails to all subscribed Q28/16 Experts should be sent to t05sg16ehmmf@itu.int.

Those wishing to subscribe or unsubscribe to e-mail reflectors hosted by ITU should follow the instructions at http://www.itu.int/ITU-T/edh/faqs-email.html.

#### 3.14.6.2 Future meetings

No future meetings are planned.

## 3.15 Question 29/16 – Mobility for Multimedia Systems and Service

Question 29/16 was addressed in one session during the SG 16 meeting under the chairmanship of Dr. Leo Lehmann (OFCOM, Switzerland). The group adopted the agenda in TD 533/WP2.

The objectives for this meeting were:

- Handling Liaisons
- Approval of Technical Paper on Multimedia Service Mobility (TP.MMSM)

- Coordination work with other Questions
- Future Work

### 3.15.1 Documentation

The following documents were examined:

- Contributions: -
- TD/Plen: -
- TD/Gen: 430, 490, 492
- TD/WP2: 521, 533, 535, 541, 542, 558

### 3.15.2 Report of Interim Activities

Since the last SG 16 plenary meeting, Question 29/16 held Rapporteur meetings joint also with Q.6/13 and Q.2,5/19 in Seoul Korea from 17.-23. January 2008 (WP2/16 Rapporteur meeting joint with NGN GSI meeting). The report of this Rapporteur meeting (TD 535/WP2) was approved at this SG 16 meeting. Documentation is found in external FTP area for WP2/16 Questions at: http://ftp3.itu.ch/av-arch/avc-site/2005-2008/.

The address for e-mails to be sent to all subscribed Q29/16 Experts is itu-sg16@lists.packetizer.com.

### 3.15.3 Discussions

#### 3.15.3.1 Incoming Liaison Statements

No liaison has been examined for this meeting.

#### 3.15.3.2 TP.MMSM "Service Mobility for new Multimedia Service Architecture"

TD558/WP2: The Technical Paper on Service Mobility for new Multimedia Service Architecture (Final revision) identifies the possibilities to deploy service mobility with regard to the provision of Multimedia Services via underlying heterogeneous access networks. This includes but is not restricted to the Next Generation Network (NGN), defined by ITU-T.

The current revision has included different handover scenarios, including also devices with network access of different capabilities within different IP domains. Herby a strong focus is given on dynamic service adaptation according to the given restrictions of current device and access profile. Furthermore the remarks from the recent interim meeting (see chapter 1.2.2) have been included.

The described service model, functional architecture and mobility management algorithm do also include the handling of real time text in order to support the needs of handicapped and elderly persons. Based on the discussion during the Q.29 session additional text was further included into the document, which considers explicitly the needs of disabled persons.

A new work item related to "Mobility needs for disabled persons" may be generated in the future.

The Q.29/16 session recommended that TPMMSM will become approved at the SG16 plenary.

### 3.15.4 Intellectual Property Statements

No IPR statements were received at this meeting.

### 3.15.5 Outgoing Liaison statements

No LSs were prepared at this meeting.

### 3.15.6 Work programme

#### 3.15.6.1 Future work

E-mail correspondences pertaining to the activities of this group are routinely conducted using the e-mail reflector currently hosted by Packetizer. Those wishing to subscribe or unsubscribe to this email reflector should visit the Packetizer Mailing List web page at:

http://lists.packetizer.com/mailman/listinfo/itu-sg16

E-mails to all subscribed Q22/16 Experts should be sent to itu-sg16@lists.packetizer.com.

This Question collaborates in the context of the NGN-GSI with Questions 6/13 and 2/19, 5/19.

The currently open work items are as follows:

| Recommendation | Editor | Consent / Approval | Reference |
|---|---|---|---|
| TP.MMSM Service Mobility for new Multimedia Service Architecture | Leo Lehmann | 2008-05 | TD 558-WP2 |
| H.mmsm End to end Open Services Architectural Framework. Specification of service mobility requirements with regard to Multimedia Architectures | TBD | 2009 | |

#### 3.15.6.2 Future meetings

Q.29/16 is planning to hold one Rapporteur meeting with Questions 1, 2, 3, 4, 5, 21, 22, 24, 25 before the next SG 16 meeting in 2009.

## 4 Summary of Liaison Activity

The following is a summary of the outgoing Liaison Statements prepared by Working Party 2/16. The text of these Liaison Statements is contained in TD 506/Plen.

