ITU Telecommunication Standardization Sector
Study Group 15
Experts Group for Video Coding and Systems
in ATM and Other Network Environments

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Temporary Document 65(PLE/15)

Working Party 1/15
Geneva, 13-24 November 1995

Source : Working Party 1/15
Title : Meeting report

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1. General

The fourth meeting of Working Party 1/15(Audiovisual) was held on 13-24 November 1995 in Geneva, under the chairmanship of Mr.M.Yamashita (NTT, Japan), Vice-Chairman of Study Group 15.

A joint meeting of WPs 1 and 2/15 took place during the meeting where harmonization of protocol activities between the two WPs, future structure of AVMMS studies and G.723.1 related issues were discussed. The report of this meeting appears in TD30(GEN).

2. Meeting objectives

1) To decide draft Recs. for broadband visual systems (H.222.1, H.245*, H.321 and H.322), narrow-band H-series (H.231, H.243, H.242 and H.320) and low bit-rate visual telephone (H.223, H.245*, H.263, H.324 and G.723.1);

2) To determine draft Recs. for broadband visual systems (H.22Z[222c], H.32X[310] and H.32Z.2[323]), low bit-rate visual systems (enhanced H.324 and G.723.1 Annexes A and B) and for mobile (G.723.1 Annex C);

3) To discuss future organization of our work in ITU-T;

4) To plan our future work and to revise Questions 1 to 3/15, based on the above discussions.

3. Documentation (asterisks denote double assignment)

3.1 Draft Recs. for decision

1) H.222.1
-COM15-156 : Rec. H.222.1 (Rap.Q.2 (SO))
-TD16(PL) : Proposed changes to H.222.1 in COM15-156 (Rap.Q.2 (SO))-
-TD34(1/15)* : ATM Forum VoD Service Definition Spec. (CM15 on behalf of ATM Forum)

2) H.245
-COM15-155 : H.245 (Rap. Q.2 (RS))
-D624 : Proposal for amendment of H.245 (FT)
-TD15(PL) : Draft H.245 (Rap.Q2(SO & RS))
-TD41(1/15) : Codepoints in H.245 for DSVD (WP1/14)
-TD48(1/15) : Appendix II to draft H.245 (Rap.Q2 (SO & RS))

3) H.321
-COM15-157 : Rec. H.321 (Rap.Q.2 (SO))
-TD14(PL) : Proposed changes to H.321 in COM15-157 (Rap.Q.2 (SO))

4) H.322

-COM15-158 : Rec. H.322 (Rap.Q.2 (SO))
-TD17(PL) : Proposed changes to H.322 in COM15-158 (Rap.Q.2 (SO))

5) H.231
-COM15-160 : Rev. H.231 (Rap.Q.3 (DS))
-TD3(PL) : Changes to H.231 revised (Rap.Q.3 (DS))

6) H.242
-COM15-154 : Rev. H.242 (Rap.Q.3 (NDK))
-COM15-233* : Minor improvements to H.242 and H.320 (Rap.Q.3 (NDK))
-D530 Comments on H.242 revised (USA)
-TD27(1/15) : Response to SG8 MLP rate request liaison (Rap.Q3(DS))
-TD47(1/15) : MLP data rates in a multipoint conference (Rap.Q10/8)

7) H.243
-COM15-161 : Rev. H.243 (Rap.Q.3 (DS))
-TD4(PL) : Changes to Rev.H.243 and Rev.H.242 (Rap.Q.3 (DS))
-D475 : Corrections to H.320 and H.243 (USA)
-TD44(1/15) : Additional correction to H.243 (COM15-161) (Rap.Q3(DS))
-TD45(1/15)* : Codepoints in H.230/H.221 to support H.243 (Rap.Q3(DS))

