

Source: SA&A/The ATM Forum

Title : Liaison regarding H.320 over AAL and AMS Phase 1 Work Scope

Purpose: Information

From: Dean M. Skidmore +1-919-254-4806
Dept: IBM Networking Systems: Networking Technology Analysis
Subject: SA&A/AMS Liaisons from the February Meeting

To the Members of the SA&A/AMS Adhoc Group, here are the three liaisons which will go out to the respective organizations. These three were reviewed and approved by the SA&A Plenary and later approved by the ATM Forum Technical Plenary. The three liaisons are:

1. H.320 over AAL5 study initiation by ATM Forum
2. Response to Class C liaison request from ISO SC29 WG11 (MPEG Systems)
3. Informational Correspondence of AMS Phase 1 Work Scope and Schedule.

-----Liaison number 1-----

Date: February 10, 1995

To: ANSI T1A1
ANSI T1S1
ETSI NA5

From: George Dobrowski, Chair, ATM Forum Technical Committee
Dean Skidmore, Chair, ATM Forum SA&A/AMS Work Group

Subject: H.320 over AAL5 Study initiation

In the interest in improving communications to outside fora, the ATM Forum would like to inform you that during our February 9-14, 1995 meeting in Burlingame, California, USA, a member contribution on Video Conferencing (H.320-based) was reviewed. This contribution went into detail on how H.320 over AAL5 may be supported.

After significant discussion, a motion was passed. This motion stated,

"SA&A AMS Working group will study H.320 terminal using AAL5 in a ATM environment within the scope of work for AMS Phase 2".

This motion passed by a vote of 27-Yes, 0-No and 15-abstentions.

As a result of this vote, the ATM Forum Technical Committee will begin to study how H.320 over AAL5 might be addressed in Phase 2 of the Audiovisual Multimedia Service Phase 2 Implementation Agreement. As of this writing, there is no defined schedule agreed to for Phase 2.

Please indicate to us any areas of interest which your respective organizations may have in this H.320/AAL5 area.

In addition, the ATM Forum would like to ask ANSI T1S1 to forward this status to ITU-T SG15 via the US Study Group B.

Regards,

-----Liaison Number 2-----
Date: February 10, 1995

To: Narumi Hirose, Secretariat, ISO/IEC JTC1 SC 29

From: George Dobrowski, Chair, ATM Forum Technical Committee
Dean Skidmore, Chair, SAA/AMS Work group

Dr. Hiroshi Yasuda, Chairman, ISO/IEC JTC1/SC 29
Dr. Leonardo Chiariglione, Convener, ISO/IEC JTC1/SC 29/WG 11
Ms. Anne Ferris, Executive Director, ATM Forum

Subject: Response to your Request for Class C Liaison

Your letter dated 1994-12-16 to Ms. Anne Ferris, regarding establishment of a Class C Liaison between ATM Forum and ISO/IEC JTC1 SubCommittee 29 Work Group 11 has been reviewed.

In your letter you requested that a Class C liaison be established between ISO SC29 WG 11 and the ATM Forum SA&A/Audiovisual Multimedia Service Work group. The membership of the ATM Forum Technical Committee has accepted this Liaison request.

Pursuant to responsibilities stated in your 1994-11-12 Proposal, it states that "SC29 and the ATM Forum agree to abide by the following Guidelines:

1. Liaison representatives from SC29 and the ATM Forum and who are acceptable to both organizations shall be appointed. Each Liaison representative may attend meetings of the other organization and should be added to its mailing list.
2. Within the Scope of work of SC29, SC29 and its WG's meetings shall be the forum at which points of common interest are discussed and agreed. The ATM Forum may contribute papers and contribute to relevant agenda items. It is noted that the liaison does not extend to the formal decision-making processes, such as balloting and voting in meetings.
3. Either party may withdraw and thus terminate the liaison at any time.

Therefore, with interest to appoint a Liaison representative from the ATM Forum SA&A/AMS work group to the SC29 WG11, the Chair, Dean Skidmore will serve as this liaison until such time that a permanent Liaison representative may be agreed to by both ATM Forum and ISO SC 29/WG 11.

When SC29 has nominated their liaison representative, please inform the addressees of this letter of your decision.

