OPTIMIZATION OF HANDOVER FAILURE AND DROP CALL IN GSM NETWORK

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Abstract

Handover is one of the important processes in cellular telecommunication system that is continuously considered in order to introduce a good and effective mobile phone service to subscribers. This process is important to avoid drop call but also to let subscribers to achieve a great service on the calls made as they are moving from a point to another in cell, especially the distance from base station increased.

In this thesis, is virtually represented by graphical presentation from TEMS Investigation of ERICSSON. Here, the parameters for handover are observed. The main parameters that are look at including the signal strength, the quality of call and the co-channel interference. The outside factors; fading effect, also attached in this project. Another parameter that is taken into consideration is propagation loss. This is represented by using Microsoft Excel.

The obtained result by using the Microsoft Excel is, when the distance of a mobile from serving cell is increasing, the propagation loss will also increase. This situation will cause handover to initiate. From the TEMS Investigation presentation, it can be seen that handover happens if the stated reasons occur – signal strength, co-channel interference and fading effect, to name a few.

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