

ABSTRACT

DVB-T2 system (Next Generation Digital Video Broadcasting Terrestrial) uses OFDM to transmit information system. OFDM systems can indeed be used to send data to the High Data Rate in accordance with the DVB-T2 standard, but the OFDM system is very vulnerable in case of Frequency Shifting due to the movement of the receiver to the transmitter. To avoid the occurrence of defects in the signal receiver, it is necessary to Channel Estimation in order to reduce the impact of the Frequency Shifting.

DVB-T2 technology can be applied to the condition of a moving receiver (mobile), on conditions of mobile receivers using the DVB-T2 DVB-T2 Lite scheme Profile Averaging Adaptive Channel Estimation (AACE) is one method of Channel Estimation on the DVB-T2 technology, Channel Estimation This uses the estimated Doppler Shift (DS), in determining the interval when the Channel is considered flat and during the interval Scattered Pilot (SCP) in averaged. Then the method will AACE in comparison with the method of Minimum Mean Square Error (MMSE), Channel estimation using adaptive Wiener Filter. By comparing Channel estimation method and MMSE AACE is expected to note the advantages and disadvantages of each, so that it can be used for furthure research.

Based on the system's performance to be compared is a graph BERvsSNR on the system DVB-T2 Lite profile. Simulations performed with two scenarios, the first scenario uses the Channel Estimation AACE and the second with Channel Estimation using MMSE. With the assumption system will pass through Rayleigh Channel and receiver speed variation conditions 3km / h, 30km / h, and 100km /h.