TRENDS CONTINUOUS GLOBAL VAT COMPLIANCE

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SOVOS

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Foreword

This 11th edition of Trends in Continuous Global VAT Compliance reflects almost two decades of experience from an international group of experts in VAT compliance.

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In keeping with emerging requirements as continuous transaction controls (CTCs) sweep around the world, the scope of this edition has been broadened to address not only e-invoicing and e-archiving compliance, but also the critical adjacent areas of value-added tax (VAT) reporting and tax determination.

As will be clear from the long list of country requirement summaries in the second half of this document, we have come a very long way as an industry that almost two decades ago started timidly with PDF and EDI invoices as tax originals in Europe and a few other countries. At that time, there were no good practices – neither for businesses nor for governments. EU tax authorities didn't always know precisely how to operationalize the e-invoicing rules of the VAT Directive. For years, businesses and service providers built on those foundations until – more or less overnight, starting in Latin America – tax authorities started their own digital transformation. And as this report shows, this "other digital transformation" is profoundly impacting how companies operate and comply with law.

And yet, the end of this revolution caused by varying forms of tax digitalization is not yet in sight. Many countries around the world have just started their individual journeys toward CTCs, and countries that have had them for many years continue to add new features – both to further close VAT gaps and to add interoperability and economic benefits to the foundations they have built.

Another enhancement from previous editions is the expanded section with concrete advice for businesses. Many companies – in particular multinational corporations – feel lost among the rapid succession of CTC mandates around the world and do not know how to avoid painting themselves into a costly and perilous corner by using a multitude of diverse local solutions. In working with such companies and their solution providers every day, we know how important it is for responsible executives to help all affected corporate functions cooperate toward a coherent approach that turns CTCs into an advantage instead of a risk.

With the increasing intensity and diversity of CTC regulation, the challenges that international companies face may well be among the most onerous in history. This report aims to provide clear, actionable advice to find workable solutions amid this mind-boggling complexity. We wrote this document to help business leaders take pragmatic steps to manage the risks and maximize the opportunities of the CTC revolution. We stand ready to help businesses and solution vendors to achieve optimum results.

*Please note that the information provided in this report is based on research and information available in September 2019.

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A TALE OF TWO DIGITAL TRANSFORMATIONS

INTRODUCTION

A tale of two digital transformations

Globalization has spurred tremendous opportunities and challenges. It is no surprise Steve Jobs chose Tim Cook to succeed him in leading Apple. Tim Cook built Apple's supply chain into what became one of the company's greatest strategic advantages.

Most multinational corporations strive to consolidate processes and supporting IT systems. However, automating business processes globally is a major challenge for complex global businesses, which can have many other priorities. Markets, politics and legislation can create challenges, but many obstacles to a company's full digital transformation are self-inflicted: different imperatives among lines of business; finding a productive balance in decision-making power between corporate functions and subsidiaries; and the impact of mergers, acquisitions and divestments are intrinsic to managing an international company. On top of this, while modern technology has allowed companies of all sizes to vastly improve many processes, the computing power, software and expertise that would be required to run a typical multinational enterprise from a single set of systems has, until very recently, simply not been available.

Fast-changing and diverse local legislation is an inevitable challenge for companies that trade beyond their national borders, and tax legislation is among the toughest to keep up with. Until recently, however, that challenge had mostly been associated with a company's accounting procedures, filing reports and retention of documentary evidence. Until the turn of the millennium, companies could adopt digital tools to replace manual, paper-based processes without triggering tax requirements. The main reason for this period of relative freedom is that the decision-making and planning necessary to modernize a national revenue administration are much slower and more politically complex than the equivalent changes required for businesses. In addition, businesses tend to focus primarily on digitalizing internal administrative workflows and day-to-day communications, and those activities are not the center of attention for tax authorities.

From the year 2000 onward, this difference in the pace of modernization between the private and public sectors started to become problematic as businesses also wanted to adopt paperless invoicing processes – and invoicing is something tax authorities, by contrast, are very, very interested in. The fact that tax authorities didn't have the right tools to audit digital invoice flows and archived data made them reluctant to allow businesses to take the step toward full electronic invoicing. This was the first time that the digital transformation of companies intersected in a concrete manner with the digital transformation – or lack thereof – of revenue authorities. And, as often when two colossal powers collide, forces were set in motion that ever since have started impacting the world economy in big ways. The fear of losing control over revenue collection made tax authorities accelerate their digital transformation in bold, unexpected ways that are now changing the very paradigm of business administration.

This report summarizes why and how this "other digital transformation" is unfolding. In so doing, it also provides recommendations for businesses to ensure they don't get caught up in the tsunami of global continuous transaction controls.

VAT AND ITS CHALLENGES

VAT AND ITS CHALLENGES

What is value-added tax?

The basic principle of VAT is that the government gets a percentage of the value added at each step of an economic chain, which ends with the consumption of the goods or services by an individual.

While VAT is paid by all parties in the chain, including the end customer, only businesses can deduct their input tax. Therefore, VAT requirements concerning invoices ordinarily only apply between businesses. Many governments use invoices as primary evidence in determining "indirect" taxes owed to them by corporations. VAT is by far the most significant indirect tax for nearly all of the world's trading nations. Roughly speaking, VAT contributes more than 30 percent of all public revenue. VAT as a tax method essentially turns private companies into tax collectors. The role of the taxpayer in assessing the tax is critical, which is why these taxes are sometimes referred to as "self-assessment taxes."

FIGURE 1: A schematic overview of how VAT works

VAT basics

The form, content and method of creating or exchanging invoices is often regulated because invoices are the prime source of audit for VAT purposes. VAT was first introduced in the 1950s and quickly spread throughout Europe and other countries.

Despite the OECD's attempts to create high-level standards for streamlined taxation of cross-border trade, there are no global rules for VAT. The EU's VAT system is the closest any region has come to harmonization, but even its rules are notoriously complex and diverse.

The VAT gap

VAT depends on companies meeting public law obligations as an integral part of their sales, purchasing and general business operations. The dependency on companies to process and report VAT makes it necessary for tax authorities to audit or otherwise control business transactions — but despite such audits, fraud and malpractice often cause governments to collect significantly less VAT than they should. The difference is often referred to as the VAT gap.

In Europe, the VAT gap amounts to approximately 137 billion EUR every year, according to the latest report from the European Commission. This amount represents a loss of 11.2 percent of the expected VAT revenue in the block. Globally, we estimate VAT due but not collected by governments because of errors and fraud could be as high as half a trillion EUR. This is comparable to the GDP of countries like Norway, Austria or Nigeria. The VAT gap represents some 15 to 30 percent of VAT that should be collected worldwide. These numbers only consider bona fide, registered business activity and would certainly be much higher if one added lost tax revenue due to unregistered business activity.

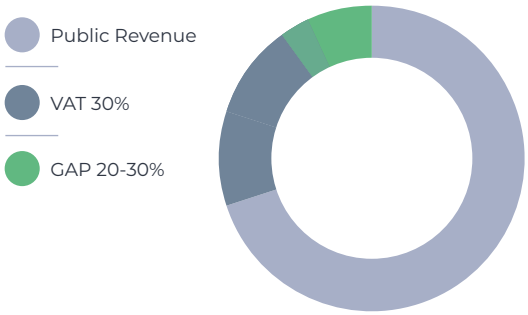
VAT AND ITS CHALLENGES

The consequences of VAT non-compliance

To reduce the VAT gap, countries are pushing taxable organizations to comply with VAT requirements and enforcing different types of legal consequences for irregularities. The consequences of non-compliance with VAT requirements can be significant. As a result, most companies want to be as certain as possible they can quickly and easily prove their VAT compliance to avoid risks, including:

- **Administrative fines:** If a company cannot prove the veracity of invoices, it may be fined. Trading partners who have been drawn into an audit that leads to this conclusion may also be penalized.
- **Sanctions under criminal law:** In some countries, non-compliance with invoicing requirements can be equated with tax evasion, which is typically liable to sanctions (e.g., fines, imprisonment) under criminal law.
- **Protracted audits:** Audits should generally take only a few days, but many companies are audited for weeks or even months. This eats up precious expert resources and creates risks of more processes and documents being scrutinized and, potentially, found flawed or lacking.
- **Spillover effects into other areas of taxation or accounting:** Once a tax authority has established that a sales transaction cannot be evidenced, a company may also face sanctions in other areas of taxation. For example, non-recognition of an invoice for tax purposes may undermine the credibility of a company's annual accounts or deductible expenses under corporate income tax.
- **Trading partner audits:** The tax authority may have no choice but to verify the records and original documents of the audited company's trading partners. This can negatively affect a company's relationship with business partners.
- **Mutual assistance procedures:** Auditors may need to call on their counterparts from other countries to obtain evidence about certain aspects of the company's operations. Such procedures tend to be long and can tie up expensive expert resources within a company for months or even years.

FIGURE 2: High-level overview of the contribution of VAT to government revenue globally and the VAT gap as a portion of that contribution



- **Loss of right to deduct VAT:** A company that does not have sufficient evidence of purchases — that cannot prove it was in control of its processes at the time of the transactions — may need to pay back input VAT it reclaimed on such purchases. With an average VAT rate of 20 percent, this means a high risk of that company retroactively losing more than its profit margin.
- **Obligation to pay VAT over fraudulent invoices:** If a fraudster can easily forge invoices that are not reasonably distinguishable from a supplier's normal invoices, a tax authority without credible evidence to the contrary may in extreme cases consider such invoices to have been issued by that supplier and claim output VAT payment if the buyer reclaimed the corresponding VAT.
- **CTCs and data analysis:** The introduction of CTCs and tax authorities' growing ability to analyze vast amounts of transactional and other economic data collected directly from source systems rapidly makes compliance a much more binary proposition than before. In the post audit world, compliance was often a matter of legal interpretation where courts upheld standards of reasonableness such as proportionality, which tempered the desire of many tax authorities to penalize taxpayers for mere irregularities. The consequences of non-compliance in the CTC world is expected to become much tougher and far-reaching.

CTCs drive harsher penalties

A recent example of the trend for countries with CTC regimes to toughen invoicing-related penalties is a recently adopted Mexican law (CS-LXIV-II-1P-006) that makes invoicing for, for example, non-existent operations a felony, equating potential invoicing errors with tax fraud and organised crime.

A BRIEF HISTORY OF VAT DIGITIZATION

A BRIEF HISTORY OF VAT DIGITIZATION

VAT requirements historically follow three broad categories, each of which corresponds to a certain period from the perspective of a company that must meet them.

- **Invoicing and storage requirements –** at a high level, the requirements that apply during the processing of business transactions break down into requirements related to:
  - **The form of invoices:** Most countries have abolished such requirements, but in some cases, businesses still use pre-printed paper invoices obtained from the tax authority; these types of requirements often exist to give the tax authority tight control over invoice numbering and integrity.
  - **Minimum content requirements:** In most countries with VAT, an invoice is only recognized for VAT purposes if it contains certain information such as the name of the supplier and the buyer, the type of supply, etc. In addition to VAT and other indirect tax laws, commercial and other laws may also impose certain requirements on the content of invoices.
  - **Tax determination:** For every invoice, the supplier must determine the applicable law and decide on that basis what the applicable tax rate is; in addition, the application of certain tax rates requires a reference to an article in the VAT law to be mentioned on the invoice, as well.
  - **Timing:** The moment that an invoice must be issued is often specifically dictated by the VAT law.
  - **Record-keeping:** An "original" invoice should be archived by each trading partner as evidence of the underlying supply; archiving requirements often further specify the retention time, location and specific features – such as human readability – that must be present to ensure auditability.
- **Periodic reporting requirements –** These are reports for business transaction data in summary or aggregate form or full data from individual invoices. Historically such reporting requirements have often been monthly, with certain less-common reports being quarterly or yearly.
- **Audit requirements –** These requirements come into play when, during the mandatory retention period for invoices and other records and books – typically seven to 10 years – a tax authority may request access to such records and books to assess their correspondence to reports.

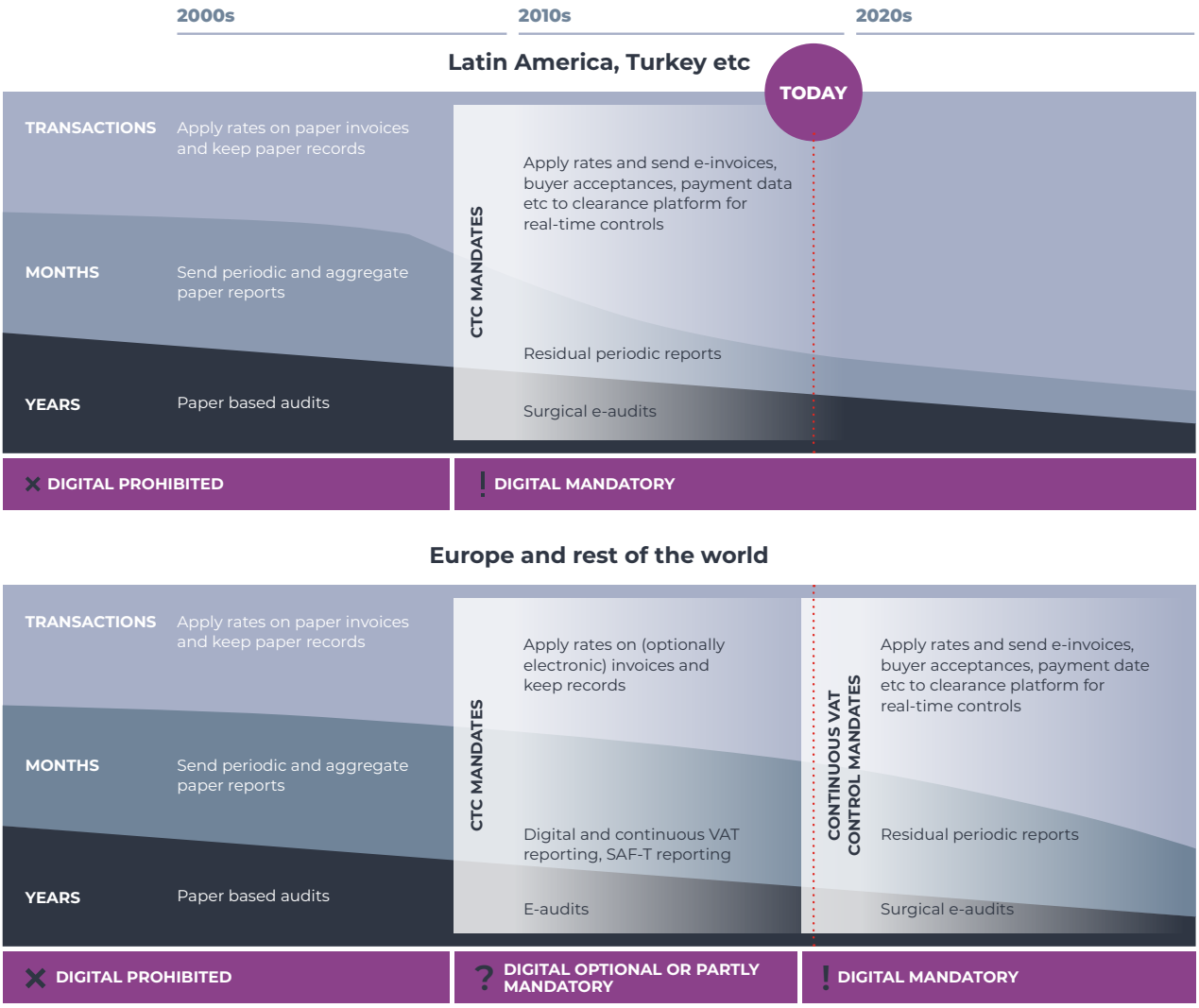
These requirement types and their relative importance for businesses and tax authorities have changed significantly in recent years. The overall trend is clearly toward various forms of CTCs.

The first steps toward this radically different mode of enforcement, known as the *"clearance model"*, began in Latin America within years of the early 2000s (for a deep dive, see 105). Other emerging economies, such as Turkey, followed suit a decade later. Many countries in the Latin American region now have stable CTC systems where a significant amount of the data that is required for VAT enforcement is based on invoices, and other key data is harvested and pre-approved directly at the time of the transaction.

Europe and other countries passed through a stage where they allowed original VAT invoices to be electronic, without changing the basics of the VAT law enforcement model. This phase of voluntary e-invoicing without process re-engineering is often referred to as "post audit" e-invoicing. In a post audit system, the tax authority has no operational role in the invoicing process and relies heavily on periodic reports transmitted by the taxpayer. The principal VAT requirement for post audit e-invoicing is that trading partners must demonstrate the integrity and authenticity of their e-invoices from the moment of issuance until the end of the mandatory storage period.

Largely due to the staggering improvements in revenue collection and economic transparency demonstrated by countries with existing CTC regimes, countries in Europe, Asia and Africa have also started adopting similar schemes. However, as is further explained in Emerging regional CTC flavors, Page 21, this rapid global adoption of CTCs doesn't follow the same simple path of quick migration of the early adopters – in fact, as this trend spreads around the globe, it is becoming increasingly clear there will be a multiplicity of models.

FIGURE 3: A 'histomap' of technology-facilitated VAT controls on business transactions, mapped against the evolution of enterprise software during the same period



THE CHAOTIC GLOBAL MIGRATION TO CTCs

THE CHAOTIC GLOBAL MIGRATION TO CTCs

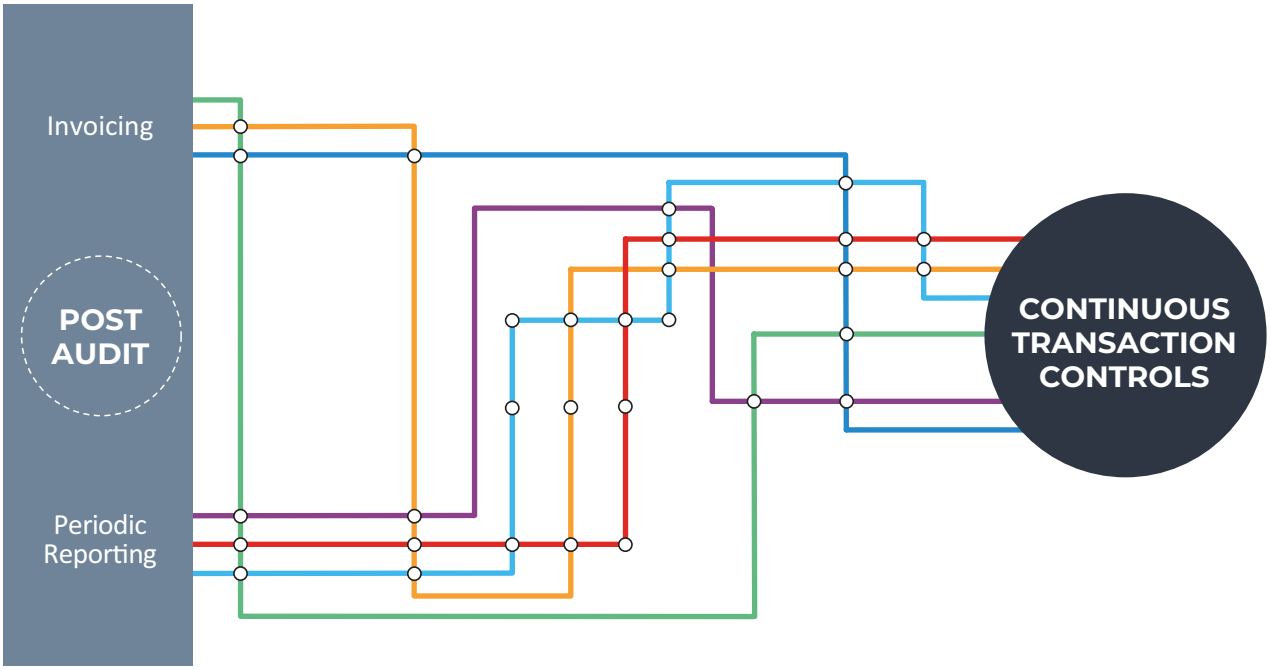
Overview

The adoption of indirect tax regimes based on CTCs is expected to accelerate sharply in the coming five to 10 years. Our expectation is that most countries that currently have VAT, GST or similar indirect taxes will have adopted such controls fully or partially by 2030.

