



Electronic sending of invoices with signatures at DOW CHEMICAL

The chemical giant is making use of benefits of electronic invoicing on an international basis



The customer

DOW, which offers chemicals, plastics, products for agriculture and the services associated with that, for example, is one of the leading corporate groups operating on an international basis. DOW supplies customers in more than 170 countries together with the international subsidiaries.



“We have found a solution that can be used on an international basis with the AuthentiDate technology. We can meet the requirements of all of the companies in this way with only one integration process, without creating expensive, individual national projects. Furthermore, the solution of AuthentiDate provides us with a high level of investment protection and planning certainty - something that is indispensable for every company.”

Wim Jansen, Global Project Manager Customer Invoicing & Settlement Services bei DOW CHEMICAL

The objective

Invoices have to be sent on a worldwide basis for these deliveries and services.

A paper-based invoice is time and cost-intensive, because the invoices have to be printed, put into envelopes and sent. Time and cost savings can be realized, however, with a conversion to electronic invoicing. Dow made a decision to use this potential for savings and to reduce the proportion of paper invoices.

Companies that send their invoices in an electronic fashion to or within Europe have to take the legal regulations that are applicable there into account. The requirement of an electronic signature applies with regard to an electronic invoice.

This situation also applies to DOW. The chemical group sends both its own invoices and invoices on behalf of its subsidiaries to Europe from the computer center in Michigan/USA. There is therefore an extremely high total amount of invoices.

That is why DOW looked for a solution that meets the international requirements with regard to the signature functions that are stipulated and can automatically and quickly sign large amounts of invoices. Furthermore, the solution also had to meet other conditions:

- It should be able to be integrated into the computer center at DOW CHEMICAL in Michigan/USA in a quick and easy way so that the processes are disturbed as little as possible.
- The solution should be capable of being continuously expanded – and thus capable of being adapted to increasing amounts of electronic invoices without expensive additional integration.
- It should, in particular, also be practical for the invoice recipient and provide him with additional benefits in the optimum case, in order to increase acceptance.

A solution that meets all of these requirements was installed in the computer center of DOW CHEMICAL Michigan/USA with the AuthentiDate eBilling signature solution.

SUCCESS STORY

The solution at DOW CHEMICAL in the computer center in Michigan/USA

Invoices via e-mail

DOW USA does not just send out its own invoices, but also takes on this task on a centralized basis on behalf of its subsidiaries. Sending invoices via e-mail suggested itself as the most variable, and therefore the optimum, solution for being able to meet these internal-group specifications. The invoice is sent to the invoice recipient in the form of a PDF file attached to an e-mail here. This format choice ensures that the recipient will have the visual invoice layout that he is accustomed to.

Signature functionality from the signature specialist

The DOW Group decided on the eBilling signature server of the signature specialist AuthentiDate to be able to sign the electronic invoices automatically and in a mass process.



According to § 14 UStG [VAT Act], electronic invoices can only be used by the invoice recipient to deduct the input tax when they are provided with a qualified personal signature.

The AuthentiDate eBilling signature server makes it possible to generate qualified personal signatures for the electronic invoices.

These signatures satisfy the conditions of the German Signature Act¹ and the EU Signature Directive². The signed invoices can consequently be used in the respective countries - in accordance with the requirements of the German VAT Act³ and the EU Invoice Directive⁴ - to deduct the input tax⁵.

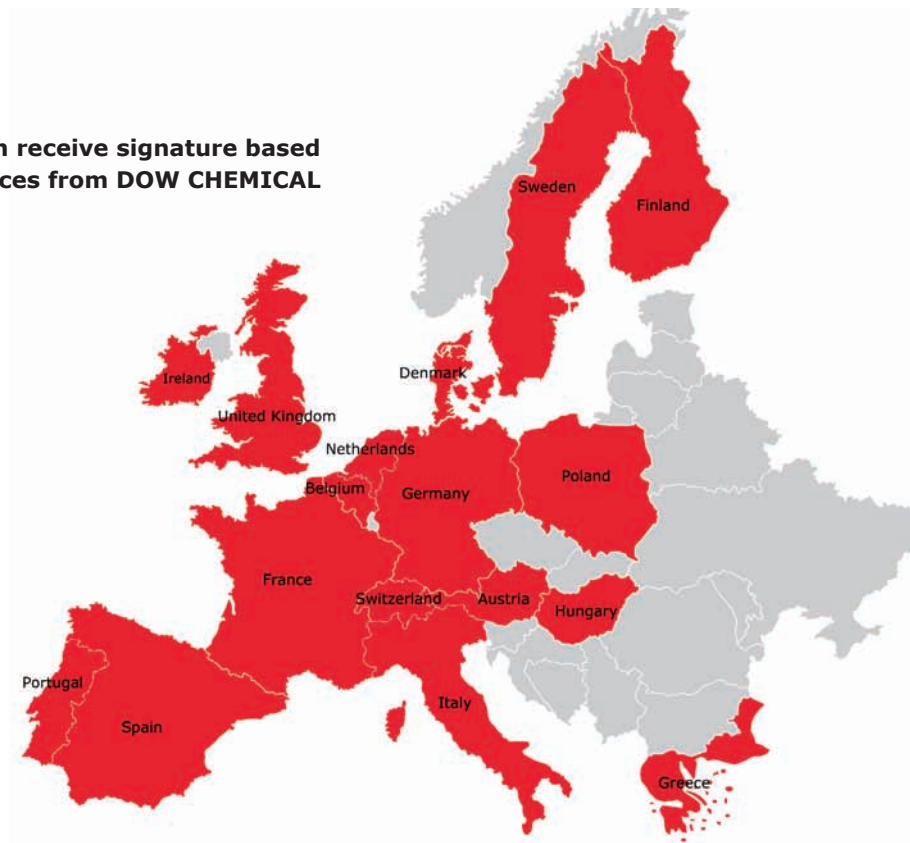
Additional paper invoices are no longer required. This makes the use of the solution possible in international business transactions.

