European E-Invoicing Guide for SMEs

SUPPORTING EUROPEAN SMALL AND MEDIUM ENTERPRISES IN THE ADOPTION OF ELECTRONIC INVOICING
November 2009

"This Guide is a very helpful instrument that will certainly encourage SMEs' uptake of electronic invoicing. At the same time and perhaps more importantly, it also demonstrates that only if the current EU rules on e-Invoicing are amended and simplified as proposed by the European Commission we will be able to reap the benefits of a single, EU-wide legal framework."

Gerhard Huemer, Economic and Fiscal Policy Director at UEAPME.
THE EUROPEAN E-BUSINESS LAB

The European e-Business Lab is a cross-industry initiative launched by successful organisations committed to sharing and improving e-Business best practices, adoption, standardisation and innovation. It is a division of the European Business Lab Association. The Laboratory provides a platform for a user-driven open innovation ecosystem focused on e-Business developments.

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It is with great pleasure that we introduce to you the first of the European e-Business Lab’s Guides, the ‘European e-Invoicing Guide for SMEs’.

The European e-Business Lab (EBL) is an initiative launched by successful organisations who are committed to sharing and improving e-Business best practices, adoption, standardisation and innovation. We monitor and gather business needs to improve the current electronic business ecosystem and work closely with European institutions, the public sector, solution and service providers to make sure that SME requirements are taken into consideration.

For the first e-Business Guide, we chose to address an accelerating trend that will impact every company in Europe over the next few years. The trend is the automation of the invoicing process and is known as “e-Invoicing”.

The intent of this Guide is to provide SMEs (and all organisations) with unbiased information and insight regarding the different aspects of e-Invoicing and practical guidance on how to begin. The Guide combines business, technical, practical, legal and compliance information in a way that interested SMEs can be armed with knowledge when making their own independent decisions to chart the best way forward for their business.

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About this Guide

SECTION ONE: INTRODUCTION TO E-INVOICING
Section 1 provides an introduction to e-Invoicing and its impact on business, processes and technology. An overview of different levels of process automation and integration, from a manual, semi-automated to a fully automated, end-to-end solution is provided. Impact on the buyer (receiver of the e-Invoice) and the supplier (sender of the e-Invoice) is analysed under each type of scenario.

SECTION TWO: HOW TO GET STARTED
Section 2 offers practical guidance on “How to get started”. A detailed checklist defines the typical phases and decisions of an e-Invoicing implementation project for full end-to-end automation, including critical aspects.

An introduction to electronic signatures and emerging technologies is included at the end.

SECTION THREE: BEST PRACTICES
Section 3 details Best Practices gathered at European and international level by e-Invoicing experts and practitioners to provide the highest level of guidance to SMEs.

SECTION FOUR: LEGAL COMPLIANCE
Section 4 explores the legal requirements for VAT e-Invoicing compliance in the EU and different Member States. It provides a practical explanation of what are the requirements and how SMEs can achieve compliance using the different options at their disposal.

The final part describes the current proposal of the European Commission to harmonise and simplify the current legal framework for e-Invoicing and how it could benefit enterprises.

SECTION FIVE: STANDARDS
Section 5 focuses on invoice data standards, messages and transport technologies.

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Content of an invoice for VAT purposes.

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Results of the SMEs Survey on e-Invoicing conducted by members of the European Commission Expert Group on e-Invoicing, in 2008.

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CHAPTER 1 - E-INVOICING

1. INTRODUCTION TO ELECTRONIC INVOICING AND ITS BENEFITS

For the past twenty years, large corporations have been automating their invoicing processes, in order to take advantage of the savings and efficiencies that e-Invoicing can provide. Since 2005, European governments (i.e. in Denmark, Spain, Italy, Sweden, etc.) have started to make e-Invoicing mandatory for the public sector. In these countries, all companies and citizens who supply goods and services to the public sector will be required to send only electronic invoices.

The benefits that Europe could derive from e-Invoicing adoption are estimated at €238 billion (cumulated over a period of six years)\(^1\). While a paper invoice costs between €1.13 and €1.65 euro, electronic invoicing would reduce the cost per invoice to between €0.28 and €0.47, a reduction of 70% to 75%\(^2\). The European Associations of Corporate Treasurers has reached similar results, estimating that companies could save up to 80% of their current costs by processing invoice data automatically, removing paper and manual efforts.

Nevertheless, today the majority of small and medium enterprises\(^3\) in Europe are still creating paper invoices, putting them into envelopes with stamps, and either sending them through the postal system or by courier to their clients. When clients receive the paper invoices, they must check that the information in the invoice is correct and manually enter the details into their systems before the payment can be approved.

This whole process can be fully automated without manual intervention: the information included in the invoice can be automatically created by the supplier’s computer and sent to the client, whose computer can automatically check that the information is correct and approve the payment. The result is a dramatic reduction in the time and cost to create, send, receive, check, approve, and pay an invoice.

A key benefit of electronic invoicing for SMEs, beyond the efficiency and cost reduction, is the opportunity (or competitive advantage) to have access to a wider market of potential customers and suppliers, especially large corporations, who prefer working with e-capable trading partners. Any opportunity to improve and expand business relationships in the current economic conditions is extremely valuable and worth pursuing.

Electronic invoicing allows SMEs to grow their business, in terms of orders, customers or suppliers, without having to invest in a proportionate number of employees to carry out repetitive administrative tasks, for which the process automation is best suited. Employees currently entering invoice data manually into the company’s internal system, opening and closing envelopes and archiving paper documents, will be able to allocate their time to more value added tasks, such as customer relationships.

Electronic invoicing is rapidly becoming the preferred means to exchange invoice data. SMEs must be prepared for this natural market evolution.

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3 According to article 2 of the Annex of Recommendation 2003/361/EC, the category of micro, small and medium-sized enterprises (SMEs) is made up of “enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro”.

INTRODUCTION TO E-INVOICING
2. E-INVOICING BEHAVIOURS AND NEEDS OF SMEs IN EUROPE

Surveys aimed at identifying the behaviours, perceived benefits, obstacles and potential accelerators of e-Invoicing adoption were conducted in 2008 (see ANNEX 2). The results can be summarised as follows:

The largest majority of SMEs are currently sending or planning to send e-Invoices either:

- as PDF: 58.9%
- from their accounting application directly to their customers: 35.5%

SMEs perceive as the main potential benefits of e-Invoicing:

- cost reductions: 75%
- increased efficiencies: 79.3%
- faster payments: 37.8%

The key problems of e-Invoicing for SMEs are:

- readiness / compatibility with internal information systems: 30.25%
- customer readiness / compatibility: 33.1%
- legal uncertainty: 22.4%
- complexity: 22.8%

The most important accelerators for e-Invoicing are:

1. free of charge IT-tools to create, transmit and send invoices
2. supporting material (solution documentation, user manuals, legal documentation, sample files, frequently asked questions)
3. assurance that the solution is VAT compliant

The realisation of the savings and efficiencies that e-Invoicing can provide to Europe will depend on its adoption by SMEs. Their current practices and needs should be considered as the foundation for any successful economic policy and related initiative.

3. KEY E-INVOICING INITIATIVES IN EUROPE

A growing number of European governments are committed to fostering e-Invoicing adoption.

In order to reduce the administrative burden to companies, EU governments (such as The Netherlands) are simplifying and harmonising the national legal framework removing current legal barriers. A harmonised legal framework and the adoption of a common global standard are two fundamental conditions for reaping the potential benefits of e-Invoicing.
An important action that EU governments could take is the promotion of a global non-proprietary standard, that satisfies the needs of communities currently using national and industry specific standards. As the single largest buyer in the European economy, the public sector would give an enormous impetus to convergence towards a common standard, reducing the costs and complexities of data translation across the entire e-Invoicing ecosystem. (See Section 5 for more information on standards)

Certain EU Member States, especially in countries where e-Invoicing is mandatory for the public sector, offer simple tools for users in the Business-to-Government domain. The Danish National IT & Telecom Agency launched an open e-Business framework – NemHandel – for the exchange of e-Business documents 4 in a secure and reliable environment.

EU governments are also engaged in a major initiative, PEPPOL (pan-European public procurement online), whose objective is to allow any company and, in particular SMEs, in the EU to communicate electronically with any European governmental institution for the entire procurement process. The PEPPOL initiative has an e-Invoicing component which will allow the exchange of e-Invoicing documents between all relevant stakeholders. 5

At the same time, the European Commission is running an e-Invoicing and e-Ordering pilot project (e-PRIOR) with a number of suppliers. The main goal of this project is to gain real-life experience with e-Invoicing and to share the lessons-learned with Member States and any other interested stakeholders. 6

The other side of the order-to-payment cycle is payments. SEPA (Single Euro Payments Area) is an initiative of the European Union for the creation of a single payments market within which electronic payments are simple, safe, cost effective and efficient. SEPA will make it possible for individuals, companies, government agencies and others, no matter where they are located in Europe, to make and receive Euro payments by using two payment instruments (SEPA Credit Transfer and SEPA Direct Debit) and to use credit and debit cards with standardised basic conditions, rights and obligations in every country.

The banking industry has delivered, in January 2008, the first pan-European payment instrument, the SEPA Credit Transfer and, in November 2009, the SEPA Direct Debit. Gradually, national payment instruments will be abandoned and replaced by SEPA instruments. E-Invoicing is considered one of the key value added services that banks can include in the SEPA offerings to their customers. A number of banks already provide e-Invoicing related services such as automated reconciliation of invoice data and payment data, automated e-Invoicing financing 7 and other financial services.

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5 For more information see: http://www.peppol.eu.
6 For more information see: www.epractice.eu/cases/ePRIOR.
7 ISO20022 standard for Invoice Financing Request service has been registered into ISO20022 Repository (www.iso20022.org) by CBI Consortium(formerly ACEBI) in 2007.
CHAPTER 2 - IMPACT OF E-INVOICING

1. IMPACT ON BUSINESS

1.1. IMPACT ON THE ORGANISATION

A small or medium size enterprise that automates its invoicing process can gain a competitive advantage against its competitors and it will be favoured by trading partners (suppliers / customers) who already conduct most of their business electronically.

By automating their invoicing process companies will relieve the Accounts payable and receivable personnel of repetitive and low value-added tasks like manual data keying of invoice information into internal systems, manual reconciliation, and focus more on customer service, process optimisation, thus improving internal communication with other departments.

The improved quality of life in the workforce will result in enhanced productivity and flexibility in reacting to market forces.

By focusing on more value added tasks and automating repetitive and error prone processes, companies will have the opportunity to grow their business without the need to hire data entry staff in direct proportion to increases in business activity.

Several case studies\(^8\) show that benefits could result, depending on a number of factors (business sector, level of process automation, number of transactions, administrative complexity, data format, etc.) in savings from 1 to 3 percentage points of the company turnover.

The transformation of business documents into electronic data eliminates the use of paper and physical transport, reducing the environmental impact of conducting business.

1.2. IMPACT ON TRADING PARTNERS

Customers and suppliers working with an SME that has automated the invoicing process will benefit from efficiency allowing for variable pricing models that may vary according to the benefits realised. Discounts are not uncommon as an incentive.

By automating the invoicing process, SMEs will provide benefits to all trading partners across the whole supply chain (buyers, suppliers, distributors, resellers, financial institutions, etc.) and allow for a cultural change within the organisation towards more collaborative models which require cross-functional team effort (logistic, administrative, commercial, financial, legal, etc.), thereby expanding and improving their relationships with trading partners.

Indicative figures reported in France\(^9\) related to the exchange of e-Invoices between businesses (Business-to-Business) show potential gains in the region of 40 billion EUR, from which little over 1 billion EUR is attributable to the 50 largest corporates, highlighting the importance of SMEs.

2. IMPACT ON PROCESSES

An e-Invoicing project may involve personnel from different departments (e.g. Finance, Administration, Procurement, Tax, Legal, IT, and Sales) and it is an excellent exercise to rethink internal processes based on the input of the different functions. This can stimulate innovative thinking and bring new insights to process improvement, optimisation, and rationalisation. Even within a very small business where these functions are performed by fewer numbers of people, the benefits from process automation can still bring similar results.


\(^9\) Arthur D. Little for Deskom/Post@xess, June 2001, as translated from “Le Livre Blanc de la Facture Electronique”, EBG (Electronic Business Group) - Deskom, September 2004.
Depending on a number of factors (administrative complexity, number of transactions, the nature and number of trading partners, and level of integration already existing) the impact on processes can be summarised as follows:

- Cost reduction and optimisation due to reduction of manual data keying and associated error margin, missing invoices, reduced archive space and postal charges;
- Efficiencies through the use of structured data\(^{10}\) for internal system integration and automated business data reconciliation; increased accuracy of data and processing speed; easier dispute handling and discrepancy resolution;
- Reduced operational risk through automated matching and approval processes that include controls on the invoice data; matching invoice data against company’s purchase orders (POs) and/or goods received notes (GRNs); and verifying that goods / services invoiced have been ordered and delivered. The automated matching process dramatically reduces the risk of fraudulent invoices and duplicate payments;
- The matching process can be enhanced by matching bank references included in the e-Invoice with those the company has already registered in its own master data. This ensures that a company (and its personnel) never changes bank details registered in its own internal system merely because an e-Invoice with different data is received. This is a key measure to protect the company from fraud (see ‘How electronic invoicing helps to reduce the risk of fraud, Section 4 of the Guide); and
- Working capital is enhanced by the reduction of the average number of days that a company takes to collect revenue after a sale has been made (DSO or ‘Days Sales Outstanding’). Decisions relating to cash management and customer credit can be optimised by the processing of information in real or near time, resulting in enhanced visibility and control over the process. Invoice disputes are reduced due to better quality of data, ultimately resulting in lower DSO.

3. IMPACT ON TECHNOLOGY

The overall effect on technology will vary according to the:

- Type of solution; whether developed internally or outsourced
- Size of solution; allowing for one or many trading partners
- Scope of solution; capable of supporting one or more types of invoicing standards and one or more types of business documents
- Level of integration; semi-automated or fully automated processing

It is quite common for a business to start with a simple solution in order to exchange invoices with one trading partner and then decide to implement e-Invoicing with as many trading partners possible. Another common scenario is the implementation of e-Invoicing only with a particular partner followed by an implementation of e-Orders, e-Payments, e-Remittances etc. until all transaction exchanges (message types) with that partner are fully automated.

In either scenario it is accurate to say that most companies will realise the benefits of their first implementation quite quickly and shortly thereafter start planning expansion. The higher the number of processes a company will automate, the greater the benefits will be.
CHAPTER 3 - E-INVOICING ADOPTION MODELS

1. E-INVOICING EVOLUTION

Electronic invoicing is the automated process of issuing, sending, receiving and processing of invoice data by electronic means.

The following models represent a gradual path from manual invoicing to the full end-to-end automation that a company could achieve by expanding its capability over time. Depending on the needs of the business, each e-Invoicing model provides significant benefits when compared to the exchange of paper invoices.

The business reasons to adopt electronic invoicing can be driven by external market forces - a large customer/supplier request, or a government initiative to make it mandatory - or internally, to expand the business using a low-cost model. In either case, the end result will be faster receipt of payments and improved customer relationships.

