## **ABSTRACT**

The presence of CDMA technology in telecommunication must be attended by people and GSM operators that is during this time being the leader. One of mobile sistem using CDMA technology is Flexi which is launched by Telkom to compete GSM. As a new technology, Telkom Flexi offer some advantages such as higher data rate, good voice quality, unjammingable, etc. But, there is new problem should be faced by Telkom Flexi when it want to make connection to GSM, that is call failure.

Call failure from Flexi to GSM can be happen because of Flexi's and GSM's factors, the behaviour of each users, and also the sistem which is connect them. As a new sistem, the network planning is not perfect so that there are areas that are not *cover*ed by the sistem (blank spot area), and cell overlapping among the cells. As the effect they can make *call* failures such as access failure, drop call, and signaling failure.

From drive test and analysis data resulted that call failure from Flexi to GSM happen because of factors such as remote congestion (0.04%), network bloking (0.06%), system fault (0.27%), ISUP fault (1.59%), terminating busy (1.7%), terminating error (5.43%), and originating release (33,96%). All factors appear due to drop calls, access failures, and call failures.

Keyword: access failure, drop call, signaling failure