IO1 – A5

FCT Course Development
E-Invoicing

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B-CAPP

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TITLE

1. What is e-Invoicing?

ABSTRACT

Even with all of the technological advances, many companies still use paper or PDF invoices, creating a system that is neither 100% efficient nor cost-effective. However, by 2019/2020, the implementation of e-Invoicing will become standard European wide, making it necessary for companies to understand how to implement this process.

GENERAL DESCRIPTION OF THE SPECIFIC ACTON

a)Understanding e-Invoicing

Electronic invoicing is a format of invoicing in which all information is provided and exchanged in an integrated electronic format between a supplier and a buyer. The invoices are issued, transmitted, received, and filed in a structured data format which allows for its automatic and electronic processing. Also, payments can be made by just clicking a button. This automatization means that the information travels from computer to computer automatically, without any use of printer, paper, scanner, nor other manual action such as the email delivery of pdf invoices.

E-Invoicing is rapidly growing in Europe and the EU efforts are aiming to make it the dominant form of invoicing by 2020. For that purpose, the European Parliament and the Council adopted the Directive 2014/55/EU in April 2014, and officially published it on 17th October, 2017. The Directive is a key legislative step towards implementing electronic invoicing in Europe, as it creates a standard in response to the many and diverse e-Invoice formats used across the EU. According to the Directive, all contracting public authorities have to use electronic invoices and that in compliance with the European norm, while nationally specific rules will remain valid. Specifically, Member States are appealed to transpose into national law and implement the Directive up to the 18th April 2019, with the possibility to request an extension until the 18th April 2020 for contracting authorities and entities which are not central governments authorities (such as regional authorities).

b)Identify EU Standards

One of the key objectives of the European e-Invoicing standard is to remove the barriers to processing different billing systems and to send and receive digital invoices using a single e-Invoicing format at European level. In practical terms, when exchanging information between two trading parties, it is necessary that the information exchanged be relevant, expressed in a format understood by both parties, and exchanged using a method that both parties can access.

The Directive 2014/55/EU called for the definition of a common European standard on electronic invoicing at semantic level (the core information contained in the e-Invoice) as well as a list of syntaxes (the format or language used for transmission of the e-Invoice) and its adoption from Member States so that it becomes mandatory receive and process electronic invoices that comply with the European standard.

This European Standard or norm was finally published on 28 June 2017, by the European Committee for Standardization (CEN). On 17 October 2017 Commission published the reference to the standard in the Official Journal.

In order to understand the EU initiative, the first step is to identify the three main versions of an electronic invoice as defined by the European e-Invoicing standard and identify the best option to be used for your business exchanges:
• Core invoice: The European standard defines a basic e-Invoice model that includes common business terms and information used in most invoicing and sufficient for most billing transactions. The basic information is obligatory in all invoices but some sections are optional and included just when. However, the core invoice may not be in all the invoice exchanges; therefore, we can find the variation on the European Standard of e-Invoicing:
• CIUS: The Core Invoice Use Specification is a restricted version of the standard and it uses just some of the different options provided by the CORE.
• EXTENSIONS: In this Invoice version options are being added to the core invoice. For the implementation of the extension there must be a bilateral agreement.
Watch this video to know more about 3 key components of the e-Invoicing standard: the CORE, the CIUS and Extensions.

ACTION TYPE (*)

Simple actions that can be implemented immediately without requiring an investment

CONNECTED ACTIONS

TIME REQUIRED TO IMPLEMENT A SOLUTION AND WHEN POSSIBLE ASSOCIATED COST

Researching and understanding the possible e-Invoicing solutions should take a couple of hours.

POSITIVE AND NEGATIVE PART OF THE SOLUTION

Positive: Facilitating comprehension around e-Invoicing solutions.

Negative: Confusion about the potential solution best for a particular company.

ESTIMATED EXPLOITATION

Higher comprehension of the situation allows for better implementation.

ICT COMPETENCE

Basic

ENGLISH LANGUAGE SKILLS

Intermediate

WEBSHOP LEVEL

n/a

INFORMATIVE TEXT

1. CEF. (2018). eInvoicing. Retrieved from https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eInvoicing
2. EUR-Lex. (2014). Directive 2014/55/EU of the European Parliament and of the Council of 16 April 2014 on electronic invoicing in public procurement Text with EEA relevance. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0055

3. Official Journal of the European Union. (2017, October 17). L266. Official Journal of the European Union, *60*. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2017:266:FULL&from=EN

4. European Commission. (2018, January 24). 3 key components of the eInvoicing standard: the CORE, the CIUS, and Extensions. *Video format.* Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2017:266:FULL&from=EN