This migration will be far from linear; countries are increasingly studying the experiences of earlier adopters, but the introduction of new regimes differs wildly in terms of pace, order and CTC requirement types.

To better understand the regional differences that are driving this chaotic transition, we need to look more closely at adjacent developments in the public and private sectors.

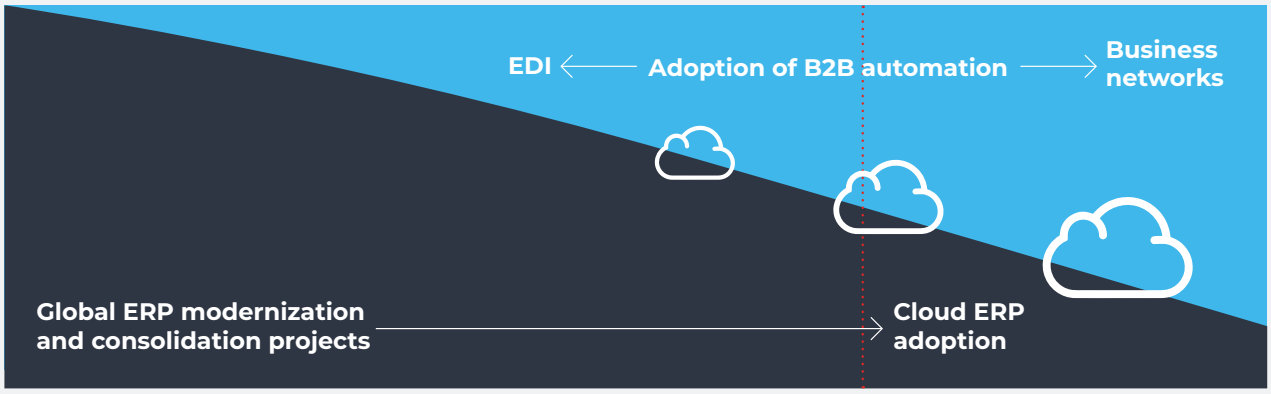
FIGURE 4: A simplified view of the chaotic adoption of CTCs, which is different for every country



THE CHAOTIC GLOBAL MIGRATION TO CTCs

FIGURE 5: High-level developments in ERP and transaction management software

Developments in enterprise software and cloud adoption



Developments in enterprise software

Figure 5 shows a high-level timeline that describes the journey businesses in many parts of the world have been on since the late 1990s. This journey started with large-scale projects to bring enterprise resource planning (ERP) and other core enterprise systems in line with technological capabilities afforded by the internet revolution. Often such ERP modernization and consolidation projects took many years to complete, with budgets running into the tens of millions of dollars. During this time, investment in other areas of IT and electronically facilitated business processes were frozen or only experimental in nature.

Around 2010, significant numbers of multinational companies emerged from this ERP modernization and consolidation phase seeking to increase return on investment (ROI) from these expensive, modernized internal core systems. To do so, they focused on software, systems and services to drive efficiencies by automating sales and purchase transactions with trading partners. With high levels of ERP customization among larger companies worldwide, no two systems could communicate with each other out of the box. B2B automation software and cloud services, such as procure-to-pay, order-to-cash and many other specialized types of software, emerged as the next area of key enterprise software investment.

The current phase sees many large companies gradually adopting B2B transaction automation systems, which are almost exclusively cloud-based and run as multi-tenant "networks" as opposed to the 1:1 EDI connections that preceded them. Businesses can obtain major process benefits and savings from automating the exchange of sales and purchase data with trading partners. Since ERP software vendors have not focused on enabling tools for seamless end-to-end process integration with their customers' suppliers and buyers, hundreds of companies have emerged to fill the void in this business-to-business integration space over the last 15 years.

Simultaneously, ERP vendors are aggressively introducing new cloud-enabled versions of their software. Leading enterprise software vendors such as SAP and Oracle have started programs to incite their installed and new customers to cloud-based versions of their new software releases, which take on board a next generation of technologies and are often much more powerful than their predecessors. This change in ERP technology paradigm requires companies to think about their migration strategy in relation to pre-existing customizations and associated processes – in relation to SAP S/4, these choices are often referred to as "brownfield" (move everything across) versus "greenfield" (take this opportunity to start from scratch). These choices are particularly relevant when viewed against the backdrop of the move from post audit indirect tax systems to CTCs.

Given these complex choices and the overall magnitude of upgrading to a brand-new ERP system, it is not surprising that many companies remain reluctant to move away from on-premises deployment. This is especially true for large multi-national enterprises, many of which are expected to plan for their migration to, for example, SAP S/4 first and to revisit the question of moving ERP components to the public cloud later.

Evolution of business transaction management

An important segment of the enterprise software sector is procurement software. In particular, the adoption of procure-to-pay cloud-based suites for managing indirect supplies is expected to grow fast: **from $5 billion today to more than $9 billion by 2026.**[1]

Cloud-based procure-to-pay and similar end-to-end transaction platforms are important drivers for the automation of B2B transactions in the industrialized world. Particularly in North America and Europe – where tax authorities initially did not focus on CTCs as a core element of their own digital transformation, and businesses could freely focus their resources on automating data exchanges with their trading partners – these cloud-based platforms took off rapidly because of design trade-offs that maximized flexibility and control for large multinational companies. In the original design of such platforms, a large company that signs up with one cloud-based procurement platform gets a single interface to hundreds of thousands of pre-onboarded suppliers on that network, while a supplier to that large company may be coerced by other large customers to join multiple other procure-to-pay networks.

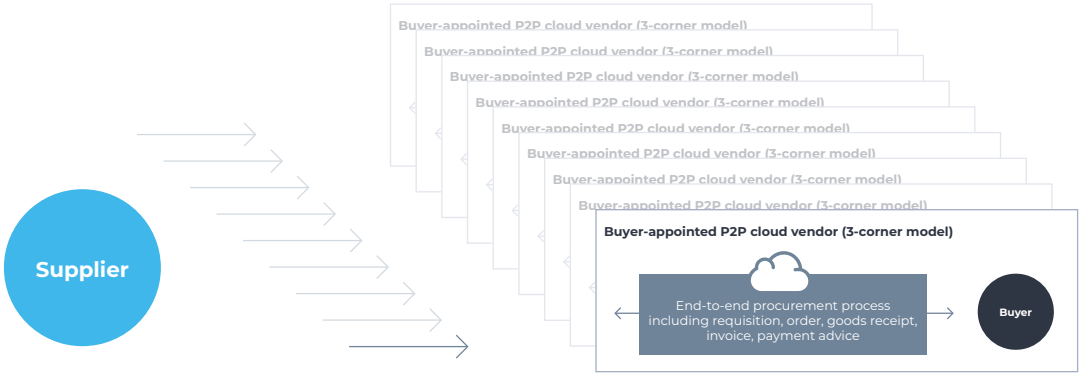
FIGURE 6: Procure-to-pay (P2P) and other business networks as viewed by large buyers

This design (also called "three-corner models" because both trading partners transact on the same platform instead of each using their own systems or service providers) allowed cloud procurement platform vendors to rapidly gain market traction.

[1] www.globenewswire.com/news-release/2019/09/05/1911800/0/en/Procure-To-Pay-Software-Market-To-Reach-USD-9-2-Billion-By-2026-Reports-And-Data.html

THE CHAOTIC GLOBAL MIGRATION TO CTCs

FIGURE 7: P2P and other business networks as viewed by suppliers



In recent years, however, service providers that originally pursued "closed network" strategies have increased their cooperation to create models that allow better interoperability among such networks and other B2B transaction automation vendors. Specifically, the European E-Invoicing Service Providers' Association (EESPA) has promulgated a model interoperability agreement that is gaining traction in the European and global marketplace. This development has been driven to a large extent by market requirements; it is also consistent with a trend toward "open networks" that has its roots in public procurement, which is described in the next section.

Public procurement represents on average

12%

of global GDP,

which represents a global market size of greater than

$10 trillion.

Public procurement (B2G) and the emergence of open networks

Governments are obviously not limiting their adoption of modern information and communication technologies solely to tax. Another area that can significantly impact businesses is the imposition of government platforms for exchanging data in relation to public procurement. Among other objectives, initiatives in this area often aim to make it possible for any business in any part of a country, economic union or federation to bid on public sector contracts under the exact same conditions as a local company.

In the EU, where this policy instrument is most prevalent, e-invoicing has become a major way for governments to achieve this objective. In addition, e-invoicing is viewed as spearheading process modernization within public administrations. As part of harmonizing e-procurement processes within the EU, governments and other public bodies are via Directives forced to accept electronic invoices that conform to the European Standard EN 16931; several member states (including Sweden, Croatia and Estonia) have extended this obligation to handle e-invoices to the supplier and implemented mandatory B2G e-invoicing.

European and other governments have generally been reluctant to adopt popular "three-corner" procurement cloud vendors for their public procurement. Public authorities, which as large buyers of goods and services have significant influence over the direction of the procurement market, have in the past decade promoted more open business network models. Ironically, the same (particularly European) authorities that reject the closed-network approach of procure-to-pay (P2P) cloud platforms have also in many cases designed their own national technology and process standards for their mandatory electronic procurement platforms. That is the case in, for example, Italy, Spain, the Netherlands and Slovenia.

Nonetheless, with a "network of networks" concept called PEPPOL (initially financed by European authorities and the European Union; now run under an association, OpenPEPPOL), disparate country approaches to electronic public procurement can coexist, while suppliers from all member states can exchange tendering and execution messages to any other Member State using the PEPPOL methodology. Part of the PEPPOL design is that individual service providers can serve as "access points" for such suppliers.

Partly due to this promotion of a more open – or at least more balanced and interoperable – approach to electronic procurement by governments, the PEPPOL concepts and technical specifications are also becoming more popular among the private sector. After all, if many companies must connect to a PEPPOL access point for transactions with certain public sector customers anyway, why not use that interoperability as a supplier also to connect to buyers' service providers, which often also have incentives to set themselves up as PEPPOL access points. As a result, a network effect is slowly emerging whereby open standards-based trading approaches will likely co-exist with closed procurement networks for the foreseeable future.

FIGURE 8: **The open network ("four-corner") approach that is being promoted by public authorities in Europe, and increasingly elsewhere, for example, Asia**

Developments in B2G e-invoicing cannot be viewed as separate from mandatory B2B e-invoicing for VAT law enforcement purposes. As witnessed with the January 2019 Italian clearance mandate, EU member states may choose to base their CTC regimes on pre-existing B2G e-invoicing platforms.

The influence of public e-procurement may however grow beyond these interoperability concepts in specific countries. Whereas the adoption of open network approaches to business transaction automation between private sector entities has thus far been based on voluntary adoption – only their use in B2G exchanges has become mandatory in a good number of countries – we are now seeing a trend whereby especially countries in Asia are seeking to develop mandatory or quasi-mandatory "national e-invoicing frameworks" that are based on or inspired by PEPPOL. (One such example is the recently published Chinese technical standard for e-invoicing service platforms, described in more detail on page 116.)

THE CHAOTIC GLOBAL MIGRATION TO CTCs

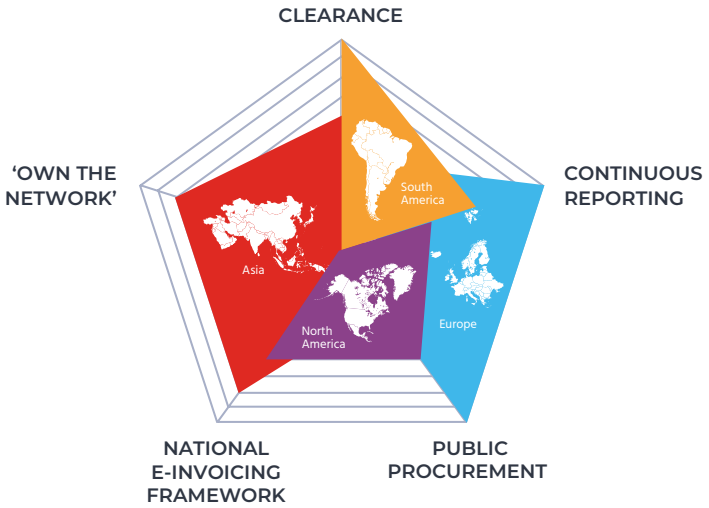
Another itinerary: making VAT reporting continuous without clearance

A considerable number of EU member states are moving toward CTCs not by imposing "clearance" e-invoicing but by making existing VAT reporting processes more granular and more frequent. As further explained in 63, this approach is partly rooted in legal constraints that make EU member states reluctant to mandate e-invoicing. Examples of non-European countries that have started their journey to CTC with reporting rather than e-invoicing-based requirements are India's GST reporting and the Chinese Golden Tax System. These countries will eventually adopt requirements for real-time or near-real-time invoice transmission, as well as potential transmission of other transaction data to the tax authority. However, it is not a foregone conclusion that they will all take these regimes to the extreme of clearance. Even so, continuous VAT reporting often looks like clearance e-invoicing, but these regimes are separate from invoicing rules and often do not require the invoice as exchanged between the supplier and the buyer to be electronic. Even where the invoice "report" must be sent to the tax authority in real-time or in near-real time, the taxable person does not have to wait for the CTC platform to return an explicit approval of the invoice before further processing the invoice.

Emerging regional CTC flavors

As described in previous chapters, the introduction of CTCs is not linear and often shows significant differences among countries and even within countries. Tax authorities must consider specific local circumstances, but they also increasingly benchmark approaches and experiences in other countries. Figure 9 below shows how different regional CTC models are emerging based on the specific mix chosen by individual countries.

FIGURE 9: Influences and models for CTC implementation in different regions



The principal influences and current models are:

- **Clearance:** This is the oldest and most prevalent form of CTC in the world today. (See p.47 for more detail.)
- **Continuous reporting:** This type of requirement is not dependent on the invoice that is exchanged between the trading partners being in electronic format; it is described in more detail in **Another itinerary: making VAT reporting continuous without clearance** and p.77.
- **Public procurement:** As described in previous chapters, countries in Europe and beyond are expected to increasingly repurpose their public e-procurement platforms for CTC implementation or use concepts from public procurement for the design of CTC systems.
- **National e-invoicing framework:** Certain interoperability and "open network" concepts that were initially designed for promoting seamless pubic procurement are influencing CTC concepts in countries that have not previously considered such methodologies. In these cases, a country starts by using its powers of persuasion (e.g., hard or soft law) to create a set of national standards and processes for invoice interoperability and then piggybacks on the resulting role distribution to allocate responsibility for transmitting CTC data to the tax authorities.
- **'Own the network':** This trend is similar to the previous one but takes the tax authority's interest in the data exchange between the supplier and the buyer a step further by using the CTC platform for this purpose as well. In other words, the public administration not only requires receipt of the data from the supplier and buyer separately, but actually becomes the invoice exchange platform. This trend seems to be gaining traction the further the CTC trend spreads eastward. Turkey and Russia have it as core concepts in their CTC legislation, and it is also fundamental to the CTC design of the function of Italy's platform. Countries like Saudi Arabia and Jordan are developing in a similar direction, as both appear to be looking into the concept of not just prescribing standards for interoperability in a national e-invoicing framework but fully operating – or at least fully controlling – the underlying data exchange network.

THE CTC CONUNDRUM OF INTERNATIONAL COMPANIES

THE CTC CONUNDRUM OF INTERNATIONAL COMPANIES

Why an explicit strategy is essential

The chaotic transition to CTCs creates a special set of challenges for companies that operate in multiple countries. This emerging clash of digital transformations – of companies and tax authorities – introduces a dynamic and often hard-to-predict element into businesses' modernization plans. With compliance non-negotiable for doing business in every country, regulatory mandates toward the introduction of CTCs will always take priority over projects that the business can decide on more freely.

When indirect tax professionals talk about their VAT "compliance" function, they generally mean their VAT periodic reporting. Typically, multinational enterprises run these processes based on manual data extraction from their ERP combined with spreadsheets for reconciling and correcting data using some combination of corporate VAT experts, external tax consultants, managed service providers, shared service centers and accounting resources.

The other major tax process that large companies maintain is tax determination to maximize control over tax rates and associated invoice content. They often pursue this through a combination of configurations and customizations, add-ons and third-party tax engines integrated with the ERP system.

Because these indirect tax compliance processes and technologies were generally designed for a world of paper-based business transactions and tax reporting, they are part of the universe of internal controls and processes around a company's accounting, and thus decoupled from the world of supply chain, procurement and sales operations. In the new world of transaction technology and continuous transaction controls, however, at least part of the emphasis of "compliance" moves to the transactional source system. In addition, legacy reporting processes, organizational structures and technologies that continue to directly interact with companies' ERP systems need to evolve to cater to the introduction of new reporting concepts based on continuous automated data transmission, which increasingly leaves no time or room for manual data preparation and review.

In this brave new transactional world, tax compliance moves from being largely an ERP-centric accounting procedure to becoming an operational concern. If pristine, 100 percent accurate transaction data cannot be sent to the tax authorities as and when required, a company's supply chains and customer fulfilment operations can suffer delays. This creates a much more direct dependency between a company's bottom line and getting tax data right the first time as part of the transaction. Tax determination processes, therefore, need to move from largely being after-the-fact validation tools to critical instruments to catch and correct errors as they are processed in transactional software.

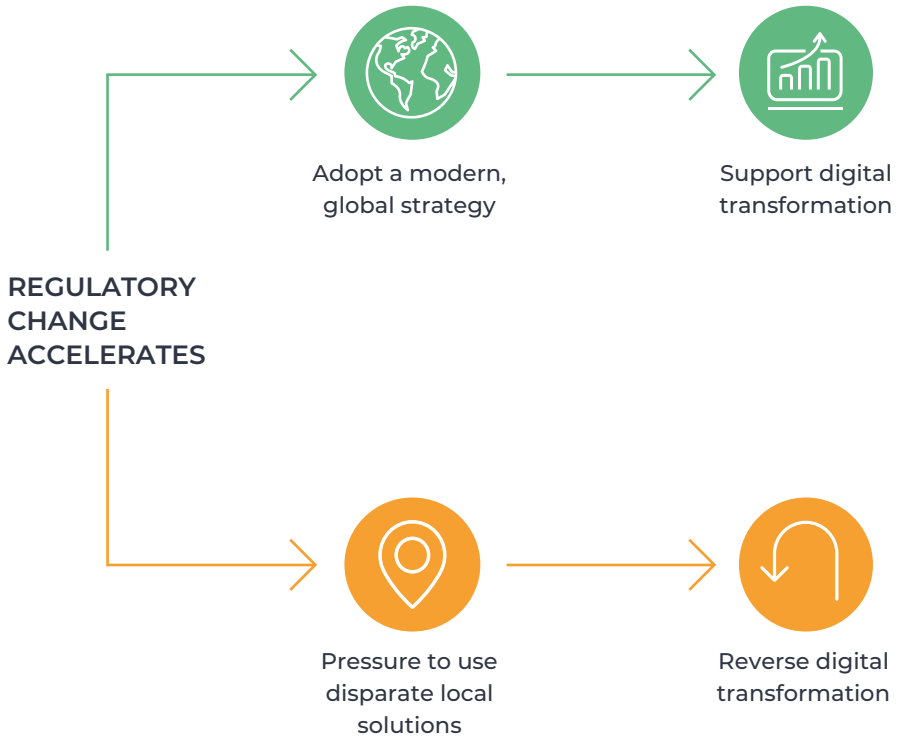
THE CTC CONUNDRUM OF INTERNATIONAL COMPANIES

If companies extend the legacy concept of decentralized VAT compliance assurance to the world of mandatory e-invoicing and continuous compliance, their local subsidiaries will adopt disparate local technologies and vendors for core trading partner and e-invoicing processes. This fragmentation directly contradicts companies' strategies to transform their finance function and to leverage the consolidating power of modern technologies.

