

Source : FRANCE
Title : Available networks in France for p x 64 kbit/s bearer services (videoconference applications)

I - INTRODUCTION

New codecs will code video signals at p x 64 kbit/s data rates. Typical p value is 6 : HO channel and 384 kbit/s circuit mode bearer service will be used to transmit information through ISDN.

This paper deals with the different ways to provide such a bearer service in France.

II - DIGITAL ACCESS

There are three different possibilities :

- 1) Leased lines as today for the 2 Mbit/s bearer service.
- 2) Pre-ISDN specialized network Telecom 1.

This network provides p x 64 kbit/s services, the data transfer is unrestricted and the connections are established on a permanent or a call by call switched basis (the exchanges are able to switch p x 64 kbit/s circuits).

The name of this service is "Transdyn".

- 3) Switched circuits on ISDN

The provided bearer services are limited to 64 kbit/s. It is therefore necessary to synchronize the bit rates from end to end in order to get an unrestricted p x 64 kbit/s channel, when (p + 1) independent circuits are established in the network. A trial is in progress on the 64 kbit/s digital network (pre-ISDN network which provides an end to end digital 64 kbit/s switched service using the PSTN paths).

III - SYNCHRONISATION PROCESS FOR SWITCHED CIRCUITS ON ISDN

The synchronization equipment operates as follows :

The total datarate is negotiated when the first circuit (64 kbit/s link) is established.

The other circuits are then established and each 64 kbit/s is framed according to H221 recommendation to fulfil the synchronization requirement.

A potentially fully adjustable $p \times 64$ kbit/s datarate is then provided to the application.

NOTE : In case of a 2B + D ISDN access, the provided datarate should be $(2 - \Delta) \times 64$ kbit/s, Δ being used for synchronization purposes.

The current trial fits rather to the primary rate access (2 Mbit/s or 1,5 Mbit/s) or several basic accesses. But the principles are the same : the main results of the trial will concern the quality of the service.

IV - CONCLUSION

In this context a compatible coding of the signals at different datarates is very attractive as it permits interworking of a large range of terminal equipment. The common datarate is then the datarate of the less versatile terminal equipment.