ABSTRACT

For fasting, securing, and managing object or moving target, need a control system and object monitoring from other place through faraway communication. Tracking system and vehicle monitoring is an example of control system and object monitoring application. Tracking system technology based on Global Positioning System (GPS) can be a complete solution for control system and object monitoring, it can be more powerfull , dynamic, interactive, and user friendly if it is combined with Geographic Information Sytem (GIS) technology. There are many transmission medium for sending data position on VTS system, in example radio, sattelite, and SMS service from ceelular operator.

VTS (Vehicle Tracking System) is an tracking system application that commonly use in many modern countries. VTS can be used for fasting, securing, and managing object or moving target, moreover VTS support operational system in many companies.VTS uses GPS receiver that receive current vehicle possition from sattelite, and then SMS service send the data , while the GIS visualize object location. All of that are integrated system with low cost and easy to develop.

This final project will plan a VTS system using GPS receiver, GIS, and SMS as a sending media for data position. Monitoring system have some component, like SMS processing software , and data position processing software included Visual Basic 6.0, MapInfo Profesional 6.0, dan MapBasic 6.5, database Microsoft Access 2000. Device on the observed site base on microcontroller, so it can be maee easily, and efficiently. In this final project was tested VTS system that have been designed and applied, in several location around STTTelkom Bandung Campus .Base on the test result, system have been made working properly.

Key word : VTS, GIS, SMS, Mikrocontroller, GPS