ABSTRACT

Information systems on rail transport still use time tables that contain train arrival and departure times by utilizing the use of track relays and signal slogans. This is a problem, as railway and rail service users do not know the location of railway periodically.

In this Final Project designed a railway location information system based on RFID and SMS Gateway. Using an RFID reader to read the smart card that procides information about the last location of the rail being operated. Then the information is sent to the database via SMS Gateway.

With the design of RFID – based railway information system and SMS Gateway can help improve railway information service, as it can help railway service users to know the estimated time. The result of functionality testing to the system shows that the designed system has succeeded and worked in accordance with the specified. In testing the sensitivity of RFID to speed has 100% success, the test of the front position of is 2 cm and the left right is 1cm, and has a reading speed of 0.178 sec. Testing of SMS sending via SMS Gateway has an average of 30.5 seconds.

Keywords : Railway Location Information System, RFID, Real – time, Smart Card, QoS.