8) H320
-COM15-151 : Rev. Rec. H.320 (Rap.Q.2 (SO))
-COM15-224* : Enhanced video codecs for H.320 (USA)
-COM15-233* : Minor improvements to H.242 and H.320 (Rap.Q.3 (NDK))
-D475 : Corrections to H.320 and H.243 (USA)
-D535 : Comments on H.320 revised (AT&T)
-D536* : Comments on G.723 in H.221
-D540* : Proposed system for H.262 and H.263 in H.320 (USA)
-D664* : Proposed optional G.7231 in H.320 system (Siemens)
-D665* : Proposal to include optional H.263 in H.320 (BT)

9) H.223
-COM15-164 : Rec. H.223 (Rap.Q.2 (RS))
-TD8(PL) : Draft H.223 (Rap. Q2(RS))

10) H.263
-COM15-159 : Rec. H.263 (Rap.Q.2 (RS))
-TD7(PL) : Draft H.263 (Rap. Q2(RS))
-TD52(1/15) : HRDs in H.261 and H.263 (Rap.Q.2(RS))
-TD57(1/15) : Final corrections to H.263 (Rap.Q.2(RS))

11) H.324
-COM15-162 : Rec. H.324 (Rap.Q.2 (RS))
-TD6(PL) : Draft H.324 (Rap. Q2(RS))
-TD18(PL) : Final corrections to H.324 (Rap.Q.2 (RS))

12) G.723.1
-COM15-153 : Rec. G.723 (Rap. Q.2 (RS))
-TD13(GEN) : Draft G.723 (Rap.Q2(RS))
-TD14(GEN)* : Annex A to G.723 (Rap.Q2(RS))
-TD15(GEN)* : Annex B to G.723 (Rap.Q2(RS))
-TD16(GEN)* : Annex C to G.723 (Rap.Q2(RS))

3.2 Interim activities reports
-COM15R-37 : 2nd meeting of JCG/AVMMS
-TD35(1/15) ; Report of LBC meeting

-TD37(1/15) : 8th progress report of experts group for video coding and systems in ATM and other network environments

3.3 New Questions
-COM15-1 : Current Questions

3.4 AVMMS studies in ITU-T
-COM15-169 : Policy concerning Audio+Data multiplexing (BT)
-D481 : Proposal on JWP on MM (Siemens)
-TD10(PL) : MM protocol studies in SG15 (Rap.Q.3(NDK))
-TD19(GEN) : ITU-T study structure for AVMMS (CM, WP1/15)
-TD20(GEN) : Analysis of AVMMS studies in SG15 (CM, WP1/15)
-TD21(GEN) : Discussion material for AVMMS study structure (CM, WP1/15)
-TD22(GEN) : Propopsal to establish a Joint Rap. Group (WP1/14)

3.5 Draft Recs. for determination for visual systems broadband and LANs(Q2 & Q3)
1) H.32Z.2(323)
-TD30(1/15) : Draft Rec. H.323 (Editor H.323)
-D531* : Comments on H.323/H.310/H.320 related to data protocols (USA)
-TD38(1/15)* : Future additions to H.245 to meet H.323 requirements (Rap.Q2(SO))

2) H.22Z(222.c)
-TD31(1/15) : Draft H.22Z (Editor H.22Z)
-TD38(1/15)* : Future additions to H.245 to meet H.323 requirements (Rap.Q2(SO))

3) H.32X (310)
-D531* : Comments on H.323/H.310/H.320 related to data protocols (USA)
-TD33(1/15) : Draft H.310 (Rap.Q2(SO))
-TD36(1/15) : Report of the H.310 hardware trial (Experts group)

3.6 Draft Recs. for determination for low bit-rate visual system (Q2/LBC)

-TD14(GEN)* : Annex A to G.723 (Rap.Q2(RS))
-TD15(GEN)* : Annex B to G.723 (Rap.Q2(RS))
-TD16(GEN)* : Annex C to G.723 (Rap.Q2(RS))
-TD28(1/15) : Draft revised H.324 (Rap.Q.2(RS))

