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STUDY GROUP XV - CONTRIBUTION

Source: AT&T, CLI, DIS, PictureTel

Title: Frame rate negotiation for p x 64 kbps video telephony

P x 64 kbps video telephony will operate over a wide range of data rates (p = 1 through 30). Some codecs conforming to the p x 64 specification will operate only within a smaller range of data rates. For codecs supporting only small values of p, it is desirable to operate at a video frame rate significantly lower than 30 frames per second.

The maximum frame rate that a codec is able to support is directly proportional to the computation rate in pixels per second. This rate therefore has a direct impact on the cost of the codec. In order to minimize cost in codecs which support only low bit rates, it is proposed that the communications procedure used to negotiate codec capabilities include a negotiation of the maximum frame rate.

It is proposed that the maximum frame rate may be specified to range from 7.5 frames per second to 30 frames per second in increments of 2.5 frames per second (resulting in 10 possible rates).

Example: If codecs were intended for a maximum value of p = 30, 6, and 2, they could be designed for a maximum frame rate of 30, 15, and 7.5 frames/sec., respectively.