

## **Abstract**

Technology of telecommunication increase very fast. It supported by developing of handphone that used as media for not only be sender or receiver data sound, but also text, images. One of facility in handphone that most delighted people is *Short Messages Service (SMS)*. SMS is very important is not only to send the data but also the data must have security to protect from another user who is not allowed.

Therefore, we must have a mechanism that can protect the security important message. One of the method is RSA algorithm. In this case, the writer make SMS encryption application in the handphone use Java 2.0. the encryption application is analyzed from response time and used memori, also security in the encryption and decryption message.

From the experience, RSA algorithm is a good way to solve the encryption and decryption. But, the writer more concretate in security message which is sent, and not consider the cost of SMS.

**Keyword** : *SMS, RSA, Java, encryption, decryption*