

BILLTRUST REPORT

E-invoicing interoperability and compliance

A guide for finance teams seeking success in global markets



Why this report?

Businesses cannot afford to waste time when it comes to e-invoicing. Traditional methods of billing and invoicing are outdated, and the processes involved are manual, time-consuming and inefficient, leading to substantial costs.

However, there is another reason why businesses, especially those operating internationally, should consider switching to e-invoicing. It may soon become a legal requirement and a tax compliance obligation, with certain countries already implementing mandatory e-invoicing.

The purpose of this report is primarily to assist companies and organizations that are considering or planning to implement their own international e-invoicing project. It serves as a valuable reference guide, keeping readers informed about current trends and diverse rules and regulations pertaining to e-invoicing in different countries worldwide. This report caters to a wide audience of business professionals, rather than solely targeting e-invoicing experts.

Why Billtrust? Billtrust has been at the forefront of the global e-invoicing market for over 20 years. We deliver outbound invoices to over 150 nations worldwide and have witnessed this radical shift in how the landscape operates firsthand.

This report is intended for informational purposes only. The validation of the current status for each country is required/recommended to ensure readers are aware of the latest updates that may have occurred. Information provided herein does not, and is not intended to, constitute legal or other professional advice.





"There is no e-invoice compliance without order-to-cash automation. You need to achieve high levels of process maturity, automation and, consequently, data quality."

Loek Smits
Director, Product
Billtrust



What you'll learn

- How the VAT gap and mandatory e-invoicing act as big drivers for digital transformation in accounts receivable
- 2 Current and upcoming types and models of e-invoicing
- Why some businesses feel electronic invoicing is a blessing and a curse
- A snapshot in time of EU e-invoicing mandates



The digital transformation of invoices and tax



Amidst the discussions surrounding digital transformation, the need for digitalization in accounts receivable (AR) has evolved from being optional to imperative.

For numerous businesses, the digitalization of their finance function is no longer a matter of choice but a necessity. Internal and external stakeholders of the finance function now expect, demand, and even mandate access to enhanced data quality and quantity.

We see two big drivers for digital transformation in AR:

VAT gap

Countries worldwide are enhancing and digitizing their tax reporting systems to support reducing the VAT gap.

Mandatory e-invoicing

The electronic invoice, commonly known as an e-invoice, is rapidly emerging as a vital component in facilitating smooth business transactions and payments between trading partners. Moreover, it is crucial for meeting current and new regulatory obligations imposed by local tax authorities.



WHAT'S THE VAT GAP?

It's the difference between the VAT revenues that EU states expect to receive and the amount of VAT that is actually collected.



The invoice process

From its creation until it is archived, an invoice must go through a number of processes and steps. While the procedures and degree of automation may vary significantly among entities, sectors, and regions, we often observe a dynamic combination of legacy processes, automated processes, and hybrid approaches.

These processes are easily recognizable:

