## **ABSTRACT**

Information technology is one technology that is growing rapidly at this time. With advances in information technology, access to information can take place quickly and efficiently. The more rampant competition in the sector of telecommunications for PT Telkom will provide the best for the client. Reliable devices must be compatible with a reliable control. If there is an interruption due to problems of broken transport or immediately known resulting network broken of connection element. Reachability device becomes a necessary condition to be fulfilled to 100%. The system used in PT Telkom in providing information at the time of interruption is still done manually. In handling these problems in focus for Metro Ethernet. Metro Ethernet is a device which is used as the backbone as a transport layer-2 to support the new wave business.

Therefore, an application built SMS Gateway for handling disturbances in PT Telkom. Applications SMS Gateway is used to ease in knowing that interference. Gateway will send an SMS to officers when there is interference, in SMS sending SMS Gateway is implemented automatically by the server and the server will send an SMS to the officer when the automatic ping was already changed into good condition. In addition, creating Web applications that are designed to report on the state of Metro Ethernet Network.

After been done examination and implementation, gotten severally conclusion, amongst those: application makes easy to fire an employee PT Telkom Solo in know Metro network condition Ethernet PT Telkom Solo, admin's officer give subjektif's estimation 85 % and common officer give estimations 86 %, application transfers SMS while there is 1 trouble, 5 troubles and 10 trouble coincide with rolled out delay as big as 3.8 seconds, 5. 8 seconds and 10.5 seconds and accords performansi PT Telkom's targets assesses RTD is more than 10 ms therefore adverse conditions as much 14.67 % and appreciative smaller RTD of 10 ms therefore good conditions as much 85.3 %.

Keywords: Information systems, SMS gateway, PHP, MySQL, GAMMU