The system was able to be integrated into DOW's computer center in Michigan/USA in a few days via the e-mail-based interface, because the AuthentiDate eBilling signature server is a solution that operates independently.

The electronic invoices are generated - as usual - in the ERP system at DOW. After that, they are automatically provided with the signatures required by law in a centralized process and sent to the invoice recipient.

¹ Act regarding the general conditions for electronic signatures and the modification of other regulations of May 16, Mai 2001, BGBl. [Federal Law Gazette] I, p. 876
² Directive 1999/93/EC of December 13, 1999
³ UStG [VAT Act] 1980, §14, Issuance of Invoices
⁴ Directive 2001/115/EC of the Council of December 20, 2001, to modify Directive 77/388/EEC
⁵ Additional national regulations for electronic invoices are to be checked in individual cases if necessary.

Countries which receive signature based electronic invoices from DOW CHEMICAL



The solution at the invoice recipient's company

Invoices with signatures

The invoice recipient receives the signed electronic invoice in the PDF format and the accompanying signature from DOW as attachments to an e-mail. Some of the invoice recipients designate a special e-mail account in the accounting department for this.

The electronic invoice in the PDF format can, for example, be passed along to the individual employees for invoice auditing by the accounting department. Time-consuming, cost-intensive copying can be eliminated.

Invoice recipients throughout all of Europe

DOW sends invoices for itself and its subsidiaries to invoice recipients throughout all of Europe, including Germany. So DOW needed a tool with which its invoice recipients could check the qualified signature

- simply and quickly
- from any work station
- with - generally available - technical equipment that the invoice recipient has.

Checking invoices when there is a low level of invoice volume

DOW decided on the AuthentiDate signature checking service. This is provided in the form of a web service. The verification service www.signature-check.com is available to all of the invoice recipients of DOW around the clock. The service is available to the invoice recipients of DOW throughout the world without any problems due to the availability via the Internet.

The checking process can be carried out in a simple and intuitive way. The AuthentiDate signature checking service offers the invoice recipients of DOW the opportunity to choose the incoming invoice of DOW and the accompanying signature file via file selection and to then have the signature checked for validity. The signature check is done in the trust center of AuthentiDate.

The invoice recipient has met the statutory requirements when he archives the result of the check together with the invoice data and the signature. This serves as evidence of the signature check that was carried out.

Checking invoices when there is a high level of invoice volume

AuthentiDate offers an independent verification server for invoice recipients with a high volume of incoming invoices.

This involves an e-mail server that can process incoming e-mails with attached, signed invoice data and that can check the qualified signature on a massive scale.

The result of the check is automatically generated and added to the respective e-mail as a further attachment. The incoming invoice, signature and the check report can consequently be directly archived or passed along to an employee.





The result and prospects for further optimization potential

DOW CHEMICAL can process its invoicing according to the German Signature Act and the EU Signature Directive by using the AuthentiDate eBilling signature server.

DOW has been sending electronic invoices with signatures to a number of countries in the meanwhile, including Denmark, Sweden, Ireland, the Netherlands, Belgium, France, Spain, Portugal, Switzerland and, of course, Germany as well.

It can easily be seen with the example of DOW CHEMICAL that the conversion to a signature-based solution does not have to take place overnight. The electronic invoicing process can also be operated in parallel with the customary sending of paper, because the AuthentiDate eBilling signature solution can be added to the existing processes without any problems. Expenses can consequently be reduced on a step-by-step basis.

In addition, DOW CHEMICAL can send out signed invoices on a centralized basis from its computer center in Michigan/USA by using electronic invoicing.

So all of the subsidiaries make use of the benefits of electronic invoicing with signatures without having to implement a solution of this type at their own locations.

Benefits

... for the invoice issuer

- ▶ Acceleration of the distribution of outgoing invoices and consequently an increase in cash flow.
- ▶ Reduction in costs by replacing the paper process.
- ▶ Capability of use on an international basis due to qualified signatures in accordance with the German Signature Act and the EU Signature Directive.
- ▶ A high degree of scalability and quick supplementation of existing billing systems due to provider-independent interfaces and a modular structure.

... for the invoice recipient

- ▶ Confirmation of the authenticity of the origin and the integrity of the invoice content via qualified signatures.
- ▶ Assurance of input-tax deductibility due to qualified signatures, even without an additional paper invoice.
- ▶ Simple and quick checking of the qualified signature from any workstation.
- ▶ Accelerated and economical paperless distribution in the company, e.g. to audit invoices.
- ▶ The invoice, the signature and result of the signature check can be electronically archived and evaluated.