Regards,

-----Liaison #3-----

Date: February 10, 1995

To: ANSI T1S1
ANSI X3L3.1
ANSI T1A1
Dr. Leonardo Chiariglione, Convenor, ISO/IEC JTC 1/SC29/WG 11

From: George Dobrowski, Chair, ATM Forum Technical Committee
Dean Skidmore, Chair, ATM Forum SA&A/AMS Working Group

Subject: AMS Phase 1 Work Scope

The ATM Forum Technical Committee would like to inform your respective organizations of the scope, schedule and direction of its work on Audiovisual Multimedia Service. This correspondence is for information and does not require a direct response, although any comments would be appreciated. It is requested the ANSI T1S1 forward this correspondence to U.S. Study Group B and request forwarding this to ITU-T SG15 Video and System Experts group.

The Audiovisual Multimedia Service(AMS) Phase 1 Implementation Agreement will focus on Video-on-Demand using MPEG-2 single program transport streams over AAL5 with bounded Quality-of-Service(QoS) characteristics. Please find more detailed information below.

Phase 1 AMS Implementation Agreement Scope:

With the ATM network bounding the cell jitter and the other QoS characteristics that an application can expect, Video-on-Demand using Constant-Bit-Rate(CBR) MPEG-2 over AAL5 is feasible.

The following are Phase 1 work items:

1. Include Video-on-Demand using CBR MPEG2 over AAL5 in the AMS workscope for Phase 1 based on attached contribution 94-0688.
2. Phase 1 AMS Implementation Agreement section on Video-on-Demand should recommend one solution for AAL5 to support CBR MPEG2.
3. Exclusive of the MPEG/AAL5 packing proposals(which are later described), adopt 94-0857 (attached) as a strawman text for VOD section of Phase 1 AMS IA.
4. Phase 1 AMS IA should include an informative annex describing the accumulation and transformation of jitter terms affecting time critical information streams. This includes:
 - Terms related to Cell Delay Variation(CDV) from cell switching or rate adaptation,
 - AAL-PDU delay variation due to segmentation and reassembly,
 - MPEG Transport Stream packet delay variation due to segmentation and reassembly.

MPEG2/AAL5 packing efficiency and MPEG2 PCR awareness

With respect to item number 3 above, the AMS Members have voted in November 1994, to support the following approach for packing MPEG2 Transport Stream packets into AAL-5 Protocol Data Unit(PDU):

Equipment supporting Phase 1 AMS Implementation Agreement must be able to transmit a stream with the following characteristics:

If an AAL-5 PDU contains a MPEG2 Transport stream Packet(TP) which contains a Program Clock Reference(PCR), the TP will be the last TP in the AAL-5 PDU. In addition:

1. As a base level a Maximum Transport Unit(MTU) size of 2 packets per AAL-5 PDU is required to be supported by the source(either a MPEG2 Server or a RealTime Encoder).

2. In absence of signalling(negotiation), 2 TPs per AAL-5 PDU is the default MTU size,
3. Larger MTU size (>2) can be negotiated via signalling for SVC or by network provisioning by PVCs.

As a result of the February 1995 meeting in Burlingame, California, the following areas require additional work in the April 95 meeting:

1. Clarification text for Video-on-Demand service description. Ensure that there is sufficient detail in 94-0688(attached).
2. Additional textual definition for ATM QoS parameters to support Video-on-Demand service description.
3. Additional text for ATM Traffic Descriptors for CBR MPEG Transport Streams.
4. Definition of the AMS Phase 1 Control plane for supporting the Video-on-Demand Service Description. MPEG-2 DSM-CC, third party call setup and proxy agent signalling are under consideration at our next meeting in Denver Colorado on April 9-14.

AMS Phase 1 Implementation Agreement document schedule:

Feb-95 -- Initial draft of Baseline Text
Apr-95 -- 2nd draft of Baseline Text
June-95 -- Editing session of Phase 1 document
August-95 -- AMS IA Phase 1 document ready for Straw vote
October-95 -- Resolve major, minor issues & editorial comments
 and forward to technical committee for plenary vote.

The next ATM Forum meeting is April 9-14 in Denver Colorado. We respectfully request that any comments be returned to the ATM Forum by March 31, 1995.

Please forward any related comments or interest to the Chair of ATM Forum SA&A/AMS working group.

Thank you for your consideration,

Regards,

Dean Skidmore, Bldg 501/Dept A58, RNL, Raleigh, NC

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