



WHITE PAPER

EU Directive 2014/55/EU

This is how you get ready for the Digital Single Market

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Summary

The European Union is working in a targeted manner to digitalize the exchange of data across the single market. Today, the digital “dialects” of the individual countries are a challenge when cross-border IT solutions need to communicate with each other. This results in reduced efficiency and productivity, and it does not harmonize with the visions for cross border trade within the EU. Due in part to this, the EU has therefore adopted Directive 2014/55/EU on electronic invoicing which all public authorities in Denmark must comply with.

This white paper will give an introduction to what the ambitions are behind the EU’s Digital Single Market. Then we will provide an overview of the status of the digital e-commerce environment in Denmark – NemHandel – and the shared European replacement – PEPPOL. This white paper will outline the technological specifications that will apply to all electronic invoicing in the public sector and will sum up both the challenges and opportunities for solutions associated with this. The white paper will finish off with good advice for the implementation of PEPPOL on your own IT platform.



The vision of the Digital Single Market

EU Directive 2014/55/EU is a directive that, going forward, will require public authorities in Denmark being able to receive electronic invoices in two special formats from suppliers across the whole of the EU. These two invoicing formats are not based on the current Danish standards for electronic invoices but rather on common European principles. In other words, the public authorities in Denmark must make an active effort to comply with EU legislation on the area. The first step will involve all public authorities being able to receive the two electronic invoicing formats by no later than April 18, 2019. A year later, the same requirements will apply to all Danish municipalities and regions.

There are two primary objectives associated with the implementation of the EU directive. Firstly, there is a desire to carry out a comprehensive digitalization of data exchange in EU's public sector in order to strengthen the competitiveness of European companies. The idea is that if you can succeed in removing administrative barriers and streamline the digital processes, then suppliers across the EU will be able to hand in better offers in the tender process and the public organizations will better be able to procure what they need. This is a completely positive development and a welcome political initiative. Today, the public purchasing processes in the EU are characterized by very great national differences. In some EU countries, deals between suppliers and the public sector includes a lot of manual processes while other EU countries, including Denmark, have made great strides in the digitalization of the procurement phase's core processes. The EU directive aims to standardize the exchange of data across EU's single market.

When the directive has been implemented, one can foresee a situation where the sub-processes of the overall electronic data interchange across EU's borders flow freely and where the jointly adopted principles for the handling and exchange of data ensures a high degree of efficiency and quality in the invoicing process and thus helps to improve the conditions in which European companies do business.

Secondly, there are financial considerations behind the EU directive. The analysis firm, Gartner, has estimated that the total efficiency gains from introducing standardized electronic invoicing across the EU's single market amount to approximately 50 billion EUR per year. This amounts to around 373 billion Danish kroner. The analysis firm, Deutsche Bank Research, takes it a step further and estimates that the efficiency gains are rather in the region of 75 billion EUR per year – around 560 billion Danish kroner. Deutsche Bank Research also believes that the savings potential is even higher if you also include the financial effect that electronic data interchange in the EU will have on, for example, the fight against corruption and nepotism in the tender processes. When all procurement processes have been digitalized and are compliant with a number of standardization principles, there will be more transparency in the procurement processes and it will be more difficult to act based on personal interests rather than the interests of the public.

Political status in Denmark

In Denmark, we are good at taking advantage of the technological opportunities. Denmark was ranked first in the EU's "Digital Economy and Society Index 2017", which measures the 28 EU member states' digital readiness and performance. Even though the analysis does reveal that there is room for improvement, the Danish public sector is generally on track. This also applies to the ability of public sector companies to receive electronic invoices. Thus, 100% of all public authorities in Denmark can currently receive an electronic invoice while the same number for private companies is around 60-70%.

A large reason for this success lies in the development of the digital e-commerce environment, NemHandel. NemHandel is a technology standard developed by the public sector that makes it easy and secure to exchange electronic data. The standard defines the syntax on the invoicing elements – what elements there needs to be and what information the elements need to contain – and beyond that, they have a catalogue of the total supplier landscape. The NemHandel environment was created in 2005 and updated in 2010 to the version we know today. When the private companies had built the IT structure that was required in order to do business with the public sector, companies also begin using NemHandel when they do business with each other as they found that it made their lives easier with less paper and less time wasted.

So this is where we find ourselves now. With a modern Danish standard that works when the public sector and private Danish companies do business. However, NemHandel is about to be phased out. On April 18, 2019 and April 18, 2020 respectively, all Danish central government authorities and all municipalities and regions in Denmark must comply with EU Directive 2014/55/EU which states the terms for the common European version of NemHandel, PEPPOL (Pan European Public Procurement Online). With this EU directive, there will be new requirements for the syntax of an electronic invoice and the infrastructure that is to make it possible to exchange digital information securely across the single market.