A typical path for an SME to follow is:

1. Internal readiness:
   - implement a type of accounting (accounts payable and receivable) software that is capable of producing invoices in a simple PDF or similar format
   - define the steps of the process (human and systems involved) in the sending/receiving of invoices and consider the steps that would impact the business significantly, if automated

2. Exchange invoices electronically:
   - begin sending or receiving PDF (or similar) invoices by email or a simple file transfer process such as FTP
   - experience the benefits resulting from speed of delivery

3. Work with your partner’s solutions:
   - be prepared to accommodate large suppliers by keying invoices into their web-portals
   - remove the pressure to expand your e-Invoicing capability before you are ready

4. Consider creating your own web-portal:
   - keep your business automated even when your customers are not e-Invoicing capable
   - allow customers to print or download their invoices from your website

5. Consider an e-Invoicing platform:
   - expand your capability to accommodate several suppliers and customers
   - integrate the sending and receiving of invoices with your internal systems and processes

6. Expand your platform:
   - automate your orders, payments, remittances, collections
   - evaluate the improvement in all areas of the business

2. E-INVOICING MODELS

The diagrams that follow depict various levels of automation, and therefore, efficiency. In particular, they are examples of: traditional manual invoicing, semi-automated process using PDF invoices, web portals (sender and receiver based), end-to-end automated e-Invoicing process, and, finally, fully integrated order-to-payment cycle.
2.1. MANUAL INVOICING PROCESS

This diagram depicts a simple manual invoicing process between two companies. The number of steps involved will vary depending on the size of the business, the number of departments and controls involved, and the complexity of internal systems and processes.

Figure 1.1

In this scenario, there are unnecessary costs and time spent by both parties on highly repetitive tasks allowing for human error in every step of the process.
Key considerations can be described as follows:

For the Sender

• cost of labour for invoice printing, sorting, stuffing envelopes, posting, and archiving
• cost of postage and paper
• environmental impact of paper and physical delivery
• possible printer or mailing errors resulting in missing invoices
• possible sorting errors resulting in one customer receiving another customer’s invoices
• cost of calling customers for late payments as a result of missing invoices
• cost of posting invoice copies and possibly extending terms
• cost of the organisational structure (manpower) to manage invoice handling
• cost of paper documents archiving
• cost related to archive management (e.g. searches, logistics, etc.)
• impact on customer relations as both parties generally believe the other is at fault

For the Receiver

• cost of labour for opening mail, sorting invoices by supplier, date stamping, matching to orders or other supporting documents, looking up supplier numbers and account codes for processing, entering the data into the computer and checking input for accuracy
• possible errors in data entry resulting in incorrect payments and reconciliation issues with suppliers or incorrect internal postings leading to further accounting problems
• cost of additional staff in order to segregate data input from invoice approval
• cost to maintain the paper archives

NOTE: While ERP by definition means 'Enterprise Resource Planning', it is also commonly used to describe the information system where your customer accounts are located, core business activities are performed, and financial transactions recorded. In some cases, these activities may be carried out in more than one system.
2.2. **SEMI-AUTOMATED INVOICING PROCESSES**

2.2.1. **SEMI-AUTOMATED INVOICING PROCESS USING TRADITIONAL PDF INVOICES**

This diagram depicts a typical situation where the supplier is sending invoices in a PDF format via email to the receiver.

**Figure 1.2**

PDF invoices may also be transferred by other more secure means as discussed in Section 2, Chapter 2.
2.2.2 Semi-automated invoicing process using Sender based web invoices

In this diagram the supplier provides invoices in a PDF format on a web-based portal for the receiver to view, print, or download.

Figure 1.3

In the two scenarios above, the supplier (Sender) realises all of the efficiencies but there is no change in process for the receiver.

Key considerations can be described as follows:

For the Sender

• reduces labour, printing/downloading, archiving and postage costs
• eliminates manual handling errors
• eliminates the environmental impact of producing and delivering paper documents
• improves the relationship by sending timely and accurate invoices
For the Receiver

• retains the cost of labour for opening mail, sorting invoices by supplier, date stamping, matching to orders or other supporting documents, looking up supplier numbers and account codes for processing, entering the data into the computer and checking input for accuracy
• possible errors in data entry resulting in incorrect payments and reconciliation issues with suppliers or incorrect internal postings leading to further accounting problems
• cost of additional staff in order to segregate data input from invoice approval
• cost to maintain the paper archives
2.2.3. SEMI-AUTOMATED INVOICING PROCESS USING RECEIVER BASED WEB INVOICES

In this diagram the receiver provides a web-application for the supplier to input their invoice data. This web-application is programmed to create the invoice in the required format for downloading into the receiver’s system.

Figure 1.4

Key considerations can be described as follows:

For the Sender

- the sender’s system would likely still need to produce an invoice in order to create the appropriate accounting records internally
- cost of additional labour to manually enter the same invoice details to the receiver’s website (although this cost may be reduced if the invoice is based on the purchase order)
- risk of entering the details incorrectly to the receiver’s website and creating two different invoices from what should essentially be the same data
- cost of labour for additional reconciliation process to ensure details match
- cost of archiving both invoice copies together
- cost savings in the labour, handling, and postage of invoices
For the Receiver

- reduces the labour involved in sorting, matching, data entry, and archiving
- eliminates data entry errors and associated reconciliation issues
- eliminates the need for additional staff to review the data entry
- often provides the opportunity to add business rules and controls in the web application
- eliminates the environmental impact of archiving paper documents
- improves the relationship by turning invoices around for payment in a timely and accurate manner

This process is generally used only in cases where the sender is creating very few invoices or where the sender records transactions manually and enters only the total values to an accounting system. It provides a balanced solution for very small businesses that trade with fully-automated e-Business capable companies.
2.3. FULLY AUTOMATED E-INVOICING PROCESS

This diagram depicts a typical process between two trading partners where both companies have e-Invoicing capability.

![Diagram of the fully automated e-Invoicing process]

Figure 1.5

In this scenario, both parties realise the full benefits of e-Invoicing resulting in reduced costs, integrity of the data, and an overall improvement in the relationship.

Key considerations can be described as follows:

For the Sender

- reduces labour, printing, archiving and postage costs
- eliminates manual handling errors
- eliminates the environmental impact of producing and delivering paper documents
- improves the relationship by sending timely and accurate invoices
- improves the efficiency and the process controls
- improves performance management

For the Receiver

- reduces the labour involved in sorting, matching, data entry, and archiving
- eliminates data entry errors and associated reconciliation issues
- eliminates the need for additional staff to review the data entry
- eliminates the environmental impact of archiving paper documents
- improves the efficiency and the process controls
- improves performance management
- improves the relationship by turning invoices around for payment in a timely and accurate manner
2.4. **Fully automated Order-to-Payment cycle**

This diagram depicts a typical end-to-end transaction between trading partners and their banks. Any number of additional parties may be involved such as e-business service providers, freight forwarders, customs agents, finance or factoring companies, etc. The parties have expanded their e-Invoicing capability to include e-Orders, e-Payments, and e-Remittance advices.

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11 It is common to refer also to the ‘Order-to-Cash’ cycle, from a supplier perspective and, to the ‘Purchase-to-Pay’ cycle, from a buyer perspective.

12 EBL makes the assumption in the above diagram that all documents exchanged are auto-archived.
In this scenario all parties involved in the transaction realise the benefits of the end-to-end integration.

Integrity of data\textsuperscript{13} is realised throughout the transaction because the information created for the initial order is re-used electronically to produce the shipping request, inventory adjustment, invoice, Accounts payable record, payment request, transfer of funds, remittance advice and final allocation of cash to the supplier’s Accounts receivable system – removing the margin for error in all of these activities.

The impact to the environment is also significant as all parties involved will eliminate printing and delivery of paper documents.

\textsuperscript{13} See Glossary
Section Two
How to Get Started
Section Two: How to Get Started

CHAPTER 1 - E-INVOICING CHECKLIST

This checklist defines the typical phases and decisions of an e-Invoicing implementation project for fully automated end-to-end integration.

1. DEFINE THE SCOPE

1.1. CONSIDER IMMEDIATE AND NEAR FUTURE NEEDS

- Receive e-Invoices from one supplier
- Receive e-Invoices from several suppliers
- Send e-Invoices to one customer
- Send e-Invoices to several customers
- Plans to expand e-Business capability eventually to include orders, payments, and remittance advices.

1.1.1. IDENTIFY A PILOT TRADING PARTNER

1. Initial discussion or survey to identify supplier / customer interest and readiness. Key questions to consider:
   - How many trading partners do I have who are currently capable of e-Invoicing?
   - Are there trading partners I could engage with if I adopt e-Invoicing capability?
   - What data standards and data transfer technologies are these companies using?

2. List current and potential suppliers / customers who are e-Invoicing capable

2. ASSESS CAPABILITY

Consider the following list of questions internally and with the pilot trading partner:

- Do you have staff with previous e-Invoicing experience?
- Do you have technical e-Invoicing capability?
- Which e-Invoicing Standards are supported or preferred?
- Which message types and versions of those messages will be used? (e.g.: invoices, acknowledgements)
- Which transport mechanism is preferred? (e.g.: AS2, FTP, VAN etc.)
- Are you currently processing invoices manually with this partner?
- Are there complexities in the invoice process? (e.g.: multiple countries)
- Are these transactions cross-border?
3. IDENTIFY YOUR E-INVOICING PLATFORM

3.1. DEFINE YOUR NEEDS

Based on the outcome of the Capability Assessment, the following factors should be considered:

- Which standards does my solution need to support?
- Which transport mechanisms do I need to support?
- Do I want to send files directly or have my partner retrieve them from an external server?
- Do I want to receive files directly from my partner or retrieve them from an external server?
- Do I have internal technical staff with e-Invoicing knowledge, or capable of supporting the e-Invoicing process?
- Will I need to hire or train technical staff?
- Do I prefer to purchase (or use Open Source) software and create an e-Invoicing platform?
- Do I prefer to outsource all or part of this activity to an experienced service provider?
- Does my trading partner outsource this activity or have self-service (in-house) capability?
- Have I checked my system(s) or my ERP provider for existing import / export or e-Invoicing capability?
- Will my chosen platform need to expand to other trading partners, other messages, etc.?

3.2. OUTSOURCING, SELF-SERVICE OR, LIMITED SELF-SERVICE CAPABILITY

After defining the requirements, the company should decide how to implement its solution, considering the options described below.

3.2.1. OUTSOURCING

While the decision to outsource is entirely one of business preference, there are some additional points to consider from an e-Invoicing perspective.

Most e-Invoicing service providers use software that is capable of translating several different standards and handling multiple transfer technologies. This allows the company to trade with a large number of partners and still only support one method of receiving files (directly from a service provider) in the required format. This is of particular benefit if the company has outsourced its entire IT function or is trading with a large number of partners who use a wide range of technologies.

NOTE: These services are often charged on a sliding scale ‘fee per transaction’. In situations where your trading partners already have in-house e-Invoicing capability and are paying to support their own infrastructure, they will generally not expect to pay fees to your service provider in order to trade with you.

3.2.2. SELF-SERVICE CAPABILITY

If your business decides to create an e-Invoicing infrastructure, many providers offer packaged solutions that include data translation software, guidance on setting up the ‘gateway’ infrastructure (for sending and receiving files), along with training and implementation support. Some also offer lower cost ‘one to one or more’ solutions that will get you started – with only one or a limited number of trading partners.

If your business already has in-house technical staff with the appropriate skills but is not able to invest in additional software, there are many lower cost or free of charge ‘Open Source’ software and file transfer options available. The necessary skills to implement these would be at a minimum an understanding of data extract formats, file transfer and related network security, and knowledge of the import/export capabilities of your ERP system.
3.2.3. LIMITED SELF-SERVICE CAPABILITY

In this scenario one trading partner (commonly the receiver) provides an Internet portal where the sender can input or upload invoices into a template. This template is programmed to convert the invoice data into an automated file in the format of the receiver’s ERP system. This creates an automated process for the receiver while the sender may not have any e-Invoicing capability. The downside for the sender is the manual re-keying or uploading of the data into the Internet form. The potential risk, if an error occurs, is that the invoice produced on the sender’s ERP system may not match that of the data keyed into the receiver’s portal.

Whether you outsource these activities or purchase software to carry them out internally, in all three of the scenarios above, a software or service solution can generally be expanded to automate many other types of transactions (i.e. orders, shipping advices, confirmations, payments or collections, remittance advices, statements, etc.).

3.3. LEGAL REQUIREMENTS

When implementing an e-Invoicing solution, it is important to consider the legal and compliance aspects described in Section 4 of the Guide.

Based on the Country Matrix (Figure 4.1), your business should start assessing the legal requirements from a VAT perspective.

The implementation described in this section of the Guide represents a typical EDI solution (in line with the Commission Recommendation 1994/820/EC relating to the legal aspects of EDI which allows for the use of agreed standards such as EDI or XML-based standards), one of the three options to comply with the requirements of the VAT Directive for authenticity of origin and integrity of content.

From a VAT perspective, a compliant EDI solution does not require the use of Advanced (or Qualified) electronic signatures. This requirement would conflict with the VAT Directive which defines three alternative options for compliance.

3.4. COST / BENEFIT ANALYSIS

There are various methods of determining the cost of processing invoices manually. At a minimum, the sender should consider the costs of printing paper, postage and handling, while the receiver should consider the cost of approving / accepting the invoice, the data entry of the invoice details, correcting errors, and filing of paper invoices. While many e-Invoicing software/solution providers have online calculation tools to assist with this analysis, time and motion studies may also be carried out to support the estimates.

It is important to note that some benefits are difficult to quantify – in particular the reduction in the time spent handling queries, or related payment delays, in addition to the overall improvement in supplier and customer relationships.

3.5. SELECTION OF A SOLUTION OR SERVICE PROVIDER

The solution or service provider that best fits your current and future plans should be carefully selected. Many businesses that adopt e-Invoicing with one partner will generally decide to expand their capability to other suppliers / customers or to automate additional business processes.

An e-Invoicing solution that is limited to one type of transaction, one standard, or the ability to exchange with only one partner may serve an immediate business need but could be costly if it cannot be upgraded to support further e-Business expansion.
4. IMPLEMENT YOUR SOLUTION

Once you have decided on an e-Invoicing platform (software / hardware or solution provider) and have chosen a ‘pilot’ trading partner who is e-Invoicing capable, the e-Invoicing implementation stage can begin.

4.1. DEFINE TRADING PARTNER RESPONSIBILITIES

In this initial phase the following key actions should be taken:

- Define resources and business commitment
- Propose a timeline suitable for both parties
- Define the data testing process and number of cycles required
- Identify test IDs and addressing routines
- Document partner responsibilities, communication channels, etc.
- Identify cut-over plans from the test to live environment
- Agree post implementation process
- Enter into formal agreement; if required

It is important to document key points agreed including development and testing plans. This should include information regarding days and hours of availability for resources and systems.

Human resource planning is crucial because a successful e-Invoicing implementation may depend on familiarity with the partner’s data and how it will be processed by the ERP system. If there is an existing relationship, accounting or operational resources may be able to provide insight as to mandatory data (beyond the legal and tax requirements covered later in ANNEX 1). These resources would also be of particular value in the data testing process prior to implementation.

System resource availability is a key factor in planning the frequency of file collection, processing and, download to ERP systems - in real time, scheduled, or overnight batch processing.

It is equally critical to determine if the sender is able to batch all invoices, transmitting one file daily (or periodically). E-Invoicing processes that transmit individual invoices at regular intervals can be problematic due to intermittent network downtime on either partner’s systems and may cause missing invoices and reconciliation problems. The use of invoice acknowledgements are strongly recommended where batching is not an option.

4.1.1. GENERAL AGREEMENT - TRADING PARTNER RESPONSIBILITIES

In this phase the partners agree and document how the daily process will work post-implementation. Trading partners need to agree the proposed cut-over date from paper invoicing, as well as how they will communicate and resolve any issues related to the ongoing process.

