

ABSTRACT

Present mobile communication technology develop fast, equal with service features development that support in GSM system. One kind of service that offered is MMS (Multimedia Messaging Service), kind of technology that developed from SMS (Short Message Service), so it will be possible to send image data. Safety level data that has been sent through MMS still have not guaranteed yet, because network vendor or operator side still can know message content that sent. This final project will build software that has advantage to increase message security that happened on communication through MMS.

Software built to improve message security with inserted message from text form to be image form. To reach goal need a key that only known by sender and receiver. That system called image steganography. For higher security, the message that will be inserted to image, it must be done with text cryptography. Method that used on steganography system is Least Significant Bit (LSB) method, but for cryptography using International Data Encryption Algorithm (IDEA).

Software that built using J2ME platform can be set on mobile phone. Based on software trial, it can be seen that software done well and steganography algorithm LSB and IDEA cryptography can be implemented to encrypt MMS on mobile phone.

Keywords: MMS, steganography, LSB, cryptography, IDEA, J2ME