A lot of that transaction software won't be within the direct control of a single enterprise – and a lot of it will be operated in the cloud by third-party vendors that maintain the same set of end-to-end processes for millions of other trading parties. It becomes the responsibility of those third-party vendors to ensure transactional tax compliance as an integral component of their service offering. It will also become very important for companies to select such vendors based on their tax compliance monitoring and change management capabilities. These transaction management platforms will be interacting with a new generation of cloud-enabled ERP, which, thanks to in-database processing and other new technologies, will receive a massive upgrade in processing power.

In this emerging consolidated digital business ecosystem, it will be counterproductive for a company to push "compliance" to its subsidiaries. By extending the legacy concept of decentralized VAT compliance assurance to the world of mandatory e-invoicing and continuous compliance, companies encourage local subsidiaries to adopt disparate local technologies and vendors for core trading partner and e-invoicing processes. This will make it impossible for companies to benefit from the cloud-based transaction platforms they want to roll out globally to benefit from corporation-wide management dashboards, spend management and financing options. Keeping to a decentralized VAT compliance approach will feel like business as usual, but in a world where CTCs will soon be the norm, such decentralization will reverse digital and finance transformation and turn it into a loss-making and strategically dangerous proposition.

FIGURE 10: Fundamental strategy options for multinational enterprises

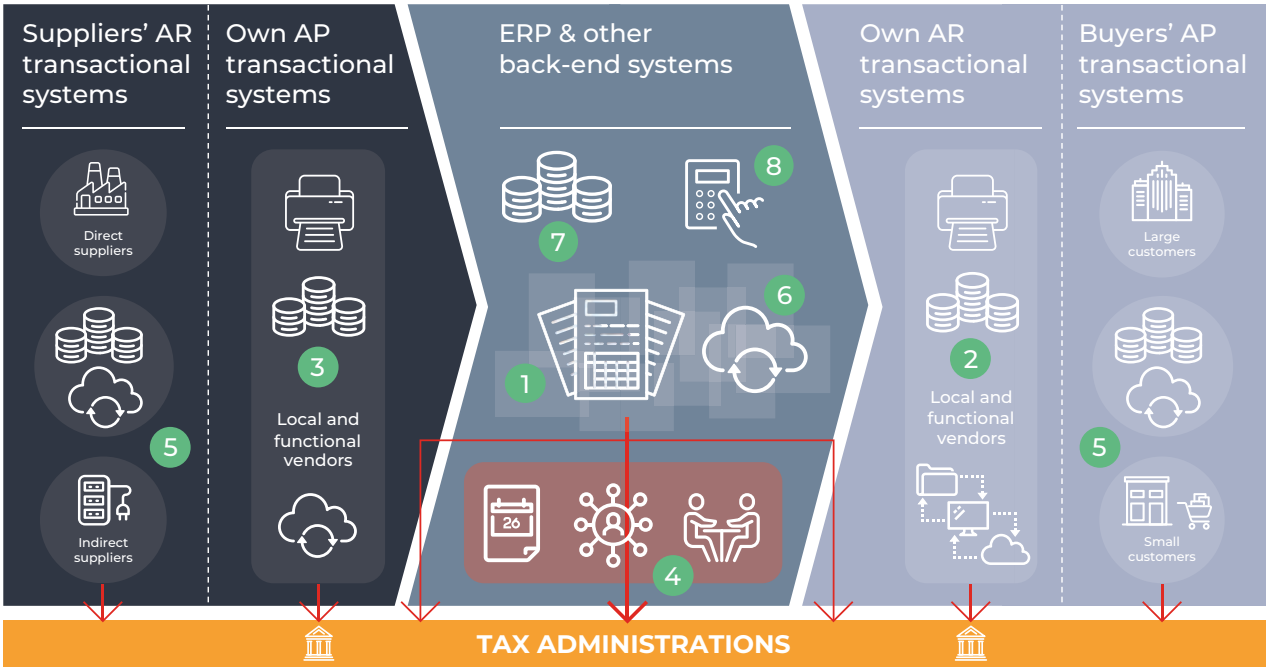


Formulating a strategy

A good strategy to turn the global CTC trend to your strategic advantage requires two things:

- Excellent insight into applicable and upcoming CTC mandates; this generally is available only from specialized vendors. The summary in part II of this document is provided to give the reader a general idea of applicable legislation today.
- A shared understanding across the company of systems and processes that are or will soon be affected by indirect tax imperatives. Figure 11 below serves as a template for mapping out such systems and processes.

FIGURE 11: Key areas that must be considered in a CTC strategy



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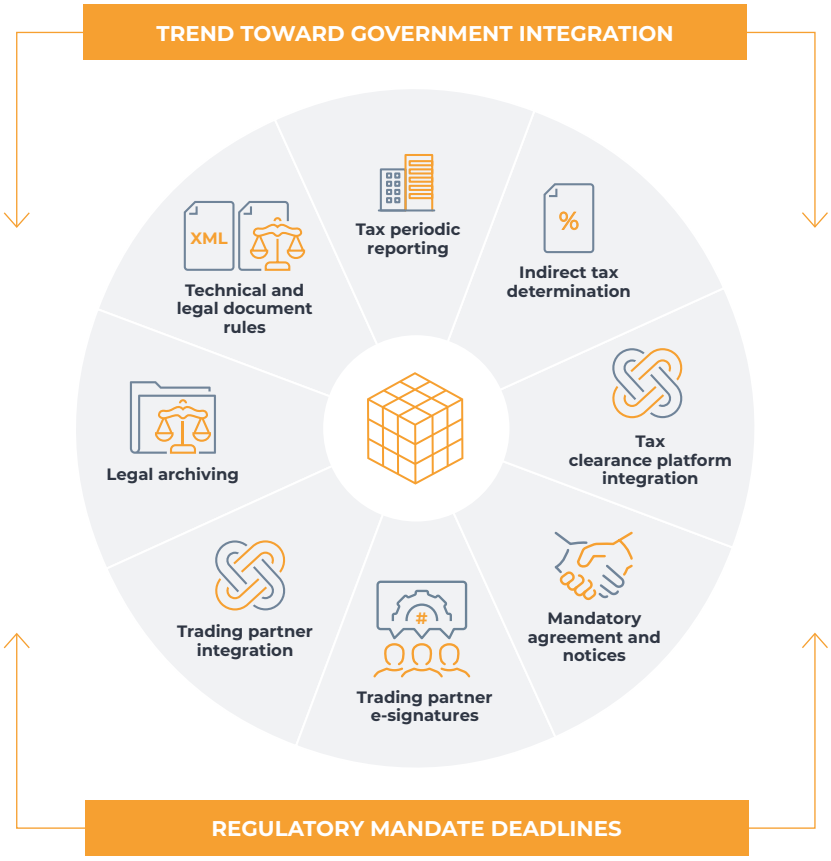
The key components that should be mapped out as a basis for analyzing a company's tax-relevant systems and processes, as shown in figure 11, are the following:

1. ERP and other core finance or enterprise systems are complex. Large companies seldom have a single ERP system – the "normal" range is between two and 100. In manufacturing, some large companies still run internally developed legacy ERP systems from the 1990s that support critical core operations while more standardized ERP systems are used for consolidated processes (e.g., finance). Many companies are permanently migrating ERP systems from acquired companies to their chosen strategic ERP. In addition, the strategic ERP system today is often in need of a significant upgrade, and the company may be implementing various intermediate steps (e.g., Central Finance in SAP) to mitigate the complexity of that version migration.
2. Companies have over the past decade invested in various accounts payable (AP) automation solutions. The introduction of CTCs in some countries (e.g., in Latin America) may have led to the adoption of country-specific inbound invoicing vendors that are principally focused on tax compliance, while AP automation vendors in countries without CTCs are often specialized in supporting different categories of suppliers (e.g., EDI with large suppliers, as well as scanning or OCR and procure-to-pay platforms for smaller ones) or processes (e.g., travel and expense management tools). As companies go paperless, they often overlook the fact that paper invoices, where they are still allowed, are often subject to different rules than electronic invoices, especially in relation to archiving. When paper invoices are scanned, the paper original must often still be archived unless specific local scanning, authentication and archiving requirements are met.
3. Likewise, on the accounts receivable (AR) side, a company may have adopted a mix of software tools and cloud-based service providers that either cater to specific business processes or that ensure e-invoicing compliance in countries with CTC legislation. Fully automated order-to-cash software and cloud-based services are starting to become more popular but are less prevalent than their procurement equivalents. Finally, many companies are now using e-commerce tools to sell their goods or services directly to consumers – this adds complexity for several reasons:
   - Distant selling to consumers is often regulated.
   - Online sales to consumers often have a significant cross-border component (which tax authorities increasingly target due to high levels of non-compliance).
   - It can be difficult to properly distinguish between B2C and B2B transactions, which are typically treated differently from a VAT viewpoint.
   - Many countries have different CTC requirements for consumer receipts.
4. Periodic VAT reporting is often done using manual data extraction from the ERP or other systems, combined with spreadsheets for reconciling and correcting data using some combination of corporate VAT experts, external tax consultants, managed service providers, shared service centers and accounting resources. There's a high probability that data used for such reporting is not of sufficient quality for straight-through processing, and that shared service center or local accounting staff are working with error-prone tools and approval processes. This area is particularly vulnerable to the introduction of continuous reporting CTCs, which may start with near-real-time requirements. Those requirements can still be managed by a company's reporting teams but are likely to evolve to real-time reporting or e-invoicing, requiring automation and in certain cases a different source system than the ERP.
5. Companies may – knowingly or unknowingly – have been onboarded onto portals and systems that are their larger trading partners' AP and AR systems. These third-party systems in many cases perform tax-relevant functions, such as e-invoicing, on your behalf. This means that these systems from a tax compliance perspective become part of your responsibility. The lack of control you have over your trading partners' systems can be problematic in this regard, particularly as many countries adopt CTCs that can affect your operations and are often accompanied by higher fines.
6. Intercompany invoicing is an area that often deserves specific attention. In a post audit world, it has often been preferable for multinational companies to keep these intra-group invoices inside an ERP system and never explicitly "issued," processed or archived by distinct supplier and buyer systems. Architecturally, however, this means that these invoices cannot easily be brought within the scope of solutions that are adopted to ensure compliance with CTC requirements.
7. The complexity of most companies' ERP landscape, combined with the increased adoption of AP and AR automation systems and the use of mandatory portals by large trading partners, often leads to extreme fragmentation of archives for critical tax documents and data, such as invoices.
8. Tax determination has become a standard – even commoditized – component in the landscapes of companies that trade in countries with sales and use tax, such as the USA and Canada. In countries with VAT, the use of tax determination technology is expected to evolve from a nice-to-have to a must-have as the risk of operational disruptions grows with the introduction of CTCs.

Analyzing legal requirements

Once a company has mapped out its own relevant systems and process landscape and has acquired a thorough understanding of applicable and upcoming CTC mandates, it should make sure that different stakeholders in the enterprise use the same terminology and have a shared understanding of common components of CTC mandates. Figure 12 below provides an overview of these.

FIGURE 12: Principal requirement categories to be taken into account for compliant e-invoicing across countries



Technical and legal document rules
- Many different compulsory formats
- Mandatory data worldwide
- Mandatory human-readable renditions (audit, transport)

Tax periodic reporting
- Today summary level and manual – web and paper
- Increasing frequency and transaction – oriented automation
- E-Audit requirements: SAF-T/export capabilities/ certification

Indirect tax determination
- Tax rate and code determination
- Applicable law driven mandatory notices in invoices

Tax clearance platform integration
- Massively different platforms and integrations (country, region or city level)
- End-to-End orchestration: invoices, credit notes, cancellation, contingency invoices

Mandatory agreement and notices
- E-invoicing notification or prior approval
- Trading partner agreements
- Third party e-invoice insurance authorisations
- Storage abroad or foreign operator notification / derogation requests
- Buyer consent rules

Trading partner e-signatures
- Supplier and buyer signatures and time-stamps
- Many different formats, certification authorities

Trading partner integration
- Many different B2G platforms in the EU
- Mandatory delivery methods and response messages

Legal archiving
- Localization requirements in e.g., EU, Turkey
- Auditability and access requirements
- Search criteria
- New certifications e.g., Belgium

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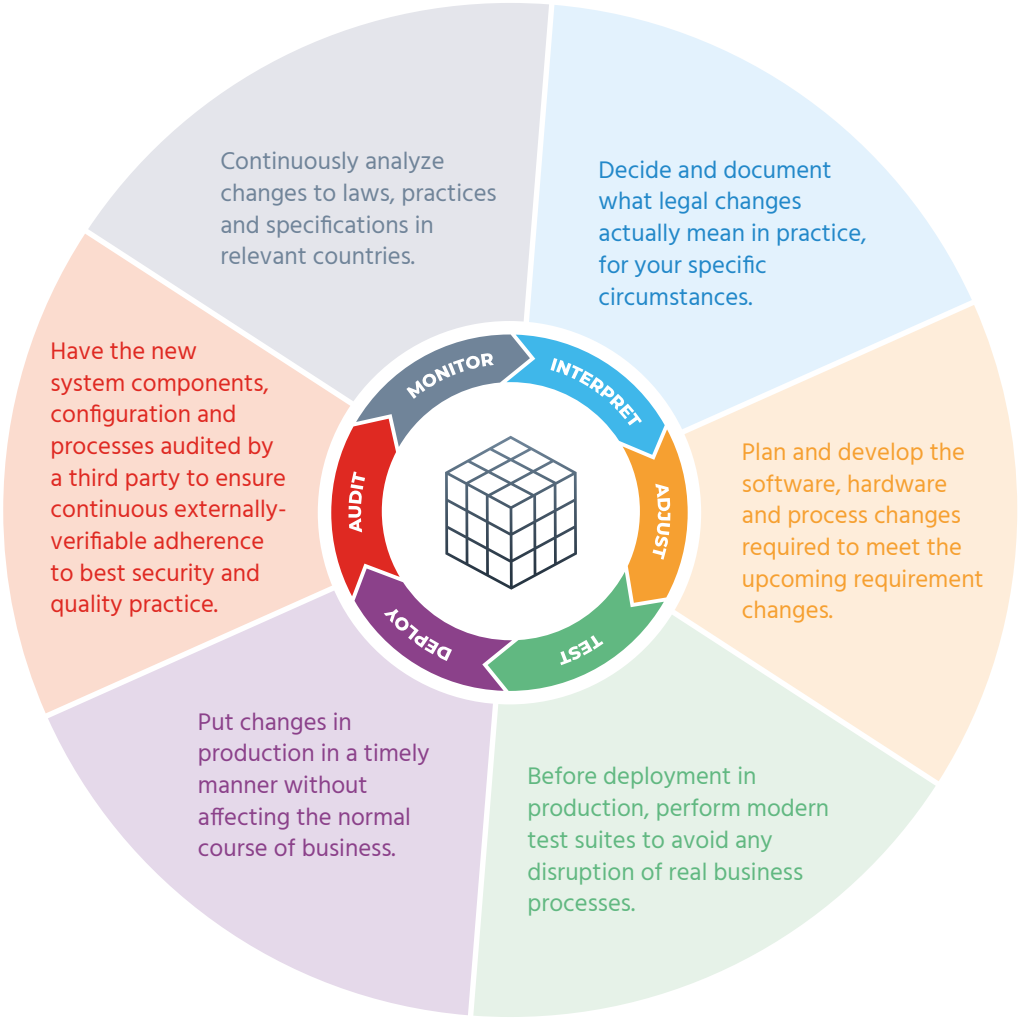
The requirement matrix is also anything but static: laws and associated technical specifications inevitably change over time. Therefore, an electronic invoicing strategy must consider the need for compliance change management. Figure 13 describes the principal components of a typical compliance change management process.

FIGURE 13: Fragmented legal requirements require strict compliance change management



Archiving: from a must-do to a must-have

With tax authorities spending billions on next-generation online invoice control systems, companies trading internationally come under pressure to implement global e-invoicing in a consistent, scalable and cost-effective manner. The quality of your compliance strategy will consequently become a competitive differentiator – and archiving will increasingly play an important role in getting it right.

To design a winning approach, our advice is to start thinking about the big picture with a solid archiving blueprint at the center. As shown in Figure 11, there are many practical reasons why companies often end up archiving their invoices and other important transaction data from many different systems and external transaction automation platforms. This, however, does not necessarily mean that a company must accept as many business and compliance approaches to archiving as it has archives. The ideal architecture is a single underlying archive with consistent access and compliance management but total flexibility as to which systems or platforms send data to that archive.

The arguments for taking archiving seriously fall into two categories:

A. Classic arguments for a robust approach to archiving

1. **Archiving is a base requirement nearly everywhere**

   Archiving is a common denominator. E-invoicing rules vary from country to country, but most countries require the "original" of an invoice to be archived. Contrary to transaction compliance, where compliance-specific processes can vary wildly, archiving can be done in a compliant manner by using a "superset" approach to country rules, which requires relatively little country-specific logic as part of your archiving solution.

2. **An archiving strategy is half of the work toward global compliance**

   The legal archive is where your ultimate evidence is. For tax authorities worldwide, this makes archiving a key consideration in assessing your compliance. Yes, there are many requirements that relate to the transaction part of the e-invoice life cycle, but getting archiving right means you've done pretty much half the work toward a full e-invoicing strategy already.

3. **Having an archiving strategy helps you stay in control of your own destiny**

   Multinational companies will be less vulnerable to pressure from subsidiaries or departments that seek a quick implementation of e-business solutions that include e-invoicing and e-archiving through local solution vendors.

   If you don't have an archiving strategy, you'll invariably end up with a fragmented archiving landscape and vendor lock-in. Extracting yourself from such relationships can be close to impossible.

4. **Archiving is a common anchor for all transactions in your global architecture**

   If you know in which archive you are going to store your original e-invoices, it becomes easier to trace a "compliant path" back from that ultimate resting place to the different applications, service providers, trading partners, processes, product lines, and countries where e-invoices originate.

