

## **ABSTRACT**

In this final project writing discusses the decoding of encrypted GSM communications. The tool used is RTL-SDR which can capture BTS (Base Transceiver Station) signal and Gr-GSM application for data decoding process captured from BTS. The purpose of writing the final project is to analyze data security on GSM communication networks. From the results of this analysis can be concluded that, from the process of testing the signal capture and decoding obtain operator information from the frequency of GSM Frame Number, IMSI (International Mobile Subscriber Identity), TMSI (Temporary IMSI), security algorithm used on operators, and communication data on GSM security.

Keywords: GSM, RTL-SDR, -GSM, decoding, analyze