This should include a discussion about whether the technical or non-technical staff in each company will coordinate discussions if problems or questions arise. Additionally, if a service provider is involved, it is strongly recommended that trading partners are directly involved in all communications. This is essential since trading partners are solely responsible (from a legal and tax perspective) for their invoices and need to be aware of any problems that might arise.

This document should also include agreement about how rejected invoices will be handled, whether the problem is due to a technical failure or incompatible data. Some e-Invoicing systems may be set up in a way that doesn’t allow an e-Invoice to be re-transmitted even if it has been corrected by the sender. In these cases there needs to be agreement up-front that a PDF or paper replacement would be accepted and processed manually in these circumstances.

While the use of electronic acknowledgements provides some comfort from a technical transfer perspective, it does not generally identify individual invoices that are rejected during the load to the
receiver’s ERP system. Monthly issuance of statements by the sender and reconciliation of those accounts by the receiver are the common accounting processes that ensure completeness of the process – whether manual or e-Invoicing is involved. It is therefore important to set these expectations and obtain agreement very early in the process.

The points agreed above may constitute the basis for a more detailed document or formal trading partner agreement outlined prior to implementation.

4.2. DETAILED DATA REVIEW

In this implementation phase the following key actions should be taken:

- Obtain copies of invoices and credit notes
- Ensure all mandatory invoice information will be transmitted
- Discuss any special processing (discounts, freight or other charges)
- Understand the transaction from a VAT perspective
- Check data field sizes to ensure compatibility

4.2.1. EXCHANGE AND REVIEW OF DATA ELEMENTS

In this phase the trading partners need to agree on the type of data that will be sent and must ensure the receiver’s system will be able to accept and process all of the appropriate details. The following is not exhaustive but provides an example of the questions that may need to be considered.

1. Is the sender able to provide all of the data required for a standard invoice?

2. What other data might be needed for the receiver to correctly process the invoices (or associated credit notes)?

The receiver would normally be matching the incoming invoice to their original order and may need to receive the order number, order date, and shipping details along with all the product codes, part numbers, serial numbers, descriptions, quantities, and expected terms and pricing. For credit notes there may be returned goods reference numbers or other codes expected in order to match to the original order and invoice.

3. Is the receiver’s system able to accept the above mentioned data?

Since businesses use various types of software, there may be a need to truncate certain data (due to lengths or types of characters) that might not otherwise fit into the receivers system’s data fields. For example, a supplier may send serial numbers with 18 characters but the serial number field in the receiving system may only hold 15 characters. The receiver may need to create a rule or a program that will truncate these incoming numbers to accept only the last 15 characters. In these cases, a business decision needs to be made to ensure you retain the most important characters in each case.

4. Will the receiver need to roll-up some of the data – for example sub line items into line items?

5. Do both parties agree on what is ‘header or summary’ information as opposed to ‘detail’ information?

In points 4 and 5 above, special mapping may be required if one system accepts detailed data but the other accepts only summary type data. For example: the sender’s system may invoice freight charges or VAT at the summary level but the receiver’s system may need to break these down into the line item level in order to load to their system.

6. Are there intra-community supplies where weights and commodity codes are required?

7. Will there be any invoice or line item level discounts?
8. Will there be multiple VAT rates on one invoice?

The above list may vary with each partner but these details are the most complex areas in any e-Invoicing set-up. Once mapped and implemented, they form the structure of the ongoing data matching process.

When properly combined with the sender ID and any other identification required during the communication process, the precision of this automated matching process provides certainty of authenticity and data integrity far beyond that which may be achieved by the use of digital signatures.

4.3. CUSTOMER SET-UP AND DATA MAPPING

In this implementation phase the following key actions should be taken:

- Build cross-reference table of customer/supplier IDs
- Cross-reference any product and/or terms codes necessary
- Carry out the mapping of the invoice data fields
- Set-up the test environment
- Perform technical review of test data
- Ensure business users evaluate and approve test data for accuracy and completeness

4.3.1. CUSTOMER SET-UP AND CROSS-REFERENCING

This phase includes any changes that need to be made in the trading partners’ systems in order to produce and accept the test invoices. System capability may range from a series of simple programs and tasks to a very complex multi-layered trading partner gateway.

The initial set up of an e-Invoicing customer requires entries into software tables (customer cross-reference mapping) of all the known, agreed, and mandatory data that those invoices will contain. These entries will be specific references (which may be alpha or numeric codes) that only the supplier’s system uses to describe its terms and products. The sender ‘codes’ will be cross-referenced to the equivalent codes that the receiving company’s system uses to describe them.

For example: the supplier’s system may identify itself as a company with a code of ‘A1234’ while the receiver’s system might identify that particular supplier as ‘B5678’. In this case the cross-reference table in the receiver’s system used to identify this supplier will have an entry of: A1234=B5678. This cross-referencing process may be repeated several times for any type of known data such as VAT IDs, product codes, payment terms codes, etc. Once the invoice has been accepted as having been sent by an established sender, it typically goes through a secondary process of matching to an established order (by matching on an order number or product details, amounts, etc.).

The software tables (or look-up tables) need to be set-up and maintained. They may include checks for mandatory data and programs to identify and communicate any rejected invoices.

4.3.2. DATA MAPPING AND FILE TESTING

Data mapping (as it pertains to e-Invoicing) can be described as the process of identifying the format of the data that is expected from the supplier and defining how to convert or ‘translate’ the data, so it can be accepted by the receiver’s computer system.

It is carried out either by writing a unique software program or by implementing purpose-built data mapping ‘translation’ software. Once completed, the map will be used to translate incoming invoices on an ongoing basis. Some companies may create one map for each customer, while others develop one map to handle each data standard that they support and are able to re-use these maps for multiple customers (usually supported by customer cross-reference tables as mentioned in point 4.3.1).
Depending on the complexity of data, quality of data, or expertise of the trading partners, the technical review and processing of test files may be carried out over a few days or may require significant changes, resulting in re-testing that may extend the process over several weeks. The completeness of the data element discussion—referenced above in point 4.2—will have a direct effect on the quality of the testing and speed of implementation.

While it is acceptable to begin testing with a small data sample to ensure the base concepts are in place, it is equally important to test files containing several invoices, credit notes and as many data variances as possible prior to implementation. For test data to be effective it needs to clearly represent the actual detailed elements of the sender’s invoice data. A comparison of the electronic data to a sample paper invoice is extremely helpful in the early stages of testing.

### 4.4. INTERFACE TESTING

In this implementation phase the following key actions should be taken:

- Agree number of test cycles, time and location of test area
- Ensure technical experts are available for support
- Test file transmissions at proposed times and ‘out of hours’ to ensure coverage

It is recommended that trading partners agree rules regarding frequency of test transmissions and create separate sender (and receiver where applicable) IDs and passwords to clearly segregate test and live production data.

It is important to allow some time and resource for testing of the file transfer process (at least one full week) if one or more partners are using a particular transfer method for the first time.

### 4.5. DUAL PROCESSING AND IMPLEMENTATION

In this implementation phase the following key actions should be taken:

- Change the customer set-up to ‘live’ processing
- Disable test IDs
- Ensure business users compare e-Invoicing results to paper copies for agreed period
- Co-ordinate the cut-over date to stop sending / receiving paper invoices
- Ensure daily troubleshooting procedures are in place

The dual processing period is defined as an agreed period of time where the sender will transmit invoices electronically while continuing to produce and send paper invoices to the receiver. This allows the receiver to check the paper invoices against the electronic data received to ensure accuracy, data integrity, and overall completeness of data. It also provides the means to ensure all invoices and credit notes are being received electronically. It is generally accepted that this process should be carried out over a two week period.

If the supplier’s system is technically not able to send e-Invoices and paper invoices simultaneously for the same transactions, a statement or report containing the invoice detail is generally acceptable during this period.
CHAPTER 2 - ELECTRONIC SIGNATURES

1. INTRODUCTION
From a practical perspective, an electronic signature is a technology that provides:

a) assurance that the ‘signed’ invoice received is actually from the company, or person, who claims to have issued it – otherwise known as ‘Authenticity of origin’;

b) assurance that the ‘signed’ invoice has not been modified – otherwise known as ‘Integrity of data’.

2. ELECTRONIC SIGNATURE TECHNOLOGIES
There are many types of technologies that can be used to create electronic signatures.

For example, technology that is embedded in (or attached to) the software used to create (or transfer) documents and files to ensure end-to-end integration, without manual intervention; or solutions that require manual intervention, such as smart cards or USB devices, that a user can plug into its PC to personally sign documents or approve file transfers.

PKI is a commonly used technology in electronic signatures and stands for ‘Public Key Infrastructure’. This technology uses public and private (cryptographic) keys to allow the exchange of data across the Internet, or other unsecured networks, in a secure and private manner.

The private key is used to create the signature, as a form of identification, while the public key is used to verify the authenticity of the signature, encrypting the message while in transit. The keys are generated and managed (revoked, renewed, etc.) by a Certification Service Provider (through software), or locally by the client with a specific application.

The key pair (private key and corresponding public key) can be stored in different ways, depending on the security level required. Keys can be stored in files on the users’ desktop (or laptop) for low risk applications, while smart cards or USB tokens could be used to grant a higher security level.

The signer certificate is usually contained in the signed message and verified by or on behalf of the receiver, as part of the signature verification process that guarantees the authenticity and integrity of the message.

In order to establish the ‘chain of trust’, there is the need for a Certificate Authority, a trusted third party. A Certificate Authority (CA) can be a service / solution provider or, a company (user) that develops a CA internally, using one of the technologies available on the market.

That company (CA) validates the authenticity of the organisation and issues the root certificates14 (which establish a chain of trust) to the organisations or individuals. In an e-Invoicing context, the CA will often need to have some level of approval of the geographically competent tax administration.

Where the law does not explicitly require such approval, it may still be valuable to use a known CA so that a tax auditor can easily establish the trustworthiness of the process.

14 A root certificate is either an unsigned public key certificate or a self-signed certificate that identifies the Root Certificate Authority (CA). Source: Wikipedia.
3. ELECTRONIC, ADVANCED AND QUALIFIED SIGNATURES

In Europe, three distinct terms are used as follows:

A) Electronic signature

An Electronic Signature is a legal term mentioned in the 1999 Electronic Signature Directive. In practice, any code, identifier or mark meant to authenticate electronic data or an electronic transaction could be an electronic signature. PKI is just one of the technologies that can be used to create electronic signatures.

B) Advanced electronic signature

An Advanced Electronic Signature (AES) has specific legal and technical requirements that must be satisfied:

- Uniquely linked to the signatory
- Capable of identifying the signatory
- Created using means that the signatory can maintain under his sole control; and
- Linked to the data to ensure that any subsequent change of the data is detectable

For example, the use of a PKI based key pair (public/private key) and a certificate (that can be purchased online from a trusted provider and downloaded) complies with this. There are also a number of solutions and services currently available on the market that can be integrated into the e-Invoicing process providing transparent functionality.

An alternative approach is the web of trust scheme[^15], which uses self-signed certificates and third party attestations of those certificates. The term “Web of Trust” does not imply the existence of a single web of trust, or common point of trust, but rather any number of potentially disjointed “webs of trust”. Example of implementations of this approach are PGP (Pretty Good Privacy) and GnuPG (an implementation of OpenPGP, the standardised specification of PGP). Because PGP and GnuPG implementations allow the use of e-mail digital signatures for self-publication of public key information, it is relatively easy to implement one’s own Web of Trust.

C) Qualified signature

A Qualified Electronic Signature is an Advanced Electronic Signature that must also be supported by the use of a Secure Signature Creation Device and based on a ‘Qualified Certificate’ to assure the signer’s identity. In particular:

1. the certificate on which the signature is based is Qualified, adding the requirement that the signer’s identity is verified by the registration authority. The certificate must be purchased at a Certification Authority - that complies with the rules listed in section 4 of the Guide - where there is typically a face-to-face registration (e.g. city house, bank, etc.). In most countries, qualified certificates may only be issued to physical persons (individuals) and not legal persons (companies); however, in some cases a CA will allow a company name to be mentioned in a certificate. To apply for Qualified Certificates, the applicant must register as a subscriber once, while renewals can be done without additional authentication processes. The person that signs a document is uniquely identified via his Qualified Certificate.

2. the signature is generated using a Secure-Signature-Creation-Device (SSCD). This means that the private key and the certificate are stored on a secure device. Some examples of SSCD include:
   - Smartcard - where a PIN code to access it is needed

• USB token - which contains a smart card chip inside, providing the functionality of both USB tokens and smart cards
• Hardware Security Module (HSM) - used widely to secure the root key in a PKI system
• In some countries, a software-based security module may also be recognized as an SSCD

Therefore, an ordinary electronic signature that is not Advanced, could certainly not be Qualified.

Qualified certificates are issued by specific operators that meet certain legal requirements and are subject to legal liability for providing the service to their customers. In theory, the trusted third party should effectively create a circle of trust among its users.

In practice, technical interoperability can be problematic when multiple operators are involved. Secure technologies are emerging constantly, as are the standards they are based upon.

Additionally, certificates carry expiry dates and can be revoked (e.g. in case of loss of the private key) so they need to be well-managed in order to ensure ongoing validity.
CHAPTER 3 - EMERGING TECHNOLOGIES

1. INTELLIGENT PDF

While some companies have developed semi-automated data scanning processes where character recognition software is used to read and interpret the invoice data from a paper or PDF document, there is emerging technology that fully automates the process.

‘Intelligent PDF’ is the term used to describe a secure e-Invoicing process based on the ISO 32000 Standard and Adobe ‘LiveCycle’ ES server technologies.

In this process, the invoices created by the sender’s ERP system are converted to an XML format using the LiveCycle ES software. The invoices are then transmitted to customers via email or any of the file transfer methods mentioned in Section 5 of the Guide.

Upon receipt, the LiveCycle ES software loads the invoices into a staging area where they are checked for correctness and can be viewed manually (if necessary) prior to automated matching and loading into the receiver’s ERP system.

The key advantage of this process is the combination of XML automation and PDF ‘human readable’ documents, turning a semi-automated process into a fully-automated and integrated solution.

2. CUSTOMISED SPREADSHEET TEMPLATES

For businesses whose trading partners require documents in a spreadsheet format, there exist server based software solutions or web services that:

A) convert invoices produced in the sender’s ERP system into the ‘ready to load’ spreadsheet format required by the receiver; or

B) provide the capability for the sender to produce invoices in a spreadsheet format that will be converted to the ‘ready to load’ format required by the receiver’s ERP system.

These solutions use customised spreadsheet templates that include built-in data validation routines to minimise errors and ensure data integrity.

3. OTHER TECHNOLOGIES

3.1. OPEN SOURCE SOLUTIONS

Open Source Software (OSS) is software (the underlying code and associated rights) that is developed for use in the public domain, with no license costs involved for its use. It is often developed by academics, by the public, or funded initially by governments and other interested parties.

While there are no user or developer license costs involved, the market has been cautious in adopting the open source concept and many of those who have adopted, have contracted with service providers for ongoing support and maintenance (including upgrades) of the software. There has been a recent surge in market acceptance\textsuperscript{16} due in part to current economic conditions and increased adoption by governments and other prominent corporations.

Specific rules must be adhered to when using Open Source Software. If a company makes changes to modify the source code or to improve the core software, those changes must be published in the

\textsuperscript{16} According to the IDC study, "Worldwide Open Source Software 2009-2013 Forecast," worldwide revenue for Open Source Software will increase annually by 22.4 per cent, leading to revenues of \$8.1 billion (£4.9 billion) by 2013. (See: \url{http://www.idc.com/getdoc.jsp?containerId=prUS21947509})
public domain under the same open source license. This does not mean that a company has to openly publish any product that it develops using open source software.

