

Communication by E-Mail safe from prying eyes

Secure E-Mail



EULER HERMES

The underestimated danger

Exchanging E-mails has meanwhile become a perfectly normal and indispensable means of B-to-B communication. The medium has persuasive advantages, being easy to handle and fast, combined with minimal costs. But unfortunately, this often leads people to overlook its failings in the security area, and so it is often used to transmit sensitive or confidential information in a form which is easy to access for „prying eyes“.

Euler Hermes Deutschland AG (henceforth referred to for the sake of simplicity as Euler Hermes) can help you to block such unauthorized access. With a certificate you get free of charge from Euler Hermes you can encrypt your E-mails and sign them digitally. In this way you protect your data and profit at the same time from the expanded options you have under Secure E-Mail technology!

The security loophole

Conventional E-mails have two major weaknesses. First of all, the protocol used to transmit them via the Internet allows the address of the sender shown in the display to be chosen at will. This feature is exploited, for instance, by criminals who try to lure unsuspecting bank customers with forged addresses onto equally falsified websites in order to come into possession of their personal access data (so-called „phishing“). The same means could be used by an unauthorized person to send E-mails in your name.

And then there are no mechanisms in conventional E-mails to prevent access by third parties during transmission. This means that a hacker could see or even manipulate your data without it being possible to prevent such intrusion, and even without it being noticed in any way by the addressee.

The confidentiality level when sending a conventional E-mail is thus pretty much comparable with that when sending a postcard through the post. All the information is open to everyone to see – and in the case of the E-mail it can even be altered without anyone knowing! And while an unauthorized person who tries to get at your postbox would at least run the risk of being seen, a skillful hacker can eavesdrop on the transmission of your data via the Internet without anyone being the wiser.

In order to exclude such fraudulent acts from the outset, Euler Hermes offers you the use of a Secure E-Mail system for your communication with your customers. This is suitable, for instance, for sending credit limit decisions.

The system is based on the so-called S/MIME standard, which expands the scope of conventional E-mail programs to include encryption and digital signatures, and has a high level of acceptance and use all over the world.

In order to become a participant in Secure E-Mail communication, certain technical prerequisites are necessary on your side. These are set out in detail in the following.

What do I need in order to use Secure E-Mail technology?

The first thing you need is an E-mail software which supports the S/MIME standard. Most widely used programs, such as Microsoft Outlook, Lotus Notes or Mozilla Thunderbird, already fulfil this requirement in their latest versions.

On top of this you need a so-called certificate. This can best be understood as a sort of electronic ID card, which is issued for each E-mail address you use after an authentication process. The certificate comprises an unmistakable pair of keys (the private and the public key). Encryption and decryption is based on these keys, and they are used to create a digital signature.

In order to exclude the possibility of abuse through identity theft, the certification authority at Euler Hermes checks the personal details of every applicant before issuing a certificate. This is the basis for a verifiable digital signature, which can even be used to effect legally valid transactions via E-mail. The certificate, which costs you nothing, enables you to create advanced electronic signatures according to the provisions of the German Signature Act (SigG) effective as of 16th May 2001.

By the way, you can make an application for such a certificate by simply clicking with the mouse on the Online Service screen of Euler Hermes Deutschland AG.

What benefit do you have from it?

The major benefit is that using Secure E-Mail combines the advantages of electronic data transmission with the confidentiality level of conventional letters sent through the post. In this way you save time and money when exchanging information which needs to be protected. And in addition you can achieve a leaner workflow by using the digitally signed E-mails as the electronic interface between your company and Euler Hermes.

The following summary illustrates the advantages which Secure E-Mail technology has to offer:

- A reliable security standard: S/MIME technology offers the protection your confidential information needs. The encryption process is based on a mathematical one-way function. Given the computing capacity of currently available computers, this code cannot be broken within a reasonable period of time. Technical developments in this field are constantly being monitored by the Federal Networks Agency, which publishes recommendations on adjustments to the depth of encryption from time to time where necessary.
- The information is transmitted direct to the workplace of the addressee. If he is using a notebook, this may of course be a mobile one.

- A higher level of confidentiality is possible than with sending letters by post or faxes. Faxes often lie around on the fax machine for anyone to see until the addressee comes to get them. Letters are opened in the incoming post office and then passed on within the company. But the encrypted E-mail goes direct to its addressee.
- Legally valid statements of intent can be transmitted by means of a digitally signed E-mail. According to the German Signature Act, a digital signature can be used as an equivalent to a handwritten signature. This means that legally valid contracts can now be concluded via E-mail.
- Fast and full-scope transmission of information: the attachments to E-mails are also encrypted. Whatever media you choose to send with the E-mail (data, images, programs, films etc.) can be transmitted safely in this way.
- Speed up your processes: by using purely electronic data transmission you can accelerate serial or intercompany work processes.
- Automatic on-processing: information transmitted in standardized formats, such as credit limit notification letters, can be automatically processed in your systems using individual scripts.
- It is more convenient: processing and filing of electronic data is simpler and takes up less space for the user than storing piles of paper.
- The potential cost savings: by sending confidential information securely via the Internet you can reduce the costs for postage and courier services.

Our Secure E-Mail supporter will be happy to answer any questions you may have about the system under +49 (0) 40/88 34-25 00 or by E-mail to SecureEmail-Support@eulerhermes.com