Abstract

Facsimile continues to be communication bedrock for transmitting sensitive business critical documents with legal standing. Traditional facsimile uses PSTN network for communication. As the mobile technology advances, fixed wireless terminals are being used to connect landline devices such as telephone, fax machines etc and transmit using the mobile phone networks. Fixed wireless terminals are used in locations where traditional landline infrastructure is unavailable. This paper presents the performance analysis of facsimile transmission using GSM fixed wireless terminal under varying conditions to determine the margins of the network parameters that enable successful communication. The metrics Facsimile Satisfactory Rate parameter was used for the evaluation of the quality of facsimile transmission using GSM fixed wireless terminal. The analysis was carried out under varying traffic conditions to study the effect of congestion on the facsimile transmission using GSM fixed wireless terminal, at varying distances from the base station both in the rural and urban area. The results showed that the facsimile transmission using GSM fixed wireless terminal is dependent on the terrain, the distance of the fixed wireless terminal from the base station and the traffic volume.
A Comprehensive Study and Performance Analysis of Facsimile Transmission Using GSM Fixed Wireless Terminal

- Ketan J. Sarvakar, Kiran Amin, Rajendra Patel, Menka Patel, Komal Maheta and Bhavesh Patel, Utilization of SIP contact header for reducing the load on proxy servers in FoIP application, in: First International Conference on Computational Intelligence, Communication Systems and Networks, July 2009.

Index Terms
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Keywords
Facsimile Transmission; Gsm Fixed Wireless Terminal; Fax; Facsimile Satisfactory Rate; Ss7; G3 Facsimile