For example: when a company uses open source word processing software and creates hundreds of documents with that software, those documents are still the property of the company that created them. The company may have used the software to create other documents or products, however it did not change the underlying word processing software itself, its source code, or how it functions.

For more information on Open Source in Europe, see: http://www.osor.eu
Section Three
Best Practices
Section Three: Best Practices

CHAPTER 1- BEST PRACTICES FOR E-INVOICING

In order to ensure a satisfactory level of technology neutral controls over the invoicing process (including but not limited to authenticity of origin and integrity of data), the following controls and Best Practices are recommended:

1. CONTROLS OVER INVOICE DATA

   1.1. COMPLETENESS AND ACCURACY OF THE INVOICE DATA

   1.2. VALIDATING AND MATCHING OF INVOICE DATA
         A) with other critical business data such as: purchase orders, agreed pricing, or payment terms;
         B) with other master data such as: VAT identification numbers, customer or supplier IDs, or contract numbers;
         C) with product related data such as: transport documents, delivery locations, product codes, unit prices and line item references.

   It is strongly recommended that matching be done at a minimum with the supplier ID and order number or other business critical data. In many cases, matching is done at a very detailed level through each and every line of the purchase order incorporating products ordered and agreed pricing.

   1.3. PREVENTION OF DUPLICATION OF PROCESSING INVOICE DATA

   1.4. PREVENTION OR DETECTION OF POSSIBLE CORRUPTION DATA PRIOR TO ACCEPTANCE OR PROCESSING

   1.5. TRANSMISSION OF INVOICE DATA IN A SECURE ENVIRONMENT, USING TECHNOLOGY NEUTRAL ACCEPTED MEASURES THAT ARE PROPORIONATE TO THE BUSINESS ACTIVITY RISKS
         A) Using agreed transport means (for example: http-s, FTP, SFTP, AS2, VAN, email, etc..)

   1.6. USE OF STRUCTURED DATA FORMATS OR STANDARDS

Additionally, trading parties must:

   A) be able to demonstrate the existence of a recovery plan in case of system failure or loss of data; and

   B) maintain an audit trial between the electronic invoicing system(s) and the internal application system(s) that are used to process the electronic invoice data.
2. RECOMMENDED BEST PRACTICES

2.1. CONTROL OVER BANK ACCOUNT DATA OUTSIDE THE E-INVOICING PROCESS

Supplier bank account set-ups and subsequent changes to those account details must be verified outside of the technical e-Invoicing process. Bank account details of trading parties in the company master data should not be changed based solely on new bank account details in invoice data received, unless there are internal controls and other processes to confirm those details before payment is made.

2.2. MONTHLY RECONCILIATIONS

It is recommended to carry out reconciliations on a monthly basis with the supplier sending an outstanding invoice statement to the receiver, and the receiver carrying out the necessary research to ensure there are no old and unpaid invoices. This is a recommended best practice regardless of whether the invoices are sent and processed manually or through an automated solution.

2.3. BATCHES OF E-INVOICES

It is recommended, where possible, that all invoices for a particular trading partner are collected in a batch and transmitted as one file at the same time on a daily (or agreed periodic) basis. This significantly reduces the risk of missing e-Invoices due to small network outages or during system down-time. It also provides consistency and allows the receiver to put processes in place to track file activity, reacting accordingly when files are not received within a specified time period.

2.4. CUSTOMER AGREEMENT TO RECEIVE ELECTRONIC INVOICES

A customer agreement to receive electronic invoices is generally required across the EU. It is recommended that trading parties using e-Invoicing formalise the agreement in a document, to prove the existence of the agreement if requested by tax authorities. Agreement between parties regarding the data format, standards and transport means may be included.
CHAPTER 2 - BEST PRACTICES FOR E-ARCHIVING

1. SUPPLIER AND RECEIVER RESPONSIBILITIES

During the storage period, trading parties must be able to reproduce the original invoice data - the data itself, not the formatting - from their respective storage systems in a readable format. (For more information about e-Archiving legal compliance, see Section 4 of the Guide).

Additionally, trading parties must:

   A) readily be able to produce invoice information as requested and be able to obtain it from third party providers, where applicable;
   B) keep history files of where to find appropriate details from any particular time in the past, if a visiting officer requires it.

This also applies to scanned images of paper documents used and stored as electronic records for VAT purposes.

CHAPTER 3 - TECHNOLOGY CHANGES

Companies might need to change technology used in e-Invoicing and e-Archiving under two scenarios:

   A) if an unforeseen problem arises (temporarily) with the e-Invoicing technology or process, during normal trading activity, that makes it technically difficult or impossible to continue using e-Invoicing systems. Trading parties might need to switch back to a paper process - including storage - until the problems are resolved; or
   B) when a company changes technology in order to upgrade its systems or e-Invoicing capability.

In either case, it is important to document the old, interim, or new processes in detail. Tax auditors must be reassured that the appropriate controls have been applied, regardless of the technology used.
Section Four
Legal Compliance
Section Four: Legal Compliance

1. INTRODUCTION
This section of the Guide addresses the need for legal transparency and clarity. The focus is on VAT requirements for e-Invoicing and e-Archiving, which vary in different European countries.

When planning to adopt e-Invoicing technologies, any enterprise has to be aware of the legal framework that EU Member States have established for electronic invoicing and storage of invoice data.

Even when an SME decides to use one or more service or solution provider(s) to automate the e-Invoicing process, it must consider that each trading party (SMEs, large corporations, etc.) is responsible, in its role as a taxpayer, for the validity of its e-Invoicing process which feeds into returns and claims. Solution and service providers are never liable.

In the first part of this section the requirements at European level are described, respectively, for e-Invoicing and archiving of invoice data. Country specific information is provided in Figure 4.1 and 4.2, where key legal requirements have been listed for 23 European countries.

In the second part of this section, potential future changes are identified, with particular attention to the current proposal of the European Commission to amend the VAT Directive, which represents a significant effort to simplify and harmonise the legal framework for e-Invoicing.

2. E-INVOICING COMPLIANCE IN EUROPE
An invoice (paper or electronic) generally has a dual function (from a compliance perspective): to ensure and to document that the correct VAT amount has been charged by the supplier and, to exercise a right to deduction by the customer (VAT charged or deducted). Tax authorities have to verify the correctness of the VAT treatment and of the VAT amount included in the invoice data, which consists of all the data elements necessary to provide sufficient evidence of the transaction17.

Invoices (paper and electronic) include relevant information and are part of an interlocking set of documents that tax auditors typically use to conduct their inspections.

Where a transaction is liable for VAT18, the supplier and the customer are obliged, respectively, to issue and receive a valid invoice (paper or electronic). A valid invoice has to meet certain conditions, specifically in terms of content (please see ANNEX 1). For electronic invoices, two additional conditions must be fulfilled to ensure VAT compliance:

A) acceptance by the customer; and
B) guarantee of authenticity of origin and integrity of content.

The EU VAT Directive19 is the European reference point for compliance of electronic invoicing for VAT purposes. In particular, the Directive requires that for electronic invoices the authenticity of the origin and the integrity of content must be guaranteed using one of the three following options:

17 A formal invoice is not required in certain jurisdictions or trading environments (e.g. retail and B2C transactions)
18 An obligation exists also when the supplier is not liable for any VAT (i.e. exemptions)
1. by means of an Advanced Electronic Signature; Member States* may ask for the advanced electronic signature to be based on a qualified certificate created by a secure-signature-creation device;

2. by means of Electronic Data Interchange (EDI) if the agreement relating to the exchange provides for the use of procedures guaranteeing the authenticity of the origin and integrity of the data (Member States may also, subject to conditions which they impose, require that an additional summary document on paper be sent);

3. by ‘other means’, subject to acceptance by the Member States* concerned.

For the purpose of clarification, Options 2 and 3 above relate to possible methods of automating the invoicing process while Option 1 simply relates to a specific type of additional security that may need to be added to the process.

From an e-Invoicing perspective, ‘Authenticity’ is the certainty that the document actually came from the sender, where ‘Integrity’ is the certainty that the invoice data was not changed or tampered with in transit.

*See Figure 4.1 for the country specific e-Invoicing requirements.

2.1. ADVANCED ELECTRONIC SIGNATURES AND QUALIFIED CERTIFICATES

According to the VAT Directive, companies can use advanced electronic signatures in order to ensure the authenticity of the origin and integrity of content of an e-Invoice.

An electronic signature\(^{20}\) is defined as ‘data in electronic form which are attached to or logically associated with other electronic data and which serve as a method of authentication’. Any type of electronic data, including the use of unique sender and receiver identifiers or a scanned human signature, which is attached to the electronic data, is considered an electronic signature.

An advanced electronic signature is an electronic signature that meets all four of the following requirements:

A) It is uniquely linked to the signatory
   A signatory is a person who holds a signature-creation device, which is configured software or hardware used to implement the signature-verification-data (such as codes or public cryptographic keys used for the purpose of verifying an electronic signature) and acts either on his own behalf or on behalf of the natural person or legal entity he represents. A third party can sign on behalf of another company (i.e. outsourcing);

B) It is capable of identifying the signatory
   Software or hardware is required to verify specific data (called signature verification data) that are linked (or correspond) to a specific person/entity and to confirm the identity;

C) It is created using means that the signatory can maintain under his sole control
   This requires that the person/company who holds the device is using unique data (codes, or private cryptographic keys) to create the signature and that both data and device are in its sole control; and

D) It is linked to the data to which it relates in such a manner that any subsequent change of the data is detectable.

The first three requirements refer to authenticity of origin, while the forth refers to integrity of content.

The VAT Directive also allows Member States to require an Advanced Electronic Signature based on a qualified certificate and created by a secure-signature-creation-device\(^{21}\), which is commonly defined as a Qualified Electronic Signature.

While a certificate is an electronic attestation that links signature-verification-data to a person confirming the identity of that person, a qualified certificate is a certificate which meets the following requirements\(^{22}\):

- A) an indication that the certificate is issued as a qualified certificate;
- B) the identification of the certification-service-provider and the State in which it is established;
- C) the name of the signatory or a pseudonym, which shall be identified as such;
- D) provision for a specific attribute of the signatory to be included if relevant, depending on the purpose for which the certificate is intended;
- E) signature-verification data which correspond to signature-creation data under the control of the signatory;
- F) an indication of the beginning and end of the period of validity of the certificate;
- G) the identity code of the certificate;
- H) the advanced electronic signature of the certification-service-provider issuing it;
- I) limitations on the scope of use of the certificate, if applicable; and
- J) limits on the value of transactions for which the certificate can be used, if applicable.

and is provided by a Certification service provider, who fulfills the following requirements:

- A) demonstrate the reliability necessary for providing certification services;
- B) ensure the operation of a prompt and secure directory and a secure and immediate revocation service;
- C) ensure that the date and time when a certificate is issued or revoked can be determined precisely;
- D) verify, by appropriate means in accordance with national law, the identity and, if applicable, any specific attributes of the person to which a qualified certificate is issued;
- E) employ personnel who possess the expert knowledge, experience, and qualifications necessary for the services provided, in particular competence at managerial level, expertise in electronic signature technology and familiarity with proper security procedures; they must also apply administrative and management procedures which are adequate and correspond to recognised standards;
- F) use trustworthy systems and products which are protected against modification and ensure the technical and cryptographic security of the process supported by them;
- G) take measures against forgery of certificates, and, in cases where the certification-service-provider generates signature creation data, guarantee confidentiality during the process of generating such data;
- H) maintain sufficient financial resources to operate in conformity with the requirements laid down in the Directive, in particular to bear the risk of liability for damages, for example, by obtaining appropriate insurance;
- I) record all relevant information concerning a qualified certificate for an appropriate period of time, in particular for the purpose of providing evidence of certification for the purposes of legal proceedings. Such recording may be done electronically;
- J) not store or copy signature-creation data of the person to whom the certification-service-provider provided key management services;
- K) before entering into a contractual relationship with a person seeking a certificate to support his electronic signature inform that person by a durable means of communication of the precise terms and conditions regarding the use of the certificate, including any limitations on its use, the existence of a voluntary accreditation scheme and procedures for complaints and dispute settlement. Such information, which may be transmitted electronically, must be in writing and in readily understandable language. Relevant parts of this information must also be made available on request to third-parties relying on the certificate;
- L) use trustworthy systems to store certificates in a verifiable form so that:
  - only authorised persons can make entries and changes,

\(^{21}\) A 'secure-signature-creation-device' means a signature-creation device which meets the requirements laid down in ANNEX III of the Directive 1999/93/EC.

\(^{22}\) ANNEX 1 of the Directive 1999/93/EC.
• information can be checked for authenticity,
• certificates are publicly available for retrieval in only those cases for which the certificate-holder's consent has been obtained, and
• any technical changes compromising these security requirements are apparent to the operator.

Some of the countries that require Qualified Electronic Signatures are: Estonia, Greece, Italy, Portugal, Switzerland, Hungary, Germany, Latvia, Poland, Slovenia and Spain.

For practical guidance about e-Signatures and the various levels of assurance they provide, see Section 2, Chapter 2 of this Guide.

2.2. ELECTRONIC DATA INTERCHANGE (EDI)

The Commission Recommendation relating to the legal aspects of electronic data interchange defines EDI23 as ‘the electronic transfer, from computer to computer, of commercial and administrative data using an agreed standard to structure an EDI message’.

In practice, the requirements for compliance of an EDI solution can be summarised as follows:

A) Electronic transfer, from computer to computer, of commercial and administrative data. There must exist a transfer of electronic data between computers, where the transfer can be achieved in different ways24 and the parties determine the method of communication to be used. The type of information exchanged in an invoice message is usually commercial and administrative.

B) The data exchanged must be based on agreed standards, which relates to the use of recognised European and international standards approved by standardisation bodies and made publicly available (such as EDIFACT or commonly used XML based standards). In all cases, the parties must reach an agreement on the standard to be applied and determine the level of details and specifications required.

C) Exchange of an EDI message, consisting of a set of segments (representing information to be included: such as the supplier name, VAT rates, amount, etc.), structured using an agreed standard, prepared in a computer readable format and capable of being automatically and unambiguously processed. EDI messages should be processed as soon as possible after receipt without manual intervention (unless an error occurs in the processing which requires manual intervention to change procedures).

D) Use of procedures (i.e. verification) guaranteeing the authenticity of origin and integrity of content to ascertain that any EDI message received is complete and has not been corrupted, are mandatory for EDI messages. Recommended control measures include specific checks, acknowledgement of receipt, reference number, identification, etc. The level of controls clearly depends on the level of importance of a transaction. Member States generally do not impose specific procedures in this respect and leave companies with the needed flexibility.

E) Member States may, subject to conditions which they impose, require that an additional summary document be sent.

The summary invoice lists all electronically sent invoices during calendar months. The summary invoice needs to be either in paper form or, in electronic form, depending on the country requirements (see below).

<table>
<thead>
<tr>
<th></th>
<th>AUSTRIA</th>
<th>FRANCE</th>
<th>GREECE</th>
<th>HUNGARY</th>
<th>ROMANIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Electronic</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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23 As defined in Article 2 of Commission Recommendation 1994/820/EC of 19 October 1994 relating to the legal aspects of electronic data interchange.

24 Including, but not limited to, transfer of data over the Internet by HTTPS, SOAP, ASN.1, etc.
In Greece, a summary is required only for transactions with parties established / residents abroad (in the EU or third countries) and, it has to be on paper.

In Germany, the requirement for an additional summary document for EDI-based invoices has been abolished from January 1, 200925.