Legacy processes predominantly rely on paper-based invoices

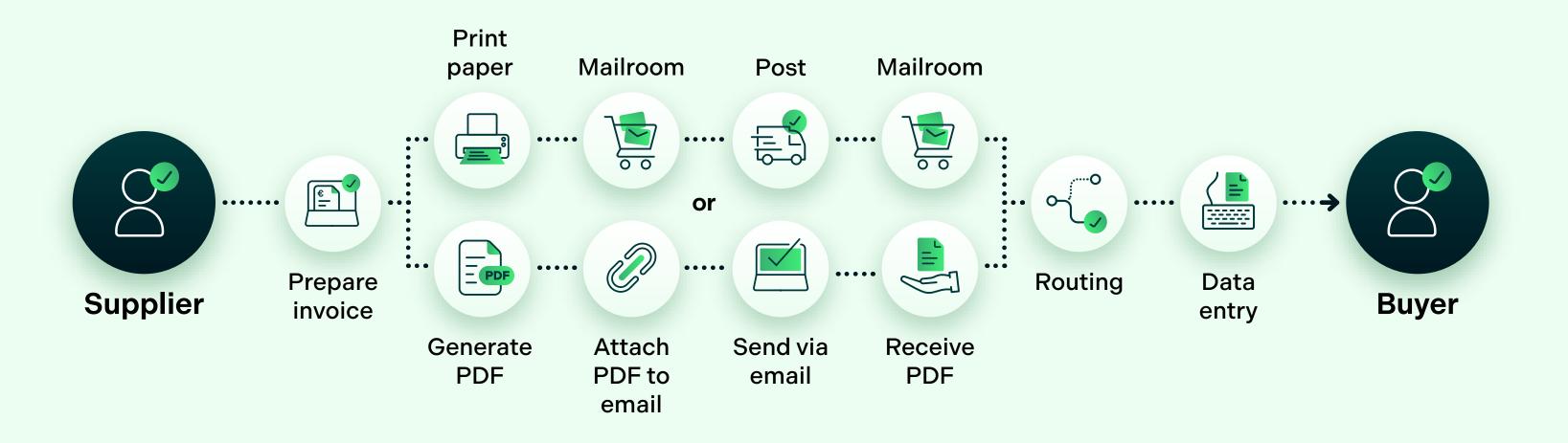
Automated processes utilize electronic invoices

The extensive middle ground operates on digitized paper, usually in the form of PDF invoices

Paper invoice	PDF invoice	Electronic invoice
The traditional invoice - printed on paper, enveloped and mailed - was designed in an era when companies had mailrooms and clerks to deliver mail to employees using a trolley and doing one or multiple rounds per day.	The traditional invoice in a digital form ("digitized") is sent through email and/or presented on a buyer facing portal. However, it is important to remember this is only a digitized version of the paper invoice.	The primary feature of an e-invoice is its focus on straight-through processing , distinguishing it from paper or PDF invoices. It recognizes that the recipient of the invoice is not a human but a system, emphasizing its distinction.
Expensive: Cost of paper, printing costs and mailing costs	Less expensive than paper invoice	Low cost per invoice
Not environmentally friendly	More environmentally friendly	Environmentally friendly
Labor intensive because of manual handling (sending and receiving).	Still manual processing despite optimized invoice layouts.	Facilitates the automation of supplier (order-to-cash) and buyer side processes (purchase-to-pay).
Difficult and costly to archive	Easy to archive	Easy to archive



Traditional invoicing



E-invoicing





The potential of e-invoicing for suppliers, buyers, and tax authorities

Put yourself in the shoes of an employee working for a national tax authority in Europe, assigned to tackle fraud and money laundering. Politicians have declared that the country intends to crack down on suspicious business practices, with the tax authority taking on the responsibility of verifying and approving every single invoice before it can be transmitted from the supplier to the buyer.

The year Italy mandated e-invoicing, the first country in the EU to do so

In an ordinary country, like Italy for example, where a staggering 95 invoices are sent every single second, resulting in an enormous annual invoice volume of 3 billion, this verification and approval process appears to be an overwhelmingly challenging task for any tax authority.

However, thanks to the advent of e-invoicing, this seemingly insurmountable task has become a realistic possibility. Tax authorities across Europe have developed sophisticated electronic invoicing systems, often referred to as "national e-invoicing platforms," capable of swiftly and efficiently validating and approving invoices before they are exchanged between trading partners, operating at an astounding speed and scale.

The first country in the European Union (EU) that mandated e-invoicing for B2B transactions was Italy in 2019. As part of this mandate, businesses operating in Italy are obligated to upload their invoices to a designated platform called Sistema di Interscambio (SDI). The SDI has proven instrumental in enabling the Italian tax authorities to achieve a significant increase in their collected tax revenue.

Obviously, none of this would be possible without the utilization of e-invoicing systems. Contemplating this success leads one to wonder about the vast array of possibilities that e-invoicing could unlock in the future.



Types of electronic invoicing in practice







B2B e-invoicing

B2G e-invoicing

Clearance

What is it?

The exchange of structured invoice data between two businesses, a buyer and a supplier.

