

FINAL YEAR PROJECT REPORT
BCE
GSM NETWORKS
&
CELL PLANNING TECHNIQUES



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ABSTRACT

The project encompasses the basic principles and guidelines of GSM networks. It is a study based project focused on understanding the entities and functionality of GSM 900 & GSM 1800 standards.

The sequence of platforms which constitute the GSM network are thoroughly researched in order to understand the routing of calls made by a cellular subscriber, and the consequent delivery of the call to the destined subscriber. The three main setups which play a fundamental role in routing the call are the Base transceiver systems (BTS), Base station sub-system (BSS) and Mobile switching centre (MSC).

The significance of the research is important in devising methods to improve the quality of the existing GSM network. A particular area of the GSM networks, Cell site planning and model tuning has been studied. The exercise carried out to tune the current propagation model of the network, using cell planning tools like TEMS and ASSET, will help to improve the call connectivity and overall enhance the performance of the coverage area of cell sites.

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