3.7 Q1
No contribution was available at this meeting.

3.8 Q2 (N/B-ISDN visual telephone systems)
3.8.1 Broadband visual telephone systems
-COM15-190 : Amendments to H.222.0|ISO/IEC13818-1 (Rap.Q.2 (SO))
-COM15-191 : Amendments to H.262|ISO/IEC13818-2 (Rap.Q.2 (SO))
-TD2(GEN) : Transmission performance considerations for networks using ATM (Q28/12)
-TD9(GEN)* : New AAL to support, e.g., mobile comm., in B-ISDN (SG13)
-TD2(1/15) : J.82 (SG9)
-TD9(1/15) : Generic real time interface specification (ISO/IEC JTC1 SC29/WG11)
-TD14(1/15) : DSM-CC/Real time interface (ISO/IEC JTC1 SC29/WG11)
-TD18(1/15) : Harmonizing T.120 and H.24X protocol stacks for ATM (SG8)
-TD21(1/15) : Video signal support in B-ISDN (SG13)
-TD22(1/15) : Corrupted data delivery option in AAL Type 5 CPCS (SG13)
-TD24(1/15) : ATM QOS (SG13)
-TD34(1/15)* : ATM Forum VoD Service Definition Spec. (CM15 on behalf of ATM Forum)
-TD38(1/15)* : Future additions to H.245 to meet H.323 requirements (Rap.Q2(SO))
-TD49(1/15) : Revised COM15-190 (Rap.Q2(SO))
-TD50(1/15) : Revised COM15-191 (Rap.Q2(SO))
-TD51(1/15) : Corrigenda to H.262 (Rap.Q2(SO))

3.8.2 H.320 system
-COM15-224* : Enhanced video codecs for H.320 (USA)
-D665* : Proposal to include optional H.263 in H.320 (BT)
-D532 : ANSI T1 terms and definitions for video performance (USA)
-D540* : Proposed system for H.262 and H.263 in H.320 (USA)
-D664* : Proposed optional G.7231 in H.320 system (Siemens)
-TD1(1/15) : Transmission time for H series video codecs (SG12)

3.8.3 LBC/MPEG-4
-TD9(GEN)* : New AAL to support, e.g., mobile comm., in B-ISDN (SG13)
-TD14(GEN)* : Annex A to G.723 (Rap.Q2(RS))
-TD15(GEN)* : Annex B to G.723 (Rap.Q2(RS))
-TD16(GEN)* : Annex C to G.723 (Rap.Q2(RS))
-TD17(GEN)* : Traffic engineering aspect of MM transmission in PSTN (SG2)
-TD23(GEN) : Application of framed QADM to V.34 modulation (WP1/14)
-TD4(1/15) : Seamless rate change for V.34 (SG14)
-TD6(1/15)* : Proposed simultaneous fax and voice operation (SG14)
-TD8(1/15) : Real-time audio/video conversational services (ISO/IEC JTC1 SC29/WG11)
-TD13(1/15) : Network independent service requirements for VLBR (SG1)
-TD28(1/15) : Draft Revised H.324 (Rap.Q2(RS))

3.9 Q3
3.9.1 Harmonization/Framework for Recs.
-TD1(GEN) : DSVD coder evaluation (SG12SQEG)
-TD4(GEN) : Liaison on G.DSVD (SG14)
-TD5(GEN) : Revised Rec.F.811 (SG1)
-TD17(GEN)* : Traffic engineering aspect of MM transmission in PSTN (SG2)
-TD24(GEN) : Liaison to G.DSVD (WP1/14)
-TD25(GEN) : Status of simultaneous/alternating voice and data (Rap.Q1/14)
-TD6(1/15)* : Proposed simultaneous fax and voice operation (SG14)
-TD10(1/15) : Terminology for new services and technologies (ITU-R SG10 & 11)
-TD11(1/15) : HLC codepoints (SG1)
-TD12(1/15) : Multimedia call set-up in the B-ISDN (SG1)
-TD19(1/15) : Support of general MM service (SG8)
-TD20(1/15) : Codepoints for use of T.120, T.84 and T.434 (SG8)
-TD23(1/15) : MM service requirements (SG13)
-TD25(1/15) : Response to review of JCG/AVMMS (SG11)
-TD26(1/15) : HLC codepoints for FTAM and for MM (WP2/11)
-TD32(1/15) : ISDN Multimedia interworking (Rap.Q.3(NDK))

