

ABSTRACT

The natural disaster on the railway is a highly undesirable event for railroad users. Natural disaster that occur include floods, landslides and earthquakes. In addition, natural disasters can also cause big losses both material and immaterial losses. The above problems can be anticipated by the existence of train control system when natural disaster occur. This system will work automatically when it gets active notifications during a disaster from the nearest station and will display on the locomotive's dashboard. In this final project will be design and manufacture of railway control system during natural disaster, which function as notification system and emergency system in the event of disaster. This system is active when the GSM module receives notification from the nearest station that a natural disaster occurs and displays the disaster level on the locomotive's dashboard. Then the microcontroller process the data and will directly control the train rate. This final project aims to produce railway control system during flood, earthquake and landslide. Sending SMS using an SIM800L with Telkomel provider, gets an average delay of 3.64 seconds.

Key Words : GSM, Microcontroller, Tachometer, Vehicle.