ITU Telecommunication Standardization Sector — Document AVC-793
Study Group 15 — May 5, 1995
Experts Group in Video Coding and Systems in ATM and Other Network Environments

SOURCE: USA
TITLE: US National Body Position on MPEG-2 Real-Time Interface
PURPOSE: Information

At its May 1995 meeting in Atlanta, the US National Body for JTC1 SC29 WG11 (MPEG) voted to disapprove the advancement to International Standard status of the proposed MPEG-2 Real-Time Interface. The USNB feels that the RTI should be modified to suit a larger range of applications. The RTI clearly states that it is optional. It serves to help promote interoperability between equipment that generates or accepts bitstreams that are delivered in real time. To increase the utility of the RTI, the RTI should not contain a specified value for maximum allowed timing jitter in a bitstream's real-time delivery. The RTI only should define a framework that helps MPEG users specify their interoperability requirements between equipment such as video servers, delivery networks, storage devices, and decoders. By leaving the value of *t_jitter* undefined in the RTI, MPEG users can apply the RTI to their specific applications, e.g. satellite MPEG delivery, ATM delivery, storage of MPEG streams. It was recognized at the Atlanta meeting that bodies other than MPEG probably are better suited to choose acceptable timing jitter values for different applications.

The content of the USNB position on the RTI follows:

Specifically, we recommend that the second paragraph of section 1 of the RTI be replaced with:

> This part of the standard provides a framework for the specification of real-time delivery requirements for MPEG-2 transport streams. The framework is intended to help MPEG users define interoperability requirements between system components such as video servers, networks, storage devices, and decoders. The framework defines a "Real Time Interface" at which a transport stream arrives and uses the interface to define constraints on the delivery of the transport stream. One parameter of this interface, the allowed timing jitter, is not specified here. It should be chosen by users of Part 9 to suit the needs of their specific applications.
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> Use of Part 9 is optional. For systems that do choose to use Part 9, Part 9 does not change or supersede any of the requirements of Part 1 of ISO/IEC 13818 and in particular does not change the PCR accuracy requirement specified in Part 1.

Further, we recommend that the fourth paragraph in section 1 be amended as follows:

> Figure 1 provides a simplified view of the scope of Part 9. This figure shows a Data Link Interface Adapter, a Real-Time Interface Decoder, and the location of the transport stream which complies with this RTI specification. It should be noted that the Data Link Interface Adapter is responsible for removing any data link protocol/data structures as well as sufficient timing jitter to comply with whatever timing jitter parameter a user specifies.

Further, we recommend that section 2.5 be replaced with:

The value of the constant t_jitter shall be chosen by users of Part 9 to suit the needs of their particular applications.

Finally, we recommend that the suffix "-LJ" be removed throughout Part 9 and that the words "for Low Jitter Applications" be removed from the title of Part 9.