

## ***ABSTRACT***

Lately, mobile operators complained about the high rate of theft of the device attached to the Base Transceiver Station (BTS). This event could even happen every day. No matter who installed the alarm sometimes does not work properly. In previous research, there are weaknesses on the system, so that security information is not obtained as expected.

At this time last project, will develop a security system from previous studies that still use the same system is IC microcontroller and SMS, but there are some additional features of the sensor components, namely PIR (Passive Infrared Receiver / Motion Detector), Webcam, servo motors and Website . When the sensor of this instrument to detect the existence of a human gestures then the device will follow the movement of the object movement using servo motors mounted cameras webcams and three PIR sensors so that the detected object will be too by the webcams capture it. Then the signal that is used in the form of SMS (Short Message Services), which can be analogue as the alarm warning messages automatically to the supervisor of BTS, where signaling occurred only security center is not in the room where the system is installed. With the gesture, party room security center supervisors can monitor the situation to use webcams that are designed with VLC Streaming Server that can be accessed in real-time via Web anywhere using a computer connected to the LAN network or Internet and can take immediate action.

The purpose and benefits of the system is to reduce and even prevent crime at the facilities of telecommunications equipment using simple systems.

*Keywords: PIR Sensor, Webcam, Servo Motor, SMS, Server, VLC, Website, Microcontroller, Streaming (real time), Base Stations, LAN / Internet*