AVC-316

CCITT SGXV
WORKING PARTY XV/:
EXPERTS GROUP FOR ATM VIDEO CODING

RECOMMENDATIONS FOR CELL LOSS EXPERIMENTS

(David Sarnoff Research Center, USA)

I. For comprehensive evaluation of ATM cell-loss resilience, a number of factors need to be considered. These include:

(1) Codec Mode (Prediction Method, Normal/Low Delay, Bit-rate, VBR/CBR, 1/2 Layer, Traffic Shaper)

(2) ATM Transport Mode (VBR/CBR, Peak Control, Average Control, HP/LP Priority)

(3) ATM AAL Features (SEQ #, CRC, Entry Pointer, MB/Slice#)

(4) ATM Network Scenario (CLR's for: CBR, Strictly regulated VBR (e.g. Telco Widearea), loosely controlled-VBR (e.g. stat-mux local area)

(5) Decoder Concealment features (temporal/spatial/adaptive, use of MC)

II. SUGGESTED CORE EXPERIMENTS

Encoder Mode	**ATM Transport Mode**	**ATM AAL**	**Decoder Conc.**	**ATM Network Scenario**			**Results**
				Descr.	**HP CLR**	**LP CLR**	
MPEG TM1 Normal 4 Mbps, CBR 1 layer	CBR 1 Priority	N/A	To be specified by experimenter	Fixed CBR	-	10^{-8} to 10^{-6} Random	
MPEG TM1 Normal 4Mbps avg VBR 1 layer	VBR/w Peak & Avg. Cont. 1 Priority	SEQ#, CRC, Entry Pt.	"	Reg. VBR	-	10^{-4} to 10^{-6} Random	
MPEG TM1 Normal 4Mbps avg VBR 2 layer	VBR/w Peak & Avg. Cont. 2 Priority	"	"	Loose VBR	10^{-7} to 10^{-5} Random	10^{-2} to 10^{-4} Corr.	
MPEG TM1 Normal 4Mbps 1-layer	VBR/w Peak Contr. 1 priority	"	"	"	"	"	
" with: low delay	"	"	"	"	"	"	