3.9.2 Multiplexing schemes (H.221, DSVD, channel aggregation, data ports)
-COM15-232 : Further enhancements to H.221 and H.230 (Rap.Q.3 (NDK))
-D536* : Comments on G.723 in H.221
-TD12(GEN) : Simultaneous voice and fax transmission (SG8)
-TD18(GEN) : Report of G.DSVD expert group (Chair Q12/15-G.DSVD Group)
-TD3(1/15) : Digital channel aggregation (ISO/IEC JTC1/SC6 WG6)
-TD5(1/15) : DTE/DCE signalling and control for GSTN videophone (SG14)
-TD6(1/15)* : Proposed simultaneous fax and voice operation (SG14)
-TD7(1/15) : Dataport for videotelephones, etc. (SG14)
-TD17(1/15) : Serial data for connecting PC to videophone (SG8)
-TD29(1/15) : Request for adding audio-ISO codepoints in H.221 (Q40/9)

3.9.3 H.230
-COM15-232 : Further enhancements to H.221 and H.230 (Rap.Q.3 (NDK))
-COM15-234 : Character sets for H.320 terminals (Rap.Q.3(NDK))
-TD45(1/15)* : Codepoints in H.230/H.221 to support H.243 (Rap.Q3(DS))

3.9.4 Multipoint
-TD15(1/15) : Control protocol for AV/MM info. retrieval (SG8)
-TD16(1/15) : T.128 AVC (SG8)

3.10 Others
-TD20(PL) : SG15 studies in the area of GII (CM, SG15)

4. Results
4.1 General
1) AVMMS studies in ITU-T
See TD30(GEN).

2) GII
TD20(PLE) addressing GII and related SG15 involvement was introduced. It was the understanding of the group that the studies conducted in the Working Party have much relevance to GII and by progressing the work, the group can contribute to the achievement of GII. In this context, it was agreed necessary to refer to GII in the texts of Questions the Working Group is developing.

The WP Chairman reminded the delegates of the planned Rapporteurs meeting in January 1996, and encouraged them to attend it as much as possible.

4.2 New/Revised Questions
Following a brief discussion at the last WP meeting, it was agreed in principle to try to formulate Questions according to a combination of "vertical" and "horizontal" approaches, i.e. to set-up Questions in terms of systems (vertical) and technical components common to more than one system and/or service (horizontal). The purpose of horizontal Questions is to achieve harmonized development of Recommendations, and it was mentioned that cooperation among the Rapporteurs is indispensable. All the multimedia terminal related aspects from layer 1 to layer 7 will be studied under the vertical Questions. Draft study items for the following Questions were prepared;

(Vertical Questions)
Q.A : Multimedia terminals transmitting at very low bitrate
Q.B : N-ISDN audiovisual communication systems
Q.C : B-ISDN multimedia terminals
Q.D : LAN multimedia terminals

(Horizontal Questions)
Q.X : Harmonization and interworking of multimedia applications and services
Q.Y : MCUs, call control and service interworking
Q.Z : Advanced media coding

Most of the work in terms of developing Recommendations would be carried under vertical Questions, except in cases for Recommendations with common nature. It was also said that one vertical Question Rapporteur can take up another horizontal Question so that he/she can ensure harmonization across the horizontal plane.

The draft texts for these questions are contained in Annex 1. Contributions are solicited to the May 1996 SG15 meeting for the final review.

4.3 Report of interim activities
The following interim activities were reported;

I. JCG on AVMMS (COM15 R-37) and the relevant discussions in TSAG in September
II. Rapporteur meeting of experts on low bit-rate visual telephony (TD35(1/15))
III. Rapporteur meeting of experts on video coding and systems in ATM and other network environments (TD37(1/15))

The Working Party thanked the Rapporteurs and the experts for progressing the work and bringing forward the draft Recommendations to this meeting. The main parts of the report of two experts group are reproduced in Annexes 2 and 3.