In Switzerland, although EDI is accepted as a VAT compliant option to guarantee authenticity and integrity, monthly (or other recurrent) summary invoice statements must be signed with an e-signature based on a qualified certificate.

F) The existence of an “Interchange Agreement”.

The EC Recommendation stipulates the need for an Agreement which includes the legal provisions to be addressed when using EDI, supplemented by a Technical Annex which includes all technical specifications (and procedures) agreed by the parties. The European Commission recommends the use of the ‘European Model EDI Agreement’ - as an example of an Interchange Agreement. (For practical guidance see point 4.1 in Section 2, Chapter 1)

The Agreement can be adopted by the parties as a bilateral document or, it can also be used as a multilateral agreement and be adopted by a group of companies, community of users or by any user group. The Technical Annex should include operational requirements (operational equipment, means of communication, EDI message standards and codes); processing and acknowledgement of EDI messages; security of EDI messages; time limits; procedures for tests and trials to establish and monitor the adequacy of the technical specifications and requirements.

While the use of EDI is generally considered expensive for SMEs, it has to be noted that recent technology developments allow for cost effective implementations of EDI solutions.

From a legal perspective, an EDI solution relates to the agreed terms and conditions to be used by trading parties when exchanging electronic data, therefore, depending on the type of technology companies would like to use to implement it, the related costs will vary.

The EDI option for guaranteeing VAT compliance of e-Invoicing is generally accepted by EU Member States (see Figure 4.1 for country specific information).

For practical guidance on how to get started with an EDI implementation, see Section 2 of this Guide.

2.3. OTHER MEANS

A number of EU Member States do not impose any specific technology solution to ensure authenticity and integrity. In those countries, companies are free to use any technology they consider appropriate to automate their invoicing process, while remaining responsible as taxpayers for the validity of their e-Invoicing process. (See Figure 4.1 for country specific information).

The rational behind this option is that specific technologies imposed by regulation may not be as effective as the use of business controls to ensure authenticity of origin and integrity of content of e-Invoices. Moreover, technology develops quickly and it is not feasible for any legal framework to change at the same speed. Therefore, specific technology solutions cannot be relied upon to satisfy legal requirements.

In general, when using other electronic means to guarantee the authenticity and integrity of an e-Invoice, companies must to ensure the following:

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25 With the Tax Bureaucracy Reduction Act, legislators have abolished the requirement of an additional billing summary in electronic (EDI-based) invoicing for supplies rendered in 2009 or later.
A) a satisfactory level of control over completeness and accuracy of the invoice data;
B) timeliness of processing, prevention or detection of possible corruption of data during transmission;
C) prevention of duplication of processing.

Recommended Best Practices for providing a satisfactory level of control over the invoicing process are described in Section 3 of this Guide.

Certain EU countries, like the UK for example, provide a list of recommended controls and good practices that companies should implement in order to guarantee the authenticity and the integrity of e-Invoices. Similar controls and procedures are currently adopted in most EDI implementations as well, as they constitute generally accepted business practices and provide reassurance to tax authorities.

In The Netherlands, since February 2009, the use of email as a transport means for invoice data file without using advanced electronic signatures is considered compliant with VAT law. Enterprises can freely decide the specific method of storage of electronic invoices and previous approval of tax authorities to use an alternative method (“other means”) has been abolished. The receiver agreement to accept electronic invoices is still required, however, the agreement does not need to be explicit.

While PDF invoices are considered e-Invoices for the purposes of following appropriate legislation, they are not an end-to-end integrated solution but simply a method of eliminating the physical delivery of invoices. It has to be noted that the exception to this is described in Section 2, Chapter 3 of the Guide: Intelligent PDF.

3. EU COUNTRIES WHERE E-INVOICING IS MANDATORY FOR THE PUBLIC SECTOR

The commitment of the public sector will play a key role in fostering the adoption of electronic invoicing in the European landscape.

Public Administrations will act as key players to:

- encourage migration from paper to electronic invoices, especially for SMEs;
- promote the automation of the complete order-to-payment cycle, including reconciliation, document archiving, etc.

EU countries where e-Invoicing is mandatory when the recipient is the Public sector are: Denmark (since 2005); Spain (by November 2010); and Finland (by the end of 2010). In Sweden, the government decided that all government agencies shall handle invoices electronically by July 2008. In Italy, the law “Finanziaria 2008” introduced the e-Invoice obligation in the Business-to-Government domain. However, the Italian community is still waiting for the executive decree that will define the technical requirements (e.g. standard to be used) and timelines to be followed for sending e-Invoices to public administrations. The decree is expected to be published by the end of 2009.

In countries such as Denmark, the government is providing companies with the tools needed to exchange e-Invoices with the public sector.

4. E-ARCHIVING COMPLIANCE IN EUROPE

Taxable persons supplying goods or services must store purchase invoices and copies of sales invoices. The same obligation exists for customers generating invoices (self-billing) and for third parties (outsourcing).

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26 HMRC Notice 700/63 Electronic Invoicing, section 4.4.
27 For more information please see: http://www.epractice.eu/en/news/292390
In order to allow tax authorities to perform their work and inspections, invoices whether electronic or paper (and other relevant documents) must be stored according to the national VAT rules.

Complete access to invoice data and other transaction documents must be allowed to tax auditors, within a reasonable timeframe, by taxable persons exchanging invoices.

Taxable persons\(^\text{28}\) must, for the entire storage period, guarantee:

- the authenticity of origin of the invoice;
- the integrity of invoice content (i.e. invoice information should not be altered); and
- readability.

Member States may require that invoices be stored in the original format in which they were sent (or made available), whether paper or electronic.

Where invoices are stored by electronic means, the Member State may require that the data guaranteeing the authenticity and the integrity of their content must be stored as well.

In particular, Member States can make this requirement when invoice data is received or sent using advanced electronic signatures or, EDI. In these cases, a company may be required to store not only the invoice data, but also the advanced electronic signature; and/or the qualified certificate. If EDI is used, the data providing evidence of authenticity and integrity (e.g. verification messages) must also be retained.

This requirement is one of the most difficult to meet for electronic storage of invoice data. In practice it requires companies to maintain the same technology for the whole storage period, which in certain countries could be up to 10 years.

It is essential that the content (i.e. the meaning of the invoice data) is reproducible throughout the storage period just as at the time of its transmission.

Different mandatory storage periods are required by Member States (see Figure 4.2).
5. CROSS-BORDER E-INVOICING AND E-ARCHIVING

The effort required for being compliant may appear more difficult when enterprises are doing business cross-border in the EU as uncertainty exists with relation to which country’s rules apply. The rules on invoicing are those applicable in the Member State where the supply takes place for VAT purposes (this can be in the Member State of the supplier or the customer, depending on the type of transaction).

It must also be noted that e-Invoicing is at the crossroads of other legal fields, like corporate tax, accounting and privacy law and these areas should be dealt with just as they would with paper invoices (for example, data privacy considerations regarding location of invoice storage, archive period, etc.).

6. E-INVOICING AND E-ARCHIVING REQUIREMENTS IN THE EU

Even though the VAT Directive was meant to create a common European legal framework, Member States have applied the three options for guaranteeing authenticity and integrity of e-Invoicing in different ways, thus creating barriers, complexities and compliance costs.

A non-exhaustive list of legal requirements for e-Invoicing and e-Archiving and how they are implemented in EU Member States is illustrated in Figure 4.1 and Figure 4.2. This information provides general guidance only and does not replace professional advice.

Please note that the storage period required by law for VAT purposes might be different from the storage period required by the Accounting Law or Direct tax, etc. For example, in Spain the storage period required for VAT purposes is 4 years, while the Accounting law requires a 6 years storage period.

When the storage period required for VAT purposes is shorter than the period required by Accounting law, the latter will prevail. In Figure 4.2 the number of years required for VAT purposes has been included when equal to (or longer than) the period established by Accounting law. In countries where the storage period required by the Accounting law is longer, the latter has been included.

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### Figure 4.1 - Country specific requirements for e-Invoicing in Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>EDI accepted</th>
<th>E-signature type - mandatory only when EDI not used and other means not accepted</th>
<th>Other means accepted</th>
<th>Customer agreement required</th>
<th>Notification to authorities required before issuing e-invoices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Yes</td>
<td>AES</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Belgium</td>
<td>Yes</td>
<td>AES</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Denmark</td>
<td>Yes</td>
<td>AES</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Estonia</td>
<td>Yes</td>
<td>QES</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Finland</td>
<td>Yes</td>
<td>Any</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>France</td>
<td>Yes</td>
<td>AES</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
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<td>AES</td>
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<td>Yes</td>
<td>No</td>
</tr>
<tr>
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<tr>
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<td>Yes (E)</td>
<td>No</td>
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<tr>
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<td>Ireland</td>
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<tr>
<td>Norway</td>
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</tr>
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<td>Spain</td>
<td>Yes</td>
<td>QES</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

1 In Italy, the authenticity of the origin and the integrity of the content must be guaranteed also by means of a temporal reference (or ‘Timestamping’).
2 In Slovak Republic, implementary regulations to the Electronic Signature Law No. 215/2002 came into force on April 8, 2009.
3 In Hungary, a time stamp is required.
4 In Belgium, when using other means to ensure authenticity and integrity an individual authorisation is required from the Belgian Ministry of Finance.
5 In the UK, the existence of business internal controls, or good practices, when using other means, is sufficient to ensure compliance (HMRC Notice 700/63 Electronic Invoicing, June 2007).
6 Since 16 February 2009, enterprises in the Netherlands are free to choose the form (PDF, for example) and means by which electronic invoices are issued, sent and received. In practice an electronic signature or the use of EDI is not mandatory anymore. However the rules only apply to transactions within the Netherlands. When using other means, notification to authorities is not required anymore.
7 An individual authorisation is required by the Spanish tax authorities when using other means.
8 In France, it is recommended to contact and notify tax authorities when using EDI for ensuring VAT compliance.
9 In Ireland, if other means are used, the Revenue Commissioner must be notified accordingly.
## Country specific requirements for e-Invoicing: Terminology

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Data Interchange (EDI) accepted</td>
<td>Acceptance of the specific Member State of an EDI system as one of the options to comply with VAT requirements for authenticity and integrity.</td>
</tr>
<tr>
<td>Type of e-Signature - mandatory ONLY when EDI is not used and other means are not accepted.</td>
<td>Mandatory use of a specific electronic signature in a Member State to ensure compliance, required only when a company does not use an EDI system, or when the use of other electronic means is not accepted in the Member State.</td>
</tr>
<tr>
<td>AES</td>
<td>Advanced Electronic Signature</td>
</tr>
<tr>
<td>QES</td>
<td>Qualified Electronic Signature</td>
</tr>
<tr>
<td>Any</td>
<td>Acceptance of any type of e-Signature (ES, AES, QES) in the specific Member State to ensure compliance</td>
</tr>
<tr>
<td>Other means accepted</td>
<td>Member State's acceptance of other electronic means to ensure compliance. Use of EDI or any type of electronic signature is therefore not mandatory.</td>
</tr>
<tr>
<td>Customer Agreement to receive e-Invoices</td>
<td>The customer has to agree to accept e-Invoices from the sender. The agreement can be reached informally between trading partners, or in certain Member States an explicit formal agreement may be required.</td>
</tr>
<tr>
<td>(E)</td>
<td>Explicit agreement (see above)</td>
</tr>
<tr>
<td>Notification to authorities required before issuing e-Invoices</td>
<td>It refers to the need to notify national authorities before issuing e-Invoices, in specific circumstances.</td>
</tr>
</tbody>
</table>
Figure 4.2 - Country specific requirements for e-Archiving in Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>Storage period (years) required</th>
<th>Archiving in another EU country accepted</th>
<th>Archiving outside the EU accepted</th>
<th>Notification to tax authorities required for storage outside your country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>7</td>
<td>Yes</td>
<td>Yes</td>
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</tr>
<tr>
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<td>(MA)3</td>
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<td>Spain</td>
<td>6</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes8</td>
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</tbody>
</table>

1 In Italy, e-Invoices must be stored within 15 days from their issuance / receipt, by the issuer and receiver respectively.
2 For electronic invoices, storage abroad is allowed if the invoices can be accessed from Switzerland.
3 Storage is only permitted within the EU and in countries with which Denmark has legal instruments relating to mutual assistance, i.e. Norway, Iceland, Greenland and the Faeroe Islands.
4 Temporary storage is possible in an EEA or OECD country without a permission. For other countries a permission issued by the Accounting Board is needed.
5 All invoices stored in a country with which no mutual assistance exists, must also be stored by the taxable person in Greece (electronically, or on paper).
6 If the invoices are taken temporarily to a non-EEA or non-OECD country, a permission is needed.
7 In Ireland, Revenue approval required in countries with which no legal instrument exists relating to mutual assistance.
8 Prior authorization from the Authorities in Spain is required in case of invoices stored in a third country with which no legal instrument exists relating to mutual assistance.
## Country specific requirements for e-Archiving: Terminology

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Storage period (years) required</td>
<td>Mandatory period of time (years) that invoices need to be stored.</td>
</tr>
<tr>
<td>Archiving in another EU country</td>
<td>Archiving e-Invoices in another EU country is allowed.</td>
</tr>
<tr>
<td>Archiving outside the EU</td>
<td>Archiving e-Invoices outside the EU is allowed.</td>
</tr>
<tr>
<td>Notification to authorities for storage outside your country</td>
<td>Requirement to notify national authorities when e-Invoices are archived outside the national territory.</td>
</tr>
<tr>
<td>MA</td>
<td>Mutual Assistance. The aim of mutual assistance is to improve administrative cooperation between Member States. Storage of e-Invoices in another country is allowed where a Mutual Assistance treaty is established with the other country.</td>
</tr>
<tr>
<td>N/A</td>
<td>Not applicable.</td>
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EBL INSIGHT - HOW ELECTRONIC INVOICING HELPS TO REDUCE THE RISK OF FRAUD

As in the paper invoice environment, the real risk in the electronic invoicing process is not in the delivery of the data but in the matching, processing and payment of invoices by the receiver’s system. A company can be a victim of fraudulent behaviour only if it does not have the appropriate controls in place.

Security or authentication measures at the data transport level do not protect from fraudulent behaviour. If, for example, a company (or fraudster within that company) issues an e-Invoice for products that have never been produced or with different bank account details, an electronic signature will have absolutely no power to protect the receiver. Only the receiver’s internal controls and procedures will protect the receiving company.

Typical points of failure reside in the lack of data matching and verification of the supplier payment details.

In order to effectively minimise the instance of internal or external fraud, it is of paramount importance that there is an internal policy regarding segregation of duties to ensure that:

- the verification of client bank details is carried out independently (i.e. verified by person A) from the input of those details to the company master data (i.e. performed by person B);
- the verification should include a trail of the initial input and any subsequent updates to the client master data;
- the verification must be done whether the bank details are derived from an automated or manual process.

The above mentioned policy represents the most important step in reducing fraud.

For smaller companies it can be quite difficult to maintain staff levels at all times to ensure complete segregation between the receipt, input and approval of an invoice. This can leave the business and often unsuspecting employees open to fraud. Since the e-Invoicing process removes the human receipt of the invoice (along with the manual cross-referencing, approval and input to the ERP system), the risk of internal fraud is significantly reduced. Therefore, SMEs are able to carry out these automated transactions and maintain controls with a smaller number of staff.

