

ABSTRACT

The current trend in Indonesia shows that the social network application fever triggers a new social need to be “always connected”. Base Transceiver Station (BTS) is the key factor to provide good internet communications without leaving voice communication as a primary function. Operators, as the BTS managers must be able to keep the BTS run well in order to provide the good customer service. According to data available on the BTS Telkom Flexi Yogyakarta, the accuracy on an external alarm, causing the reading of alerts on the Base Station Management (BSM) as the BTS condition monitor are less valid. In addition, the effectiveness of monitoring admins who should standby in front of the monitor BSM become less effective if treatment is quickly needed to sort the trouble out especially if it has to do with temperature conditions at the shelter and BTS power supply.

Therefore, a mobile monitoring system which is able to deal with the above problems is invented. This system will send a report directly to the BTS technician when sensors capture the conditions under and outside the tolerance limits. As the interface system, an information system is created in order to makes things easier for admin to manage the data of each BTS and make a report disruption of existing data in the information system.

The invented system is able to perform its function properly. The system is able to quickly send trouble SMS auto forward with an average delivery of 13 seconds and has a minimum and maximum auto- forward for each of 9 seconds and 31 seconds. In addition, the system has a stable voltage output, so that the system is able to run normally for a long time.

Keywords: Monitoring, BTS, BSM, Mobile Device, Sensor