

ABSTRACT

In 2018, the number of criminal acts that had a direct physical and material impact such as murder, theft, physical violence, and sexual harassment in Indonesia reached 130,000 with a crime rate ratio of 113 per 100,000 population. This can cause various kinds of adverse effects from various aspects of society, such as the large amount of material loss, loss of life, to the psychological impact felt by the community in an environment that is vulnerable to these crimes.

It is hoped that progress in the field of telecommunications can contribute to reducing the number of crimes, particularly with the radio communication technology Public Protection and Disaster Relief. This technology was developed with the aim of optimizing the communication flow in police agencies which is expected to minimize the Response Time or the time required for police officers to reach the crime scene.

In this final project, an analysis of the PPDR communication system simulation on broadband networks has been carried out for the benefit of Public Protection of police agencies. Simulation is done by designing PPDR communication scenario modeling on two different telecommunication networks, namely narrowband network and broadband network.

The results obtained in this final project are as following. On narrowband networks, resulted a minimum police response time of 327,9 seconds and a maximum value of 906,94 seconds with an average value of 574,4 seconds. Whereas on a broadband network, the minimum police response time value is 284,49 seconds and reaches a maximum of 822,52 seconds with an average value of 536,29 seconds.

Keywords: *Public Protection, PPDR, Police Response Time*