B. CTCs and reconciliation, and the complexity of auditing

Another set of arguments for a robust approach to archiving is directly related to the fundamental reason why tax authorities have such a strong preference for CTCs, particularly the real-time variants. By getting fresh data directly from the transaction, they will over time declare their systems rather than the taxable person's systems to be the starting point for audits. When such tax authorities are confident that the CTC system has achieved this goal, they will reduce or drop archiving and periodic reporting requirements and instead send taxpayers their own reports.

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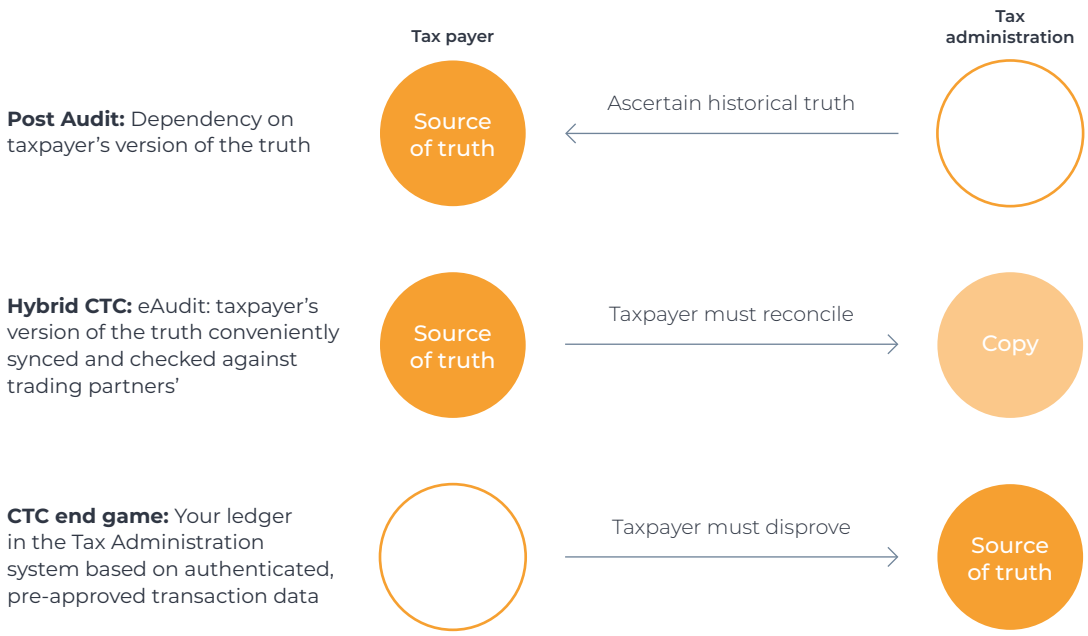
While it may at first sound as though the elimination of archiving requirements is a clear benefit to businesses, this will turn out to be a double-edged sword. If the tax authorities have iron-clad evidence of your, and your trading partners', transactions in their own systems, it becomes much more important for businesses to maintain a very strong evidence position of these same transactions as well. Archiving may no longer be a "must-do" that businesses have often viewed as a simple matter of meeting minimum legal requirements; it is becoming an absolute "must-have" where businesses need to think proactively about how to maximize their evidence position to be at least as good at those of the tax authorities.

An important new component of a successful archiving strategy in a world that will soon be dominated by CTCs is the need for reconciliation capabilities that can robustly show any differences between your own ledgers and evidence archives, and those of the tax authorities.

FIGURE 14: How CTCs transform the notion of original tax records



Tax determination – from a nice-to-have to a precondition for business continuity

Determining applicable indirect taxes correctly is a key compliance process for companies that transact in countries with indirect taxes such as VAT, GST, and sales and use tax (SUT). Companies have over the last two decades increasingly adopted tax determination software to automate these functions. The rapid introduction of CTCs in many countries, however, is changing the business need for automated tax determination. Particularly in countries with mandatory clearance e-invoicing, errors in invoices can create significant operational challenges.

What is tax determination?

In defining the phrase "tax determination," it is important to clarify that we are not referring to direct taxes, such as corporation tax, tax provisioning or income tax, but rather to indirect taxes, such as VAT, GST, SUT, insurance premium tax (IPT) and excise taxes. With that clarification in mind, we can define "tax determination" as the process of making a compliant tax decision at the moment of booking a transaction in the accounting system, in order to facilitate accurate and compliant recording of all transactional tax data.

The tax determination process must resolve each of the following attributes in order to arrive at a compliant tax decision:

- **Where the transaction is taxed** – in which jurisdiction(s): "place of supply".
- **When the transaction is taxed** – in which period: "time of supply" or "tax point".
- **Who is taxed** – who are the parties involved: "legal supplier and legal recipient of the supply".
- **How much tax is charged** – what tax rate is applied to the underlying supply: "taxability".
- **Why a tax decision was reached** – legal basis for tax treatment: "invoice messaging" or "exemption texts".

Tax determination attributes

The above attributes would be simple to resolve in the case of a single legal entity, selling a limited range of goods, to individual consumers, within a single jurisdiction, governed by a simple tax framework. However, most businesses today do not operate in such a binary tax utopia. The reality is that modern enterprises operate in an environment that creates an endless array of permutations, the properties of which are constantly shifting due to legislative change, thereby putting excessive strain on their ability to determine tax correctly and safeguard compliance.

A comprehensive analysis of the reasons why these attributes are difficult to resolve is, in itself, a significant undertaking and is outside the scope of this report. Nevertheless, we have set out some clear examples to illustrate how the complexity arises:

Where the transaction is taxed (place of supply):

- For example, an e-commerce business that sells goods cross-border in the EU is currently governed by different distance-selling thresholds across 28 EU Member States. New legislation comes into force in 2021 that will completely change the existing provisions. Similarly, in the United States, the impact of the US Supreme Court's decision on *Wayfair*[2] will subject sales or use tax collection and remittance responsibilities to many U.S. retailers and e-commerce businesses, as well as inbound (non-U.S.) companies.
- A European manufacturer sells goods via a central sales entity that has VAT registrations in more than 15 countries. Most of its activities involve complex supply chain movements with connected, intercompany entities, involving invoicing and goods movements between multiple countries. Each country has its own set of rules, procedures and legal precedents (interpreting European VAT legislation), which need to feed directly into the tax determination process in order to establish where each link in the chain should be taxed.

When the transaction is taxed (tax point):

- Different jurisdictions apply different rules governing the time of supply, which ultimately determines in which period a transaction should be reported and tax paid, and similarly in which period the recipient is entitled to deduct the tax. Examples could be delivery date, invoice date, payment date, payment received date or work completion date.

[2] U.S. Supreme Court. South Dakota vs. Wayfair, Inc. 585 U.S. 17-494 (2018).

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Who is taxed (legal supplier and legal recipient):

- In a large organization, identifying the true, legal contracting parties in a transaction is often not a simple task. This is because the logistical and commercial data elements required to create the transaction in your ERP system may not reflect the underlying legal relationship. Consider a standard sales process in SAP, which requires four partner profiles to be specified at the time of sales order creation:
- **Bill to** – the partner to whom the invoice should be sent (but this could be a shared-services center).
- **Ship to** – the partner to whom the goods are being shipped (but this could be a warehouse operated by a third party of your customer, or could even be your customer's customer).
- **Sold to** – the partner to whom you are selling the goods (but this could be a subsidiary of your customer that is merely ordering the goods).
- **Payer** – the partner who is paying for the goods (this could be a group treasury entity of your customer that settles all payments on behalf of the group).

In this example, each partner profile could be a different legal entity in a different country. It is crucial that the tax determination process can resolve such conflicts and establish with certainty the legal recipient of the supply.

How much tax is charged (taxability):

- Different countries, regions, states, cities and local municipalities apply different tax rates to specific categories of goods and services. Exposure to complexity in the attribute of taxability is driven by two key parameters: jurisdictional scope and the diversity of materials a company buys and sells. Broadening the scope in either parameter results in an exponential increase in taxability conditions that will need to be configured and maintained (as both tax rates as well as goods and services classifications are subject to frequent change).

Why a tax decision was reached (invoice messaging or exemption texts):

- There are many cases where a jurisdiction mandates a special, overriding tax treatment or simplification mechanism once certain conditions are met. These conditions may be optional or mandatory (depending on the circumstances) and trigger special invoicing and reporting requirements. Examples include:
- Specific *flows* (triangulation, bonded flows, extended reverse-charge, call-off stock, inward processing relief, etc.); or
- Specific *industries* (tour operators, exporters, defense contractors, government bodies, etc.); or
- Specific *goods and services* (waste products, construction, computer equipment, etc.).

Forces driving complexity

There are a number of key market forces that will have a direct impact on an organization's tax determination process and its ability to maintain accuracy and control. We will briefly touch on these in order to establish cause and effect:

1. Business structures

It is common for a multinational enterprise to establish a tax efficient supply chain (TESC) structure in order to minimize its effective corporate tax bill. A TESC incorporates tax planning within the operational supply chain structure by optimizing the geographic location of the key supply chain functions, assets and risks in order to realize enhanced tax saving benefits. These structures often include a principal sales entity established in a single jurisdiction, buying, holding, moving and selling goods across multiple jurisdictions – often in conjunction with connected intra-group entities. These principal entities will be required to register for VAT or GST in multiple jurisdictions by virtue of their activities and be exposed to multi-jurisdictional reporting obligations.

While these complex business structures offer efficiency from both a supply chain and corporate tax management perspective, indirect tax determination becomes increasingly complex and difficult to maintain.

2. IT transformation and consolidation

With the benefits of increased speed, new functionality and lower total cost of ownership, businesses are accelerating the transformation and consolidation of their ERP landscapes toward a single, global instance, powering the needs of the whole organization. In the past, tax determination logic would have been localized within the landscape of regional or divisional ERP systems, built and tailored to the needs of the entities and jurisdictions they served. Maintenance of these tax determination processes and the accompanying system logic would have been decentralized, with higher levels of input from local IT and tax resources and better knowledge retention. Simply put, with IT transformation and consolidation comes the requirement to squeeze more tax determination functionality and logic into a single system with complexity fueled by an increased number of jurisdictions demanding their own localized tax requirements.

3. Process automation and optimization

Traditionally, inbound P2P and outbound order-to-cash (O2C) processes were all considered mainstream activities of the central ERP. These costly and time-consuming processes were ripe for disruption, and we are now in an era of mature, cost-effective, specialized cloud-based applications covering core P2P and O2C processes. As the primary recording of the transaction sits within the specialized application (albeit with interfaces to the core ERP), it is becoming increasingly important to embed tax determination processes and logic within the specialized application. Considering these applications were not designed for tax compliance purposes, functionality to cope with complex tax determination requirement is limited.

4. Corporate acquisitions

Acquisitions, mergers and other corporate finance activity often leads to expanding jurisdictional and trading complexity for the enlarged group. Integration of the target business within the processes and IT landscape of the acquirer will impact tax determination, adding another dimension to an already complex process and logic.

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5. Finance transformation

Shared services centers (SSC) have been a key finance transformation initiative of the past 20 years, centralizing core finance functions of an organization within a global (or regional) accounting hub. The SSC acts as an internal supplier to the group, typically providing core AP, AR and general ledger (GL), as well as indirect tax compliance functions.

As the geographical scope and remit of the SSC expands over time, its ability to deliver operational tax compliance excellence while safe-guarding compliance standards comes under pressure. This is due to the following key factors:

- **Standardization:** It becomes difficult to standardize processes relating to ERP data extracts and routine compliance checks as different group entities often have localized processes and routines that differ from each other.
- **Manual tasks:** It's common for SSC compliance teams to make extensive use of spreadsheets to try and standardize templates and prepare indirect tax returns. This is time consuming and prone to error.
- **Legal change:** Tracking legal, procedural and technical change with an expanding geographic footprint is a challenge.
- **Point solutions:** Different entities may have taken decisions to implement point solutions or outsource an element of their tax compliance functions to one (or more) service providers. Maintaining (or amending) these relationships while trying to standardize processes is yet another challenge.

As the SSC assumes guardianship of the quality of the transactional data that populates tax filings and associated declarations, it too must ensure that the tax determination process and system logic support this aim. While this objective is frustrated due to points mentioned above, it nevertheless presents an opportunity for the SSC to drive initiatives to refresh the organization's approach to tax determination, seeking to eliminate manual touchpoints and improve the quality and accuracy of transactional tax decisions.

6. Legal change

Legal change is by far the most intuitive of all factors, creating legal force behind the requirement for businesses to react. To give an indication of the global extent, there are in excess of 14,000 regulatory changes on a monthly basis covering more than 16,000 taxing jurisdictions.

To understand better the scope of this change and how this might impact tax determination, let us examine the broad categories of change:

- **New Forms:** new (or amended) indirect tax declarations may require separate disclosure items which, in-turn, require separate classification of the underlying transaction (perhaps via a new tax code). This would require a change to the tax determination configuration and condition logic.
- **New mandates:** new real-time reporting requirements or electronic 'clearance' mandates represent a major impact to the business, which will need to be thoroughly reviewed. At the very least, a mapping exercise would need to be undertaken from the tax determination and tax-code outputs, to the real-time reporting/ e-invoicing data schemas. Depending on the granularity of a new mandate, additional tax determination logic may be required in order to automate the required level of detail at a transactional (recording) level that otherwise would only have been possible manually.
- **Rate changes:** changes to tax rates, and changes to the classification of goods and services governed by a particular tax rate, both require updates to core master-data and tax determination logic. This factor represents a significant pain point for businesses that are exposed to countries that have multi-layered, indirect tax jurisdictions (such as the USA) with taxes applied at state and various local levels.
- **Rules and messaging:** special rules governing specific tax scenarios and simplification mechanisms may be impacted by a direct legal change or by a shift in tax authority procedure or interpretation. These are often more complex and always require specialist tax resources to track and consider impact on the business. This is an area where ERP tax determination logic is put under considerable stress as the scenarios (and permutations thereof) require specialist configuration to ensure robust and adaptable compliance.
- **Jurisprudence:** the results of relevant case law can have a significant impact on how existing indirect tax law should be applied and interpreted. Consider the US Supreme Court Judgment in the *Wayfair* case and the Court of Justice of the European Union Case *Firma Hans Bühler*.[3]

[3] CJEU (Case C-580/16) – 2018

Why is automated and compliant tax determination important in the era of CTCs?

The impact on tax determination of CTCs is clear. Up to now, businesses have tolerated a degree of error within their tax determination logic because they have had time to review transactional data in order to identify and correct errors before disclosure and reporting via their periodic VAT/GST/SUT returns. The sun is setting on those days. In an era of CTCs, there is simply no time between the recording of a transaction and its eventual reporting to the tax authorities. Errors and inaccuracies will be visible to the tax authorities immediately, which can impact the organization financially (in terms of penalties and assessments), reputationally and – in the case of clearance e-invoicing – operationally.

Many businesses are already in tune with these implications and are considering how they can improve and fully automate their tax determination logic in order to gain process efficiency and eliminate the risk of error. One approach is to implement a bolt-on, tax determination solution to the ERP system (and any P2P and O2C subsystems), which delegates tax determination decisions to a specialized, cloud-based "tax engine." These tax engines are equipped with global content that is continuously updated for legal changes (for example, tax rules, rates, scenarios, invoice messaging, etc.).

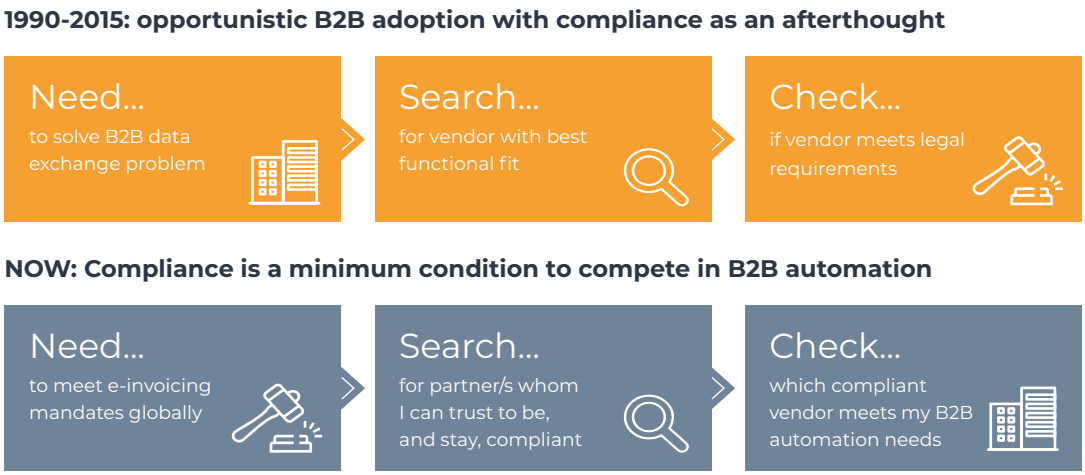
If correctly implemented and managed, this approach has several key benefits:

- Removes the need for tax departments to track and consider the impact of global legal changes.
- Improves efficiency for the compliance function, as processes to apply tax decisions manually or processes to identify and correct tax determination errors can be retired.
- Reduces costs for the IT organization, as they do not have to design, build, test, implement and maintain tax determination logic nor undergo constant change-requests relating to legal change.

The evolution of market behavior

Many companies that are faced with compulsory integration to CTCs, whether domestically or for their transactions abroad, have started taking measures to be better prepared to deal with this global trend. Consequently, market behavior regarding the adoption or further rollout of B2B transaction automation systems is changing. Whereas legal compliance in the past was often an afterthought, now the ability of business networks and similar vendors to ensure compliance with current and future CTC mandates is an upfront selection criterion. As companies worldwide seek to protect themselves against the challenges of CTCs, they look for vendors that have a proven track record in combining robust ongoing compliance assurances with B2B transaction automation benefits.

FIGURE 15: How enterprise software purchasing attitudes are changing with the introduction of digital tax mandates



A PRIMER ON POST AUDIT SYSTEMS

A PRIMER ON POST AUDIT SYSTEMS

An auditor wishing to ascertain VAT compliance of a taxable person over a past period must always make a judgment as to the reliability of a company's accounts, which form the basis for a company's VAT declarations.

The objective of an audit is to establish that a company's accounts accurately reflect all the actual sale/purchase transactions based on which VAT, if applicable, is calculated and reported. Such evidence is based on historical information that, within the limits of applicable law and practical parameters, can be obtained from the taxable person being audited.

Key role of the invoice

The shorthand "VAT compliance" is often heard to describe various types of obligations – on a high level these can be broken down as follows:

- A tax authority must be able to verify that invoices it audits are real and unchanged; therefore, the integrity and authenticity of invoices must be guaranteed. These qualities must be verifiable from the moment of issue of an invoice until the end of the mandatory archiving period.
- A tax authority must be able to interpret invoices it audits; the legibility of invoices must be guaranteed.
- To confirm that VAT has been correctly administered, reported and paid, a tax authority must be able to verify the nature of the supply, the consideration (fee) and relevant business terms of the transaction; therefore, the content of an invoice must meet certain minimum criteria.
- Ultimately tax authorities want to be able to verify the veracity of business transactions (often referred to as "supplies") within the scope of VAT law.

One common objective of tax audits in post audit countries is to verify that transactions recorded in a company's books are real. The extent to which the invoice is viewed as the sole or primary information platform in this context varies from country to country, but it is generally true that a well-managed invoicing process and archive, including credible evidence of integrity and authenticity of invoices during the storage period, can be a determining factor in a strategy to keep audit time and compliance risks to a minimum. Enabling tax authorities to easily ascertain the trustworthiness of stored invoices can therefore be a key strategy for rolling out low-risk e-invoicing across an extended enterprise or service environment.