| Title | Destination | Purpose | Document | Source |
|---|---|---|---|---|
| Reply LS on improved IMS-CS Video Interworking with MONA | 3GPP TSG-CT WG3 (CC to: IMTC 3G-324M Activity Group) | Information | TD 616R1/WP2 | Q1 |
| Reply LS to IMTC 3G-324M AG on clarification of H.324 Use of FunctionNotSupported Message | IMTC 3G-324M Activity Group | Information | TD 617R1/WP2 | Q1 |
| Reply LS to ITU-R SG 5 on Question 223-2/8 “Internet protocol applications over mobile systems” | ITU-R SG5 | Information | TD 608R1/WP2 | Q2 |
| Reply LS to IETF MMUSIC WG on RTSP2.0 | IETF MMUSIC WG | Information | TD 610R1/WP2 | Q3, 21 |
| LS to TISPAN on filtering and latching | ETSI TISPAN WG3 | Information | TD 611/WP2 | Q3 |

| Title | Destination | Purpose | Document | Source |
|---|---|---|---|---|
| LS to TISPAN on approval of Recommendations related to gate management | ETSI TISPAN WG3 (CC to: ITU-T Q5/11) | Information | TD 612/WP2 | Q3 |
| LS to TISPAN on H.248.41 Amd.1 "Gateway control protocol: IP domain connection package: IP Realm Availability Package" | ETSI TISPAN WG3 | Information | TD 613/WP2 | Q3 |
| Reply LS to ETSI TISPAN on rules concerning mandatory/optional package properties in H.248 profiles | ETSI TISPAN WG3 | Information | TD 614/WP2 | Q3 |
| Reply LS to SG 17 on H.350 web services interface | ITU-T SG 17 | Information | TD 634/WP2 | Q4 |
| LS to OASIS-Telecom on Advanced Multimedia System | OASIS Telecom Service Oriented Architecture Development Group | Action | TD 624R1/WP2 | Q12 |
| Reply LS to ITU-T Q 1/15 on draft new Recommendation G.hnta - Generic Home Network Transport Architecture | ITU-T SG 15 Q.1/15 | Action | TD 609R1/WP2 | Q12 |
| LS to Q3/2 on Advanced Multimedia System Scenarios and Requirements | ITU-T SG 2 Q3 | Action | TD 648R1/WP2 | Q12 |
| Reply LS on a three party query response IdM model | JCA-IdM Co-convenors | Action | TD ~~xxx~~674/WP2 | Q12 |
| Reply LS to ISO/IEC JTC 1/SC 29/Maintenance Task Force on ISO/IEC 13522 Series on the collaboration on the maintenance of T.172 | ISO/IEC JTC 1/SC 29/Maintenance Task Force on ISO/IEC 13522 Series | Action | TD 671/WP2 | Q13 |
| LS to ISO SC29/WG11 (MPEG) on possible collaboration on IPTV | ISO SC29/WG11 (MPEG) | Information | TD 672/WP2 | Q13 |
| Reply LS to ITU-T SG 5 on home network | ITU-T SG 5 | Information | TD 632/WP2 | Q.21, 22 |
| Reply LS to ITU-T SG 9 on Home Network | ITU-T SG 9 | Information | TD 633/WP2 | Q.21, 22 |
| Reply LS to ITU-T SG15 on Home Network | ITU-T SG 15 (cc: JCA-HN) | Action | TD 630/WP2 | Q.21, 22 |
| Reply LS to ATIS IIF on Remote Management | ATIS IPTV Interoperability Forum | Information | TD 629/WP2 | Q.21, 22 |
| Reply LS to SG 15 on the ANT standards overview and work plan | ITU-T SG 15 (Q1/15) | Action | TD 631/WP2 | Q.21 |
| Reply LS to Q2/13 on alignment issues between Y.idserv-reqts and F.MID | ITU-T SG 13 - Q2/13 | Information | TD 628R1/WP2 | Q.21, 22 |
| LS to SG17 on tag-based identification triggered multimedia information access | ITU-T SG17 (CC to: JCA-NID) | Information | TD 660/WP2 | Q21, 22 |
| Reply LS to SG17 on USN security | ITU-T SG 17 | Information | TD 661/WP2 | Q.22 |
| Reply LS to JCA-NID on NID Terms and Definition | ITU-T JCA-NID | Information | TD 659/WP2 | Q.22 |
| Reply LS to JCA-IdM on a proposed breakdown of the ITU-T Focus Group on IdM use case gap analysis | ITU-T JCA-IdM (CC to: All ITU-T Study Groups, JCA-NID, JCA-HN, JCA-NGN, JCA-IPTV) | Information | TD 657/WP2 | Q.22 |

| Title | Destination | Purpose | Document | Source |
|---|---|---|---|---|
| Reply LS to JCA-IdM on A three party query response IdM model | ITU-T JCA-IdM (CC to: All ITU-T Study Groups, JCA-NID, JCA-HN, JCA-NGN, JCA-IPTV) | Information | TD 658/WP2 | Q.22 |
| Reply LS to ISO/IEC JTC1/SC6 on proposal of a collaboration progress between ISO/IEC JTC 1/SC 6 and ITU-T SG 16 | ITU-T ISO/IEC JTC1/SC6 | Information | TD 664/WP2 | Q.22 |
| Reply LS to SG 15 on collection of information of QoS architecture and mapping | ITU-T SG 15 | Information | TD 653/WP2 | Q.24 |

## 5 Workplan

The updated work programme for Recommendations that are the responsibility of WP 2/16 is in TD 509/Plen and on the SG 16 web page at http://itu.int/ITU-T/workprog/wp_search.aspx?isn_sp=1&isn_sg=153.