We do not know how long NemHandel will remain available in Denmark. However, signals from The Danish Agency for Digitisation indicate a gradual phasing out after April 18, 2020.



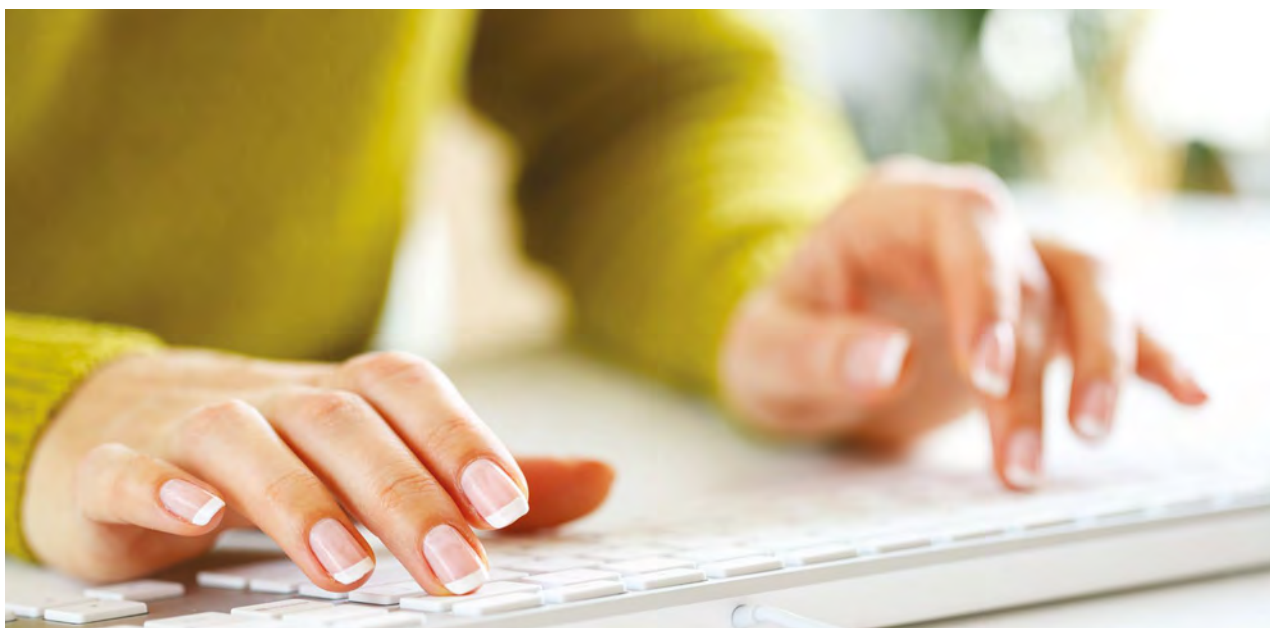
CEF eInvoicing and CEF eDelivery

The EU's Connecting Europe Facility (CEF) is a program that aims to promote digital cohesion and data exchange between EU member states via the development of generic tools, platforms and services. CEF defines it as a vision of a "Digital Single Market". To support this digital single market, CEF has prepared a number of digital specifications, Digital Service Infrastructures, which are to be used across the public sectors of the EU member states. There are currently five Digital Service Infrastructures – CEF eInvoicing, CEF eDelivery, CEF eID, CEF eSignature and CEF eTranslation. In this context, we will only be looking at CEF eInvoicing and CEF eDelivery. CEF eInvoicing specifies the syntax requirements for an electronic invoice in the EU directive, while CEF eDelivery specifies the infrastructure requirements for a secure exchange of data and documents, including electronic invoices.

- The CEF eInvoicing specification has been defined by the European Committee for Standardization (CEN) as the European invoicing standard EN 16931. This standard takes shape in two new formats – PEPPOL BIS and Cross Industry Invoice (CII). All public sector authorities in Denmark must, before the two deadlines for implementation of the EU directive, be capable of supporting PEPPOL BIS and CII in order to be able to receive an electronic invoice from a supplier in the EU.
- The CEF eDelivery specification defines the principles for a public sector digital architecture for secure exchanges of documents and data across national borders in the EU. Unlike the CEF eInvoicing specification, the work with the eDelivery specification has not yet resulted in a permanent standard for the member states to use. However, it is important to note that all public authorities must still comply with the principles that the CEF eDelivery specification outlines by the two closing dates for the implementation of the directive. It is also worth noting that the OpenPEPPOL protocol is already being used several places in the EU and that the protocol complies with the principles of the CEF eDelivery specification.

