ISO / IEC JTC1 / SC29 / WG11
MPEG 93 / 76
January 1993

CCITT SGXV
Working party XV/1
Experts Group for ATM Video Coding
(Rapporteur's Group on part of Q.3/XV)

Document AVC - 431
Version 2

SOURCE : Telia Research AB, SWEDEN
TITLE : Leaky Prediction
PURPOSE : Information

Simulation results:

Simulation have been performed with leaky prediction. A TM3 frame-based coding structure with frame-based motion vectors was used. Adaptive macroblock quantisation and rate control as in TM3 is implemented.

Flowergarden 50 pic,	M=3, LF=7/8	M=1, LF=15/16
No leak N=15	28.09	28.15
Leak, (with lim cyc)	27.94	27.71
Leak, (lim cyc sol 2)	27.93	27.76

Mobcal 24 pic,	M=1, LF=15/16
No leak N=15	28.20
Leak, (with lim cyc)	27.14
Leak, (lim cyc sol 2)	27.58

Conclusion:

On the Flowergarden sequence leaky prediction gives visually comparible results to other tm3 simulations.

We saw no difference on the Flowergarden sequence on leaky prediction with or without solution 1 or 2 to the limit cycle problem. The two different solutions to limit cycle gave almost the same SNR values. They differed just about 0.01 dB.

Leaky prediction with M=1 behavs well with cell loss.

A part of the Mobcal sequence with not so much motion was chosen for the simulation.When leaky prediction was used the background was quite noisy.