The exchange of structured invoice data between a business (supplier) and a governmental entity (buyer).

The requirements to share invoice data with tax authorities. Tax authorities in many countries are seeking to use e-invoicing technologies as a means to reduce their VAT gap.

How does it work?

The service provider of the supplier and the service provider of the buyer establish a connection to exchange invoice data and status updates. This model involves four parties, thus earning its name as the **four-corner model** of e-invoicing.

B2G e-invoicing in Europe relies mainly on a shared digital infrastructure, the Peppol network, and largely standardized European e-invoice specifications (with little room for national deviations).

In the case of **Invoice Clearance**, the tax authorities become part of the invoicing process. Before an invoice can be issued, corrected or canceled, an (automated) approval is required first. Real-time **Reporting** is very similar, tax authorities just need to be informed of invoices issued, there is no need for approval.

Mandatory?

This type of e-invoicing is done on a voluntary basis, and specific agreements can be made between supplier and buyer to determine what data needs to be exchanged to enable smooth processes for both trading partners.

In Europe, e-invoicing in public procurement is ubiquitous and, in many EU member states, mandated by law.

Yes, mandated by law.

Status?

B2B e-invoicing has seen significant growth thanks to the rise of numerous Accounts Payable (AP) platforms on the buyer side, with some well-known examples including SAP Ariba, Basware, Coupa, Tungsten, and Tradeshift.

B2G e-invoicing in Europe is regarded as a great success and as a result, European standards such as the Peppol network and electronic invoice specifications are now in the process of going global from Asia-Pacific to North America.

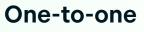
In the European Union, Italy was the first country to successfully operate a Clearance model. Other countries, such as Poland, France, Belgium and Spain will adopt Clearance models in 2024 and beyond.



Introducing the e-invoicing models of exchange

There are multiple models of ensuring e-invoicing interoperability, with varying benefits and limitations to each. In these interoperability models no preapproval from tax authorities is required, and the main goal of these models is to facilitate automation and digitalization between businesses.

Two-corner





What is it?

Limitations?

model

Two trading parties connect oneto-one in a direct fashion.

Big implementation effort and lack of scalability because of its one-to-one nature.

Three-corner model





What is it?

Limitations?

Suppliers and buyers connect oneto-one indirectly, through a single platform exchange hub.

Big implementation effort and lack of scalability because of its one-to-one nature.

Four-corner model

Many-to-many

Indirect

What is it?

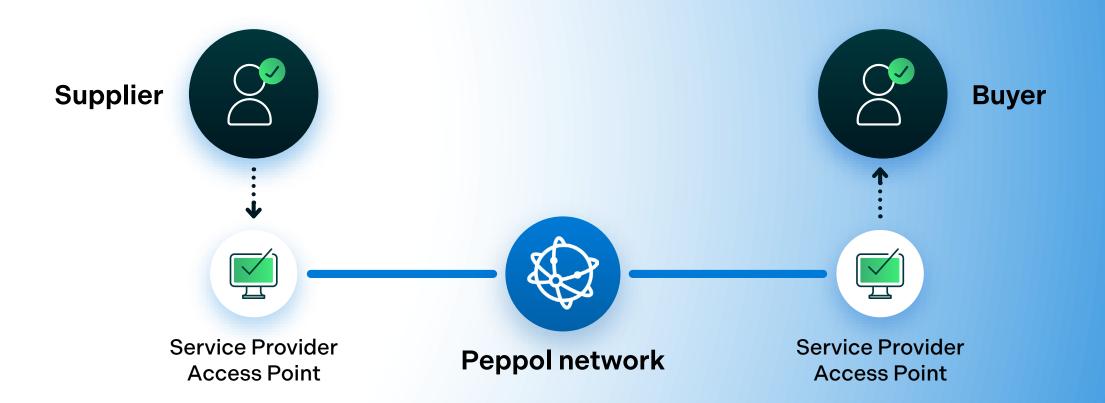
Benefits?



