Abstract

In today era Global System for Mobile Communication (GSM) is so much important for every cell phone users because mostly every network worked on the GSM system. The GSM platform is an extremely successful wireless technology and an unprecedented story of global achievement. The GSM platform is growing and evolving and offers an expanded and feature-rich voice and data enabling services. Wireless communication is the transfer of information over a distance without the use of enhanced electrical conductors or wires. The distances involved may be short (a few meters as in television remote control) or long (thousands or millions of kilometers for radio communications). When the context is clear, the term is often shortened to "wireless". It encompasses various types of fixed, mobile, and portable two-way radios, cellular telephones, Personal Digital Assistants (PDAs), and wireless networking.

In this research simulated the performance analysis in the MATLAB software for reducing Signal- to- Noise Ratio (SNR) for better performance. MATLAB software from Mathworks was used for the simulation. Rather than for simulation the program choose the random value of
signal-to-noise ratio (SNR) in dB (Decible). In the GSM system, the digital signal from source to user is transmitted through the channel. The final output represents the graphical form using BCH coding. In the GSM system, for encoding the digital signal, a convolutional coding and for modulation, a QAM modulation is used.

References

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**Index Terms**

| Computer Science | Wireless |

**Keywords**

BCH Coding, Convolutional, Coding, Viterbi Algorithm, GSM System, SNR ratio