An important part of an e-Invoicing implementation involves the exchange of identifiers between trading partners that are used to configure a series of ‘cross-reference’ tables. The purpose of these tables is to create a path for the key references contained within the sender’s invoice (master data such as: supplier ID, VAT ID, terms or product codes) to be converted to the equivalent references contained in the receiver’s system. These tables form the basis for the first stage of the identity recognition process that an invoice must pass through to be accepted by the receiver’s system.

The second stage of the invoice matching process takes place during the download to the receiver’s ERP system. This is generally a more detailed form of data recognition where matches may be required for order numbers, product details, invoice values, etc.

Invoices that fail to load during the automated matching process will be rejected and communicated to the appropriate trading partner. This is the second step in significantly reducing the risk of external fraud.

In summary, the combination of e-Invoicing adoption with a well thought out matching process and strict controls on bank account entries are key to eliminating business fraud.
7. PROPOSAL FOR A SIMPLIFIED AND HARMONISED LEGAL FRAMEWORK

On January 2009, a revolutionary and highly necessary step forward to overcoming the legal barriers hampering mass market adoption of e-Invoicing in Europe was made by the European Commission with the adoption of a proposal to amend the VAT Directive, treating paper and electronic invoices equally.

The key changes that affect electronic invoicing and storage are the following:

A) **E-signatures or EDI:** Businesses will be free to send electronic invoices under the same conditions as they would send paper invoices. The pre-conditions for sending electronic invoices by either advanced electronic signature or by electronic date interchange (EDI) are removed.

B) **Acceptance by the recipient:** this is no longer required. Normal commercial practice of tacit approval will apply.

C) **Electronic storage:** the option for Member States to require the storage of invoices in the original format is removed. This allows businesses to store paper invoices in electronic form. (This is already possible in certain EU countries)

D) **Period of storage:** the option for Member States to set the period of storage is withdrawn. A common EU storage period for VAT invoices is set at 6 years.

E) **Place of storage:** no conditions can be imposed on the place of storage other than the place of storage must allow the invoices to be available without undue delay. The requirement for invoices to be available electronically on-line when held outside of the Member State of the supplier or customer is removed.

F) **Notification of the place of storage:** this is no longer required in any circumstances.

G) **Storage by non-taxable persons:** In B2C (business to consumer) supplies, Member States currently have the option to require the private individual or nontaxable legal persons to store the invoices received. This option for Member States is withdrawn.

The Member State in which the rules are applicable when exchanging e-Invoices cross-border is now clearly defined in legislation by this proposal:

A) **Issue of an invoice**

The rules on the issue of an invoice are applicable in the Member State from which the supplier making the supply is identified for VAT.

B) **Storage of an invoice**

The rules are applicable in the Member State in which the supplier and customer are respectively identified for VAT.

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30 The current VAT Directive (article 237) required the Commission to present a proposal amending the conditions applicable to electronic invoicing in order to take account of future technological developments in that field, by December 2008.

31 Proposal for a COUNCIL DIRECTIVE amending Directive 2006/112/EC on the common system of value added tax as regards the rules on invoicing.


The EC proposal fully satisfies the needs and requirements of European enterprises for technology neutrality and simplification of the legal environment. Companies will be free to decide the type of technologies they need to automate their business processes, based on controls and procedures already in place in their organisations and in use by their trading parties.

Legislators should define the legal requirements, not technology solutions to satisfy those legal requirements. Technology should not be imposed as a "forced control" on a process. Supporting documents, controls on accounting systems and data entries/records, the data matching process and an audit trail, are the key elements to ensure a satisfactory level of business controls to tax authorities.

The Commission proposal will create a truly harmonised legal framework for e-Invoicing and storage, reduce administrative burdens, addressing fraud more effectively and allow for massive savings across Europe. If adopted by all EU Member States, the current EC Proposal will enter into force in 2013.

While substantial effort to simplify and harmonise the e-Invoicing legal framework is under way, SMEs should start planning for adoption of e-Invoicing in all EU countries taking into account the current legal environment.
Section Five: Standards

It is becoming increasingly difficult for companies to decide what type of e-Invoicing technology they should adopt and which data standards they need to support. This is due in part to the speed at which technology is changing but also to the increasing number of standards emerging within specific industries and organisations.

In this section, we aim to guide companies by providing definitions, common options and practical suggestions to make informed decisions on the best technology options.

1. TECHNICAL STANDARDS

Technical standards can be compared, in simple terms, with the languages that people use commonly to communicate with each other. As with human beings, computers need to communicate in order to exchange and understand information. The languages and rules that computers use to communicate are based on technical standards.

Each human language has its own grammar that provides the rules for creating statements correctly and a dictionary that defines the meaning of the words. Each technical standard has a type of grammar, ‘syntax’, for structuring messages correctly and a dictionary, ‘semantic’, to define the meaning of the terms.

However, computers have the ability to write statements using different syntaxes (grammatical structures) with the same semantic (meanings). This capability, a sort of interoperability, is particularly important because it allows computers which use different languages to understand the meaning of the statements they exchange - because the dictionary that they refer to is the same.

Finally, just as there are some common languages in the world that are used in several countries (for example English, French, Spanish, etc.), there are also technical standards that are used more commonly within Europe or at an international level.

2. E-INVOICING STANDARDS

E-Invoicing standards are sets of technical rules and requirements (known as specifications), used to structure electronic invoicing documents (known as messages), ensuring readability and usability (known as interoperability) between trading partners’ systems. The contents and rules for usage of the standard are often developed and supported by standards organisations who involve industry and government, at all levels, to define the business processes they must serve.

3. BENEFITS OF USING STANDARDS

The key benefit to using e-Invoicing standards is the consistent application of common terms and data structuring guidelines amongst trading partners ensuring both parties and their systems are ‘speaking the same language’. The rules of the standards are developed to promote best practices amongst partners. There is open access to these message rules and detailed definitions.

Technically, the use of standards allows for an efficient and re-usable data translation process across all trading partners. As more trading partners adopt the same standard, a common language and understanding of these terms and practices spreads throughout the business community to create a core level of integrity and interoperability.
Commonly used standards are often adopted by the software development community and eventually they become an integral part of ERP software. Bank extract file formats in ERP systems are a good example of this evolutionary process.

**EBL INSIGHT**

The alternative to using standards is an inefficient process of exchanging data in proprietary file formats. This is generally defined as the use of a simple ‘text’ or ‘flat’ file in a format that is readable only by the ERP system of one of the two trading partners. This practice promotes an environment where there is little or no common language, and therefore processes, that can be re-used across your trading partner community.

Some companies believe that using proprietary formats ‘lock them in with their customers’ while in reality, the company enforcing them is simply shifting the administrative burden to their customers or suppliers. Most e-Invoicing software will be capable of translating the most commonly used standards but will certainly not be readily able to handle a proprietary file format of one particular company.

While service providers will generally accept the administrative burden and deal with the cost of processing e-Invoicing files in ‘any’ format, these costs are real and will still need to be passed on to customers within the transaction fees.

The use of these types of unstructured data files can be problematic technically. In particular, when even minor software changes are made to the sender’s system or, when free form data fields are used in invoices that may include unreadable characters or commas (for example in a comma delimited file), the resulting data could be read incorrectly or even corrupted. It is difficult to ensure data integrity in these circumstances.

4. **COMMON GLOBAL AND REGIONAL STANDARDS**

**UN/EDIFACT**: an EDI standard developed under the United Nations and maintained by UN/CEFACT (United Nations Centre for Trade Facilitation and Electronic Business) which is used predominantly across Europe.

**ANSI X12**: an EDI standard developed by the American Standards Institute – used predominantly in North America and Asia.

**eCOM**: includes GS1 EANCOM, based on a sub-set of the UN EDIFACT standard (focusing on mandatory elements) and, GS1 XML, designed specifically for data exchanges over the Internet. GS1 is a global organisation dedicated to the design and implementation of cross-industry supply and demand chain standards.

**ebXML**: Global XML based cross-industry standards sponsored by OASIS (Organisation for the Advancement of Structured Information Standards) and UN/CEFACT.

**UBL**: XML based cross-industry standards developed by OASIS with a variety of industry data standards organisations. UBL is commonly used by the European public sector (for example, in Denmark).

**RosettaNet**: an XML based standard developed by RosettaNet (a consortium of major computer, electronics, semi-conductor, and logistics companies) and used predominantly in North America and Asia, with growing use in Europe.

**NOTE**: RosettaNet is not only a standard for messaging (invoices, payments, etc.) but also for file transfer, encryption, and the entire end-to-end process.
5. INDUSTRY SPECIFIC STANDARDS

Many communities have developed standards based on business rules or practices specific to their industry or sector. Some examples are:

**ODETTE**: an EDI standard developed by a consortium (Organisation for Data Exchange by Tele Transmission in Europe) specifically for use in the automotive industry.

**PIDX**: EDI, XML, and FTP standards developed by the Petroleum Industry Data Exchange Committee for use in the oil and gas industry.

**CIDX**: EDI based ‘Chem e-standards’ developed for the Chemical Industry, transitioned in 2009 to the Open Applications Group Inc. (OAGI, an organisation dedicated to developing cross-industry standards) and the Chemical Information Technology Centre (ChemITC).

6. EMERGING STANDARDS

**UN/CEFACT Cross Industry Invoice (CII) version 2**: UN/CEFACT recently developed version 2 of the Cross Industry Invoice (CII) standard.

**CBI**[^35]: an XML based standard widely used in Italy and developed by the CBI Consortium. CBI ISO20022 and SEPA compliant standards include payments, collections, e-Invoice exchange and invoice financing. In particular CBI e-Invoice standard is aligned with UN/CEFACT CII semantic data model and with ISO20022 financial services thus assuring full process integration through the entire financial value chain domain.

**Facturae**: an XML based, e-Invoicing standard developed jointly by the Spanish Banking Association, Ministry of Industry, and the Spanish Tax Agency, for use in transactions with the public sector.

**ebInterface**: the Austrian XML standard for electronic invoicing[^36].

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[^34]: For information about the CII standard, see: [http://www.unece.org/press/pr2009/09trade_p08e.htm](http://www.unece.org/press/pr2009/09trade_p08e.htm)

[^35]: For information about the CBI e-Invoice and financial messaging standard, please see [www.cbi.org.eu](http://www.cbi.org.eu)

7. STANDARDS CONVERGENCE

Convergence towards a common global standard should be the final objective of the standardisation efforts in every country and industry.

Developments in this direction are currently under way between UN/CEFACT and UBL. In 2006, UN/CEFACT recognised UBL 2 as appropriate first-generation XML documents for e-Business. It was agreed that future UN/CEFACT deliverables will constitute the upgrade path for UBL, while OASIS will produce no further major versions of UBL (past UBL 2).

In November 2008, an informal meeting was held at the European Commission premises with the participation of several standards body representatives. During the meeting it was confirmed that future developments of UBL will be included in the various UN/CEFACT activities. In particular, an alignment of the data elements between the UBL and UN/CEFACT CII standards was achieved during the CEN/ISSS Workshop-BII, however a complete convergence has yet to be reached37.

8. TYPES OF MESSAGES

Message is the term used to describe the type of document that is being transmitted (for example: Invoice, Order Request, Order Response, Remittance Advice etc.).

Documents most commonly used in an e-Invoicing environment are Invoices, Credit Notes, and Debit Notes. In most standards, the ‘Invoice Message’ includes a code that identifies which documents are Invoices, Credit Notes, or Debit Notes.

Detailed or Summary Acknowledgements are automated messages that are used to confirm the receipt of a transmission.

Some e-Invoicing network environments are able to utilise additional message types in order to support the entire e-Invoice exchange business process between trading parties. An example would be “business status messages”, used by the receiver to inform the sender about the acceptance/rejection of the invoice. These messages may or, may not, be automated, but are generated on the basis of the e-Invoice data verification (e.g. total to be paid, unit price, quantity etc.).

9. DATA TRANSPORT METHODS

**FTP**: File Transfer Protocol is a simple and efficient way to transfer files between computers across the Internet. FTP client software is normally provided with any operating system but the more user friendly versions are accessible as freeware. In order to connect to an FTP server, an ID and password must be issued by the administrator.

**SFTP**: SSH (Secure Shell) File Transfer Protocol is a more secure method of transferring files over the internet using FTP as above but within a secure channel. It uses encryption to ensure integrity and confidentiality of the data and authenticates the computer and user remotely.

**VAN**: A value added network is a secured private network (i.e. closed network) offered generally by a third party service provider to support data file transfers. The service often provides an audit trail including archives of all activity, such as: file and user authentication, tools for end users to track / trace or manage files; and the provision of secured external ‘mailboxes’ for pick up / delivery of data. VAN services may also provide data translation, conversion, and error identification.

**EDIINT (inc. AS1, AS2 AS3)**: Communication standard for the transfer of EDI or XML messages based on Internet protocols, providing for all of the security, non-repudiation, audit trails, file management, partner mailboxes, and acknowledgement messaging, traditionally provided by value added networks.

**E-mail**: A generally unencrypted method of exchanging messages and attachments within or across networks including the Internet. Based on SMTP (Simple Mail Transfer Protocol) and MIME (Multi-purpose Internet Mail Extensions).

**S-HTTP**: Secure Hypertext Transfer Protocol is a message-oriented communications protocol to protect sensitive data. It is used commonly for e-Invoicing web applications.

NOTE: The term EDI is often associated with the exchange of structured files over value added networks while the term XML is often associated with file transfer protocols over the Internet. These associations are historical and have become increasingly invalid. The method of file transfer that you choose is entirely unrelated and separate from the decision to use structured files based on EDI or XML standards (for clarification, please see the legal definition of ‘EDI’ in Section 4 of this Guide).

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**EBL INSIGHT**

Individual businesses need to decide which method of file transfer fits best with their activities. Companies who exchange data with large numbers of trading partners often opt for software or services that organise, track, and report on all activities, including non-events such as ‘files not received’ from a customer within a given time frame. Companies with more manageable levels of activity may choose to use more cost effective or simpler methods.

In either case, there are varying levels of security available whether within the file transfer method itself or as an additional step in the file transfer process (see Section 2: Electronic Signatures).

Businesses first must decide whether they consider their data:

- **A)** to be at low risk because they and their partners have the appropriate business controls in place;
- **B)** to be extremely sensitive or confidential (for example if their pricing is not published in the public domain), in which case, they may want to consider using a ‘closed network’ solution.
Annexes
Annex 1

CONTENT OF AN INVOICE FOR VAT PURPOSES

The following details are required for VAT purposes on invoices:

1. the date of issue;
2. a sequential number, based on one or more series, which uniquely identifies the invoice;
3. the VAT identification number referred to in Article 214 under which the taxable person supplied the goods or services;
4. the customer's VAT identification number, as referred to in Article 214, under which the customer received a supply of goods or services in respect of which he is liable for payment of VAT, or received a supply of goods as referred to in Article 138;
5. the full name and address of the taxable person and of the customer;
6. the quantity and nature of the goods supplied or the extent and nature of the services rendered;
7. the date on which the supply of goods or services was made or completed or the date on which the payment on account referred to in points (4) and (5) of Article 220 was made, in so far as that date can be determined and differs from the date of issue of the invoice;
8. the taxable amount per rate or exemption, the unit price exclusive of VAT and any discounts or rebates if they are not included in the unit price;
9. the VAT rate applied;
10. the VAT amount payable, except where a special arrangement is applied under which, in accordance with this Directive, such a detail is excluded;
11. in the case of an exemption or where the customer is liable for payment of VAT, reference to the applicable provision of this Directive, or to the corresponding national provision, or any other reference indicating that the supply of goods or services is exempt or subject to the reverse charge procedure;
12. in the case of the supply of a new means of transport made in accordance with the conditions specified in Article 138 (1) and (2)(a), the characteristics as identified in point (b) of Article 2(2);
13. where the margin scheme for travel agents is applied, reference to Article 306, or to the corresponding national provisions, or any other reference indicating that the margin scheme has been applied;
14. where one of the special arrangements applicable to second-hand goods, works of art, collectors' items and antiques is applied, reference to Articles 313, 326 or 333, or to the corresponding national provisions, or any other reference indicating that one of those arrangements has been applied;
15. where the person liable for payment of VAT is a tax representative for the purposes of Article 204, the VAT identification number, referred to in Article 214, of that tax representative, together with his full name and address.

