

Chapter – XI

Application of Encoders

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The encoders as proposed and discussed in the previous chapters may be used for maintaining the security of a message. A message can be considered as a stream of strings concatenated. The string length of 256 bit maximum has been tested, verified and analyzed for the encoders. The encoders may be used for higher string length. The message can be split up into the strings of length, to be selected by the user. To each of the string, any of the encoding process or the cascaded encoding process is applied to convert the same into encoded strings making the message into a cipher text, as shown in fig 11.1 (a) and (b).

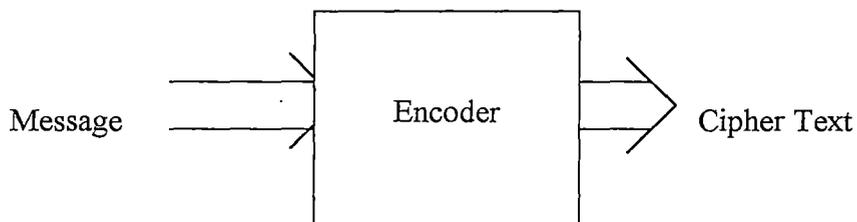


Fig 11.1(a): Encoding at the Sending End

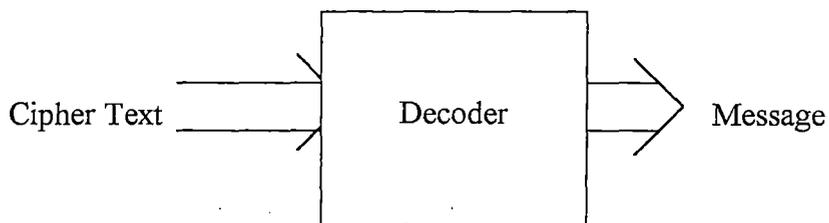


Fig 11.1(b): Decoding at the Receiving End

The cipher text is sent to the receiving end through telephone line using internet. The message will be recovered by the decoder (may be the same encoder as decoder or a different one) at the receiving end.

The principles of the encoders are verified by the microprocessor based system. For a user-friendly application in practice, the principles have to be realized in a high level language and to be interfaced with suitable software.

The prospective area where the encoders can be successfully applicable are as follows.

i) Defense:

The message in defense is highly valuable and needs to be secured in the interest of the country. The encoding methods can be used for the security purpose.

ii) Banking / Insurance Sector:

The information in banking /Insurance sector has to be maintained reliable and secured in the interest of the user and the sector itself.

iii) Business Sector:

The business sector also requires the security of information, where the encoders can be used successfully.

iv) Government Administration:

Government has to maintain secrecy of information for proper administration, where the encoding processes can be used.

v) Police and Crime Control Branch:

The secrecy of information gets top priority in Police and Crime Control Branch. The encoders can be used there for the purpose.

And any other places where the security of the message is the prime importance.