

## METHODS OF MODULATION AND DEMODULATION IN OFDM SYSTEM

**R. ELAVARASAN**

Assistant Professor, Department of ECE, Hosur Institute of Technology and Science,  
Errandapalli, Krishnagiri, Tamil Nadu, India

### ABSTRACT

The structure and algorithm of IDFT DFT, the conventional method used in modulation/demodulation process in OFDM system, has matured today. Researchers have developed new transforms in an effort to replace this traditional structure, such as DHT-based structure (Discrete Hartley Transform) and DWT-based (Discrete Wavelet Transform) structure. In this project, all three structures will be implemented in MATLAB to acquire their BER (Bit Error Rate) performances, and the results will be compared and analyzed along with other two aspects, hardware performance and hardware complexity to gain a complete view of their advantages and disadvantages.

**KEYWORDS:** Algorithm Of IDFT DFT, Modulation/Demodulation Process, OFDM System, DHT-Based Structure