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

Document AVC-701
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SOURCE : Japan
TITLE : The specification of H.32X hardware for the interconnection experiment
PURPOSE: Proposal

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1. Introduction

An interconnection experiment is planed to verify the recommendations H.262, H.222.0, H.222.1, H.32X, and H.24X. Document AVC-659 describes the scope of experiment, schedule, testing items and so on. According to the document, we propose the hardware specification.

2. Hardware specfications

Items	Mandatory spec.	Optional spec.
Video codec		
Coding scheme	H.262	
Picture format (ENC)	525/60 720(pixel) x 240(line) x 60(field)	625/50
Profile/Level (ENC)	SP@ML(field or frame structure)	MP@ML
Picture format (DEC)	525/60	625/50
Profile/Level (DEC)	SP@ML(field and frame structure)	MP@ML
Coding rate	CBR	VBR
Audio codec		
Coding scheme	MPEG-1 Layer-2	
The number of channel	2 channel (stereo)	
Coding rate	384 kbps (192kbps x 2channel)	192, 224, 256, 320 kbps
Sampling rate	48.0 kHz	44.1 kHz
Multimedia MUX		
MUX scheme	H.222.0 TS	H.222.0 PS
Information rate at AAL-SAP (*1)	n/m of network clock (n,m)=(47,1215) [6.016Mbps]	(n,m)=(47,2430), (47,810), (94,1215) [3,9,12Mbps]
CSPS	-	On/Off
System clock/Network clock synchronism(*2)	none	sync.
The number of program	single	multiple
AAL		
Type (*3)	Type 1 or Type 5	Type 1 and Type 5
Timing recovery	none	Adaptive clock (*4)
Error correction	none	Long interleave /Short interleave (I.363) (*4)
Others		
Physical interface point	none	AAL-SAP, ATM-SAP
Data channel	none	multiple
C&I	none	sync. to video
Communication procedure, protocol	none	H.24X
Interconnection to the different type terminal	none	H.32Y (H.320)

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notes
*1 : The values of n, m are specified to offer 6.144 Mbps after the AAL1 PDU header (1 byte) is added. These values remain for further study in case that AAL type 5 is employed and/or FEC is employed.
*2 : Clock relation is shown in Figure 1.
*3 : The mapping from TS packet to ATM cell in AAL5 is for further study.
*4 : These can be selected for AAL type1.

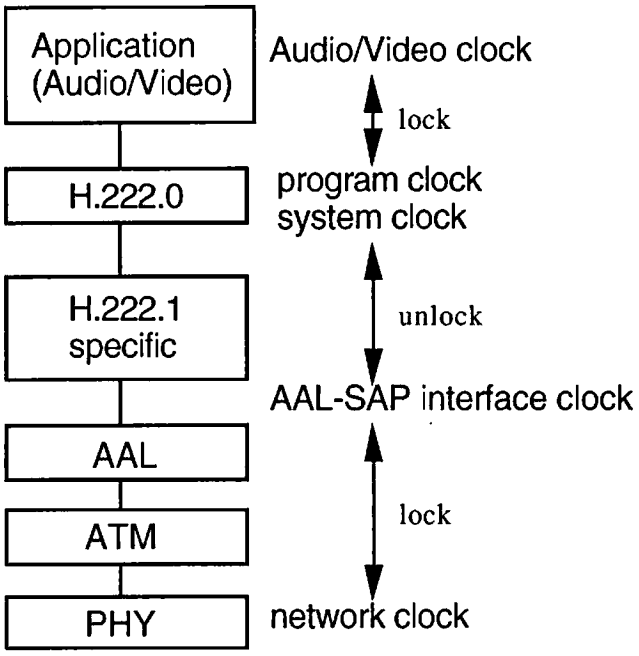

Fig.1 Clock relation in the H.32X protocol stack

3. Call for participation

Three Japanese organizations are scheduled to take part in this verification test as of October 1994, and more participants would be welcome. It is possible for a variety of communication equipments to participate, such as an encoder only or decoder only terminal, a video server, and a test signal generator.

Reference

AVC-659 "A plan of H.32X hardware interconnection experiment in Japan", July 6th, 1994.

END