

ABSTRACT

LTE (Long Term Evolution) technology is the latest technology in 4G, as a form of development of GSM (Global System for Communication) / EDGE (Enhanced Data Rate for GSM Evolution) and UMTS (Universal Mobile Telephone Standards) / HSDPA (High Speed Downlink Packet Access). But at this time 4G technology is still commercial so that many of the testers have not been able to do research for this technology. This Final Project aims to simulate when licensed 4G technology could become open source using the OAI platform. Open Air Interface itself is a software or application that runs a system to operate a 4G network, this software is based on Open Source, with this software we can simulate cellular networks using USRP devices or with SDR devices. In developing 4G, a packet called eNodeB is needed to send a signal. The final project implementation testing this time uses Laptop hardware, SBC (Single Board Computer) and USRP B205 Mini.

Keywords: eNodeB, EPC, Open Air Interfaces, USRP, 4G