38 Art 226 of the COUNCIL DIRECTIVE 2006/112/EC of 28 November 2006 on the common system of value added tax.
Annex 2

E-INVOICING SMES SURVEY

During the spring 2008 PricewaterhouseCoopers (PwC) conducted a study for the Commission on the use of e-invoices in Europe. In April 2008, the PwC questionnaire was sent to Finnish SMEs and 694 replies were received, giving a fairly representative picture of the situation in Finland. Members of the EC Expert Group on e-Invoicing sent a similar questionnaire (adding a few questions) to SMEs in Austria, Italy and Spain. The number of replies was lower in these countries: 126 in Austria, 60 in Italy and 34 in Spain. However, the replies show similar pattern behaviours among all SMEs.

The working group who prepared the study and translated the questionnaire for the different countries consisted of Carmen Ciciriello, Liliana Fratini Passi, Maria-Jesus Garcia-Martin, Gerhard Laga and Risto Suominen.

1. HOW MANY INVOICES DOES YOUR ORGANISATION ISSUE ANNUALLY %?

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<td>5001 -</td>
<td>23,2</td>
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2. IS YOUR ORGANISATION CURRENTLY SENDING ELECTRONIC INVOICES TO ITS CUSTOMERS?

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<td>Not yet, but we plan to start sending electronic invoices to our customers</td>
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3. IF YES, IN WHICH FORM?

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<td>Other</td>
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4. **How do you archive e-invoices?**

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<td>DVD</td>
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5. **Has your organisation ever been requested, by its customers, to send invoices electronically?**

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<td>No</td>
<td>59,7</td>
<td>59,7</td>
<td>67,2</td>
<td>72,7</td>
</tr>
</tbody>
</table>

6. **Which type of e-invoicing solution is your organisation using or planning to use?**

<table>
<thead>
<tr>
<th></th>
<th>AU</th>
<th>FI</th>
<th>IT</th>
<th>SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>You send an electronic invoice, from your accounting application, directly to your customer</td>
<td>33</td>
<td>29,6</td>
<td>36,4</td>
<td>42,9</td>
</tr>
<tr>
<td>You send an electronic invoice, from your accounting application, via an e-Invoicing platform, to your customer</td>
<td>7</td>
<td>17,7</td>
<td>11,4</td>
<td>7,1</td>
</tr>
<tr>
<td>Name of the e-Invoicing platform:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You use the portal of your customer, where you enter the invoice data into a web form</td>
<td>1,7</td>
<td>2,4</td>
<td>2,3</td>
<td>7,1</td>
</tr>
<tr>
<td>You use the portal of an e-Invoicing platform, where you enter the invoice data into a web form, and the e-Invoicing platform sends the electronic invoice to your customer</td>
<td>1,7</td>
<td>4,4</td>
<td>0</td>
<td>3,6</td>
</tr>
<tr>
<td>Name of the e-Invoicing platform:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You send a PDF via email</td>
<td>63,5</td>
<td>46,2</td>
<td>54,5</td>
<td>71,4</td>
</tr>
<tr>
<td>Other being</td>
<td>13</td>
<td>13,1</td>
<td>11,4</td>
<td>0</td>
</tr>
</tbody>
</table>

7. **What are potential benefits of e-invoicing for the sender?**

<table>
<thead>
<tr>
<th></th>
<th>AU</th>
<th>IT</th>
<th>SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost reduction</td>
<td>82,9</td>
<td>84,5</td>
<td>93,9</td>
</tr>
<tr>
<td>Increased efficiency</td>
<td>77,2</td>
<td>86,2</td>
<td>63,6</td>
</tr>
<tr>
<td>Faster customer payments</td>
<td>43,9</td>
<td>24,1</td>
<td>45,5</td>
</tr>
<tr>
<td>Less customer disputes</td>
<td>11,4</td>
<td>17,2</td>
<td>21,2</td>
</tr>
<tr>
<td>In tune with customer preferences</td>
<td>30,9</td>
<td>13,8</td>
<td>91,1</td>
</tr>
<tr>
<td>There are no benefits</td>
<td>2,4</td>
<td>1,7</td>
<td>0</td>
</tr>
<tr>
<td>Other being</td>
<td>8,9</td>
<td>1,7</td>
<td>0</td>
</tr>
</tbody>
</table>
8. **WHAT ARE POTENTIAL BENEFITS FOR THE RECEIVER OF E-INVOICES?**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>AU</th>
<th>IT</th>
<th>SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost reduction</td>
<td>64</td>
<td>66,1</td>
<td>56,3</td>
</tr>
<tr>
<td>Increased efficiency</td>
<td>77,6</td>
<td>93,2</td>
<td>78,1</td>
</tr>
<tr>
<td>Less customer disputes</td>
<td>13,6</td>
<td>32,2</td>
<td>40,6</td>
</tr>
<tr>
<td>In tune with customer preferences</td>
<td>24</td>
<td>10,2</td>
<td>9,4</td>
</tr>
<tr>
<td>There are no benefits</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>3,4</td>
<td>3,1</td>
</tr>
</tbody>
</table>

9. **WHAT DO YOU REGARD AS POTENTIAL PROBLEMS OF ELECTRONIC INVOICING?**

<table>
<thead>
<tr>
<th>Problem</th>
<th>AU</th>
<th>FI</th>
<th>IT</th>
<th>SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complexity</td>
<td>27</td>
<td>18,9</td>
<td>23,9</td>
<td>21,4</td>
</tr>
<tr>
<td>Expensive/high investment required</td>
<td>12,3</td>
<td>17,5</td>
<td>15,6</td>
<td>11,1</td>
</tr>
<tr>
<td>Concerns over return on investment</td>
<td>14,2</td>
<td>9,2</td>
<td>13,9</td>
<td>14,8</td>
</tr>
<tr>
<td>Readiness/compatibility of internal systems</td>
<td>30,4</td>
<td>34,6</td>
<td>36</td>
<td>20</td>
</tr>
<tr>
<td>Customer compatibility/readiness</td>
<td>36</td>
<td>51,8</td>
<td>23,9</td>
<td>20,7</td>
</tr>
<tr>
<td>Legal uncertainty concerning the acceptance of the invoice in different Member States.</td>
<td>46,8</td>
<td>9,4</td>
<td>21,4</td>
<td>12</td>
</tr>
<tr>
<td>There are no barriers</td>
<td>10,3</td>
<td>11,6</td>
<td>20,8</td>
<td>15</td>
</tr>
<tr>
<td>Other:</td>
<td>23,7</td>
<td>10,3</td>
<td>0</td>
<td>15,4</td>
</tr>
</tbody>
</table>

10. **DOES YOUR ORGANISATION USE ANY OF THE FOLLOWING E-PROCUREMENT SERVICES?**

<table>
<thead>
<tr>
<th>Service</th>
<th>AU</th>
<th>FI</th>
<th>IT</th>
<th>SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Catalogue Services: you provide your customers with electronic product information or you use electronic product information from your suppliers</td>
<td>49,3</td>
<td>43,6</td>
<td>27,5</td>
<td>58,8</td>
</tr>
<tr>
<td>Electronic Ordering Services: you receive orders from your customer electronically or you send electronic orders to your suppliers</td>
<td>65,2</td>
<td>76,6</td>
<td>32,5</td>
<td>58,8</td>
</tr>
<tr>
<td>Electronic Payment Services: you pay your supplier electronically</td>
<td>65,2</td>
<td>56,5</td>
<td>90</td>
<td>70,6</td>
</tr>
</tbody>
</table>
11. Which functionalities would you see as essential in an E-Invoice Portal (i.e. a portal where you enter the invoice data into a web form)?

<table>
<thead>
<tr>
<th>Functionality</th>
<th>AU</th>
<th>FI</th>
<th>IT</th>
<th>SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create invoice and save as draft</td>
<td>78,8</td>
<td>73,6</td>
<td>76,9</td>
<td>80,6</td>
</tr>
<tr>
<td>Edit (draft) Invoice and Submit invoice</td>
<td>78,8</td>
<td>65,6</td>
<td>69,2</td>
<td>64,5</td>
</tr>
<tr>
<td>Send credit / debit notes</td>
<td>76,9</td>
<td>45,4</td>
<td>71,2</td>
<td>45,2</td>
</tr>
<tr>
<td>Resend invoice</td>
<td>80,8</td>
<td>49,8</td>
<td>61,5</td>
<td>51,6</td>
</tr>
<tr>
<td>Search and view archived invoices for a limited number of time</td>
<td>31,7</td>
<td>28,9</td>
<td>32,7</td>
<td>54,8</td>
</tr>
<tr>
<td>Search and view archived invoices for the legally required period of time (e.g. 10 years)</td>
<td>76</td>
<td>46,1</td>
<td>65,4</td>
<td>74,2</td>
</tr>
<tr>
<td>Check status of invoices (received by customer, approved, to be paid in X days, paid, …)</td>
<td>69,2</td>
<td>40,6</td>
<td>67,3</td>
<td>74,2</td>
</tr>
<tr>
<td>Download the legal invoice (e.g. signed PDF)</td>
<td>86,5</td>
<td>27</td>
<td>73,1</td>
<td>80,6</td>
</tr>
<tr>
<td>Export invoice to a booking file (XML or other format) for integration with your accounting system</td>
<td>76</td>
<td>44,4</td>
<td>71,2</td>
<td>58,1</td>
</tr>
<tr>
<td>Print Invoice</td>
<td>76</td>
<td>45,4</td>
<td>71,2</td>
<td>71</td>
</tr>
<tr>
<td>Discussion Forum – Dispute management process</td>
<td>17,3</td>
<td>13,4</td>
<td>17,3</td>
<td>9,7</td>
</tr>
<tr>
<td>Create invoice from Order-Goods receipt</td>
<td>34,6</td>
<td>22,1</td>
<td>15,4</td>
<td>45,2</td>
</tr>
<tr>
<td>Copy invoice from previous invoice</td>
<td>46,2</td>
<td>32</td>
<td>34,6</td>
<td>58,1</td>
</tr>
<tr>
<td>Use pricing information from an online catalogue</td>
<td>21,2</td>
<td>20,1</td>
<td>9,6</td>
<td>35,5</td>
</tr>
<tr>
<td>Attach technical annex or timesheets</td>
<td>51</td>
<td>48</td>
<td>40,4</td>
<td>48,4</td>
</tr>
</tbody>
</table>

12. Which elements do you consider to be the most important accelerators for your organisation to engage with electronic invoicing?

<table>
<thead>
<tr>
<th>Element</th>
<th>AU</th>
<th>FI</th>
<th>IT</th>
<th>SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free IT tools or solutions for you to create, transmit and send electronic invoices.</td>
<td>60,3</td>
<td>62,1</td>
<td>75</td>
<td>71,9</td>
</tr>
<tr>
<td>Guaranteed faster payments</td>
<td>31,9</td>
<td>29,5</td>
<td>35,7</td>
<td>43,8</td>
</tr>
<tr>
<td>Supporting Material (solution documentation, user manuals, legal documentation, sample files, frequently asked questions, …)</td>
<td>53,4</td>
<td>48</td>
<td>41,1</td>
<td>50</td>
</tr>
<tr>
<td>A service desk for all your electronic invoicing related questions</td>
<td>51,7</td>
<td>40,4</td>
<td>26,8</td>
<td>53,1</td>
</tr>
<tr>
<td>Training on proposed solutions</td>
<td>22,4</td>
<td>38,4</td>
<td>23,2</td>
<td>28,1</td>
</tr>
<tr>
<td>A certification from a 3rd party, stating that the solution proposed by your customer is VAT compliant</td>
<td>60,3</td>
<td>48,8</td>
<td>46,4</td>
<td>21,9</td>
</tr>
<tr>
<td>Other:</td>
<td>12,9</td>
<td>7,1</td>
<td>3,6</td>
<td>6,3</td>
</tr>
</tbody>
</table>
List of references


HMRC Notice 700/63 Electronic Invoicing.

REPORTS AND STUDIES


Politecnico of Milan, “Electronic Invoicing as a keystone in the collaboration between companies, banks and PA”, May 2008.


Arthur D. Little for Deskom/Post@xess, June 2001, as translated from “Le Livre Blanc de la Facture Electronique”, EBG (Electronic Business Group) - Deskom, September 2004.

Glossary

This glossary provides short definitions and explanations of technical and economic terms that are used in this Guide. The definitions proposed in this glossary have been extracted from different sources available online and adapted or shortened, if needed. The main sources used are:


http://en.wikipedia.org – The internet-based encyclopedia Wikipedia was used where appropriate references were provided.

**Accounts payable (A/P):** The series of files or accounts that contain the amount of money that a company owes to suppliers but has not paid yet (a form of debt). When a company receives an invoice, this is added to the A/P files. The A/P is a form of credit that suppliers offer to their customers by allowing them to pay for a product or service after it has already been received.

**Accounts receivable (A/R):** The series of accounting transactions related to the billing of customers who owe money to a company (a supplier) for goods and services provided to the customer. The accounts receivable is the amount that customers owe to that company. A company generates the invoice data which are delivered to the customer, who in turn must pay it within an established timeframe called credit or payment terms.

**Authenticity:** In the context of e-Business, authenticity could be described as assurance of the origin of the data or identity of the sender. Authentication in this context is a method by which a computer recognizes and verifies the identity of the sender of a message or file. The authentication mechanism can be based on something that the entity knows, has, or is (e.g. a password, smart card that uses some encryption or random number for a challenge-response scheme, or a fingerprint).

**Back office system (or Back End):** Computer infrastructure within an organisation which supports core business process applications but has no external interface with customers (unlike a Web site or portal). It is commonly referred to as an ERP system.

**Data integrity:** The assurance that data has not been changed, destroyed, or lost in an unauthorized or accidental manner.
Data processing system: A system which processes data that has been captured and encoded in a format recognizable by computer or has been created and stored by another unit of an information processing system.

Date/Time stamp: A timestamp is a sequence of characters, denoting the date and/or time a transaction or document is initiated or submitted to a computer system, or the time at which a transaction is logged or archived. The practice of recording timestamps in a consistent manner along with the actual data is called timestamping.

Days Inventories Outstanding (DIO): Refers to the number of days that a company takes to convert inventory into sales. The lower the DIO figure, the faster inventory is being converted. Companies generally hold as little inventory as possible, in order to decrease the working capital needs of the company.

Days Payables Outstanding (DPO): Refers to the number of days that a company takes to pay its creditors in a given period.

Days Sales outstanding (DSO): The average number of days that a company takes to collect revenue after a sale has been made (or average time it takes to turn receivables into cash). A low DSO number means that it takes a company fewer days to collect its accounts receivable. A high DSO number shows that a company is selling its product to customers on credit and taking longer to collect money.

Electronic Data Interchange (EDI): The electronic transfer of structured data (commercial and administrative) using agreed message standards, from computer to computer.