With regard to the items put to consideration by the WP, the following points were made;

- Interworking is increasingly becoming an important factor, and it will form a major part of one of the new Questions for the next study period. A gateway may be placed between two networks, but it can also be implemented as a type of terminal equipment such as an MCU, which, on one side of the equipment accesses network A and on the other network B. This will a subject for study in WP1/15.
- With refernce to the allocation of interworking functions allocated to the terminal and to the gateway, it was pointed out that the adaptation function would be required to deal with variable bit rates when LANs are involved.
- For the communication with fora/consortia, it was said that TSAG should have developed a fromal procedure to be followed and it was agreed to look for such a document.

4.4 Draft Recommendations for decision at the SG plenary

On the basis of Delayed Documents and TDs, the drafts for the following Recommendations have been reviewed by the Working Party.

H.222.1, H.245, H.321, H.243, H.242, H.320, H.223, H.263, H.324 and G.723.1;

After the review, revised texts were re-examined at the Working Party and they were agreed to be sent to the SG Plenary for their deliberations for decision.

Note that G.723 has been renumbered G.723.1 following the discussions in the Joint WPs 1 and 2 meeting (ref.TD30(GEN)).

See: H.222.1(TD 47 (PLE)), H.245(TD 58 (PLE)), H.321(TD 49 (PLE)), H.243(TD 35 (PLE)), H.242(TD 30 (PLE)), H.320(TD 48 (PLE)), H.223(TD 45 (PLE)), H.263(TD 29 (PLE)), H.324(TD44 (PLE)), and G.723.1(TD 28(PL));

4.5 Draft Recommendations for determination

The following draft Recommendations have been examined at the WP and agreed to be stable enough to be determined at this meeting. Note that in view of the overall numbering plan in the Recommendation framework, H.22Z.2 has given the number H.225.0 and H.32X the number H.310. Amendmants to H.222.0 and H.262 follow the rules stipulated in the common text Recommendation. The final editorially updated texts for the draft Recommendations will be submitted as white contributions to the May 1996 meeting by the responsible Rapporteurs.

1) H.323 Visual telephone systems and equipment for local area networks which provide non-guaranteed quality of service (TD 77 (P))

2) H.225.0 Media stream packetization and synchronization for visual telephone systems on non-guaranteed quality of service LANs (TD76 (P))

3) H.310 Broadband audiovisual communication systems and terminals (TD 46 (P))

4) H.222.0|ISO/IEC13818-1 (Amendments)
Systems aspects for moving pictures (TD72 (P))

5) H.262|ISO/IEC13818-2 (Amendments)
Generic coding of moving pictures (TD 71 (P))

6) G.723.1.1 Annexes A, B and C
Speech coding for mobile/PSTN (TD14, 15,16(GEN))

Note: In TD16(GEN), p2, Section1, first line, replace the word "requires" by "may benefit from".

4.6 Q1

It was noted that in the last meeting, WP1/15 had asked the SDH experts in WP3/15 to examine the French proposal on the transmission of sound-programme within VCs of SDH. The SDH experts had kindly reviewed the proposal, but their final response containing comments and questions was not available during the WP1/15 meeting. Therefore, it was not possible to reopen the discussion in the meeting, but the FT delegate agreed to consider the paper before the next meeting.

4.7 Q2 (N/B-ISDN visual systems)

1) Broadband visual systems

TD51(1/15) which contained the corrigenda to H.262 was presented by the Rapporteur (Mr.Okubo). It was noted that corrigenda can be approved at the SG plenary. Since another set of corrigenda is under ballot in MPEG, it was agreed to put the two sets of corrigenda to the May 1996 SG15 meeting for approval.

As regards future enhancements of H.245, the meeting agreed to consider the inclusion of the source of mode preference request in the future revision in the context of cascaded MCUs.