Suppliers and buyers establish an indirect connection with each other, utilizing their respective platforms or service providers for exchange of information.

Scalable, low implementation effort.

The Peppol Four-Corner model



What is it?

Peppol (Pan-European Public Procurement Online) is a common set of e-invoicing specifications and a network, based on a four-corner model, where businesses can exchange information, including e-invoices. Businesses use a Peppol Service Provider or a Peppol Access Point to gain access to the Peppol network and exchange documents.

These service providers or access points work with a specific data format, Peppol BIS.

What is the difference with other interoperability models?

The exchange mechanism is regulated by Peppol and users can only exchange documents in the Peppol BIS format.

What is it not?

A CTC model (see for a description of CTC models below), because no information is exchanged with tax authorities.

Current status?

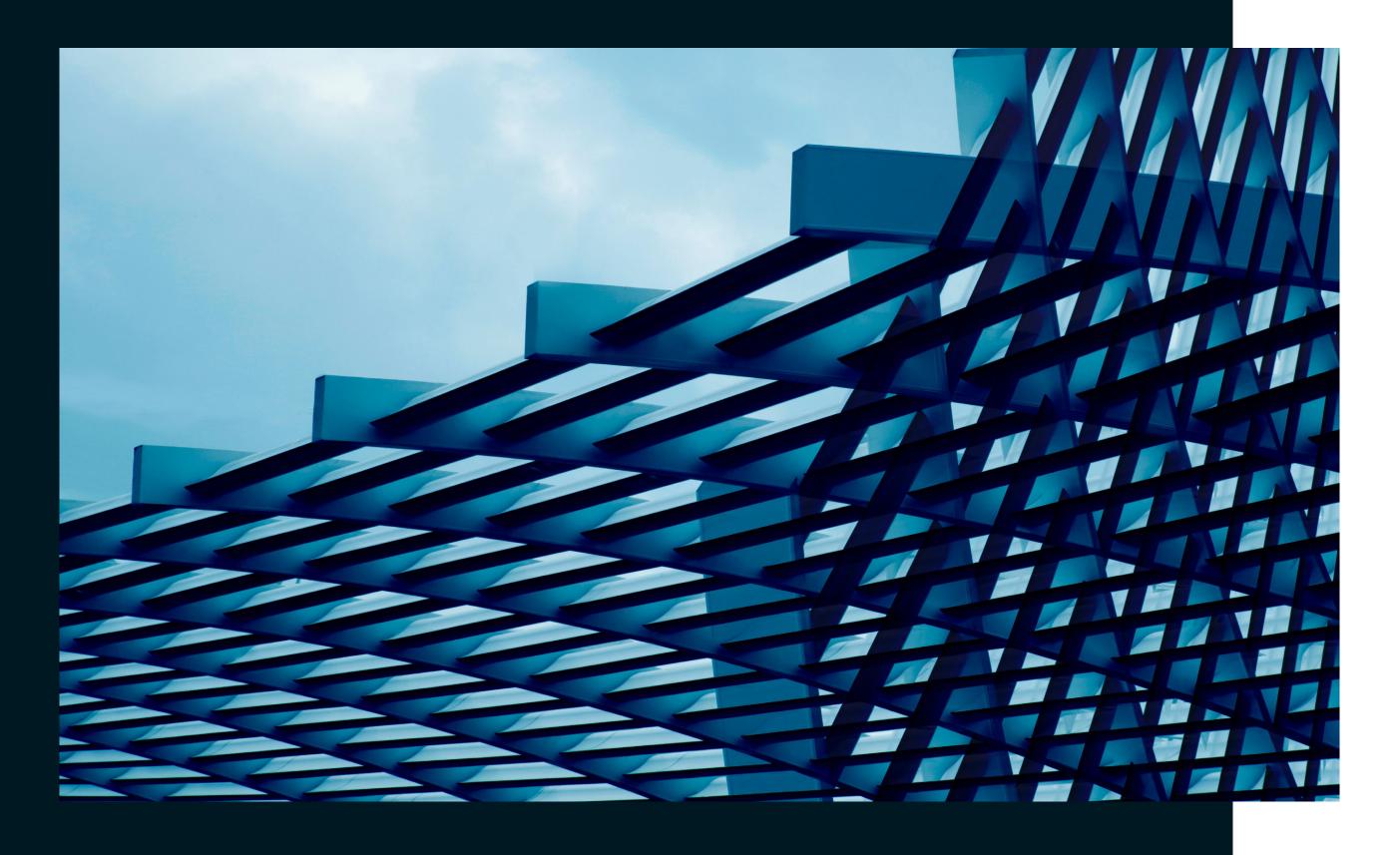
Since the launch of Peppol more than 40 countries have adopted the Peppol model - 32 of them in Europe.