EDIFACT: Electronic Data Interchange For Administration Commerce and Transport. See UN/EDIFACT

Electronic data: the information that is entered into a data processing system typically without manual intervention, in electronic form

Enterprise Resource Planning (ERP): A software system or, group of systems, that help to integrate and cover all major business activities within a company, including product planning, parts purchasing, inventory management, order tracking, human resources and finance.

e-Business: automated business processes (both intra and inter-firm) over computer mediated networks. ‘Automation’ refers to the substitution of formerly manual processes. This can be achieved by replacing the paper-based processing of documents by electronic exchanges (machine-to-machine) but it requires the agreement between the participants on electronic standards and processes for data exchange.

e-Catalogue: An organised descriptive list of products or services made available by suppliers to potential buyers via the Internet.

e-Commerce: the sale or purchase of goods or services, whether between businesses, households, individuals, governments, and other public or private organisations, conducted over computer-mediated networks. The goods and services are ordered over those networks, but the payment and the ultimate delivery of the goods or service may be conducted on or off-line.

e-Invoicing: the automated process of issuing, sending, receiving and processing of invoice data by electronic means.
e-Procurement: the business-to-business, business-to-consumer or business-to-government purchase and sale of supplies, work and services through the Internet, as well as other information and networking systems, such as Electronic Data Interchange and Enterprise Resource Planning.

e-Remittance advice: an electronic message (whether EDI, XML, etc.) that contains the details required to apply a payment. The file generally contains the payment total, payment date, individual invoice reference numbers, dates, and amounts.

HyperText Markup Language (HTML): the main language used to create Web documents.

Internet Protocol (IP): The rules governing how computers on the Internet communicate and share information.

Interoperability: The ability of information and communication technology (ICT) systems, as well as the business processes they support, to exchange and use information.

Master data: Master data, or reference data, is information that is key to the operation of business. It may include data about customers, products, employees, materials, suppliers, etc. The Master Data is generally held in the core business or accounting system (sometimes referred to as the 'back-end' or 'ERP' system).

Open source software: Computer software published under a license that gives the following freedoms, without restrictions or limitations: to use, change, and improve the software, and to redistribute it in modified or unmodified forms. Access to the source code is a pre-condition.

Open standard: A standard adopted and maintained by a not-for-profit organisation, whose development occurs on the basis of an open decision-making procedure available to all interested parties. It is publicly available and the standard specification document is available either freely or at a nominal charge. It must be permissible to all to copy, distribute and use it for no fee or at a nominal fee. The intellectual property of the standard is made irrevocably available on a royalty-free basis.

Portable Document Format (PDF): Is a file format created by Adobe Systems in 1993 for document exchange. PDF is used for representing two-dimensional documents in a manner independent of the application software, hardware, and operating system. Files with a .pdf extension have been created in another application and then translated into .pdf files so they can be viewed by anyone, regardless of platform. Formerly a proprietary format, PDF was officially released as an open standard, and published by the International Organization for Standardization (as ISO/IEC 32000-1:2008)

Self-billing: An arrangement where a customer prepares VAT invoices on behalf of their VAT-registered supplier. The customer sends a copy of the invoice to the supplier with the payment. A self-billing application allows customers to create their own invoices, based on usage, date or other parameters, and provides an automated payment remittance via an electronic transfer or web interface.

SMEs: The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro. (Extract of Article 2 of the Annex of Recommendation 2003/361/EC)

Structured data: Data that can be shared electronically with customers and suppliers, because the structure and meaning of data has been standardised and usually determined by a Data model. If the same data structures are used to store and access data then different applications can share data.
UN/CEFACT: United Nations Centre for Trade Facilitation and Electronic Business. It is now defining the next generation of trade facilitation and e-business standards and tools.

UN/EDIFACT: United Nations rules for Electronic Data Interchange for Administration, Commerce and Transport.

Unstructured data: Data whose meaning has to be elaborated in order to be used by a computer, such as word processing documents, email messages, pictures, digital audio, and video.

Working capital: Represents operating liquidity available to a company. It is calculated as short-term (current) assets minus short-term (current) liabilities. Current assets consist of: cash; short-term and marketable securities (e.g. money market funds, government securities, etc.); inventory (including finished products awaiting shipment, unsold completed goods, works in progress and raw materials); Accounts receivable (A/R). Current liabilities consist of: Accounts payable (A/P), short-term loans, issued commercial paper, current repayment obligations on long-term debt, other short-term debts.

Positive working capital ensures that a firm is able to continue its operations and that it has sufficient funds to satisfy both maturing short-term debt and upcoming operational expenses.

XML (Extensible Markup Language): A means for writing documents that define structured data. XML provides a basic syntax that can be used to share information between different kinds of computers, different applications, and different organizations. Like HTML, it is written in plain text by using tags to specify a structure for its content. Both XML and HTML contain mark-up symbols to describe the contents of a page or file, however, whereas HTML defines how elements are displayed, XML defines what those elements contain. An XML document can include a self-describing set of rules that identify the tags and their relationships; it allows users to create a language tailored specifically to their needs. Many vocabularies have been developed and a universal language has been created to provide a standard for interoperability between them (see UBL).

UBL (Universal Business Language): a format for exchanging data from one XML business language to another. Based on ebXML Core Components, UBL is designed to provide a common language that acts as an intermediate vocabulary so that one XML vocabulary can interoperate with another. UBL was created to promote e-business over the Internet. Derived from the Common Business Language (CBL), which was sponsored by the U.S. Government, UBL became an OASIS standard in 2004.
Sponsors
The Austrian Federal Economic Chamber (WKO) coordinates and represents the interests of the Austrian business community at a national and international level. By law, national governments are obliged to consult with the Chambers on legislative projects and important regulations.

The Chamber actively promotes the adoption of e-Invoicing together with its partners from the public and private sector. In an effort to increase the knowledge of Austrian companies – particularly of SMEs – regarding the legal framework and the practical aspects of e-invoicing, the Chamber has created a webpage http://wko.at/e-rechnung with an online consulting tool, as well as a printed handbook (Handbuch für elektronische Rechnungsstellung in Österreich).

Electronic invoicing is also among the major topics on ICT events (E-Day, TELEFIT) that are organized by the Chamber. In addition, WKO is the driving force behind the standardisation platform AUSTRIAPRO, which has developed the first Austrian XML e-Invoicing standard "ebInterface".

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W: http://wko.at/e-business
AUSTRIAPRO is the B2B standardisation platform for Austria. The Association was founded in 1989 as an initiative of the Austrian Federal Economic Chamber. About 90 Austrian enterprises, research institutions and public organizations are members of this cross-industry experts platform.

AUSTRIAPRO has developed the first Austrian XML standard “ebInterface” for electronic invoicing in cooperation with leading Austrian ERP and Accounting software companies. The standard is rapidly gaining acceptance throughout the Austrian business sector.

ebInterface has already been integrated in a growing number of widely used ERP/accounting software systems, such as SAP. The development of ebInterface is continuing, and currently it is available in version 3.0. First steps of internationalisation on the technical level (UBL 2.0, ebXML) and on the organizational level (CEN/ISSS, NORMAPME) have already been taken. EbInterface is:

- a standardised document type for electronic invoices
- a “bottom – up” solution
- a standard based on widespread Internet technologies
- an organisational innovation
- a cost-free solution for any kind of invoice issuer and recipient
- an Austrian-wide solution
- on the way to an international solution

It is thus possible for all SMEs in Austria to exchange and automatically process electronic invoices without any difficulty.

Contacts:

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W http://www.austriapro.at/
W http://www.ebinterface.at/
The CBI (Customer to Business Interaction) Consortium sets rules, technical standards and framework of the CBI Service (Interbank Corporate Banking) both at a national and international level. This Service, that consists of a group of functions, based on common rules and standards, enables the exchange of information and operation flows between a customer (companies, public administrations, intermediaries, etc.) and a financial intermediary, with the main aim of rationalizing and optimizing the management of the financial resources of a company.

In this way, the Consortium defines the shared range of products and services (basic services) and it is up to each member to define the details of its competitive offer to the market.

Moreover, the Consortium manages a modern technological infrastructure to support the relations among the different stakeholders of the CBI community (institutions, public organizations, companies, trade associations, software vendors, etc.). This network, based on the XML standard, allows to meet the needs of reconciliation, tracking/tracing, security (digital signature) and the possibility for direct communication between the several parties of the CBI community through the access financial institutions (end-to-end communication).

This enables every member to provide their customers with innovative services, both in the core area of collection and payments services, as well as in the new area of document management (e.g. electronic invoicing), and related financial services (e.g. invoice financing), developed in line with the needs expressed by all the stakeholders, international standards (ISO 20022) and developments in SEPA (Single Euro Payments Area).

Besides, the CBI Consortium manages the certification of the technical subjects enabled to operate on the network (bank-owned service providers and NODI) as technical intermediaries between members and customers. It supports actions involving information – training activities: it organizes conferences and promotional campaigns.

In the framework of the development of e-Government projects, the CBI Consortium will allow the central Public Administration a sole access, both efficient and safe, to banks and banking services, by means of an “ad hoc” network gateway (Access Point) consistent with the new market role of CBI. In this way, CBI will be able to provide services even to non - Consortium members and to develop interactions, both with the Public Administration and with the players of the new European market, while respecting the competition of its own members.

The CBI infrastructure today interconnects more than 780,000 user enterprises and approximately 685 partners (over 95% of the Italian banking system and the Italian Postal Service Plc).

E-INVOICING AND CBI

Amongst the functions offered to the clients by the banks, the most significant one is “End-to-end sending of structured documentation” (e-invoice). This service has been developed contemplating the possibility of combining it other typical financial services (such as advance on invoices, payment and reconciliation, filing, management of disputes, credit documentation, etc.), some of which are offered on a competitive basis. The objective is to facilitate dematerialisation and process integration both in relation to Business-to-Business (B2B) and in Business-to-Government (B2G) relations.

The issue of E-Invoicing has taken a leading role following the enactment of the 2008 Financial Law (article 1, paragraphs 209 to 214 of Law No. 244 dated 24th December 2007) introducing the obligation for suppliers to P.A. (including autonomous ones) and national public institutes, to issue, transmit and store e-invoices exclusively.

Therefore, the CBI network intends to become the benchmark of the e-invoice, facilitating the involvement of the P.A. both as a user – for documentation management and collection/payment services – and as a third party issuer of services to the CBI companies, with specific reference to the central P.A..

CBI could be recognised in the regulatory framework as a privileged channel (intermediary) used by companies for sending e-invoices to P.A., for its Exchange System.
UEAPME

The European Association of Craft, Small and Medium-sized Enterprises

UEAPME is the employer’s organisation representing the interests of European crafts, trades and SMEs at EU level. UEAPME is a recognised European Social Partner and acts on behalf of crafts and SMEs in the European Social Dialogue and in discussions with the EU institutions. It is a non-profit seeking and non-partisan organisation.

As the European SME umbrella organisation, UEAPME incorporates 84 member organisations consisting of national cross-sectorial SME federations, European branch federations and other associate members, which support the SME family.

Across the whole of Europe, UEAPME represents over 12 million enterprises with nearly 55 million employees.

The main objectives of UEAPME, as the voice of of crafts, trades and SMEs in Europe include:

- Monitoring the EU policy and legislative process and keeping its members informed on all matters of European Union policy of relevance to crafts, trades and SMEs
- Representing and promoting the interests, needs and opinions of its member organisations to the EU institutions and other international organisations
- Supporting its members academically, technically and legally on all areas of EU policy
- Supporting the idea of European integration and contributing to European co-operation.

Our Strategy

As the recognised voice for the interests of crafts, trades and SMEs in Europe, UEAPME acts as an ‘agenda setter’ in the area of European SME policy. It has a direct role in all EU policy that has an affect on SMEs. This is made possible through the maintenance of direct links and contact with the EU administration and strengthened by its status as a Social Partner.

UEAPME endeavours to ensure that the interests of crafts and SMEs are taken into account in all legislation that has an impact on them. Some of the key legislative areas in which UEAPME is active include: economic and fiscal policy, employment and social policy, environmental policy, enterprise policy, internal market, legal affairs, and R&D.

UEAPME analyses the role of SMEs in European economies and the challenges they face. On the basis of this analysis, UEAPME, with its members, identifies the ways in which SMEs can adapt to the challenges of the open and competitive EU economy.

E-invoicing

Electronic invoicing has a huge potential to increase the productivity of enterprises. Different national requirements, especially in the field of VAT invoicing, act as barriers to implement e-invoicing for cross border business. UEAPME is represented in an Expert Group of the European Commission, which works on the necessary measures to create a European Area for e-Invoicing.

For further information, please visit: www.ueapme.com
SEPA INTERNATIONAL

Our mission is to support the creation of an integrated and competitive European e-Business ecosystem, advocating corporate needs and requirements with decision makers and regulators.

Collaborating with key stakeholders on a number of EU-wide initiatives, SEPA advocates corporate needs ensuring that the resulting standards and regulatory framework are beneficial to enterprises and SMEs, alike.

SEPA works with EU regulators in shaping the future e-business ecosystem through active participation, guidance and vision, always keeping in sight the essential factors needed to secure mass adoption across Europe.

CORPORATE ADVOCACY

Spreading awareness and objective knowledge regarding the most relevant European e-business initiatives, their advantages and risks, is the first step towards reaching consensus.

To this goal, SEPA International has established itself as a facilitator for ongoing dialogue between European and International companies, regulators and industry associations on various initiatives.

We bring together different user communities with their needs and requirements, making possible for enterprises to speak with a single unified voice.

SERVICES

SEPA International provides advocacy and consulting services to corporations, governments, trade and professional associations, non-government organisations and the public sector.

The Company organises and its principals speak at numerous conferences around the Region to ensure that corporates understand the impact of proposals and have a voice in their final form.

If you would like to receive more information on advocacy and consulting services, please contact us at:

info@sepainternational.com
ABOUT EBL

The European e-Business Lab is a cross-industry initiative launched by successful organisations committed to sharing and improving e-business best practices, adoption, standardisation and innovation. It is a division of the European Business Lab Association.

The Laboratory provides a platform for the creation of a user-driven open innovation ecosystem focused on e-business developments. A platform where e-Business users can share best practices and practical guidance, exchange ideas, opinions and validate e-business related processes, standards, new technologies, policies and pilots.

The European E-Business Lab (EBL) has close ties to EU policy makers, standardisation bodies, experts and all relevant stakeholders which allow the Lab to directly influence and drive changes.

The Lab will voice its members’ needs and recommend solutions to improve the e-Business ecosystem, by iteratively engaging all the key actors across the innovation process and putting the users in the driver’s seat.

MISSION

Empowering enterprises to foster e-Business adoption and innovation for the development of an open and interoperable European e-Business ecosystem.

VISION

Based on a harmonised legal and regulatory framework, the future European e-Business ecosystem will be an environment where users can integrate standardised e-business tools into their internal information systems without significant investment and disruption and where all market stakeholders will benefit from a pan-European innovative and competitive level playing field.

OBJECTIVES

1. To represent the members community with EU institutions and market stakeholders, validating policies, new technologies and initiatives to drive e-Business market developments

2. To build bridges between the members community, European institutions and market stakeholders linking research, practice and policies

3. To provide knowledge and information relating e-Business developments; to identify, formulate and share best practices

4. To promote co-operation between our members, facilitating the participation of SMEs and establishing peer-to-peer platforms to exchange experiences

5. To encourage the development and adoption of common methodologies for value chain automation and standardisation; to support members with the implementation of their e-Business development programmes

6. To promote research and user-driven innovation for new technologies and pilots;

7. To co-operate with other organisations, also outside Europe, to ensure alignment and co-ordination with global e-Business developments

For more information please visit: http://www.euebl.org/ebl/

or contact us at: info@euebl.org