

# Eurojust/Europol Report on Encryption



**Cornelia Riehle**

## News

On 11 January 2019, Eurojust and Europol published their [first joint report on encryption offering](#) an overview of the state of play in this area. Encryption is defined as the process of converting data, such as messages or pieces of information, in a way that prevents unauthorised access.

The report is primarily directed at policymakers. It gives an introduction to the basics of encryption, products and services using encryption, the encryption challenge for law enforcement and prosecution, and a look forward.

With regard to the basics of encryption, the report explains the differences between symmetric and asymmetric encryption as well as cryptographic hash functions.

Looking at products and services using encryption, it outlines the use of encryption in voice communications, full disk encryption, e-mails, file sharing, and self-destructing and anonymous applications.

Analysing the challenges for law enforcement and the prosecution reveals that it is becoming progressively more difficult for law enforcement to gain access to encrypted data in the context of investigations. Hence, the report offers insight into the advantages and disadvantages of a number of possible workarounds like guessing the key.

Ultimately, the report looks at possible future developments with respect to encryption, e.g., quantum computing, artificial intelligence, 5G communication technology, and steganography.

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