

## ABSTRACT

Technology of cellular 2,5 generation have supported data communications service, one of them is CDMA2000 1X. A lot of service which can be overcome through this data network. One of new service developed to increase Average Revenue Per User (ARPU) and use packet-switched is Push To Talk (PTT). PTT is half-duplexed service "walkie-talkie-type" what deploy on cellular network. PTT represent instant technology enabling one-to-one communications and one-to-many communications, and also do not need dial-up but consumer just to press the button when will speak.

This Final Assignment studied applying of PTT system on CDMA2000 1X network which there have owned by PT. Telkom as a new service of Telkomflexi, covering: infrastuctur of PTT system, signaling procedure of PTT system, delay of PTT system, dimensioning of PTT peripheral to fulfill requirement of PTT communications until 2009, and coverage area of PTT service with existing network condition.

This research yield calculation of PTT subscriber until 2009 that is 33240 subscriber, and PTT component which required: Control Switch 2 unit, Active Directory 1 unit, and Web Server 3 unit.