

ABSTRACT

Global Positioning System (GPS) can give information about latitude, longitude and altitude continuously to every place in the world. User needs a GPS receiver to get the position. But if we combine between mobile phone with GPS the technology development will be delayed because the increase of cost.

Considering the consumer side, application that can be used by most of mobile phone user will be necessary. Another accurate method for getting position of mobile phone needed. With Enhanced Observed Time Difference (E-OTD), user position can be known by using the cellular network that already exist comparing the signals that come from serving BTS and Neighbor BTS.

This final project will make an application for getting about mobile phone position. This E-OTD application accuracy very depended on performance of the network. The performance of this method will be very reliable if supported by network performance in Indonesia. In the future, there will be many application developed from this E-OTD method. Such as an application for Location Base Service (LBS).

Keywords : *Global Positioning System (GPS), latitude, longitude, altitude, receiver, Enhanced Observed Time Difference (E-OTD), Serving Base Transceiver Station (BTS) and neighbor BTS.*