5. Costa, I. (2018, June 19). Webinar #10: CIUS (Core Invoice Usage Specifications, including PEPPOL CIUS. Webinar retrieved from https://ec.europa.eu/cefdigital/wiki/display/EINVCOMMUNITY/Interactive+Webinar+%23+10%3A+CIUS+%28Core+Invoice+Usage+Specifications%29%2C+including+PEPPOL+CIUS

ADDITIONAL RESOURCES

a) Understanding e-Invoicing

• Info graphic e-Invoicing guide

• What is e-Invoicing explained by the European E-Invoicing Service Providers Association

• Glossary for e-Invoicing

• Connecting Europe Facility (CEF)

• Worldwide electronic invoicing survey 2018

b) Identify EU Standards

• EU E-Invoicing info graphic with overview of the European standard, implementation timeline and the services and support provided by CEF

• Country specifications for formats, required fields, and platforms by which e-Invoices must be sent

• Example: Spanish specifications and the current supported Spanish e-Invoicing platform

CROSSBORDER REMARKS

It is important not only to understand the needs of a specific company in a certain country but also to realise that these nuances can change based on industry and national regulations.

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2. See how e-Invoicing can work for you

ABSTRACT

Every company is different; therefore, it is important to see how e-Invoicing can satisfy specific needs. Consider the numerous benefits to be gained by shifting away from traditional invoice to the adoption of more digitized approaches. Beyond the efficiency and cost reduction, there is the opportunity to have access to a wider market, an increase in European business competitiveness, increased sustainability, and provides business efficiency as well as revenue generating opportunities. But, before SMEs embark on an e-Invoicing project, it is necessary to analyse internal and external needs. An effective and integrated implementation of e-Invoicing starts with the assessment, planning, and coordination of the level of external and internal resources and the systems involved in the whole process.

GENERAL DESCRIPTION OF THE SPECIFIC ACTON

a) Calculate the benefits

E-Invoicing brings benefits for companies, in terms of costs, sustainability, accuracy and timeliness, as well as competitiveness which largely repay the investments necessary to achieve them.

• Financial benefits: Analyse savings generated by the e-Invoicing process thanks to the elimination of the sorting, registration and manual insertion of paper invoice data as well as savings in postage, materials, processing and storage.

• Sustainable benefits: Evaluate and develop environmental policies within the overall corporate strategy and encourage the adoption of 'green' or sustainable business practices.

• Accuracy and timing benefits:
-Identify advantages from e-Invoicing by reducing the amount of errors that could occur. The invoices are automatically stored and sent to recipients ensuring that they are received on time and less likely to be rejected because of errors. Several tips to ensure accuracy when sending electronic invoices.
-Analyse time savings: The invoices are processed more quickly, enabling on-time payment, and avoids late payment fees.

• EU competitiveness benefits: Understand and evaluate digital networks and services for e-Invoicing to allow companies in EU to create a single digital market. Europe is working towards creating a Single Europe Payment Area (SEPA) that will improve the efficiency of cross-border payments.
See more on the EU SEPA webpage.

b) Define your needs

The successful implementation of e-Invoicing is a changing process that involves the whole business and its outline: from the right management of the company's staff, supplier/customer community as well as other stakeholders, of the business processes, and automated IT systems.

- Analyse internal and external needs/issues of your business.

- Collect facts and figures on the current invoicing practice

- Be prepared for e-Invoicing forward planning, and reach the capacity to manage change

- Identify internal capabilities and necessary requirements for technology readiness

- Evaluate Acceptance and integration of supplier/customer

- Acquire knowledge on Archiving

The European Union website proposes a self-assessment test that can be found here.

c) Identify internal capabilities

The management of e-Invoicing, due to its multidisciplinary nature, requires an internal capacity assessment plan throughout all levels of the company.

- Identify internal human resources: In addition to the main role identified in the IT team, the e-Invoicing initiative will require an inter-functional team, tax experts, treasure professionals, and business line managers in the areas affected by the program.

- Identify technological readiness: A major barrier to successful e-Invoicing is system integration. The e-Invoicing solution must be integrated with supplier and customer accounting systems, but also with other business systems.

ACTION TYPE (*)
Simple actions that can be implemented immediately without requiring an investment

CONNECTED ACTIONS

TIME REQUIRED TO IMPLEMENT A SOLUTION AND WHEN POSSIBLE ASSOCIATED COST
Calculating the benefits of e-Invoicing and defining your company needs will take 2 – 3 days.