What brings the future?

Peppol CTC is an upgraded version of the current Peppol fourcorner model. Peppol Service Providers or Peppol Access Points shall report data to the tax authorities or other government agencies in real-time. Peppol CTC is a five-corner model.



What about CTC — Continuous Transaction Controls?



Tax authorities have different ways to gain access to data of business activity in their countries. When invoice data is collected directly from the transaction process in real-time or near real-time this process is referred to as Continuous Transaction Controls (CTC).

Instead of a retroactive, traditional post-audit where the tax administration relies on information of transactions long after they took place, CTC uses the data at the moment of the transaction itself for real-time validation.

While some countries still use a post-audit model, various countries around the globe have begun to accelerate the adoption of CTC, with different operational models today.

The government acts as an **intermediary**, validating invoice Centralized data and facilitating exchange of data between supplier and Government Exchange model buyer. Today, this model is used in B2G e-invoicing. Each invoice has to be approved and validated first by the government Clearance model or tax authorities, on both the supplier and buyer side. In this case Government the tax authorities become part of the invoicing process. Each time the supplier issues an invoice to the buyer, invoice data **Real-Time Invoice** needs to be **reported in real-time** to the tax authority. It's very Government similar to the Clearance model although tax authorities just need to Reporting model be informed of invoices issued, there is no need for approval. In the most complex model, governmental tax authorities would **actively** participate and gain (near) real-time access to invoice data without interfering **Decentralized** with the billing process between supplier and buyer. Their goal is checking for tax liability and ensuring compliance among suppliers and buyers. CTC and Exchange Government This model can involve service providers on either side of the buyer/supplier divide model (DCTCE) and thus end up with five different parties being involved in one transaction. It is sometimes referred to as a five-corner model. Peppol CTC is an example of this model.



On the horizon:

Seamless e-invoicing and compliance with the five-corner model

The newest five-corner model, still in development, introduces a central tax platform as the fifth corner, enhancing the existing infrastructure.

This addition enables networks such as Peppol to offer users a more efficient e-invoicing experience, facilitating seamless data exchange, including VAT charges, between users and tax authorities.

How does it work?

The supplier (corner 1) sends an invoice to its service provider (corner 2), giving the supplier access to the network. The service provider (corner 2) sends the invoice to the service provider of the buyer (corner 3) and the tax authority (corner 5), all within the same network, and then sends it to the actual buyer (corner 4).

Benefits of a five-corner model include:

- Stronger legal compliance for all involved parties
- Service providers assist in a more seamless exchange of information
- Automation of real-time reporting and the procure-to-pay process



How traditional paper-based invoice processes continue to dominate our thinking



Imagine being the owner of a building company, entrusted with the task of renovating one of your valued customer's office buildings. This renovation will take your company about a month to complete and will cost your customer approximately \$300,000.

Each morning, you kick-start the day's operations by picking up your colleagues. Before diving into the day's tasks, a quick trip to a local hardware store becomes necessary to procure the small but crucial items needed for the job at hand. For lunch, you walk to a food truck parked nearby. As the sun starts to set, you and your dedicated team wrap up operations and make your way back home. This rhythm continues day in and day out.

