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

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SOURCE : Stuart Dunstan, Siemens Ltd, (Australian UVC consortium)

TITLE : Report of Discussion group on MPEG-2 Systems and ATM

PURPOSE : Report

Mandate: To identify a suitable interworking point for MPEG-2 systems on packet oriented networks

Duration: Until the Seoul Meeting

Meetings: None

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Report:

Discussion within the group was limited.

An issue arising from the previous joint meeting was whether the MPEG Systems Packetised Elementary Stream could be used without support of either the Program or Transport Stream. The MPEG-2 Systems Working Draft is currently ambiguous on this issue. A clear statement is required.

A document was distributed that compared delay, error strategy, and packing efficiency, of two ATM network adaptation structures, being one based upon the ATM Adaptation Layer (AAL) type 3/4 SAR sublayer, and one based upon the MPEG-2 Systems Transport Stream. The capability to operate in pipelining mode and the performance when aligned to user data structure was examined. The conclusion was that the former example offers superior delay and error performance.

Figure 1 shows possible alternatives for ATM network adaptation in the H.32X terminal. Consideration must be given to which part of MPEG-2 Systems is appropriate and which AAL

procedures are appropriate. The Figure recognises that there may be H.22X specific functions not provided by MPEG-2 Systems syntax, or by the AAL.

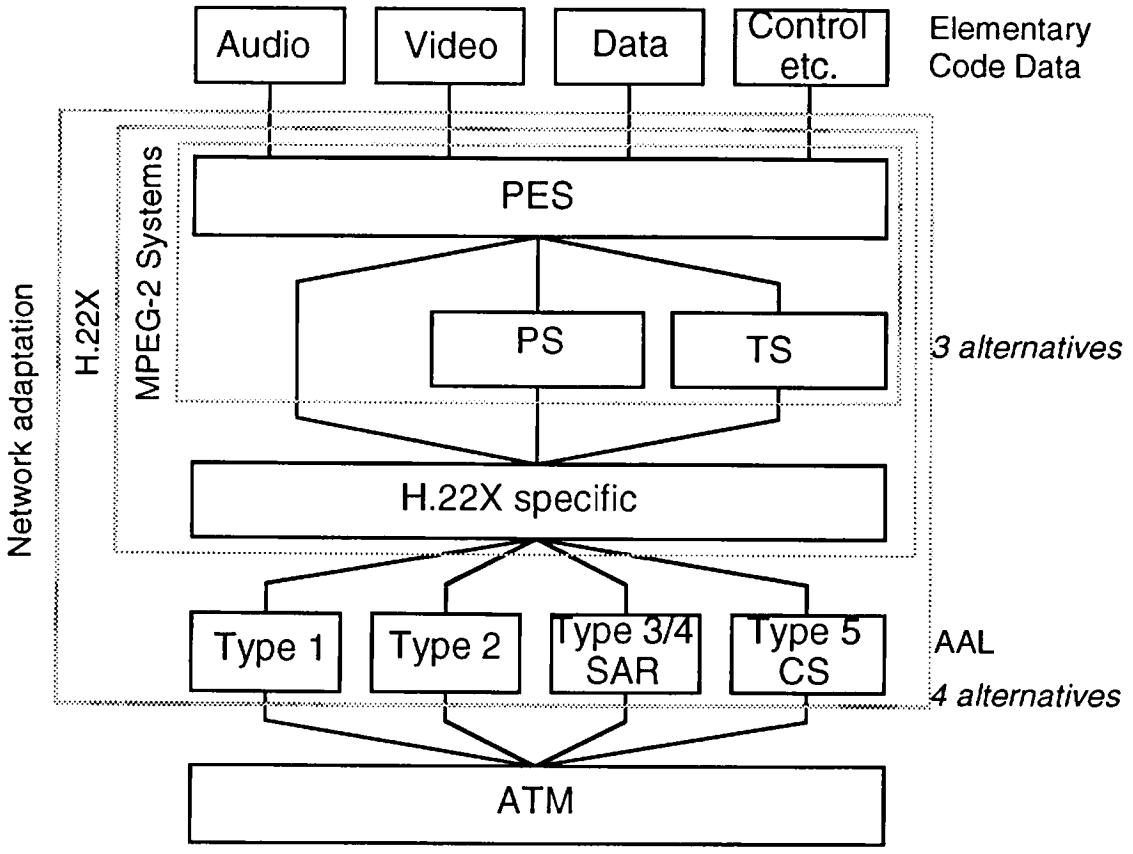

Figure 1. Possible ATM Network Adaptation alternatives for H.32X terminal.

end