POSITIVE AND NEGATIVE PART OF THE SOLUTION
Positive: Understanding the potential benefits of e-Invoicing and comprehension of company needs.
Negative: Finding that you don't have the capacity to implement the solution at this time.

ESTIMATED EXPLOITATION
Understanding the benefits can motivate the company members to be successful with their solution implementation.

ICT COMPETENCE
Basic

ENGLISH LANGUAGE SKILLS
Intermediate

WEBSHOP LEVEL
n/a

INFORMATIVE TEXT
1. CEF Ditital. (2018). What are the benefits? eInvoicing. Retrieved from https://ec.europa.eu/cefdigital/wiki/pages/viewpage.action?pageId=46992605
2. e-Invoicing Basics. (2018). The Benefits. Retrieved from https://www.einvoicingbasics.co.uk/benefits-of-einvoicing/supplier-benefits/
3. Tungsten Network. (2015). The capability to overcome your AP/AR challenges. Retrieved from https://www.tungsten-network.com/benefits-of-e-invoicing/#section2

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4. e-Invoicing Basics. (2018). Green Initiatives. Why e-Invoice? Retrieved from
https://www.einvoicingbasics.co.uk/why-einvoicing/green-initiatives/

5. Gilroy Gannon. (2017, August 23). 6 tips to ensure you send accurate invoices – and why it's
important. Retrieved from https://www.gilroygannon.com/6-tips-to-ensure-you-send-
accurate-invoices/

6. Mytilinos, N. (2013). Adoption of e-invoicing by SMEs: the business document standards
aspect. Retrieved from
https://dspace.library.uu.nl/bitstream/handle/1874/276052/Nikos%20Mytilinos%20-
%20master%27s%20thesis.pdf?sequence=1

7. European e-business lab. (2009). European E-Invoicing Guide for SMEs. Retrieved from
http://wko.at/ebusiness/e-rechnung/ebl_eInv_guide_final_web.pdf

ADDITIONAL RESOURCES

a) Calculate the benefits

• Financial benefits:

E-Invoicing benefit calculator.

Calculate financial benefits.

• This report predicts annual benefits of up to €40 billion across Europe in the business-to-
business field.

• E-Invoicing benefits, steps, and how savings can be made by replacing a paper invoice with
different types of digital invoices.

b) Define your needs

Use this article to analyse your business current internal processes for the e-Invoicing
implementation.

c) Identify internal capabilities

Check out the e-Invoicing Readiness Checker.

CROSSBORDER REMARKS

If the company has hubs in more than one country, make sure to identify similarities and
differences across all countries.

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TITLE
3. Choosing the model and platform
ABSTRACT
There are different e-Invoicing models that provide alternative ways of exchanging e-Invoices between buyers and suppliers. While there are some features that should be common to any solution, whether on an in-house software approach or select an e-Invoicing service provider, it is important to choose the best model depending on the needs of the business. Once the model has been decided and the internal capabilities have been identified, it is necessary to select a platform or service provider that best fits current and future invoicing plans. Businesses can choose whether to create an e-Invoicing infrastructure/financial system according to the EU standard, or to adopt e-Invoicing solution package offered by providers.
GENERAL DESCRIPTION OF THE SPECIFIC ACTON

a) Choose your model

Depending on the needs of the business, each e-Invoicing model provides different services and alternative ways of exchanging e-Invoices between buyers and suppliers:

- Understand and choose e-Invoicing models:

• The 2-corner model: Establishes a direct connection between trading parties can be established to exchange invoices, based on acceptable formats established between entities. The supplier and buyer directly share e-documents with each other's systems using EDI or XML files.

•The three-corner model: Senders and receivers are connected to a single service provider platform or hub for the dispatch/receipt of messages using accepted formats.

•The four-corner model: Senders and receivers of invoice messages are supported by two different service providers, one for the sender and another one for the receiver. Documents must pass between the two providers to ensure correct processing.

- To learn more about different models of e-Invoicing transfer check out this article.

One of the European initiatives based on this four-corner model is PEPPOL (Pan European Public Procurement Online), a standardised network used to connect business and organisations for electronic ordering, shipping and invoicing. It enables companies and government organisations to exchange e-documents over an interoperable, European-wide network. Check out the PEPPOL website for more information.

b) Select the platform

Companies have two options when deciding what sort of platform they want for their e-Invoicing solution. They can either build their own e-Invoicing solution according to the European standard or find a private solution or service provider that offers an e-Invoicing option that conforms to their internal and external needs.