Your company incurs both direct and indirect costs every single day: transportation expenses, labor wages, procurement of building materials, and various other necessary expenditures. Some of these costs require upfront payment, such as gasoline and building materials. Based on these factors, the goal is to determine the best approach for invoicing the customer for the completed work.

To help manage the costs, you may consider negotiating a down payment before commencing the building work. Additionally, interim invoices based on the completion of specific milestones or periodic, weekly invoices could be an option. However, have you ever contemplated sending the customer three separate invoices each day, specifying labor, materials, and indirect costs? Most likely not, as it could create unnecessary administrative burdens and be perceived as hassle-ridden.

As the project comes to an end, you discover that the budget has exceeded \$300,000. Your customer is now refusing to pay the final invoice, insisting on detailed specifications of hours worked, materials used, and even the distance traveled. This situation has turned into an administrative nightmare, leaving you wishing that customers were more accommodating and understanding.

Imagine if you and the buyer had the capability to automatically exchange invoices, remittances, and digital payments. Would you have approached the invoicing process differently?

Why some businesses feel electronic invoicing is a blessing and a curse

Despite the widespread understanding of the benefits and enormous potential of e-invoicing, many finance, IT, and tax leaders perceive it as a threat rather than an opportunity. This perception arises from the fact that e-invoicing exposes outdated systems, inefficient processes, and unreliable data to external scrutiny.

The finance function, which handles one of the most critical assets in any business (money), has been slower in embracing digital transformation due to the difficulty and risks associated with modernizing legacy systems. Its core processes are essential for the smooth operation of the business, subject to strict regulations, and require thorough auditing. Consequently, finance functions still rely heavily on legacy systems that no longer support the evolving needs of the business. Hence there are so many spreadsheets in use, to fill the gaps that exist because of legacy systems and patchwork integration.

To help make the leap from a paper-based finance legacy to a new digital reality you need to think end-to-end, global, strategic and bring a strong partner on board that you can trust.





One size does not fit all

Mapping an effective route through the e-invoicing landscape is no easy task. Keeping up with ever-changing e-invoicing requirements can be a daunting task due to dynamic regulatory and technological developments.

This complexity is why companies of all sizes are looking towards existing or new partners to help them navigate this rapidly changing landscape.

Service providers can uncover the requirements by providing answers to the following questions:

- What is the business case for enabling B2B e-invoicing?
- What are current and upcoming regulatory requirements and changes?
- Are there any vertical industry specific requirements that impact e-invoicing?
- How will e-invoicing impact the overall order-to-cash process of the supplier?

"In 2019 it was estimated only 55 billion invoices were exchanged on a paperless basis, roughly 10 percent of all invoices.

It's expected to quadruple in size by 2035."

(Source: 2019 Billentis Report)



What's next?

There is a certain level of uncertainty in the e-invoicing market. Don't be afraid to ask for help.

E-invoicing is here to stay. More than 100 countries have moved or started moving towards e-invoicing. By 2030, e-invoicing is expected to be the predominant model worldwide.

In the meantime there is a certain level of uncertainty that is present in the e-invoicing market. It sometimes feels like every quarter we have another EU member state proposing digital tax reforms that include either invoice clearance or real-time reporting requirements. Uncertainty also stems from proposals that are not yet made into law, such as the European Commission's plans for VAT in the Digital Age (ViDA).

Every time new developments happen, a flurry of commercial activities of e-invoicing service providers kicks in. Commonly used sales tactics float on the fear of non-compliance and invite tactical buying behaviors.

It is certain that numerous exciting developments are taking place in the realm of e-invoicing. While this fact holds great significance for those with insider knowledge, it may be less relevant to finance, IT, and tax leaders who have other responsibilities, rather than reviewing tax reform proposals and translating them into digital requirements for future financial operations.

So don't be afraid to ask for help. We are here to support you throughout your e-invoicing endeavors. Should you wish to further explore the topic of e-invoicing interoperability, please reach out to the Billtrust team, as we would be delighted to continue the conversation with you.





