SOURCE: Canada
TITLE: Picture Formats for High Quality Applications
PURPOSE: Proposal

1. Introduction/Background

This document proposes two picture formats (525-line and 625-line formats) for high quality applications.

The rationale for the proposed formats is:
* Progressive scanning is a better choice for video coding, it also reduces temporal aliasing;
* Higher spatial resolution than CIF is required to support high quality applications;
* Number of connections for high quality applications to be established between 525-line and 625-line countries should be relatively small compared to the number of connections within 525-line and 625-line countries;
* Ease of compatibility with the local TV standard is desirable.

2. Proposal

It is proposed to have two picture formats (525-line and 625-line formats), and to adopt a single format for all high quality applications within a country. Therefore, agreement between CCITT, CMTT and ISO should be reached to support the same two formats in their coding techniques for high quality applications. The following formats are proposed:

	525-line format	625-line format
Frame rate	30 frames/sec (progressive)	25 frames/sec (progressive)
No. of pels/line (Y, Cr, Cb)	720, 360, 360	720, 360, 360
No. of significant pels/line	704, 352, 352	704, 352, 352
No. of lines/frame (Y, Cr, Cb)	480, 240, 240	576, 288, 288

Connections between 525-line and 625-line countries could be established using the CIF format.

3. Conclusion

In this document, two picture formats are proposed (525-line and 625-line formats). It is also proposed to reach agreement between CCITT, CMTT and ISO to support these formats for high quality applications.