CCITT SGXV
Working Party XV/1
Experts Group for ATM Video Coding

Source : Japan
Title : Evaluation of TM0 algorithm at low bit rates.
Purpose: Information

_____

1. Introduction

This report provides simulation results of TM0 algorithm at low bit rates and its lower bounds for some kinds of sequences.

2. Simulation method

We used TM0 algorithm under the condition that:
frame based coding   (MPEG92/080),
rate control   (MPEG92/077),
M=3, N=12.

3. Results

Figure 1 indicates the simulation result of comparing average SNR's over 150 frames for certain sequences. In this figure, "lower bound" is the lowest bit rate setting TM0's target bit rate to 1Mbps. The rate controling behavior in this "lower bound" environment is shown in figure 2. This bound can be extended by changing step sizes or reducing macro block types.
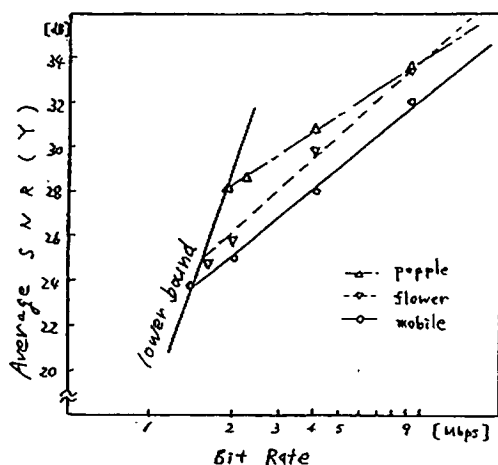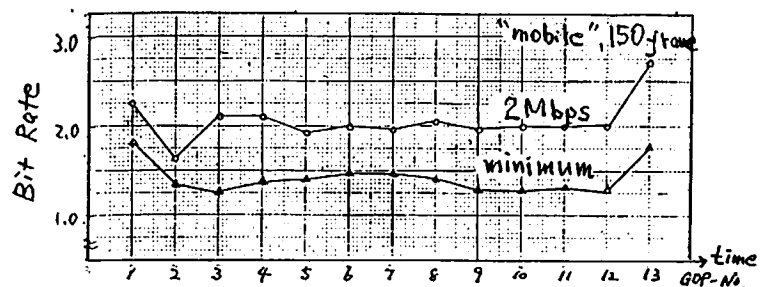

Fig.1 Performance of TM0 algorithm.

Fig.2 Rate control of TM0 algorithm at low bit rate.

End.