It is important for companies to understand three options of the standard's implementation (in Module 1) and incorporation to the current e-Invoicing platform: insourcing, outsourcing or partial insourcing. There are a plethora of registered solutions and service providers differentiated by criteria such as language, geographical coverage, and/or areas of economic

activity. It is important to carefully select the solution or service provider that best fits the current and future business plans.

When analysing the basic requirements for choosing the right service provider keep in mind the following elements:
•Viability for the long term.
•Ability to interact with different Enterprise Resource Planning (ERP) platforms.
•Capacity to model the costs and savings of e-Invoicing specifically related to the organisation.
•Global presence and flexibility to shift supply chain strategies as market dynamics change.

Browse the list of registered solution & service providers, or search for one based on criteria such as language, geographical coverage and/or areas of economic activity by following this link.

ACTION TYPE (*)
Actions that have prerequisites (other actions need to be implemented first) and require investment

CONNECTED ACTIONS
2. See how e-Invoicing can work for you 5.Identify partners' needs

TIME REQUIRED TO IMPLEMENT A SOLUTION AND WHEN POSSIBLE ASSOCIATED COST
Researching, contacting potential providers, and choosing the right e-Invoicing solution for your company will take 3 days depending on the chosen solution. Implementation and paperwork issues might take longer. Associated costs include: platform quotes, platform subscriptions, etc.

POSITIVE AND NEGATIVE PART OF THE SOLUTION
Positive: Insight into the various models and capacity to choose the one that best fits the needs of the company. Negative: Too many options for a small company leading to confusion about which one to pick.

ESTIMATED EXPLOITATION
The correct company-platform fit can facilitate simple e-Invoicing solutions for everyone involved.

ICT COMPETENCE
If you choose a pre-established platform: Basic If you decide to create your own: Advanced

ENGLISH LANGUAGE SKILLS
Intermediate to Advanced

WEBSHOP LEVEL
n/a

INFORMATIVE TEXT
1. cloudtrade. Two, three and four corner models. Retrieved from https://www.cloudtradenetwork.com/knowledge/two-three-and-four-corner-models

2. PWC. (2017, July 18). Study on the practical application and implementation of the European e-Invoicing standard. Retrieved from http://ec.europa.eu/DocsRoom/documents/25521/

3. edicom. (2017, May 9). How to choose an e-invoicing provider in France? Retrieved from https://www.edicomgroup.com/en_ES/news/9599-how-to-choose-an-e-invoicing-provider-in-france

4. Dynatos. (2017, April 19). E-invoicing. Retrieved from https://dynatos.be/e-invoicing/

ADDITIONAL RESOURCES

a) Choose your model

• Learn more about different models of e-Invoicing transfer.

• Find out more about PEPPOL.

b) Select the platform

• 10 Key Tips to choose your platform.

• 12 things to take into account when you choose your service provider.

• What to do when you are looking for an e-Invoicing Software.

CROSSBORDER REMARKS

Ensure that the model and platform fit all the company needs and keep in mind international partners might have different requirements.

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TITLE
4. E-Invoice validation

ABSTRACT

In an increasingly digitalised world, it is essential for companies to have the necessary competences and resources to validate electronically online documents. The EU has established 3 methods for ensuring the authenticity and integrity of the e-Invoicing document: electronic signatures, electronic data interchange (EDI), and alternative mechanisms (audit trails) - specifying that there is no requirement to use one particular method of e-Invoicing to ensure compliance.

GENERAL DESCRIPTION OF THE SPECIFIC ACTON

Create e-Invoice validation

The authenticity of the origin, the integrity of the content, and the legibility of an e-Invoice should be ensured from the point in time of issue until the end of the period for storage. The validation process is perhaps one of the most important that the company will undertake during the implementation of the e-Invoicing solution. This is because it will allow both the sender and the receiver to ensure that the documents they are sending cannot be changed or modified (or, in the case of modification, that it is visible to the user). According to EU Directives the sender has the possibility to create e-Invoicing validation by several different methods.

The European Union establishes three main examples of approved technologies for sending electronic invoices under the eIDAS regulation that ensure the authenticity and integrity of the generated document, as well as the electronic sending and reception of said documents:

• The Advanced Electronic Signature (AdES) is an electronic signature that is uniquely linked to and capable of identifying the signatory. In addition, the private key used to create the signature is solely controlled by the signatory and is linked to the document so that any subsequent change of the data in the document is detectable. Finally, the signature is automatically invalidated when the data has been changed.

The most commonly available technology used to provide these features is the use of a public-key infrastructure (PKI), which involves the use of certificates and cryptographic keys. See this video for an explanation on how PKI works in a secure and encrypted way.