Historical information is trustworthy when it can be established that its origin is real (authenticity) and that it has not been modified (integrity). These trust attributes are interdependent:if the integrity of records cannot be established, they are logically not authentic; and if the authenticity of the data cannot be established, their integrity is of no interest.

It is not particularly challenging for most companies to prove the veracity of an invoice from days, weeks or even months ago: the overall administrative control environment and many elements of the sales or purchase process (for example physical elements, warehouse data, trade documents) will still be demonstrably in place. However, such circumstantial evidence often erodes with time; what is "obvious" trading context one day is quickly forgotten in today's fast-paced business environment.

Change is systemic in most modern enterprises:

- Legal structures vary due to, for example, M&A activity and reorganizations.
- Change occurs as trading partners, production methods and other aspects of a business evolve.
- Legal requirements (tax, commercial law, corporate governance, privacy, etc.) are continuously modified in increasingly complex and interdependent national and international policy processes.
- Information systems are subject to perpetual change with tactical software updates, hardware and operational adjustment. Large-scale strategic overhauls are also becoming increasingly frequent in response to very rapid advances in information and communication technologies.

A PRIMER ON POST AUDIT SYSTEMS

Source data and records

To prove the reliability of its accounts, a company must in most countries retain its source documents. This typically leads to distinct administrative subsystems with different functions:

- **Accounting records — the thing to prove.** In most cases (where a company does not use cash basis accounting), a company's accounts must accurately and completely record invoices when issued or received. These bookings are not invoices themselves, even if accounting staff may sometimes refer to them that way. In modern times, these records are retained in a company's accounting system — either a software package or online service, or a more complete ERP system for larger companies.
- **The invoice — primary source of evidence.** In case of doubt concerning the veracity of a company's accounts or correctness of the VAT treatment of supplies, an auditor will typically turn to the invoice source document and ask the question: are these the invoices exactly as exchanged at the time of the supply, or have they been erroneously or fraudulently created, or modified? If the invoice is deemed reliable and there are no other reasons to suspect fraud or misconduct, the auditor can ordinarily conclude that the accounts and VAT administration are reliable. In other cases, an auditor may review complementary sources of evidence.
- **Complementary sources of evidence.** In most countries, tax law also requires companies to maintain an orderly and auditable administration, which in practice often means that companies must meet general requirements under applicable accounting law. These requirements, in turn, may include a general obligation to retain all records that may be required to substantiate a company's accounts. Trading partners are not explicitly obligated to exchange formalized trade data (key pre-contractual, contractual and transaction data, for example, purchase orders) other than the invoice, which is compulsory. But if they do, they should generally store these as well.

Why would a tax authority trust your accounts?

One can distinguish among the following high-level categories of evidence.

- **A: Intrinsic (portable) evidence:** In some cases, the integrity and authenticity of the data object (paper or electronic document, or structured data) can be demonstrated without reference to other business data or processes.

  This type of trustworthiness is based on intrinsic or logically associated features of the "object" constituting or carrying the business document in question; therefore, it is always portable. The storage or carrier medium (examples: sealed envelope; tamper-proof paper; encrypted communications channel) can ensure the integrity and authenticity of data between two communication or processing points, or at a specific point in time. When evidence is logically associated with the data (for example an Advanced Electronic Signature), integrity and authenticity can be verifiable regardless of the storage or carrier medium and, in certain cases, for a very long period of time. (Note that just trustworthiness of the storage system and processes, or the adding of technical verifiability to an invoice at the moment of storage, is almost never by itself enough to ascertain integrity and authenticity because the invoice lifecycle does not begin with the storage). Theoretically, where electronic signature techniques are used that benefit from a high degree of general security and legal recognition, integrity and authenticity evidence is conclusive. If this type of trustworthiness is available for the invoice, a presumption of the taxable person's accounts being based on reliable source data generally becomes justifiable. When other business data (for example, purchase orders, bank statements) can be verified this way, they can increase the total transaction evidence to the extent inherent in their scope.

  When the business document itself does not convey conclusive evidence about its integrity and authenticity, such evidence can arise from other sources in a post audit system. Each of these types of trustworthiness is rarely enough on its own — therefore, a combination is often required for conclusive evidence.

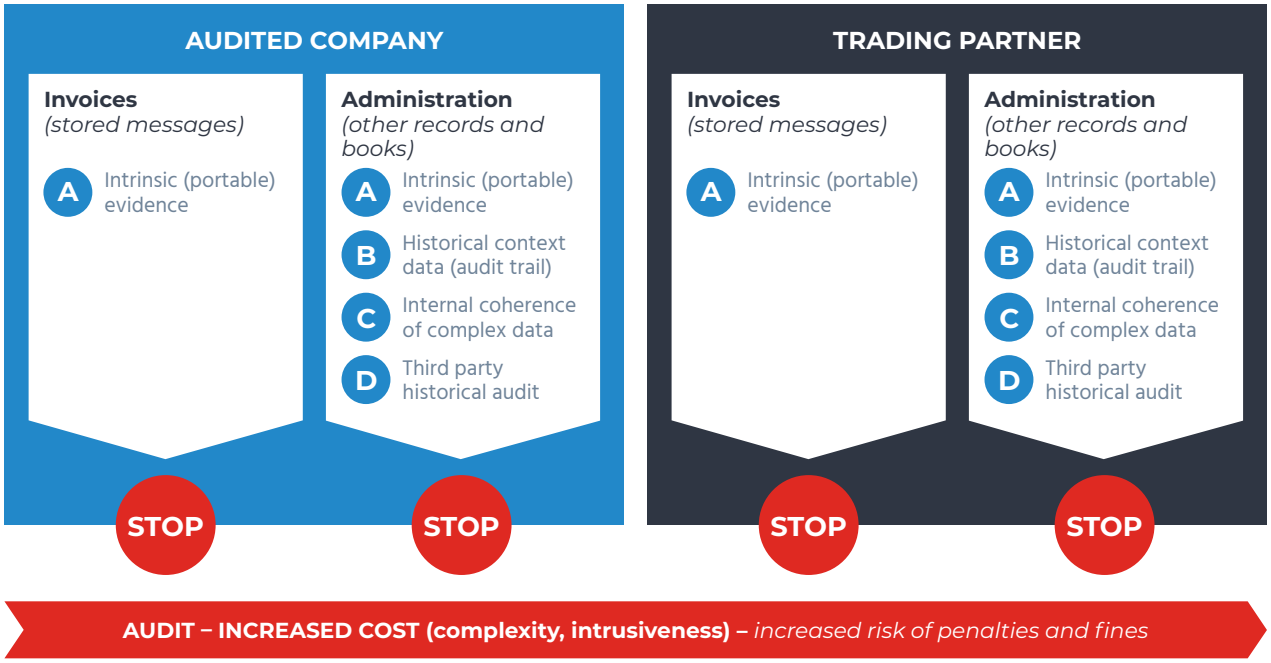
- **B: Historical context data (audit trail):** When the auditor has access to adequate information about the historical invoice process or associated business processes, he or she may be able to logically reconstitute the chain of controls guaranteeing trustworthiness. This notion, however, presupposes that the historical context data (for example, information system logs, archived transaction documents) are trustworthy themselves. Such trustworthiness must arise from one of the other trustworthiness types in this list. When the historical context data are conclusive evidence of an invoice, the taxable person therewith strengthens its evidence that the relevant supply was actually performed and paid. Alternatively, when the historical context data are conclusive evidence of a sale or purchase transaction and all mandatory details of the invoice, such evidence logically obviates the need to prove validity of the invoice as a standalone object. Integrity and authenticity of the invoice are encapsulated in a broader set of evidence on the material veracity of the full invoice.
- **C: Internal coherence of complex data:** Generally speaking, the likelihood of a large amount of complex yet semantically coherent data having been modified or falsified is low. What constitutes a sufficient large amount is directly dependent on the technical capabilities that allow a potential wrongdoer to generate such data within a reasonable timeframe: in a traditional paper-based environment, an auditor may more easily rely on a binder containing various types of trading documents with coherent information pointing to the occurrence of a supply at some point in history. In a computerized environment, increasing amounts of complex data may be needed to prove the same thing because with today's computing power, it's not hard to output significant amounts of complex yet internally coherent data in a short time.
- **D: Third-party historical audit:** Business records can be trustworthy because an independent third party has vouched or vouches for the correctness of the historical process for which a taxable person is responsible. A reliable historical audit report can guarantee that the invoicing and associated business processes were sufficiently controlled. Naturally, the audit report or certificate must itself be trustworthy—hence, other evidence types from this list may be required to conclude trustworthiness.

If, on the other hand, an auditor doesn't judge the invoice as reliable, the tax authorities will nearly always pursue a more intrusive audit of other books and records so as to compensate for this evidence deficit.

In many countries, tax authorities can also audit a taxable person's local trading partner(s) if the evidence available for the taxable person being audited proves inconclusive. In cross-border situations, if justified due to questions about potential loss of revenue where tax liabilities could have arisen in a country but were not reported there, similar trading partner audits may be organized under mutual tax assistance treaties. In addition to a financial risk created by the duration and intrusion level of an audit, administrative fines and loss of the buyer's right to deduct input VAT, companies may face a reputational risk if they don't ensure a sufficient level of auditability for VAT purposes.

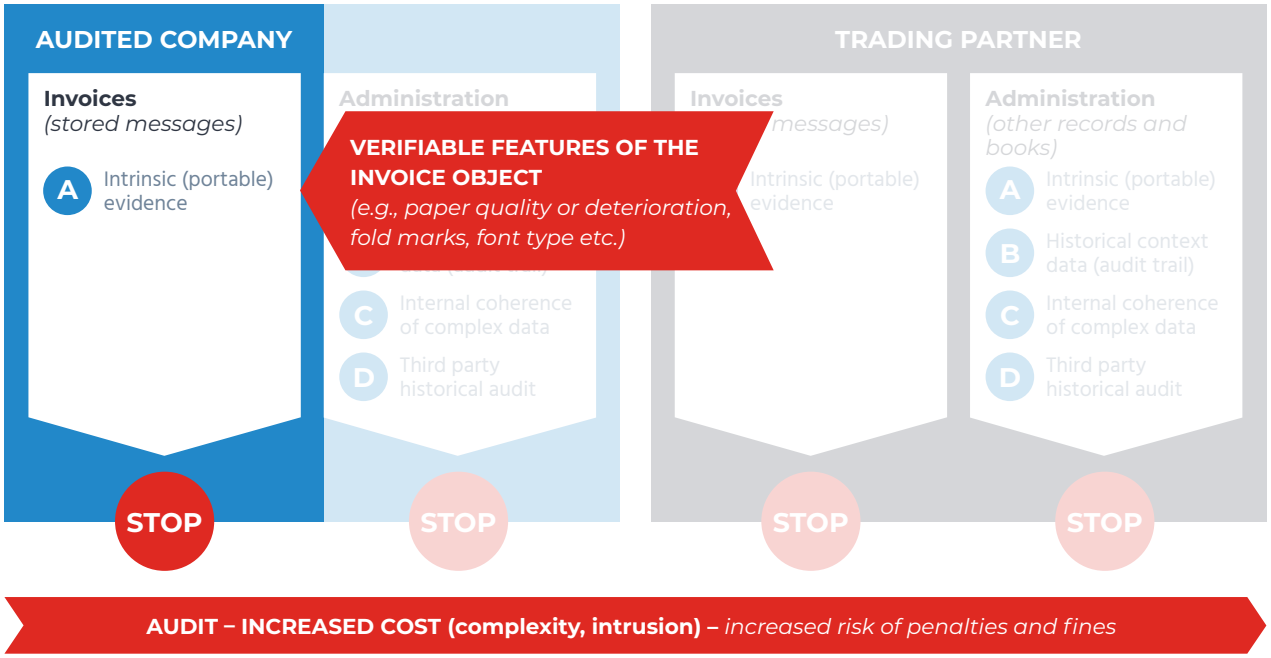
A PRIMER ON POST AUDIT SYSTEMS

VAT auditability options in a post audit environment



A short history of ex-post auditability options

Before the information age — the classic evidence scenario



In the traditional paper-based world, before the advent of information systems, an invoice would be issued on a piece of paper that became the buyer's "original" invoice. A second, identical piece of paper was stored by the supplier as proof that an invoice was indeed correctly issued. The buyer received the invoice and, upon manual verification of its content against the status of the corresponding supply, manually entered the transaction information in the company's accounts.

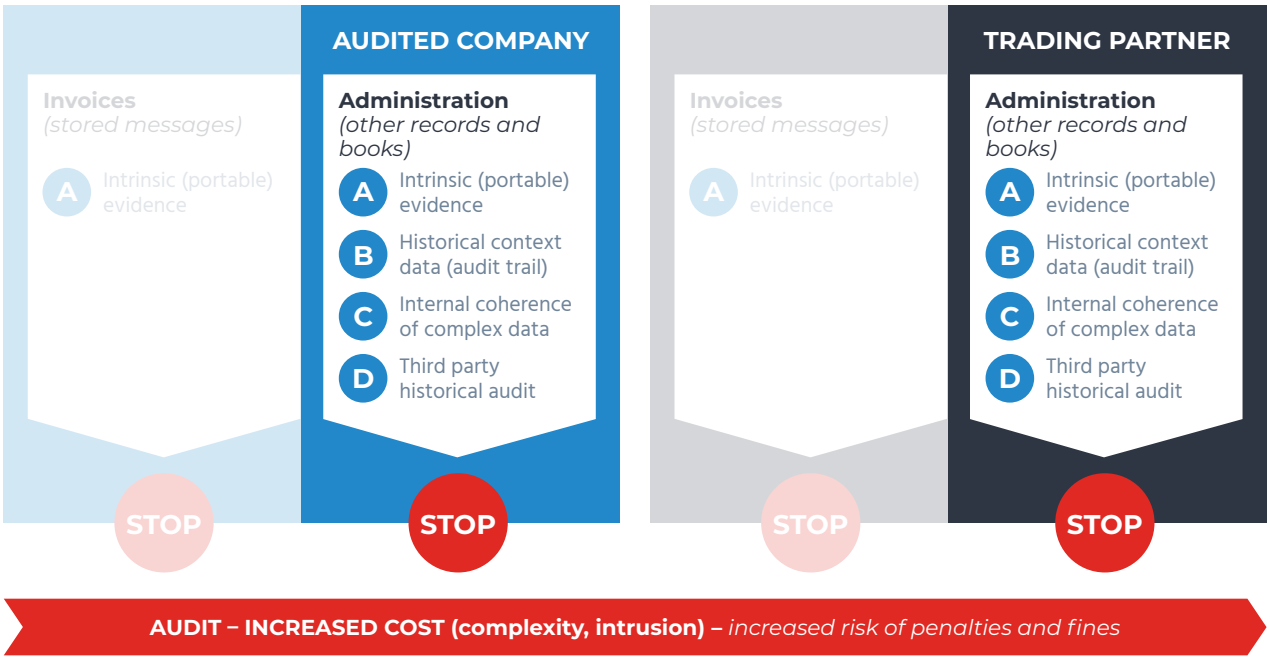
In this situation, which is still prevalent in many countries with a low penetration of information technologies, a tax auditor who wants to verify that a company's accounts are based on real invoices will consult the box or binder where the original tax invoice is stored. The intrinsic evidence value of the stored traditional invoice is considerable because typewriter fonts, invoice formatting, letterheads and other distinctive features are created in an artisanal manner; further, the weight, color and quality of the paper can be recognizable as coming from a certain supplier. Upon verification after several years, the paper might have been perforated for storage in a binder and its distinctive acid level may have yellowed it since. The envelope in which invoices were invariably transported in many cases left the paper with distinctive fold marks. The default transportation system is a state postal monopoly or at least a regulated business.

Any fraudulent modification of letters after posting – which would have been a tall order due to the other features of the invoice – is highly unlikely. Since invoices are often mixed in the paper postal system rather than managed in a dedicated channel, the "attack surface" is extremely thin.

The bookkeeping of most companies in this age of traditional paper invoices was often limited to a simple separate entry into a general ledger of sales and purchase invoices in chronological order. Where present, non-invoice trade documentation (including copies of paper checks where payment was not made in cash) would be kept as separate administrative records, separately from the company's accounts, in the same relatively reliable paper form. To the extent that an invoice would not be considered sufficiently reliable, such separate records and books could be consulted, but this wouldn't happen routinely due to the relatively high trust level of the paper invoice system.

With these inherent levels of invoice auditability, tax authorities have long been able to strike a balance between their legitimate interest in audit and businesses' need for minimum impact of VAT law enforcement.

The modern paper-based world — challenges for all stakeholders



A PRIMER ON POST AUDIT SYSTEMS

With the advent of information technologies in the 1980s, businesses' administrative practices were radically transformed. Typewriters were replaced by personal computers and printers. The invoice creation process used more standardized techniques; first using word-processing software, followed later by desktop spreadsheet software, which would facilitate invoice calculations. Just like the printer paper itself, the format, fonts and layout of invoices were increasingly uniform. Anyone with simple drawing software could fake or create colorful logos and produce professional-looking invoices. Invoice models would be stored on relatively unprotected PCs and could easily be reprinted and sent with, for example, different bank account information. Similarly, new photocopiers could render near-identical copies of any document, including invoices. Physical invoice delivery could be industrialized through professional agreements that would increasingly involve private operators outside the public law or regulated sphere distributing a company's invoices in a more dedicated process, resulting in a somewhat greater attack surface.

A tax auditor who wants to verify that a company's accounts are based on real invoices will still be pointed to the binder or box where the original tax invoice is stored. The invoice is still on paper, which may have physical qualities that can be of help in an audit process; however, the intrinsic evidence value of the stored traditional invoice had been reduced from the old manual days.

Companies' accounting systems also evolved and, especially for larger companies, quickly became subsumed into ERP systems, which would tie several core business processes into a single system that re-used data based on defined roles and controls. This development made more information about the commercial process available to a tax auditor in a more convenient manner. While in many countries faxes may have been accepted as "original invoices" as would, somewhat later, scanned paper documents, this world of paper "originals" and separate accounting systems still maintained a sharp legal distinction between the books and the evidence of the books.