2) H.320 system

Based on proposals in COM15-224, D.540, D.664, D.665 it was agreed to consider inclusion of the use of G.723.1.1, H.262 and H.263 in the next revision of the H.320. The specifications will be fixed at the next meeting in May 1996. Contributions are solicited. A baseline of the study is given in D.540. This inclusion will not only require modification of H.320, but changes in other related H.320 family Recommendations. Annex 4 lists the Recommendations and the Sections impacted.

4.8 Q2 (Low bit rate visual systems)

Relevant liaisons were examined and responded to.

4.9 Q3

4.9.1 Future revisions to H.221 and H.230

COM 15-232 proposes a number of enhancements to these Recs., further to the revision approved by ballot in July 1995, concerning addition of H.263 codepoints, mode-preference indicators, deletion of the class/family concept, and other detailed matters. D.536 (USA) and D.664 (Siemens) propose additions for G.723.1.1. It was agreed that H.221/230 revision documents would not contain any references to H.262, H.263 and G.723.1.1, but that the USA would circulate its revised proposals (taking into account other viewpoints expressed) to Q3/15 correspondents by end February, in order to reach a consensus for freezing in May 1996.

TD29 from SG9 requests modifactions to H.221 for dealing with broadcast audio channels on restricted networks by the method of J.52. This was agreed, and the reply (TD***) contains further advice relating to the desirable cross reference to H.242 which should accompany this enhancement.

COM 15-234 from the Rapporteur details a number of options for dealing with the character set in H.230, which can no longer be specified with reference to T.61. It was decided to replicate the necessary specification material from T.61 within H.230 itself, without any changes. Suitable extension to H.230 could be made in the future if there is demand for other sets such as ISO 8859-1.

Annex 5 sets out the material which WP1 has decided to freeze at this meeting - essentially those codepoints which are now required to implement the provision of H.242 and H.243 being Decided now. All other revision proposals are open for further reflection and will reappear in a contribution from the Rapporteur to the next meeting.

4.9.2 Simultaneous voice and data systems

Documents TD25(GEN) and TD23(GEN) from WP1/14 report on work on this topic.

Concern was expressed that the problem of the multiplicity of PSTN multimedia platforms with overlapping functionality had worsened since July, when the JCG/AVMMS had requested that all involved should seek to ameliorate the situation: not only had the V.34Q proposal appeared on the scene, but also suspend/resume had been added to V.gmux. It was also thought that the V.34Q held considerable promise, and the liaison to WP1/14 (see TD 67 (PLE) Annex 2) encourages this work.

Documents TD4, 18 and 24(GEN) from WP1/14 concern the speech coding G.dsvd planned for use with V.dsvd.

From the Q.3/15 point of view it was regretted that the speech coding used in H.324 had not been chosen, since it offered adequate performance at a slightly lower bitrate and the prospect of better harmonisation among the multimedia systems.

TD12(GEN) and TD20 from SG8 and TD6 refer to facsimile-plus-speech systems. A replt will be sent (TD (PLE) Annex 10) notifying the inclusion in H.245 of the T.84, T.434 and T.120 codepoints requested; furthermore we offer to include one for T.30, so that PSTN systems using H.245 will naturally be able to carry T.30 facsimile.

4.9.3 General Multimedia Service

TDs 11, 12, 19 and 26(1/15) relate to ongoing correspondence between SGs 1, 8, 11 and 15 concerning multimedia communication on ISDN, more specifically the selection and mid-call change of conversational and/or non-conversational sessions. TD32 contains a first draft H.mmiw addressing the procedures required, negotiating between H.242/H.221 and T.90(extended) protocols according to user needs and equipment capabilities. TD60 is a draft liaison to the other SGs informing them of this, and pointing out that the service definition must be such that other terminals not having both conversational and non-conversational capabilities must nevertheless respond to a call request containing the general "multimedia" HLC codepoint.