There are four main choices when deciding on a AdES:

1. XAdES (XML Advanced Electronic Signatures): a set of extensions to XML-DSig recommendation.

2. PAdES (PDF Advanced Electronic Signatures): a set of restrictions and extensions to PDF and ISO 32000-1.

3. CAdES (CMS Advanced Electronic Signatures): a set of extensions to Cryptographic Message Syntax (CMS) signed data.

4. ASiC (Associated Signature Containers) Baseline Profile: specifies the use of container structures to bind together one or more signed objects with either advanced electronic signatures or time-stamp tokens into one single digital (zip) container.

Use this guide to help set-up any the AdES options.

• The Electronic Data Interchange (EDI) is a tool that guarantees the traceability of business documents. It is consists of an electronic transfer, from computer to computer, of commercial and administrative data using an agreed standard to structure an EDI message (set of information, structured using agreed formats, prepared in a computer readable form. and capable of being automatically and unambiguously processed). For further information on EDI, download the EDI step-by-step guide to help you understand and implement this type of authenticity plan.

• Alternative existing technologies. An example of alternative technologies is the Audit trail, an electronic record that gives a step by step documented history of a transaction. This option can validate or invalidate accounting entries for the user.

Choosing a validation option that is right for your business is essential for e-Invoicing success as this is your guarantee that your invoices are not being tampered with once you have sent them. To start you e-Invoice validation process, talk to your provider (or in-house technician) to see what options are available to you with your current solution. Make sure to find an option that fits both the internal—the technology, platform, personal resources, etc.—and external— what your suppliers or customers are looking for—needs of the company.

ACTION TYPE (*)
Actions that have prerequisites (other actions need to be implemented first) and require investment

CONNECTED ACTIONS
3. Choosing the model and platform 5.Identify partners' needs

TIME REQUIRED TO IMPLEMENT A SOLUTION AND WHEN POSSIBLE ASSOCIATED COST
It will day a couple of days to research and choose an e-Invoicing validation solution. Depending on the chosen validation, it will take a minimum of couple of hours and a maximum of a several days to implement the solution. Associated cost include: quotes, supported electronic signatures, platform costs, etc.

POSITIVE AND NEGATIVE PART OF THE SOLUTION
Positive: Being able to ensure your invoices against fraud. Negative: Time and inversion needed to implement this solution.

ESTIMATED EXPLOITATION
By offering a validated signature on e-Invoices, companies will be able to ensure quality and security when working with other businesses.

ICT COMPETENCE
If you choose a pre-established validation system: Basic If you decide to create your own: Advanced

ENGLISH LANGUAGE SKILLS
Intermediate to Advanced

WEBSHOP LEVEL
n/a

INFORMATIVE TEXT

1. Kirova, M. (2016, June 28). eIDAS Regulation (regulation (EU) Nº910/2014). Retrieved from https://ec.europa.eu/futurium/en/content/eidas-regulation-regulation-eu-ndeg9102014

2. CEF Digital. (2017). What is an electronic signature? Retrieved from https://ec.europa.eu/cefdigital/wiki/pages/viewpage.action?pageId=46992760

3. Tutorialspoint. (2018, July 21). Public Key Infrastructure. Retrieved from https://www.tutorialspoint.com/cryptography/pdf/public_key_infrastructure.pdf

Joinup.eu (2018, May 22). Digital Signature Service. Retrieved from https://joinup.ec.europa.eu/sd-dss/webapp-demo/doc/dss-documentation.html#_the_xml_signature_xades

4. EDI Basics. (2014). What is EDI (Electronic Data Interchange)? Retrieved from https://www.edibasics.com/what-is-edi/

5. Netsend.com. EDI Check list: a step by step guide to EDI implementation. Retrieved from http://marketing.netsend.com/acton/attachment/18587/f-002e/1/-/-/l-000c/l-000c:25a/EDI%20check%20list.pdf

6. Netsend.com. (2018, February 21). Auditing and audit train for e-invoicing and document distribution. Retrieved from http://netsend.com/blog/auditing/auditing-audit-trail-e-invoicing-document-distribution/

ADDITIONAL RESOURCES
• See EU e-Signature standards for all AdES models. • Start using Digital Signature Services by using this guide. • A blog entry covering the Advanced Electronic Signature (AdES). • For further information on EDI, download the EDI Basics e-book.

CROSSBORDER REMARKS
Make sure that any solution adopted is flexible in an international market setting.

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5. Identify partners' needs

ABSTRACT

To be successful in electronic invoicing projects it is essential to consider and understand the capabilities and needs of the trading partners and customers, the information necessary to process the e-Invoice, the format in which they would like to receive data, and the standards which are extensively used.