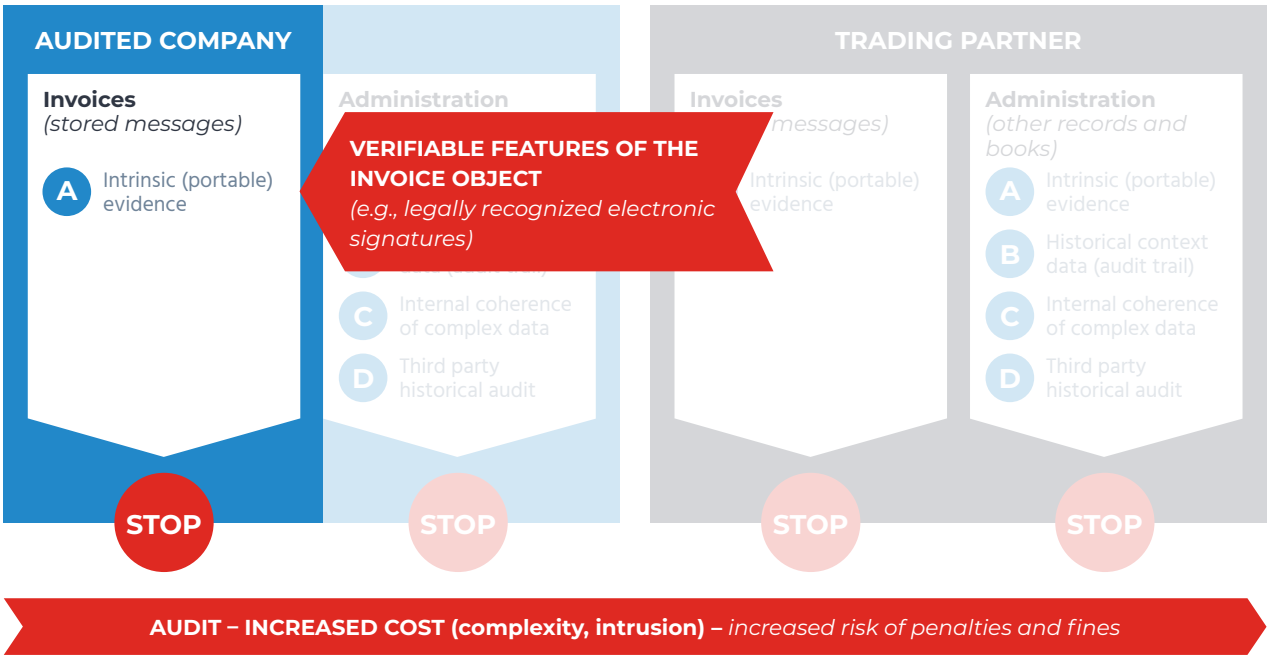
This era and its invoice methods create various challenges for tax authorities. Neither the stored invoice message nor the accounting system by itself provides a sufficiently reliable single point of evidence. While payment often occurs by bank transfer, this process rarely leaves reliable traces that tax auditors can easily access over longer periods of time.

This situation effectively aligns the interests of tax authorities with those businesses that wanted to eliminate the "switch to paper" between a supplier's and a buyer's accounting system by transmitting and storing "original invoices" electronically. The capabilities of modern information technologies to facilitate such fully fledged electronic invoices have also introduced a split in businesses' administrative practices:

1. For some — very stable, high value or high volume – business relationships, large companies took advantage of emerging computer and network technologies to rapidly introduce significant levels of automation. Already in the 1980s, some companies were performing automated B2B processes based on agreed data format definitions. For legal reasons (in some countries: prohibition of electronic invoicing, but in some cases also the requirement for human readability), many such transactions nevertheless did not produce electronic tax invoices; rather, these exchanges were treated as for business convenience only and a paper tax invoice was exchanged and stored for tax purposes. With the emphasis on structured data, these systems have gradually been integrated with ERP systems and other automated or computer-facilitated business processes.
2. Many other business relationships moved much more slowly and continued to rely on human-readable documents rather than structured data. Since these images (for example, PDF files) were created in electronic formats that could easily be exchanged electronically (for example, via email), but such images merely served as "copy" information while the paper continued to be the formal tax invoice.

Paperless invoicing

PKI-based electronic signature — dematerializing the classic evidence scenario

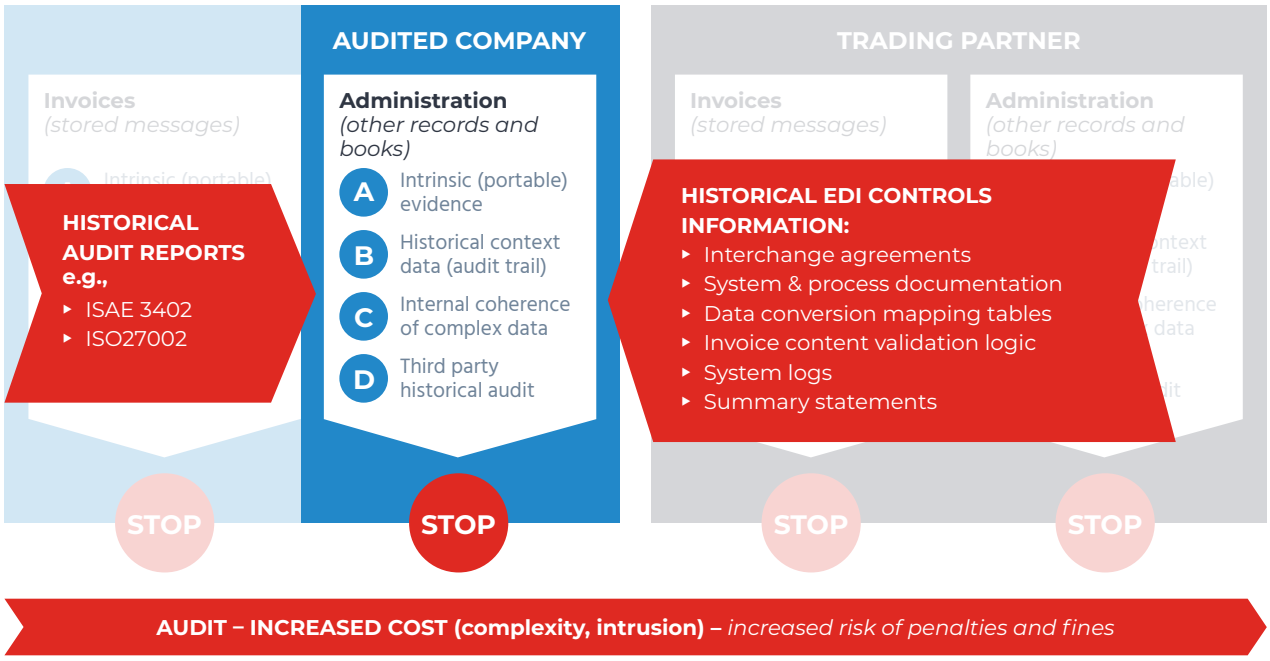


This method is essentially an electronic version of the classic paper-based scenario: it focuses on the auditability of the invoice as a discrete logical object. However, the use of data-level security technologies such as PKI allow for much higher levels of verifiability and, therefore, legal certainty. By building on a legal framework for the legal recognition of electronic signatures, in certain cases the burden of proof regarding the integrity and authenticity of the invoice can be reversed. The attack surface during the invoice process is negligible because any change to the invoice can be immediately detected at any moment from formal issuance until the end of the storage period.

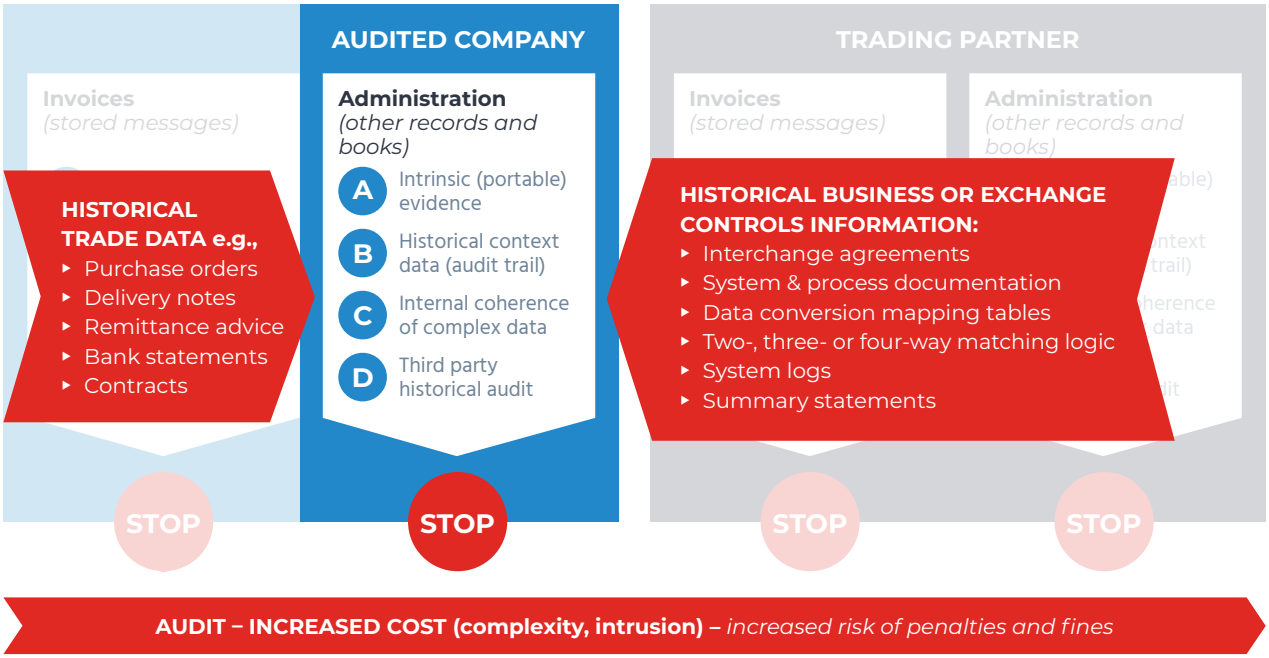
Since many companies whose evidence strategies are in this category will also have basic or even sophisticated ERP systems as well as other (though often not highly integrated) business process automation systems (for example, order systems, inventory management or customer relationship management systems), tax auditability is further enhanced for cases where an auditor wants to investigate additional evidence that a supply actually took place — but this would not happen routinely due to the high trust level of the invoice system.

A PRIMER ON POST AUDIT SYSTEMS

EDI — deriving evidence from the exchange process



Audit trail – the business process is the evidence



Many medium-sized and larger companies have implemented a form of integrated electronic data exchange for a portion of their transactions. In these cases, the structured message rather than the paper becomes the "original invoice." The invoice message must still be stored as received or (in many countries) sent; however, the evidence of the invoice's integrity and authenticity does not lie in the invoice as an object but rather in security processes that the parties have agreed to in the underlying interchange agreement. Often, this includes strict rules concerning the technical format and content of the invoice, as well as robust transport-level security in the channel over which the invoice is carried. When modern transport security standards are used, the data may, in addition to being sent over an encrypted channel, also be temporarily signed during the transmission. Since in all cases invoices are again technically unprotected when they leave such a point-to-point connection, parties must generally ensure that no uncontrolled steps occur in the end-to-end invoicing process whereby data could be exposed to change. Laws permitting this "EDI" method sometimes require the archiving system to be directly populated from the EDI system to avoid such gaps and keep the attack surface to a minimum. Parties availing themselves of this option must naturally still ensure that the stored invoices can be presented in a human-readable format.

Because the invoice object carries no distinctive features permitting its integrity and authenticity to be independently verified, this method logically also requires parties to ensure that the interchange agreement be stored. Information that is required to prove that the interchange agreement rules were followed (for example, sent/received logs, mapping tables where invoices are converted and third-party system audit reports and data validation rules) must also remain auditable during the storage period.

Since many companies whose processes are in this category will also have basic or even sophisticated ERP systems as well as other (often not highly integrated) business process automation systems (for example, order systems, inventory management or customer relationship management systems), tax auditability is further enhanced for cases where an auditor wants to investigate additional evidence. Such verifications may take place relatively frequently where the evidence of a fully controlled end-to-end exchange process is not very robust.

This method of paperless invoicing does not put the emphasis of the evidence in the invoice as a separate object but rather in the integrated or transparent nature of the business processes used by the supplier and the buyer. In a sense, in this method the invoice is not just dematerialized but effectively immaterial: the invoice represents merely one step in a process whereby controls performed on the semantic level form an inextricable whole proving more than just the specific part that is the invoice. Prime examples of such processes are those where the recipient performs three-or four-way matching with purchase orders, delivery confirmations and, in extreme cases, contracts. Reliable documentation of the rules applied in this chain, together with logs of these control processes as effected, possibly supplemented with the trade data in its various iterations when going through the end-to-end process, form a strong audit trail that proves that a supply took place and was correctly accounted for. Third-party audit reports can corroborate the process-based evidence. Importantly, all mandatory elements of an invoice should be sufficiently evidenced by the audit trail evidence stored for purposes of proving the integrity and authenticity of the invoice.

A PRIMER ON CTCs WITH A FOCUS ON CLEARANCE

A PRIMER ON CTCs WITH A FOCUS ON CLEARANCE

CTCs can at present be subdivided into the high-level categories of reporting and clearance. This section focuses on e-invoice clearance, which many experts believe is what tax authorities worldwide are working toward as the dominant pillar of their continuous VAT control systems.

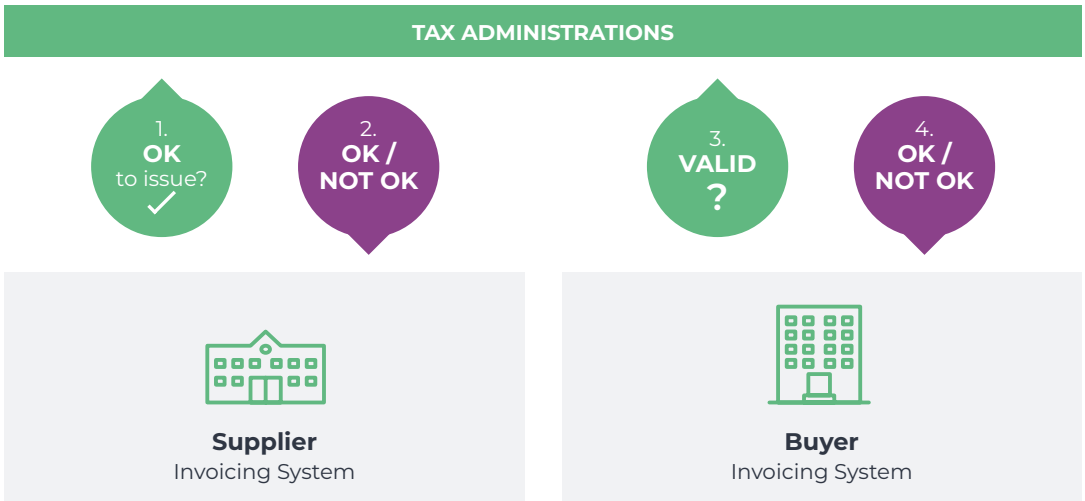
Common clearance system features

Figure 16 shows several high-level features and processes that many clearance systems have in common. It should however be noted that many variations exist on this reference model in practice; many countries with a clearance system have implemented extensions on these "standard" processes (see deep dive below):

1. **OK TO ISSUE:** Typically, the process starts with the supplier sending the invoice in a specified format to the tax authorities or a state agent licensed to act on its behalf. This invoice is ordinarily signed with a secret private key corresponding to a public certificate issued to the supplier.
2. **OK/NOT OK:** The tax authority or state agent (for example, an accredited or licensed operator) will typically verify the signed supplier invoice and clear it by registering it under a unique identification number in its internal platform. In some countries, a proof of clearance is returned, which can be as simple as a unique transaction ID, possibly with a timestamp. In some cases, it is digitally signed by the tax authority/state agent. The proof of clearance may be detached from the invoice or added to it.
3. **VALID:** Upon receipt of the invoice, the buyer is often obligated or encouraged to check with the tax authority or its agent that the invoice received was issued in compliance with applicable requirements. In general, the buyer usually handles integrity and authenticity control using crypto tools, which can also be used to verify a signed proof of clearance. In other cases, the clearance check is done online by the tax authority or agent.
4. **OK/NOT OK:** If the buyer has used an online system to perform the validation described in the previous step, the tax authority or state agent will return an OK/not OK response to the buyer.

The first "clearance" implementations, in countries like Chile, Mexico and Brazil between 2000 and 2010, were inspired by this high-level process template. Countries that have subsequently introduced similar systems, in Latin America and worldwide, have taken greater liberties with this basic process model. In this primer, we will look at the key areas of divergence among real-time and time-constrained tax control systems in existence today.

FIGURE 16: The basic clearance model, which was first implemented in certain Latin American countries



A PRIMER ON CTCS WITH A FOCUS ON CLEARANCE

Defining a clearance regime

First, a detailed analysis requires us to introduce the concept of a clearance regime, in addition to clearance rules for e-invoicing at a country level.

The reason is that different electronic invoicing systems increasingly coexist within countries. The most prominent example is Brazil, where goods (NF-e), transport (CT-e) and service (NFS-e) electronic invoicing fall under different regulations and use different technologies; in our terminology, each is a separate regime. Further, each Brazilian municipality has the freedom to define its own electronic invoicing rules for supplies of services; these are referred to as sub-regimes. Towards the end of 2013, Turkey introduced a new regime called e-Arşiv, in addition to the B2B e-Fatura regime. Interestingly, while e-Fatura is clearance-based B2B for large enterprise buyers, e-Arşiv used the post-audit method for invoices sent to smaller and medium-sized businesses and consumer buyers.

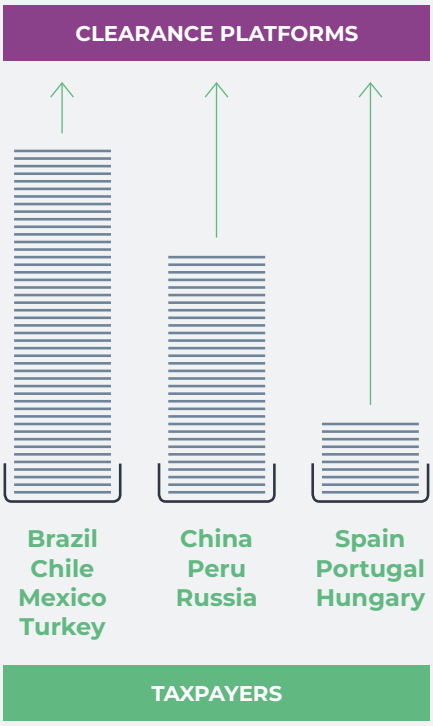
Differences in process and document scope

One area in which different real-time and time-constrained tax control systems vary significantly is the scope and complexity of mandatory processes and the type of documents to be exchanged with the clearance platform at the tax authority or agent. While many countries still use the phrase "electronic invoicing," the actual scope goes beyond just invoicing and may today cover other documents related to transactions, such as credit/debit notes, delivery notes, waybills, ledgers and accounting documents. Some countries no longer use the term "e-invoice." In Russia, the framework is called electronic document exchange. In Chile, the term electronic fiscal document is used.

We notice a general trend in clearance countries that tax authorities, in their efforts to gain more control over VAT revenue sources and prevent tax evasion, are extending their mandates to cover more fiscal documents. These documents are required to include detailed business transaction data and must be issued following workflows that don't necessarily match the corresponding business document contents and associated workflows for B2B purposes, resulting in two different parallel processes that are forced to co-exist. This situation is exacerbated by another trend whereby some tax authorities are demanding accreditation and the local presence of service providers who want to offer outsourced clearance services. This can be challenging for international B2B operators without a local presence in each country for which they support invoicing processes.

Another aspect of clearance regimes is the availability of reverse operations or corrective processes. Explicit regulated invoice cancellation allows the buyer or supplier to reverse the clearance, resulting in a no-VAT operation on the condition that VAT has not yet been paid to the tax authorities. Other clearance regimes have regulated debit/credit notes as part of the electronic invoicing framework.

