

Bank provided e-invoicing structures and benefits

The interest in and use of e-invoicing is growing at an extraordinarily rapid pace. Large scale implementation could generate annual cost savings in the EU in the range of EUR 100 billion, compared to paper-based invoicing. Banks play an important role in providing e-invoicing services.

Background

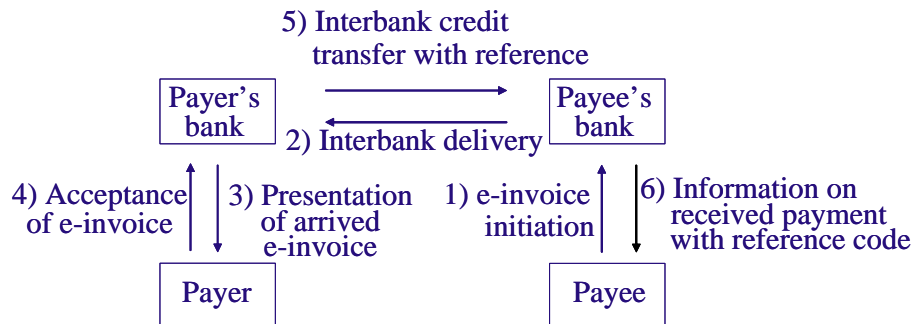
Most customers use PCs or larger processors and wish to receive and send all their payment data in electronic form via telecommunication. Corporate customers in particular would wish to exchange invoice information in electronic form using common standards in order to process invoicing information more efficiently and with less manual processing errors. In near future, private customers will most probably also have the same interests as this will help them to save time and manage their personal economics better.

Most payments made via banks are connected to an invoice or receipt, which contains the information on why the payment is made. Due to capacity restrictions in paper-based and early electronic payment systems, the data content attached to payments was considerably restricted. Invoicing data was transported separately between the payee and payer. The separate payment data contained at best only a reference number for automatic reconciliation of payment and invoicing data. IC storage and communication capacity and costs have currently reached such low levels that invoice information can easily be attached to payment information and thereby completely new benefits can be achieved.

The basic bank-provided e-invoice service

In the basic e-invoice service provided by the banks, eg in the Nordic countries, the invoicer/payee/creditor just needs to send the e-invoice information to its bank and the e-invoice information is routed via the interbank network to the payer's bank, where it is accepted by the payer and transformed into an accepted payment using the straight-through-processing mode. Generally, it processed as credit (reference) transfer after acceptance (see figure 1).

Figure 1: The basic e-invoice process



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9 December 2005

Unrestricted

For the customers it is important that the e-invoice standard is common to all banks, enabling them to reach all their customers via one route and interface (see below). Corporate customers in particular need to be able to import the data into their accounting systems for additional processing without re-inputting any data.

Corporate customers use two general options for processing the received e-invoices

- a) accepting the e-invoices via the e-banking web-service, whereby they are transformed into payment instructions, which are executed directly or wait in the bank's payment system until the due date
- b) importing the e-invoices into the payables or other accounting system of the company in which they are accepted and from which they are later presented to the banks as payment instructions.

Generally, smaller companies and private persons (and more so in the future) employ alternative (a) for invoice acceptance and use the monthly electronic account statement for accounting purposes. The large companies employ generally alternative (b).

The benefits of e-invoicing

A proper e-invoice scheme provides benefits in three legs of the traditional four-box payment model ie in the payee-to-payer leg, in the payer-to-bank leg and in the bank-to-payee leg.

In the payee-to-payer leg the e-invoice information flows automatically in STP mode and following costs can be avoided

- printing a paper invoice and putting it in the envelope
- the mailing costs of the paper invoice
- opening the invoice letter and archiving the paper invoice
- manually inputting the invoice data to the payables/accounting system at the payer.

In the payer-to-bank leg the e-invoice information is entered directly in electronic format and

- manual input from paper giros/invoices can be avoided in bank branches or by customers when using e-banking or ATM services

In the bank-to-payee leg the received payment information will be transferred in electronic format with proper remittance/reconciling/reference codes and therefore

- manual re-inputting of data can be avoided
- receivables files can be updated automatically based on the reconciling/reference codes.

The total benefits of e-invoicing depend on the current automation level in the different legs, but already a moderate estimation of the payee-to-payer leg benefits result in cost savings in the extent of EUR 10-20 per invoice. As there are about 60 billion non-cash transactions in the EU each year, the total benefits, even by cautious estimation, will be over EUR 100 billion per year. Considerable cost savings will also be found in the bank-to-customer legs due to automation.

Sending all outgoing e-invoices to the own bank and receiving all incoming e-invoices from the same site is the simplest e-invoice routing mechanism for customers, which provides both benefits via automatic STP-linkage between invoices and payments as well as a good shield against fake invoices. Ultimately the competition will determine if other alternatives such as emailing e-invoices or e-invoice hotels will survive.

The quest for common standards

Efficient implementation requires a common international XML-based e-invoice standard, preferably an ISO-standard. Currently there are several competing proposals and it is important to combine these into one common master standard. The data content of invoices varies, but XML provides the opportunity to develop a schema that includes all necessary data fields, where everybody selects the ones necessary for their specific purpose. In order to operate on a worldwide basis it has, for example, to be able to contain different VAT data structures. However, it is essential that the XML tags and attributes are standardised so that the e-invoice messages are interpreted in the same way by all users/applications. The same XML schema for a financial transfer message (FTM) can then be used by all the different bank and customer applications, which process payment or invoice messages. (See for standardisation details in separate detailed paper on e-invoicing.)

Important development possibilities

E-invoicing has started off between large corporate customers and in connection with credit transfer based payments. However, e-invoice services can and should be expanded to other customers (SMEs and private customers) and to all payment methods. The interest among SMEs is on the increase in all Nordic countries. In Norway, private customers already use e-invoicing and marketing has started in Finland.

Connecting e-invoices to direct debits would mean that the advance direct debits information could be sent to customers as e-invoices and paper notices would become obsolete. Attaching e-invoice information to card payments would especially benefit corporate customers as they would receive corporate card transaction details directly into their accounting systems. Also private customer would benefit from expanded information on card payments.

One essential result, when all payment transactions include invoicing details, is that the payment account and its account statements would become an electronic archive for all payments made. All the details on the payment receipts would be available in the electronic archive. Customers could easily browse their accounts, similarly to browsing email accounts, for special payments and their details eg when did I buy the camera and is the guarantee still in force.

The way forward

A common thrust by banks and corporate customers is needed to develop a common and comprehensive e-invoice standard, which would become an essential part of the payment messages of all payment methods. Introduce this as part of the SEPA changes would bring clear customer benefits within the SEPA process.