GENERAL DESCRIPTION OF THE SPECIFIC ACTON

Identify partners needs

To succeed with the implementing the e-Invoicing solution successfully, it is important to work closely with the trading partners and understand their capabilities and needs. This includes all business to business (B2B) and other situations where the company will have to exchange e-Invoices. It is good practice to examine the current invoicing processes and identify how the e-Invoicing project can easily fit within the trading partner's needs at an early stage. This drives towards acceptance and active participation of partners in the e-Invoicing implementation.

In order to identify partner needs, different steps should be taken in order to integrate your trading partner community into the planning of all e-Invoicing solutions:

• Compile a trading partners' contact list.

• Identify and then communicate specific key benefits of e-Invoicing process participation for trading partners. Use those provided in Module 2 or the benefits shown by the EU in this document.

• Define the communication methods and end-to-end document testing processing.

• Define the format to send/receive data and the standard used.

• Gain an understanding of technical capabilities and the format in which both partners would like to receive data.

• Set-up a general agreement -trading partner responsibilities based on the pre-established agreement that already exists for invoicing.

• Select some of your key partners to pilot the e-Invoicing system with

• Provide education, training, and support on e-Invoicing.

• Identify how to communicate and resolve any issues related to the on-going process and whether the technical or non-technical staff in each company will coordinate discussions if problems or questions arise.

It is important to note that in addition to identifying supplier and other B2B partner needs, the needs of the customer should also be taken into consideration. The adoption of an e-Invoicing solution should be explained (including the benefits) before the system is put into place. This will ensure that customers are taken into consideration during the planning process and that they feel involved in the business decisions and are not thrown off by the new invoicing solution.

In the next section see how to start with a few key partners and pilot the unique e-Invoicing solution. It may be advisable to select organisations which already have experience of e-Invoicing or EDI as a starting point.

ACTION TYPE (*)

Actions that have prerequisites (other actions need to be implemented first), but require no investment

CONNECTED ACTIONS

TIME REQUIRED TO IMPLEMENT A SOLUTION AND WHEN POSSIBLE ASSOCIATED COST

Several hours will be required to speak with partners, understand their needs, and work towards finding an e-Invoicing solution that is beneficial to all.

POSITIVE AND NEGATIVE PART OF THE SOLUTION

<u>Positive:</u> Creating an e-Invoicing solution that fits everyone's needs in the chain of work.

<u>Negative:</u> Trying to satisfy all partners' needs at once may lead to internal frustration and complicated solutions.

ESTIMATED EXPLOITATION

By working in a collaborative manner, both entities will be able to exploit e-Invoicing results.

ICT COMPETENCE

Basic to Intermediate

ENGLISH LANGUAGE SKILLS

Depending on if they are national or international partners the language level needed will be Basic to Advanced

WEBSHOP LEVEL

n/a

INFORMATIVE TEXT

1. Mytilinos, N. (2013). Adoption of e-invoicing by SMEs: the business document standards aspect. Retrieved from
https://dspace.library.uu.nl/bitstream/handle/1874/276052/Nikos%20Mytilinos%20-%20master%27s%20thesis.pdf?sequence=1
2. European e-business lab. (2009). European E-Invoicing Guide for SMEs. Retrieved from
http://wko.at/ebusiness/e-rechnung/ebl_eInv_guide_final_web.pdf

ADDITIONAL RESOURCES

• Tips for getting suppliers involved in the e-Invoicing process.

• Guide to on board your suppliers to e-Invoicing.

• Understand the main aspects that are important for you to consider about the capabilities of your trading partners.

CROSSBORDER REMARKS

Depending on the contact, make sure that cultural differences are accounted for.

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6. Test the system

ABSTRACT

The system test aims to validate the electronic invoices adopted and to check that the new invoicing method used is accepted and in compliance with all the business partners and customers. Prior to implementation, technical review, and e-Invoicing processing test begin with a small data sample to ensure the base concepts are in place, followed by testing as many data variances as possible to ensure the validity of different variables. There may be situations where e-Invoices are not generated as expected by the system or sent data is wrong. This can be seen especially in the case of international or interdisciplinary situations. Troubleshooting is an essential feature which aids in handling adequately rejected e-Invoices due to technical failures or data incompatibilities.

GENERAL DESCRIPTION OF THE SPECIFIC ACTON

a) Test the system

The technical review and processing of test files should be carried out over a flexible timeframe allowing significant changes, and re-testing. The test should begin with a small data sample to ensure the base concepts are in place and functioning. However, it is equally important to test files containing several invoices and as many data variances as possible prior to complete implementation.

