

SOURCE: Australia

TITLE: End to end significance of the ATM header CLP bit

PURPOSE: Proposal

### Abstract

*It is proposed that the CLP bit of the ATM header be used for no other purpose than that of cell loss priority indication.*

### Introduction

The function of the Cell Loss Priority (CLP) bit of the ATM header is to indicate to the ATM nodes in the B-ISDN network how the cell should be treated with respect to loss priority. It has no end to end significance. At the receiver, knowledge of loss priority of a particular cell at the ATM level is not required, and may not be available. It is only important that the cell has arrived.

The use of the CLP bit as a means of video layer identification has been raised. This use is unacceptable for the following reasons;

- it adds functionality which restricts the intended purpose of the CLP bit and associated functions eg violation tagging, which changes CLP=0 cells violating agreed traffic parameters, to CLP=1.
- it has inadequate capacity as a video layer identifier. A video coder capable of interworking may have more than two layers eg layers for interworking plus additional layering for ATM cell loss concealment. Layer identification, within a virtual channel, can be performed within the ATM Adaptation Layer.

Layer identification and cell loss priority indication should be independent functions. The issue of violation tagging can therefore be examined without reference to video layer identification.

### Conclusion

It is proposed that the CLP bit of the ATM header be used only for its intended purpose of cell loss priority indication. Video layer indication is a function which is independent of the the CLP bit.