Discussion on TD32(1/15) pointed to the need for a more general approach, encompassing a much wider range of interworking situations. It was agreed to modify in future the scope and structure of this draft Rec. "H.mmiw" to show this wider compass, without at this stage putting more than a few initial notes in the proposed new sections; the content of this new draft, appended to the report as Annex 6, was not approved in detail or frozen in any way, but will serve as a basis for a much improved Interworking Recommendation to come into the next meeting. Furthermore, it was hoped that this document could be the focus of attention of an interim Rapporteur's meeting, which would consider other related material known to the group.

4.9.4 Other matters

TD17(GEN) from SG2 requests advice concerning multilink PSTN multimedia. The reply (TD 67 (PLE)Annex 1) informs SG2 that the first version of H.324 is single link, but has hooks for multilink which will now be under study for the enhanced version. There is therefore still time to take into account any concerns SG2 may have, and more guidance is sought on certains points of detail.

TD10(GEN) from SG9 gives information about terminology for Digital Television. A response (TD 67 (PLE)Annex 6) contains a few points on which some modifications might lessen the chance of misunderstandings.

TD23(1/15) from SG13 conatins a draft baseline document addressing network issues for multimedia services, and tabulating some properties. Errors and omissions were noted, but since it was not clear how this document would advance the specification of infrastructure systems it was decided not send a detailed reply for the time being.

TD25(1/15) from SG11 to the JCG/AVMMS notes that reference to Q.939 in the Framework for Multimedia Recommendations is incorrect. However, the meeting felt that both Q.931 and Q.939 contain material specific to videotelephony; visibility of these should be retained, and the documents taken into account in the "General Multimedia" interworking studies.

TD3(1/15) contains the 19 June version of ISO/IEC 13871 on Channel Aggregation, showing alignment with our H.244 work following earlier correspondence. A reply (TD 67 (PLE) Annex4) expresses appreciation and a minor editorial point.

TD7 and TD42 from SG14 and TD17(1/15) from SG8 are responses and information concerning the matter of Dataports and other DTE-DCE considerations for multimedia terminals; the meeting felt that work in SG14 appeared to be progressing according to our needs, and we could expect suitable specifications to be produced in due course - no further LS being required for the time being.

5. Future works

5.1 WP1/15 will meet next on 27 May to 7 June 1996.

5.2 Experts meeting on video coding and systems in ATM and other network environments will be held on 16 -19 January 1996 in Ipswich, UK.
Objectives and agenda for the meeting are contained in Annex 7.

5.3 Experts meeting on low bit-rate visual system will be held on;
i) 9-12 January 1996 in San Jose, USA
ii) 23-26 April 1996
Objectives and agenda for these meetings are contained in Annex 7.

Annex 1 Draft new Questions A-D, X-Z/15 (TD 66 (PLE))
Annex 2 Reproduce pp1- 11 of TD37(1/15)
Annex 3 Reproduce pp1-20 of TD35(1/15)
Annex 4 Recommendations impacted by the inclusion of H.263 and G.723.1.1
Annex 5 Approved enhancements to H.221 and H.230
Annex 6 (reproduce TD32(1/15)

ANNEX 7 Objectives and agenda for the proposed interim meetings

1. Meeting of experts of video coding in ATM environments and other networks

Meeting	Objectives	Agenda
16-19 Jan. 1996	- to editorially review draft Recs. H.225.0, H.310 and H.323 - to examine outside activities relevant to H.310	- review of the previous meetings - review of draft Recs. H.225.0, H.310 and H.323 - discussion on hardware trial testing items - liaison with MPEG and other groups

2. Meeting of experts on very low bit-rate videotelephony

Meeting	Objectives	Agenda
9-12 January 1996	- to editorially review draft Annexes A,B and C of G.723.1.1 - to prepare remaining drafts for low bit rate mobile system	- review of the previous meetings - drafting of draft Recs. H.223/m, H.263/m, 324/m
23-26 April 1996	- to finalize draft for submission to the WP	- review of the previous meetings - review of hardware experiments