## 6 Summary of Interim Meetings

A WP 2/16 plenary meeting is scheduled on 5 September 2008, following the Q13 and Q21 Rapporteur's meeting during the IPTV-GSI event and is tasked to consider Consent of IPTV related draft Recommendations under SG16 responsibility.

As usual, the confirmation of this meeting and of its agenda will be done in a SG 16 Collective Letter to be issued at the latest two months before the meeting.

The following is a summary of the interim Rapporteur's meetings proposed by WP 2/16. Evolution of the status of the meetings will be regularly updated in the SG 16 home page at http://itu.int/ITU-T/studygroups/com16/meetings.html

| Date | Place | Host | Q. | Objectives |
|---|---|---|---|---|
| 23-27 June, 2008 (Tentative) | North Carolina, USA | Cisco or UNC (Tentative) | 12 | – Coordinate with other SDOs, Questions, and Study Groups<br>– Progress work on requirements<br>– Progress work on AMS system and terminal architecture<br>– Initiate work on a signalling specification<br>– Initiate work on media transmission and processing<br>– Discussion of miscellaneous and new work items |
| **23-27 June, 2008** | **ITU, Geneva** | **TSB** | **13** | – Work on the draft Recommendations targeted for Consent in near future: H.IPTV-SDC, H.IPTV-DSMW, H.IPTV-AEH, H.IPTV-MAP, H.IPTV-MD, [H.IPTV-CDER] (provisionally)<br>– Joint work with other SDOs<br>– Maintenance and update of T.172 |
| | | | **21** | – IPTV related issue. (IPTV-GSI) |
| **25-29** | **ITU,** | **TSB** | **1** | – Progress topics relative to multiple video streams |

| Date | Place | Host | Q. | Objectives |
|---|---|---|---|---|
| **August 2008** | **Geneva** | | | FECC<br>– Progress H.324m topics relative to CS-IMS video interworking and clarifications to responses to messages not understood to the transmitter<br>– Progress revision of H.324 and H.320-series<br>– Review of the items relative to H.320, H.324, T.120, H.310, etc. |

| Date | Place | Host | Q. | Objectives |
|---|---|---|---|---|
| | | | **2** | – Coordinate with other SDOs, Questions, and Study Groups<br>– Progress work on H.245v15, H.323v7, H.225.0v7, H.323 Annex I, H.460.geo, H.460.tm, and H.460.presence<br>– Discussion of miscellaneous and new work items |
| | | | **3** | – Coordinate with other SDOs, Questions, or Study Groups-<br>– • Progress work on: H.248.19 Amendment 2, H.248.48 (ex. H.248.QHR), H.248.50 (ex. H.248.NATTT), H.248.1 Appendix IV (Ex. H.248.Statistics), H.248.60 (ex. H.248.cci), H.248.61 (ex. H.248.IPOCS), H.248.63 (ex. H.248.Resman), H.248.64 (ex. H.248.IPR), H.248.65 (ex. H.248.RSVP), H.248.66 (ex. H.248.RTSP), H.248.67 (ex. H.248.TrM), H.248.PIPA, H.248.TDR, H.248 Sub Series IG, H.248.1v2 IG, H Series Supp 2 Release 12<br>– Consider new material |
| | | | **4** | – Progress work on the revision of H.350 Sub-series<br>– Discussion on new topics |
| | | | **5** | – Coordinate with other SDOs, Questions, and Study Groups<br>– Progress work on H.460.23, H.460.24, TP.HNFT<br>– Discussion of miscellaneous and new work items |
| | | | **12** | – Coordinate with other SDOs, Questions, and Study Groups<br>– Progress work on requirements<br>– Progress work on AMS system and terminal architecture<br>– Progress work on a signalling specification<br>– Progress work on media transmission and processing<br>– Discussion of miscellaneous and new work items |
| | | | **13** | – Progress items identified for the June meeting |
| | | | **21** | – Home Network, Visual Surveillance, Networked ID, Remote Management |
| | | | **22** | – Progress work on agreed upon work items: service awareness, visual surveillance, NID, USN, etc. |
| | | | **24** | – Progress work on H.trans.control, H.hnqos.analysis and H.codec.qoe<br>– Discussion of miscellaneous and new work items |
| | | | **25** | – Progress study of NGN-MM-SEC issues<br>– Review of the items relative to H.235-series, |

| Date | Place | Host | Q. | Objectives |
|---|---|---|---|---|
| | | | | H.460.22, etc. |
| | | | **29** | – Coordinate with other SDOs, forums<br>– Mobility support for AMS<br>– Mobility needs for disabled persons |
| 1-5 September 2008 | ITU, Geneva | TSB | 13 | – Progress items identified for the June meeting (IPTV-GSI) |
| | | | 21 | – IPTV related issue. (IPTV-GSI) |
| 1-5 December 2008 | ITU, Geneva | TSB | 13 | – Progress items identified for the September meeting (IPTV-GSI) |
| | | | 21 | – IPTV related issue. (IPTV-GSI) |

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