On the horizon: VAT in the Digital Age (ViDA)

Although countries within the European Union (EU) have been progressing at varying speeds with their e-invoicing requirements, there have been notable developments in the VAT domain.

Jan 2028

Date e-invoicing will become mandatory for all intra-community transactions in the EU

In December 2022, the European Commission introduced a proposal called "VAT in the Digital Age" (ViDA), aiming to enhance the effectiveness of the EU's Value-Added Tax (VAT) system for businesses, modernize VAT rules and strengthen its resilience against VAT fraud.

The ViDA proposal builds upon existing advancements in e-invoicing and seeks to cement e-invoicing as the norm rather than the exception. If the proposal is accepted, then by January 1, 2028, e-invoicing will become mandatory for all intra-community transactions in the 27 EU Member States.

As of today, Europe has one active e-invoicing mandate in Italy, while several other EU Member States are developing their own mandates.





The ViDA proposal identifies 3 requirements to make VAT fit in the Digital Age

Digital Reporting Requirements (as proposed in ViDA)





- 1. A new real-time reporting system that ensures all Member State authorities are fully informed of transactions in real-time, allowing them to immediately address instances of VAT fraud
- 2. Updating VAT rules so platform economy operators will be deemed responsible for collecting VAT when service providers do not, and for remitting this VAT to tax authorities
- 3. A single VAT registration for business. Allowing businesses that want to sell to consumers in another Member State to register only once for VAT purposes for the entire EU and fulfill their VAT obligations in one language, via a single online portal.

Jan 2024

- Member states may allow local standards based on EN 16931 when implementing new e-invoicing mandates.
- E-invoicing mandates with pre-clearance models can no longer be introduced or applied.
- Domestic e-invoicing and reporting obligations should be in line with EU principles.

Jan 2025

- Reporting of domestic reverse charge transactions.

Jan 2026

- Digital reporting through e-invoicing mandates for all intra-EU and cross-border supplies of goods and services. Within 2 days after issuing the invoice.
- Setup of central VIES database for tax authorities (sharing of invoice data with other Member States).
- Phase out of domestic e-invoicing mandates that are not in line with EU standards. Countries like Poland and Italy need to converge to the new rules by 2028.
- Current recapitulative statements (EC Sales Lists) for B2B intra-EU transactions abolished.





Appendix:

Asnapshot intime of EU e-invoicing mandates



A snapshot in time of EU e-invoicing mandates



Mandate: B2G

Model: Post Audit



Mandate: B2G, B2B (proposed) Model: Post Audit with view to adopt a Clearance style model in 2024/5



Mandate: B2G

Model: Post Audit



Responsible authority

Federal Ministry of Finance

Federal Public Service Policy and Support (BOSA)

Danish Business Authority (Ministry of Industry, Business and Financial Affairs)



Platform(s)

- Any platform can be used if connected to the authentication services of the Federal Service Portal (Unternehmensserviceportal – USP)
- E-rechnung.gv.at for e-invoicing Transmission

- Mercurius (B2G)
- Hermes (B2B)

NemHandel



Standard(s)

- EbInterface (national XML standard)
- PEPPOL BIS (UBL-international)

PEPPOL BIS 3.0

- OIOUBL (National UBL2.0 standard)

- PEPPOL BIS 3.0 UBL is optional



Legal storage period

7 years from the end of the calendar year

10 years from the end of the fiscal year

10 years from the end of the accounting year



A snapshot in time of EU e-invoicing mandates



Mandate: B2G

Model: Post Audit



Mandate: B2G, B2B (proposed) Model: Post Audit, Clearance (proposed)



Mandate: B2G

Model: Post Audit, Clearance (proposed)



Responsible authority

State Treasury

Ministry for the Economy, Finance and Industrial and Digital Sovereignty (policy making) Agency for State Financial Information (AIFE) (implementation and maintenance) Public Finances Directorate General (DGFiP)

- On the federal administration level: Federal Ministry of the Interior
- On the federal state level (Länder), each state (Land) is responsible for elnvoicing



Platform(s)