Identify the key actions that should be taken in this implementation phase:
• Agree number of test cycles, time, and location of test area.
• Ensure technical experts are available for support.
• Ensure troubleshooting procedures are in place.
• Test file transmissions at proposed times and 'out of hours' to ensure coverage.
• Ensure business users compare and double check e-Invoicing results.
It is recommended that trading partners agree rules regarding frequency of test transmissions. See this guide for ideas.
To test the e-Invoicing solution, use this application presented by the Italian government to help businesses carry out a formal check of the e-Invoice's contents before it is sent.

b) Troubleshooting

As e-Invoicing is now being implemented in ways it never was before, there is still limited understanding about the challenges/obstacles that companies are facing in adopting e-Invoicing and ideas of how to overcome them.

However, there are several solvable challenges/obstacles that companies can face while implementing e-Invoicing:
Internal challenges: which are usually due to a lack of resources and skills to implement e-Invoicing, choice of the solution, errors or missing, and employee's attitudes towards e-Invoicing adaptation.
External challenges: which are tied to geographical problems due to different tax regulations,

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vendor/customer problems, and customer companies not trusting the e-Invoicing solution.

If you understand the specific symptoms and causes of the most common invoicing problems you can resolve them. The most common issues can be seen listed below. Simple solutions to these problems can be found following this link.
• System integration
• Misalignment of different formats readiness/compatibility with internal information systems customer readiness/compatibility
• Invoices/Payment Reminders not generated
• Items Not Invoicing
• Double Invoices/Charges/Blank Invoices caused by a common misconfiguration
• Multiple Invoices for the same Service
• Variation in national rules
• Security concerns of e-Invoicing systems and the potential for misrepresentation in fraud.
• Lack resources, funding and skills to implement e-Invoicing

ACTION TYPE (*)
Actions that have prerequisites (other actions need to be implemented first) and require investment

CONNECTED ACTIONS
3. Choosing the model and platform 4. E-Invoice validation 5.Identify partners' needs

TIME REQUIRED TO IMPLEMENT A SOLUTION AND WHEN POSSIBLE ASSOCIATED COST
In order to ensure best results, a week should be given to test the system, adjust any issues, and retest it again. Associated costs include: support platforms for testing.

POSITIVE AND NEGATIVE PART OF THE SOLUTION
Positive: Ensure that the e-Invoicing solution works with partners' systems. Negative: Encountering issues may set back the use of e-Invoicing solutions.

ESTIMATED EXPLOITATION
By ensuing that the system works well before implementing it will all partners can save money, time, and frustration that would come with testing the system after it is in place.

ICT COMPETENCE
If you choose a pre-established test: Basic If you decide to create your own: Advanced

ENGLISH LANGUAGE SKILLS
Intermediate

WEBSHOP LEVEL
n/a

INFORMATIVE TEXT
1. CEF Digital. (2017, June 23). Conformance Testing. Retrieved from https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eDelivery+Conformance+testing 2. WHMOS. (2018). Invoicing Issues. Retrieved from https://docs.whmcs.com/Invoicing_Issues

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ADDITIONAL RESOURCES
a) Test the system [Conformance Testing service & description provided by the CEF](#) with the purpose of the service, users, scope, benefits, related roles, responsibilities and the overall process. **b) Troubleshooting** E-Invoicing benefits, challenges, and future strategies to overcome challenges thanks to [a comparative case study of Finnish Companies](#).
CROSSBORDER REMARKS
Be prepared for potential crossborder differences if you haven't already planned for this.

