Title: Picture Formats for H.26x
Source: Belgium, France, Germany, Italy, Norway, The Netherlands, Sweden, UK
Purpose: Proposal

The topic of picture formats for H.26x has been under discussion for some time and there seems to be difficulty in reaching a satisfactory conclusion. It is suggested that a fundamental reason is that the CCITT work towards H.26x has no single target application in mind. This contrasts markedly with H.261.

Though the generic approach of ISO/MPEG and JPEG has produced standards these are of questionable value for CCITT purposes where provision of services over a distance is the main aim. MPEG and JPEG are really only 'core technologies' and require 'application shells' around them. A good example of this is the use of a certain selection of MPEG-1 parameters within CD-I Full Motion Video. JPEG has yet to find a non-proprietary use.

The CCITT must address the question of what it wants to use H.26x and H.32x etc for. There are at least the following three application areas:

1. TV transmission. Primary or secondary? Contribution or distribution? This is predominantly unidirectional. Quality targets are 'VHS' upwards.

2. Videophone and videoconferencing. What is the feedback from users of the H.320/H.261 etc set of recommendations?

3. Picture databases. Whereas the above two application areas are already established, this one is not and the real requirements are not known.

Though the technical appeal of having one standard which covers all the application is not disputed, it is not clear that this makes technical, commercial or user sense. For example secondary distribution of television programmes can employ proprietary standards and equipment highly optimised for local conditions whereas videophones should be sufficiently standardised to allow interconnection throughout the whole world. Is the concept of a combined home TV/videophone really what the user should have? There are many technical and human factors aspects.

We must beware of providing only very high quality solutions which are above customers' real needs and rejected for cost reasons. Conversely, high quality options should be available for those who need and can afford them.

CONCLUSION and PROPOSAL

The only way forward at this moment seems to be a generic H.26x. This is in line with MPEG-2 and would make a common text possible. CCITT activity should commence when appropriate on 'application profiles' which will include picture formats, bit rates and many other parameters.