Decentralized network of interoperable e-invoicing operators

- ChorusPro
- Peppol

A shared portal (E-Rechnungs-Portal) has been created at the federal level. Some federal states (Länder) use this shared portal too while others will build their own portal and the rest plan to use no portal or still have no planning



Standard(s)

- TEAPPSXML3.0
- Finvoice 3.0
- PEPPOL BIS Billing 3.0

- UBL 2.1
- CII UN/CEFACT
- CIUS for Chorus Pro
- CIUS for Factur-X

Peppol (X-Rechnungs, ZUGFeRD formats)



Legal storage period

6 years from the end of the accounting year

10 years

10 years from the end of the booking calendar year



A snapshot in time of EU e-invoicing mandates



Mandate: B2G, B2B

Model: Clearance



Mandate: B2G

Model: Post Audit with view to adopt a Clearance style model in 2024/5



Mandate: B2G

Model: Post Audit



Responsible authority

Ministry of Economy and Finances, supported by the Revenue Agency

Ministry for Digitalisation & Government IT Centre

- Ministerie van Economische Zaken en Klimaat
- Dutch Peppol Authority



Platform(s)

The Sistema di Interscambio (SDI)

Peppol

Peppol



Standard(s)

FatturaPA

- PEPPOL BIS

- UBL

- Peppol BIS

- NL CIUS

- SI-UBL



Legal storage period

10 years from invoice date

10 years from the end of the fiscal year

7 years from invoice date



A snapshot in time of EU e-invoicing mandates



Mandate: B2G

Model:Post Audit



Mandate: B2G, B2B (upcoming) Model: Clearance



Mandate:
B2G, B2B
(Gradual implementation)

Model:
Post Audit



Responsible authority

- Ministry of Government
 Administration and
 Modernisation (KMD)
- Ministry of Finance (FIN)
- The Norwegian Agency for Public and Financial Management (DFØ)
- Ministry of Economic Development and Technology in joint partnership with the Łukasiewicz - Poznań Institute of Technology
- Ministry of Finance.

Ministry of Public Finance

The RO e-Invoicing platform



Platform(s)

Standard(s)

- Peppol BIS Billing 3.0 (EN CIUS)

- EHF (Elektronisk Handelsformat)

- National e-invoicing services platform (PEF)
- Krajowy System e-Fakturr (KseF)

- UBL 2.1
- UN/CEFACT CII
- PEPPOL BIS Billing 3.0
- FA(2)

- Facturae -RO Factura
- UBL 2.2



Legal storage period

5 years

Peppol

5 years from the end of the calendar year

10 years and 25 years for invoices related to capital goods



A snapshot in time of EU e-invoicing mandates	Spain	Sweden	+ Switzerland
	Mandate: Model: B2G, B2B Post Audit (proposed)	Mandate: Model: B2G Post Audit	Mandate: Model: B2G Post Audit
Responsible authority	 Ministry of Economic Affairs and Digital Transformation via the Secretary General for Digital Administration (SGAD) Ministry of Finance via the General State Comptroller (IGAE) Spanish Tax Agency (AEAT) 	Agency for Digital Government (Digg) Tax Agency (Skatteverket)	Federal Finance Administration
Platform(s)	eFACTFACeFACeB2B	Peppol	A decentralized network of certified service providers
Standard(s)	Facturae - XML based national standard (used in association with an eSignature following the XAdES standard)	PEPPOL BIS Billing 3.0 format	UBLCIIXMLZugferd
Legal storage period	6 years from invoice date	7 years	10 years





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ABOUT BILLTRUST

Finance leaders turn to Billtrust to control costs, accelerate cash flow, and improve customer satisfaction. As a B2B order-to-cash software and digital payments market leader, we help the world's leading brands get paid faster while transitioning from expensive paper invoicing and check acceptance to efficient electronic billing and payments. With over 2,600 global customers and more than \$1 trillion invoice dollars processed, Billtrust delivers business value through deep industry expertise and a culture relentlessly focused on meaningful customer outcomes.



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