FIGURE 17: Countries have introduced requirements for clearance-related processes and specific business documents to varying degrees



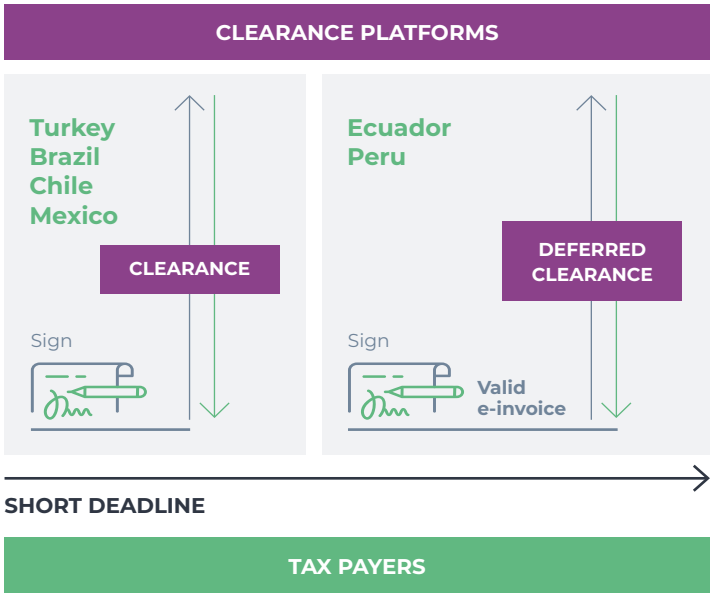
Clearance and broader CTCs

The first clearance implementations were focused on real-time controls, whereby the supplier had the obligation to both sign the invoice and get clearance in order to consider the e-invoice as a legally valid document that could be issued to the buyer. The deadline time period between signing by the supplier and getting clearance has become shorter in recent years, from days to hours. In practice today these events occur simultaneously, in real-time, for most e-invoice volumes.

Figure 18 shows examples from current implementations in relation to the moment when an e-invoice can be considered legally valid.

New clearance countries have, however, started diverging on precisely when invoices and other transaction data must be sent to the clearance point, allowing taxpayers to sign e-invoices and deliver them to the buyers without any clearance but giving a grace period: a longer deadline to get clearance. Thus, clearance legislation developed the concept that a signed e-invoice was conditionally valid for the amount of time permitted to submit the e-invoice for clearance. This more relaxed clearance approach allows the supplier to deliver the e-invoice to the buyer even though clearance may not have been obtained. This approach is "time-constrained clearance."

FIGURE 18: Overview of real-time and deferred clearance, as well as invoice transaction reporting, in relation to the moment that an invoice can be issued to the buyer



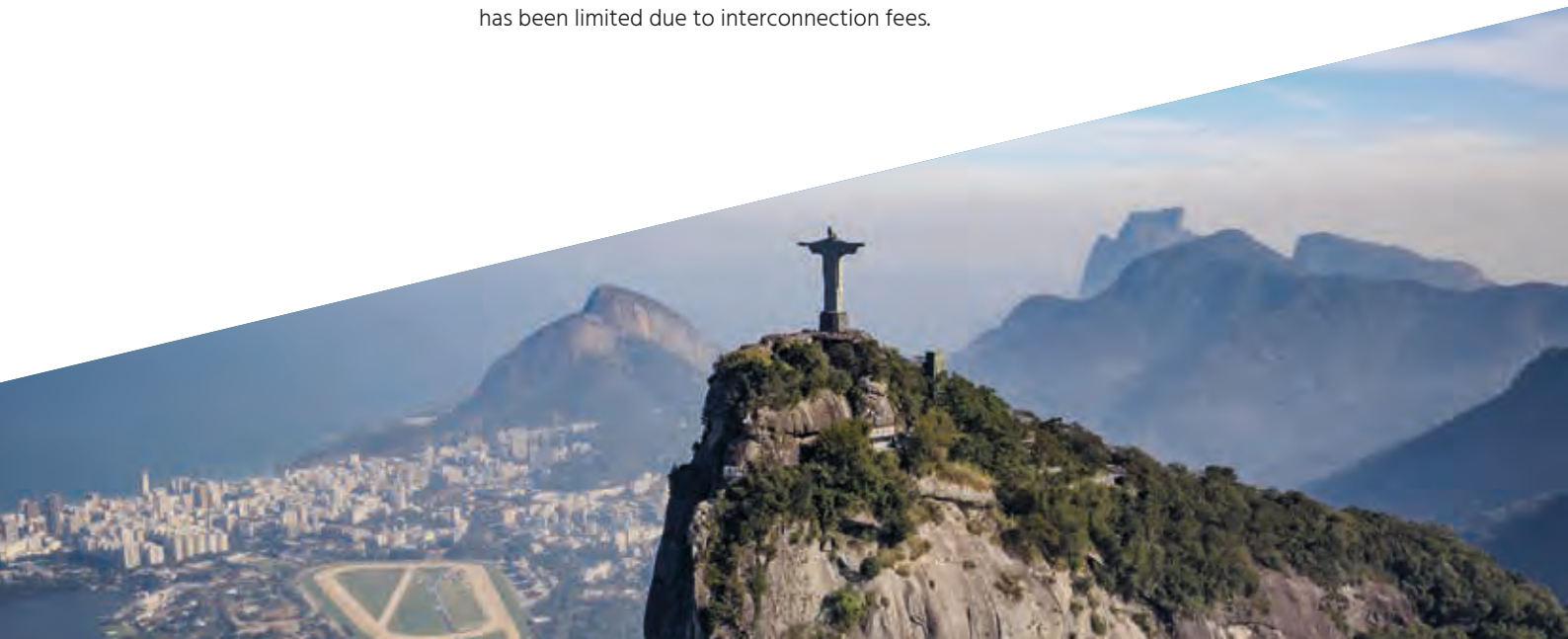
A PRIMER ON CTCS WITH A FOCUS ON CLEARANCE

Variation concerning the clearance point

Countries have also created different ways of dealing with the operational responsibility for the regulated "clearance" process. The end-to-end clearance process can be summarized into four main steps: (1) signing the e-invoice; (2) transmission to the tax authorities; (3) clearance by the tax authorities; and (4) complementary fiscal operations. Below we provide more detail on how the regimes allow delegation of these steps to third parties.

Chile and Turkey allow delegation of signing to any taxpayer registered in the country, who can sign with its own certificate. Peru, Colombia and Turkey explicitly allow and promote delegation of signing and clearance transmission to accredited service providers. Most Brazilian regimes and Chile allow any country legal entity holding a certificate to handle the transmission to the tax authorities. Peru, Colombia, Turkey, South Korea and Taiwan have regulated the delegation of transmission of the invoice to the tax authorities to accredited service providers (state agents). As for authorization of invoices by the tax authorities, in most clearance regimes the tax authorities are directly responsible for central clearance. Exceptions are Russia, Mexico and recently Peru and Colombia, where the tax authorities have delegated the clearance to service providers that have to pass strict governmental accreditation before becoming an authorized clearance state agent. Finally, once an invoice has been cleared, there could be additional operations like correction or cancellation. In Mexico, while the clearance process is delegated, cancellation is centralized at the tax authorities. Common to all delegated models is that the state agents can (and often do) also act as value-added service providers offering complementary services outside the regulated functions, for example, archiving.

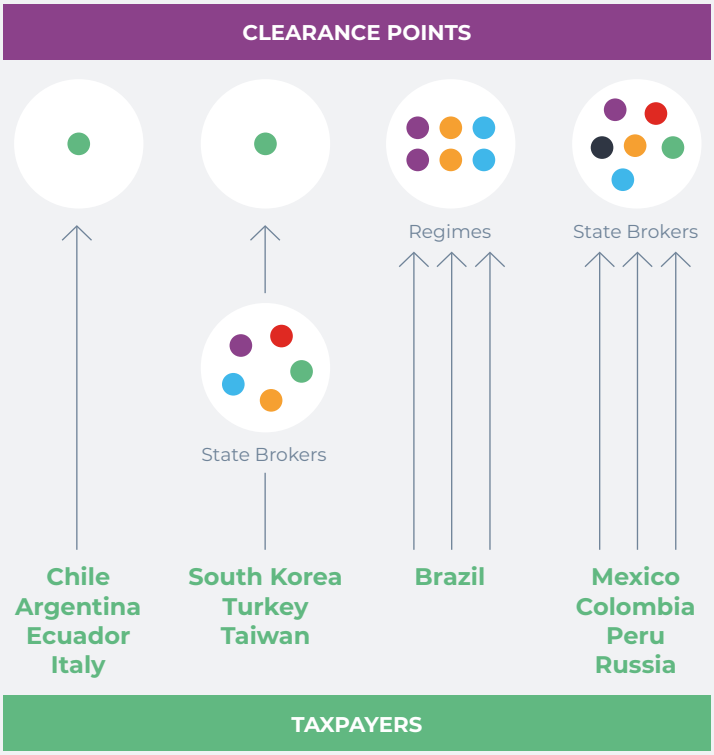
An additional dimension regarding technology is transmission homogeneity, i.e. whether the same technology can be used to transmit e-invoice to clearance points. We focus only on transmission, as the formats are standardized in all regimes, whereas transmission is not. Brazil is homogeneous on the state-level, i.e. the same technology is used by all states for a given regime, reducing development/integration costs for companies operating in different states. However, at the municipality level, in general, it is heterogeneous as there is no single standard. Some Brazilian cities are adopting the so-called ABRASF model in the pursuit of homogeneity. Mexico, Russia, Turkey, Taiwan and South Korea are heterogeneous – a company that has selected an accredited service provider can't necessarily re-use the same technology to connect to another one. Peru forces state agents to offer one transmission standard and also allows proprietary ones, so taxpayers are free to select. Due to the lack of homogeneity among Russian state agents, interoperability has not been possible. Therefore, the Russian tax authorities regulated a centralized state agent to which all other state agents would be connected in order to ensure e-invoice exchange between suppliers and buyers, but the success has been limited due to interconnection fees.



A more technical aspect is the proof of clearance returned by the tax authorities. This could be a convenient artefact that simplifies the process of validating the e-invoice. A good practice is shown by Mexico and Russia, where a returned proof of clearance is cryptographically protected with authenticity and integrity that can be verified without contacting the tax authorities – a process that can be easily automated. In other regimes, no proof of clearance is returned, or the returned proof is not protected; in these regimes, the tax authorities must be contacted to validate the e-invoice.

After or in conjunction with clearance, the invoice must be delivered to the buyer. In some regimes, such responsibility falls under the tax authorities or a state agent, like in some Brazilian NFS-es, Russia and Turkey. Other regimes put that responsibility on the supplier – this is the case in, for example, Brazil NF-e/CT-e, Chile, Ecuador, Mexico, Peru, Colombia, South Korea and Taiwan. Interestingly, most regimes use email for delivery to an address that has been provided by the company during the registration process. Even though email systems have evolved to become highly reliable, such e-invoices can get lost.

FIGURE 19: Different legal and operational implementation models for clearance processes

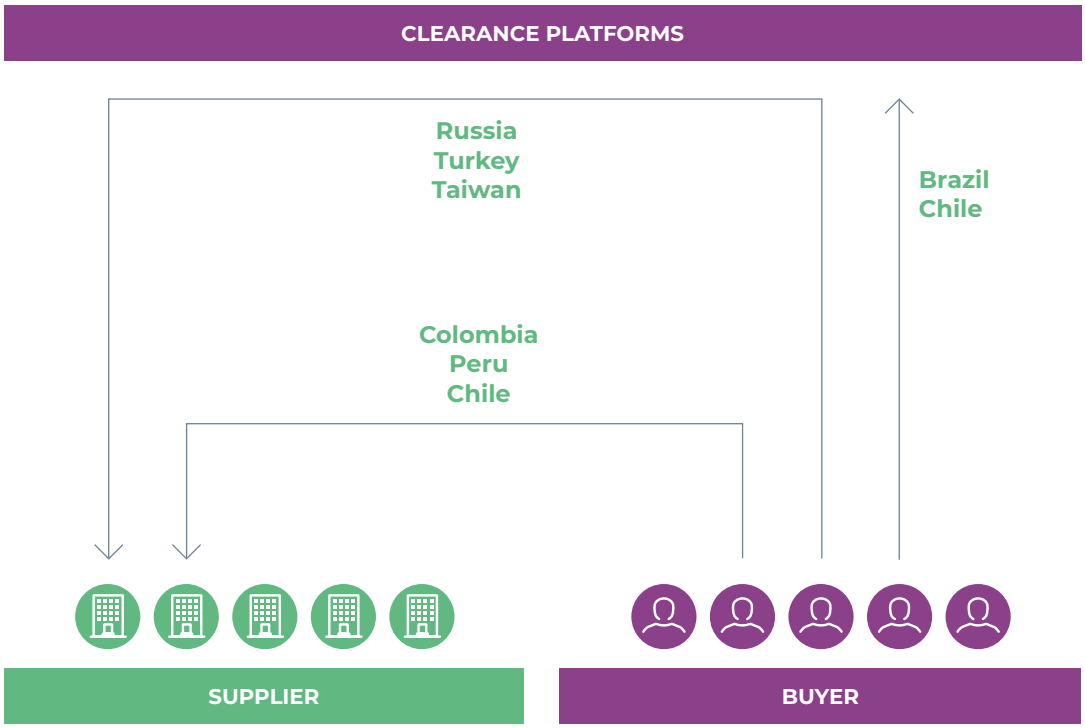


A PRIMER ON CTCS WITH A FOCUS ON CLEARANCE

Diverse buyer responses

While in many cases the buyer has the possibility or obligation to verify that an invoice has been cleared, most clearance regimes don't include any invoice status data originating from the buyer in the actual clearance process. Russia, Chile and Taiwan are examples of the few regimes that leverage technology to require such involvement from the buyer. Some countries offer both options depending on the type of e-invoice. In Turkey, basic e-invoices are supplier-side only, whereas commercial invoices allow a buyer to accept or reject the invoice during a limited period on receipt. In Brazil, goods invoices in the oil industry have buyer involvement beyond clearance validation. This approach now appears to be spreading to other new clearance countries. In Peru, the buyer must reject cleared invoices in certain situations. Colombia forces buyers to explicitly accept or reject an e-invoice. Mexico is about to introduce a mechanism that requires buyer permission before the supplier can cancel an e-invoice.

FIGURE 20: Different types of compulsory 'buyer responses': from buyer to supplier direct (lower right-to-left arrow): from buyer to supplier through the clearance point (higher right-to-left arrow): to the clearance point only



Compliance challenges for business: clearance theory and practice

The variations on the principal clearance theme that are outlined above are a driver of major cost and complexity. Sovos experts believe that the trend toward diversity isn't about to be reversed in favor of a standards-based approach among tax authorities, or even slow down, any time soon. We anticipate that new variations of approaches to transaction-oriented tax controls on invoices and other documents will continue to emerge over the next five to 10 years. It is inevitable that the platforms governments adopt to receive and process electronic invoices from suppliers in public procurement transactions will be adapted for specific types of real-time control. In Italy, for example, the existing B2G platform was repurposed to become the foundation for the general e-invoicing clearance mandate.

Clearance and B2B exchange standards will converge

Many B2B transactions will over time have the government clearance platform as a "third trading partner," and exchanges with the clearance platform will be based on law, not standards. This will modify how we develop B2B data and process standards because the cost of maintaining two sets of completely different normalized exchange methods with trading partners in the same transaction will be prohibitive.

B2B process replication will drive convergence based on legal concepts

Governments show a tendency of mandating clearance platform processes and document types that are close but not identical to "the real thing" in B2B integration as we know it. For example, the law may require a goods receipt note with specific content and in a specific format to be exchanged with the clearance platform at a specific point in the transaction. The content, form, timing and general purpose of that document may be very different from what parties exchange as a goods received note (GRN) in their existing B2B process. This duplication means that classic B2B process cycles will need to be re-engineered to meet the tax-driven demands of multiple clearance platforms depending on which law applies.

Content and form compliance will also converge, driving changes in the compliance automation market

Clearance platform processes and the massive computing power that governments can afford will lead to unprecedented levels of business transaction transparency. Among other things, this will erase previous distinctions between "form" and "content" compliance: if the government has access to every line item of every invoice (and in the future, likely: order, transport document, salary statement) there's no hiding of the very widespread "smallish" VAT or other indirect tax errors or shortcuts in individual transactions. Businesses will need to ensure much more granular tax determination decision-making earlier in both their and their trading partners' processes, and this will result in "tax engine" functionality being applied at the same time as automated decisions concerning compliance with transaction-level form requirements (integrity and authenticity, file format, clearance platform exchange orchestration, clearance platform authentication).

Other document and transaction types will quickly be included

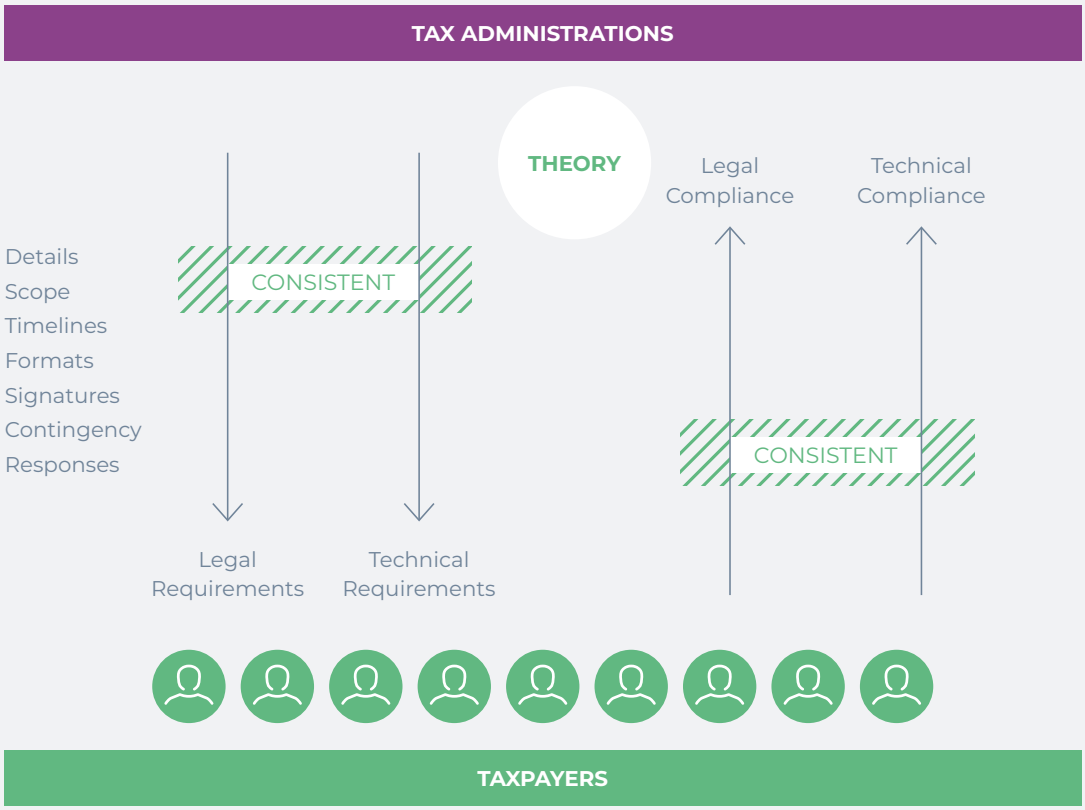
There are many examples of other documents and transaction types that will also be subject to real-time control requirements – here are a few examples:

- In Mexico, salary statements must be cleared just like invoices.
- In a few Latin American countries (Chile and Ecuador), certain information about the financing of an invoice (for example, through factoring) must be registered in the clearance platform.
- Secure cash registers for point-of-sale consumer transactions are already used in many countries worldwide. Increasingly, these machines will be designed to automatically send individual transaction information to the tax authorities. For example, in Russia, medium and large retailers must use state-certified IoT-based cash desks that automatically report online to the federal tax authorities all transactions, approximately 70 million per day.