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TITLE
7. Find funding and improve your service
ABSTRACT
In order to assist companies in the implementation of the European Standard established in the Directive 2014/55/EU, the EU launched the Connecting Europe Facility (CEF), a financing system to support projects through EU grants for setting-up, upgrading, and deploying e-Invoicing solutions. The combination of new technologies with the e-Invoicing system will make access to new markets and secure transactions easier and faster. Examples of new technology models involve concepts such as Mobile Apps for e-Invoicing, Block chain, Contactless Payments, cloud services or cloud computing, Big Data, etc. As innovation and technology continue to evolve, the e-Invoicing process will adapt and reshape companies and organizations.
GENERAL DESCRIPTION OF THE SPECIFIC ACTON
a) Find funding: EU funding for e-Invoicing solutions After the publication of the e-Invoicing standard in October 2017, Member States have 18 months for full compliance with that Directive, so 2018 and 2019 represent critical years for its implementation. According to recent studies on the current state of e-Invoicing in the EU, around half of the EU countries have a low level of maturity in e-Invoicing. The financing through grants for 2018 support this Member States EU in the implementation of the European Standard for e-Invoicing - promoting the construction of a Single Digital Market. Check out: Connecting Europe Facility (CEF) grant funding to support e-Invoicing projects in Europe. Under the CEF, every year, calls for grants are launched to select projects which can use EU money to set-up, upgrade, and deploy e-Invoicing solutions. Be informed of the grant funding available to implement e-Invoicing projects that aim to support public and private entities to comply with the Directive 2014/55/EU on electronic invoicing in public procurement and the European standard on e-Invoicing. Information about webinars, calls, etc. can be found here. ## b) Discover new technologies As innovation and technology continue to evolve, successful e-Invoicing practices will require the adaptation and reshaping of any company and organization. The combination of new technologies with the electronic invoicing system will make access to new markets and transactions easier and faster in a safer environment. Identify and become acquainted with some of the new technology models that will revolutionize businesses and consequently the digital billing: • Mobile Apps for e-Invoicing: provide instant access to e-Invoices and from any location. • Cloud: User access will be provided for e-Invoicing via cloud-based software will allow users to access the invoicing data anytime, anywhere just by using an internet connection. It can also bring in automation in several tasks by the generation of payment reminders and scheduling of recurrent payments, and more features like digital wallets which will bring uniformity in the

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process.

• Big Data: With the implementation of big data, organizations will be able to make the most of data in the invoices and produce better invoices leading to better management of invoices and reduce tax fraud.

• Block chain: Recording each and every transaction happening using bitcoin or other crypto currency speeds up processes by eliminating third parties and makes transactions completely secure.

• AI digital intelligence: Electronic capturing of paper documents and provision of information for further data processing by AI mechanisms use.

c) Adopt the best practices

To improve your own system, look towards different countries and companies that have achieved success by promoting the adoption of electronic invoicing.

- Explore some of the EU e-Invoicing best practices.
- Understand that the European Union offers a Multi-Stakeholder Forum on Electronic Invoicing (EMSFEI). The forum brings together stakeholders from national e-Invoicing forums with the objective to promote the adoption of e-Invoicing at national and EU-level. EMSFEI creates an opportunity to exchange experiences and best practice across borders.

ACTION TYPE (*)
Actions that have prerequisites (other actions need to be implemented first), but require no investment

CONNECTED ACTIONS

TIME REQUIRED TO IMPLEMENT A SOLUTION AND WHEN POSSIBLE ASSOCIATED COST
Anywhere from a couple of hours to weeks can be dedicated researching, understanding, and applying this solution. Associated costs include: investments in new technologies, etc.

POSITIVE AND NEGATIVE PART OF THE SOLUTION
Positive: Exploiting the benefits of e-Invoicing within your business.
Negative:

ESTIMATED EXPLOITATION
Exploitation of e-Invoicing capabilities and technology, potentially creating additional benefits or providing funding.

ICT COMPETENCE
Depending on how the action is implemented, it will be Basic to Advanced

ENGLISH LANGUAGE SKILLS
Depending on the action implementation, language skills will be Intermediate to Advanced

WEBSHOP LEVEL
n/a

INFORMATIVE TEXT
1. Ulrich, M. (2017, July 5). Webinar #2: Funding and grants for eInvocing. Webinar retrieved from

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https://ec.europa.eu/cefdigital/wiki/display/EINVCOMMUNITY/Webinar+%23+2%3A++Funding+and+grants+for+eInvoicing

2. European Commission. (2018). E-Invoicing. Retrieved from
https://ec.europa.eu/growth/single-market/public-procurement/e-procurement/e-invoicing_en

3. Rampton, D. (2017, September 14). 8 tips for better einvoicing. Retrieved from
https://due.com/blog/better-einvoicing/

ADDITIONAL RESOURCES

a) Funding opportunity about Connecting Europe Facility Platform: https://ec.europa.eu/digital-single-market/en/newsroom-agenda/funding-opportunity/connecting-europe-facility

b) Discover new technologies

The best apps in 2018 with software services dedicated to e-billing and e-Invoicing operation.

An example of mobile apps for e-Invoicing.

An example of cloud-based e-Invoicing.

An example of big data in e-Invoicing.

Understanding how block chains can revolutionise e-Invoicing.

How Finland is using AI to go 100% electronic with their invoices.

c) Adopt the best practices

• Catalogue of Good Practices to support the delivery of B2G e-Invoicing.

• Real experiences: EU success stories and lessons learned.

CROSSBORDER REMARKS

Finding additional motivation factors to implement e-Invoicing can help you set up for a successful future.

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