Important dates

- On April 18, 2019, all state authorities in Denmark must support EU directive 2014/55/EU and be capable of receiving invoices in the PEPPOL BIS and CII formats and also comply with the principles of the CEF eDelivery specification.
- On April 18, 2020, all regional and municipal authorities in Denmark must support EU directive 2014/55/EU and be capable of receiving invoices in the PEPPOL BIS and CII formats and also comply with the principles of the CEF eDelivery specification.



Challenges and solutions

What does it take for public authorities to be ready for EU directive 2014/55/EU? On a purely technological level, public authorities in Denmark are faced with the challenge that the required interfaces between their own IT platforms and PEPPOL have not yet been built. Currently, a supplier in Portugal or Poland cannot send an invoice to a state authority in Denmark in the PEPPOL BIS or CII format using a CEF eDelivery supported method. They must be able to do so by April 18, 2019. The same applies to municipalities and regions the year after.

There are two solutions to this challenge. The first involves that the public authorities themselves devote the resources towards building the required interfaces between their own IT platforms and PEPPOL so that the new document standards and infrastructure meet the requirements of the EU directive. This is a relatively complex task which will require significant internal resources from an IT department in a public authority. With budgets already under heavy pressure, and with increasing workloads, this is a solution model that is inherently risky.

The other solution is to find a supplier in the market who can build the interfaces between their own IT platforms and

PEPPOL. It is possible to design a conversion mechanism so that, during a transition phase, one keeps using NemHandel while also supporting PEPPOL on both the syntax and infrastructure level. With this approach, the public sector in Denmark can receive invoices in the PEPPOL format from EU countries but manage the invoice in the familiar NemHandel invoice format using their own IT platform.

For private companies that need to send an invoice to a public authority in another EU country, they can use the same conversion principle to prepare the invoice in the NemHandel format and then convert it automatically to the PEPPOL BIS or CII format when they send it. That way, the employees working on it will hardly notice the difference from today. The technology works on a deep level and requires no personal attention.

A qualified guess would be that the most common ERP solutions on the market will at some future date automatically be able to support PEPPOL BIS and CII – though not within the deadlines outlined in the directive. And it should be noted that this support would only be on the syntax level. It is doubtful whether the ERP solutions will ever be able to support the CEF eDelivery specification.

Good advice for implementation

When one considers that the first public authorities must already comply with the EU directive by the spring of 2019, there is not much time to waste. Here are some pieces of good advice for both public and private companies looking for solutions to meet the requirements.

Get access to specialized technical resources

It is no easy task to build the required conversion functionality between the company's IT platform and PEPPOL. It requires extensive technical competences to receive an invoice in one format, convert it instantly, and then show it to the user in a format they are familiar with. If the conversion is not flawless, the organization ends with big problems that can take a long time to resolve.

Get access to specialized advice

The EU directive and the work with PEPPOL is a result of many years of work in the EU. Here, it makes good business sense to be able to consult with experts who have extensive knowledge on the area. These deep insights can also be brought into play in the form of consultancy services that can assist with the external communication with collaborative partners or customers.

Make sure that the organization is geared up for implementation

Even though you, as a public or private company, might rely on an external supplier to build the conversion functionality between your company's own IT platform and PEPPOL, you need to be aware that a successful implementation still requires that the senior management gets involved on the business level. This covers everything from budgeting for the task to implementation and anchoring – the project must have the necessary support from senior management.

Analyze the business potential

For public companies it is very simple. The EU directive is something that must be complied with – period. Effective cross-border business processes in a digital single market will of course make it easier to have good procurement deals, but for the public sector, supporting the EU directive is first and foremost about compliance. For private companies, the situation is different. There is a great business potential in building the digital interfaces that make doing business with public and private companies anywhere in the EU easier and more effective. This analysis should form the basis for a decision when you consider when you want to start supporting the common European technological initiatives.

KMD's experiences with electronic data interchange

Today, KMD runs one of the Nordic region's largest competency centers for the development and operation of EDI services.

KMD has worked with electronic data interchange (EDI) for many years. KMD was the largest and most significant actor in the development of the Nem-Handel environment in Denmark and it has two seats on the European Committee for Standardization. Today, KMD runs one of the Nordic region's largest competency centers for the development and operation of EDI services.

KMD supports public and private companies in their work towards meeting the requirements of EU directive 2014/55/EU in two ways:

- KMD can build and operate the conversion solution that makes it possible to create the necessary links between the company's own IT platform and PEPPOL.
- KMD provides advice and consultancy services in connection with the development of an electronic data interchange strategy at home and abroad as well as providing IT project implementation services.