

VIDEO COMPRESSION AND TRANSMISSION IN
3G NETWORK

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**Video Compression and Transmission in
3G Network**

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ABSTRACT

Video compression technology is the key ingredient for cost effective transmission of video images over any digital communication link. Compression is also the gating factor for video delivery in multimedia authoring, entertainment and education systems, in digital CATV and in digital direct broadcast satellite. The key technique of video compression and image compression in MPEG (Moving Picture Expert Group) and JPEG is the use of the Discrete Cosine Transform or DCT. In MPEG and JPEG, the DCT is applied separately to each 8x8 block of the picture. There are several ways to envisage the DCT. It can be thought of as a matrix multiplication, as an axis rotation in 64-dimensional space, as the FFT of a block placed next to its reflection, or as decomposition into basis functions. These papers only concentrate for decomposition into basis functions. The function of the DCT is to describe how much of each basis function is present in the block. The resulting multipliers for each basis function are known as DCT coefficients, from which the original block can be recovered via the inverse DCT. Two main objectives of this paper are to develop new software for analyzing the image compression and reconstructed image using DCT.

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