A PRIMER ON CTCS WITH A FOCUS ON CLEARANCE

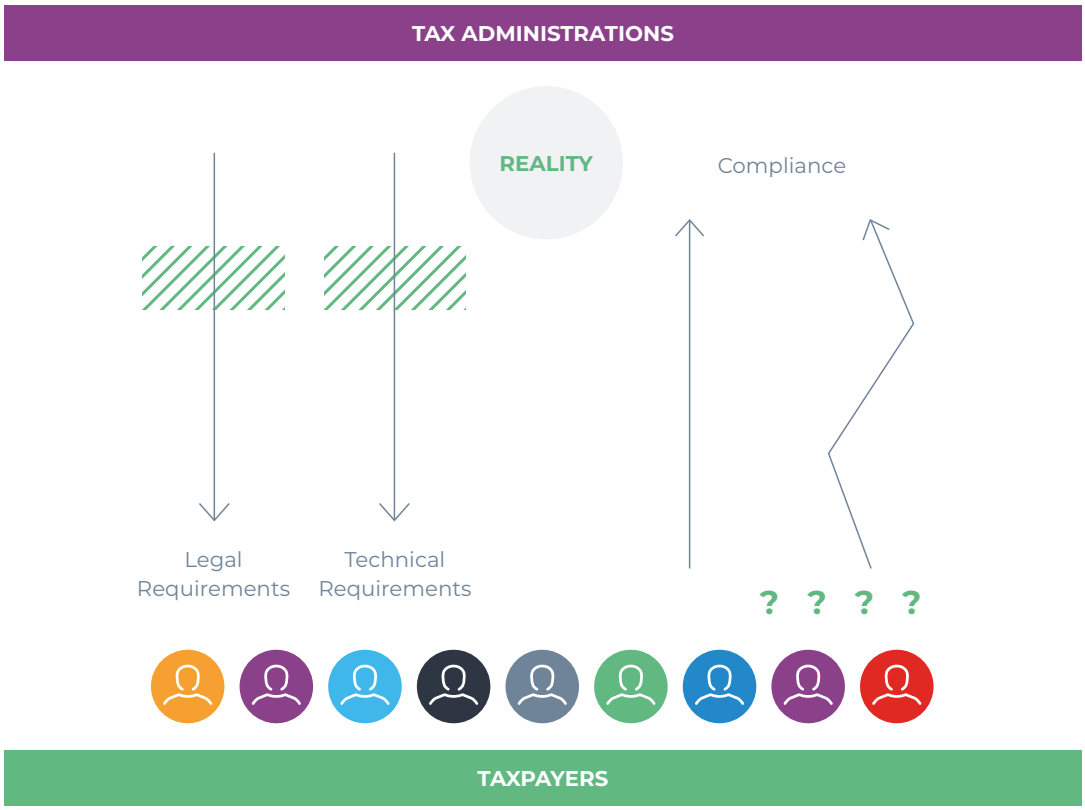
Diversity among clearance requirements is a challenge for companies, but it is not the biggest challenge in this context. Much more difficult to handle are the way-too-common small and large disconnects between theory and practice. As shown in Figure 22 below, clearance requirements are typically set out on a high functional level in tax law. The technical requirements and associated implementation specifications are normally provided in secondary legislation or tax guidance documents. Theoretically, the latter should be fully consistent with and build on the former, creating a general-to-specific normative and implementation framework that companies can use to ensure compliance. When any changes are made, this consistency should naturally be maintained.

FIGURE 21: Theoretically, legal and technical requirements would be 100% consistent between them so that taxable persons can easily ensure compliance in their business processes.



The reality of implementing support for clearance requirements is unfortunately often quite different. In many countries, weaknesses occur in the link between legal and technical requirements set out in formal documentation. This is often due to immature organizational and change management controls between technical and legal teams within tax authorities that are tasked with different facets of the end-to-end requirement package. To add insult to injury, these flaws in the consistency between technical and legal requirements are sometimes exacerbated due to inconsistent implementation of these requirements in the technical interfaces exposed by the clearance point. As mentioned, these discrepancies most frequently occur when changes are made to clearance requirements after their initial introduction.

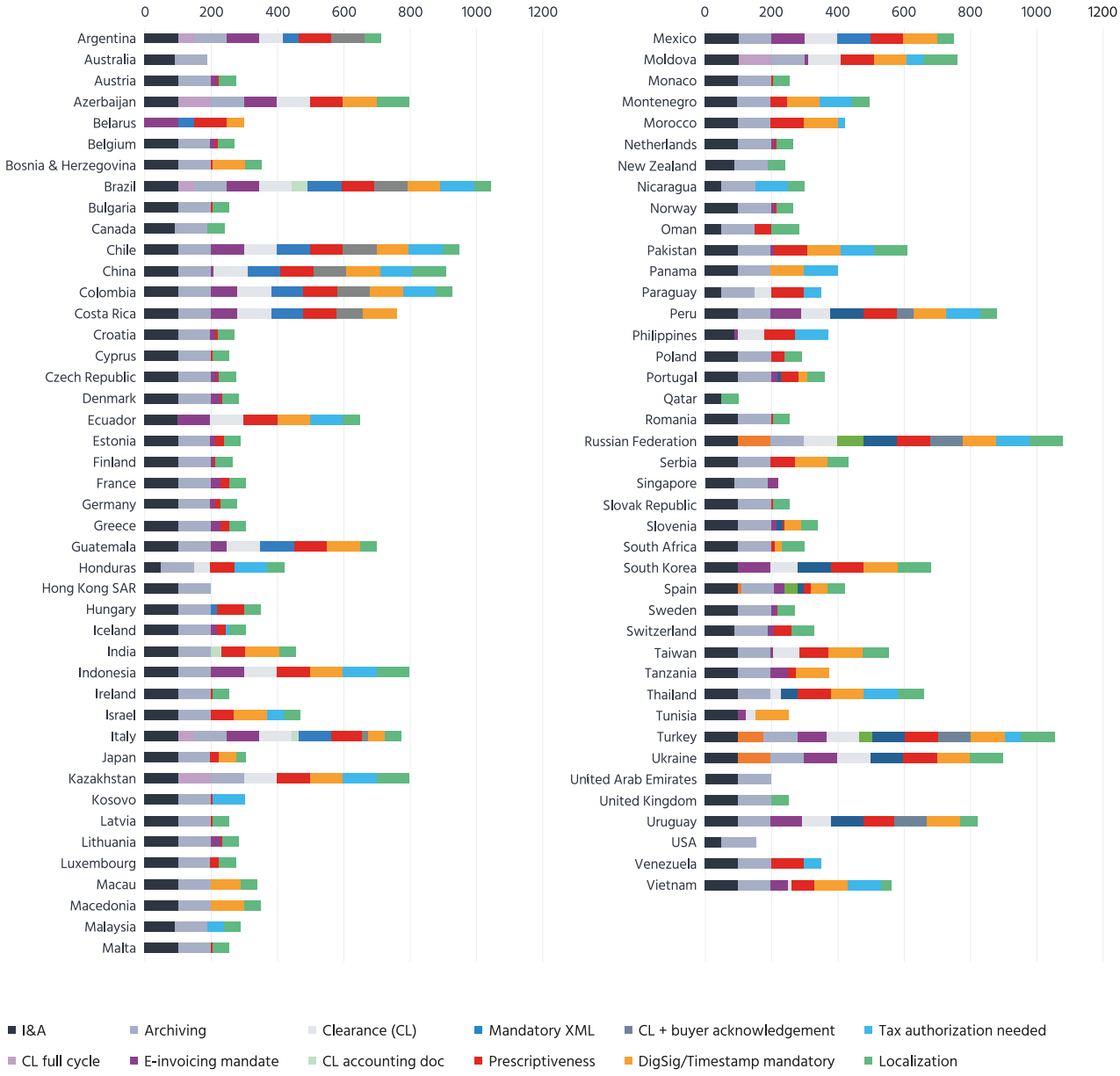
FIGURE 22: **In practice, legal and technical requirements from tax administrations often differ, which leads to implementation challenges for businesses and service providers.**



GRANULAR ANALYSIS

GRANULAR ANALYSIS

This section describes various features by which different e-invoicing regulatory regimes can be compared. The graphs below provide a schematic overview of the principal legal requirement categories and features for many of the countries profiled in this report and on the following pages you will find a brief description of the analysis methodology used for rating in each of the categories we have used.



GRANULAR ANALYSIS

I&A (Integrity and authenticity required)

A value of 100 is allocated where a country requires businesses to ensure and be able to demonstrate (a) the integrity of all mandatory fields of an invoice and (b) the authenticity of its origin (the identity of the supplier or, where allowed, the third party acting on its behalf) during the legal lifetime of an invoice. A value between 0 and 100 is allocated where such requirements are generally assumed but not explicit in the law, or if there is a formal policy within the tax authorities not to seek such evidence.

Clearance

A value of 100 is allocated if an electronic invoice must be sent to the tax authorities or its licensed/accredited agent for authorization prior to issuance as an original tax invoice. A value between 0 and 100 is allocated if clearance is required within a relatively short time before instead of after the transaction, or in cases of less intrusive clearance processes, for example, requirements for a code to be taken from an online tax authority's service and integrated into a tax invoice instead of the whole invoice being sent to the clearance service.

Clearance + buyer acknowledgement

A value of 100 is allocated if the clearance process is legally only considered complete if the buyer has sent the tax authorities or its licensed/accredited agent a confirmation that it has received and validated the invoice.

Full cycle clearance

A value of 100 is allocated in case the tax authorities or its licensed/accredited agent not only clears the invoice but also serves as a transport mechanism or access point for the buyer to obtain the cleared invoice.

Accounting document compliance

A value of 100 is allocated in case the clearance process for invoices also applies to certain other formalized B2B/accounting documents if sent electronically.

Archiving

A value of 100 is allocated in case there is a requirement for an electronic invoice to be archived for subsequent tax authorities' auditing purposes. A value between 0 and 100 is allocated where archiving requirements exist but the period is very short (less than a year), or if such archiving is viewed as more of a formality which the tax authorities do not typically pay attention to.

Mandatory XML

A value of 100 is allocated when a country specifies an XML-based invoice schema as the exclusive format for an original electronic B2B invoice.

Tax authorization needed

A value of 100 is allocated where a country requires that the tax authorities, Finance Ministry or other part of the public administration (including law enforcement) explicitly authorizes a business before it starts sending and receiving invoices electronically. A value between 0 and 100 is given if such authorization requirement is conditional, implicit, recommended or customary.

E-invoicing mandate

A value of 100 is allocated in cases where all businesses must by law use invoices in electronic format. A value between 0 and 100 is given if such a mandate does not address all businesses or if the mandate is not all-encompassing in terms of for example, types of invoices or business processes.

Prescriptiveness

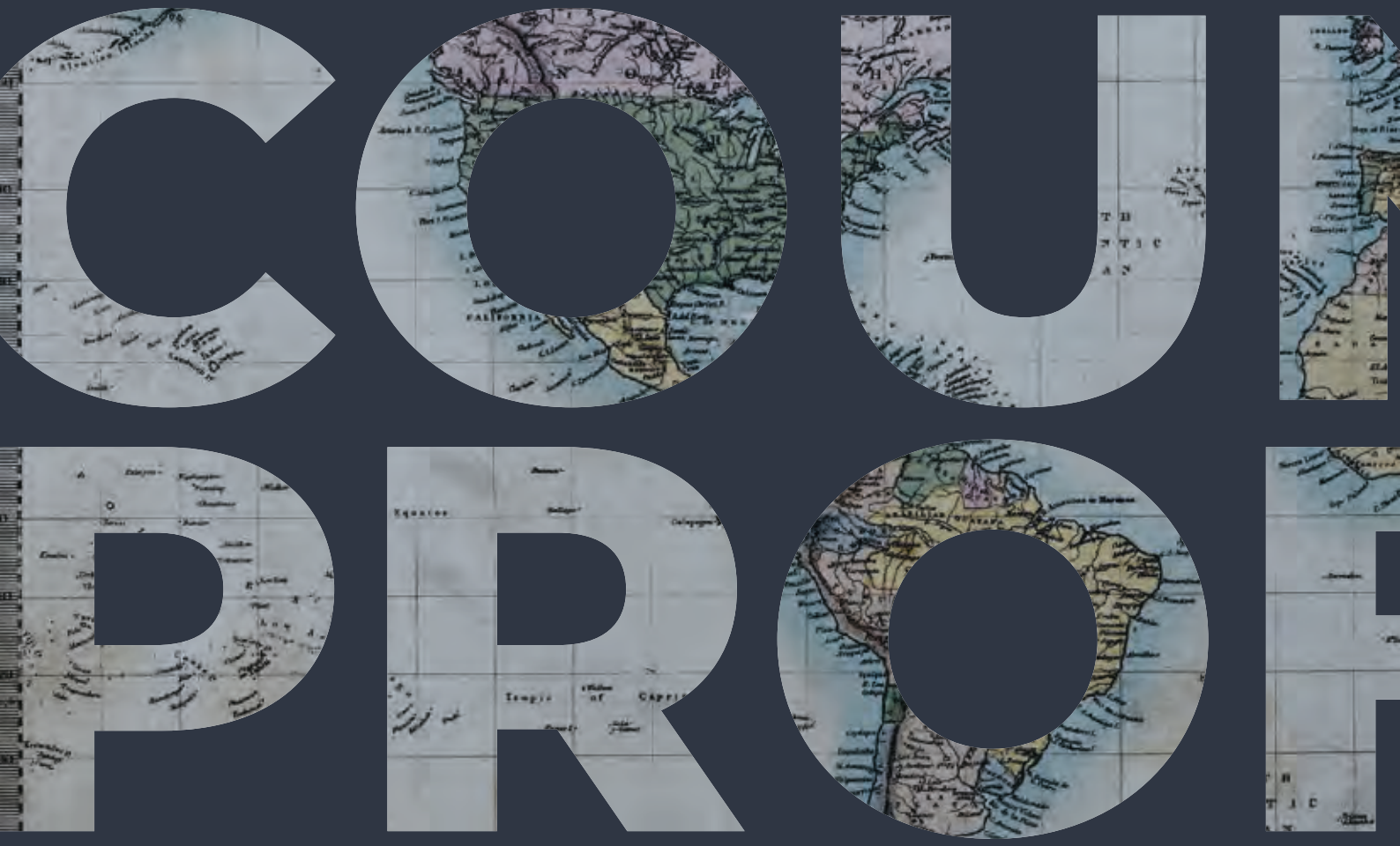
A value of 100 is allocated where a country leaves no choice to businesses as to how to achieve e-invoicing compliance. A value of 0 means complete freedom of choice as to the method used by businesses to comply. A value between 0 and 100 is given if the applicable legal regime falls in between these two extremes.

Digital signature/ time-stamp mandatory

A value of 100 is allocated when a country has a hard requirement for an electronic invoice to be digitally signed and timestamped using a Public Key Infrastructure based timestamp at some point during its legal lifetime. A value between 0 and 100 is allocated where such signature or timestamp requirements are not absolute and can under certain conditions be replaced with technologies and processes that provide an equivalent result.

Localization

A value of 100 is allocated when a country's requirements for electronic invoicing are exclusively or to a large extent intertwined with requirements for processes, service provider relationships, hardware and archiving to remain within its national boundaries. A value between 0 and 100 is allocated where such localization requirements exist but are conditional or narrower.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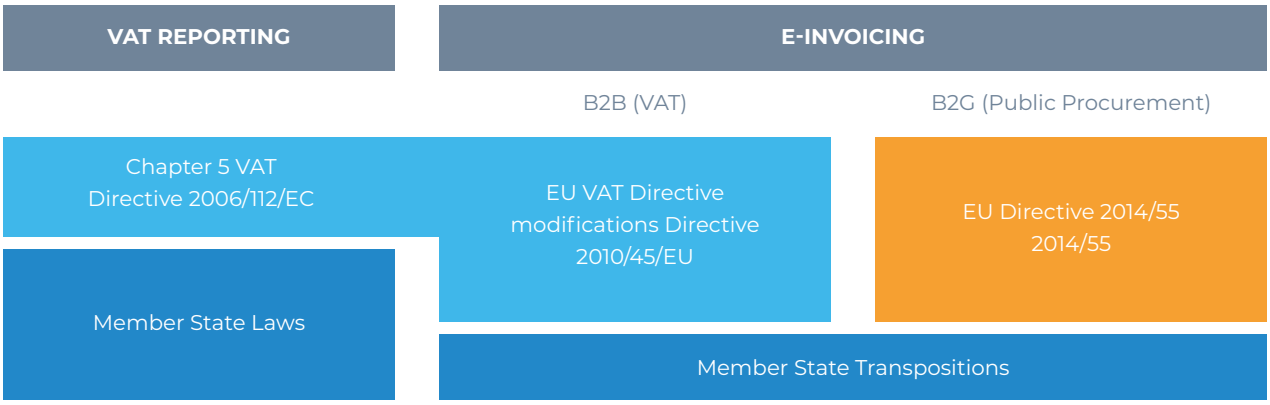
EUROPE

TOWARD CTCS IN THE EUROPEAN UNION

EUROPE
TOWARD CTCs IN THE EUROPEAN UNION

The development toward CTCs in the EU has been influenced by the gradual convergence of three major domains, each corresponding to different EU-level and Member State legislation.

FIGURE 23: Principal legislative domains on the EU and Member State levels (depth of each block indicates relative influence on requirements)



As discussed earlier in this report, a considerable number of EU member states are moving toward CTCs, not by imposing "clearance" e-invoicing but by making existing VAT reporting processes more granular and more frequent. Figure 23 above shows on a high level how member states' implementation freedom between VAT invoicing and reporting requirements may be one of the drivers of this development. They typically can organize their reporting (VAT returns) processes as they like, whereas Article 234 of VAT Directive defines member states' constraints in relation to electronic invoicing much more narrowly: they "may not impose on taxable persons supplying goods or services in their territory any other obligations or formalities relating to the sending or making available of invoices by electronic means."

Consequently, countries like the UK, Poland, Spain and Hungary have recently introduced requirements based on the concept of VAT reporting but that, instead of requiring aggregate data periodically, require digital files with more granular transaction data to be submitted – and often such submissions are more frequent than traditional VAT returns.

Figure 24 below shows how the resulting digital reporting schemes that are now applicable in these countries differ from one another: UK Making Tax Digital (MTD) is still relatively close to pre-existing online reporting methods, while the Hungarian invoice reporting requirements for suppliers are based on real-time transmission of a structured invoice file. This real-time submission may look like clearance e-invoicing but, technically, it's not – for two reasons:

1. The taxpayer doesn't have to wait for tax authorities' approval of the invoice before taking the next process step, for example, issuing the invoice to the buyer.
2. The Hungarian VAT law is fully based on the VAT Directive's post-audit system with optional electronic invoicing – invoices can still be sent on paper.

Italy is currently the only country in the EU that has full-fledged, mandatory clearance e-invoicing in place. To implement it Italy has had to obtain an EU derogation from Art 218 and 232 of the VAT Directive. As shown in Figure 25 below, however, Italy still has several VAT reporting requirements as well.

EUROPE
TOWARD CTCS IN THE EUROPEAN UNION

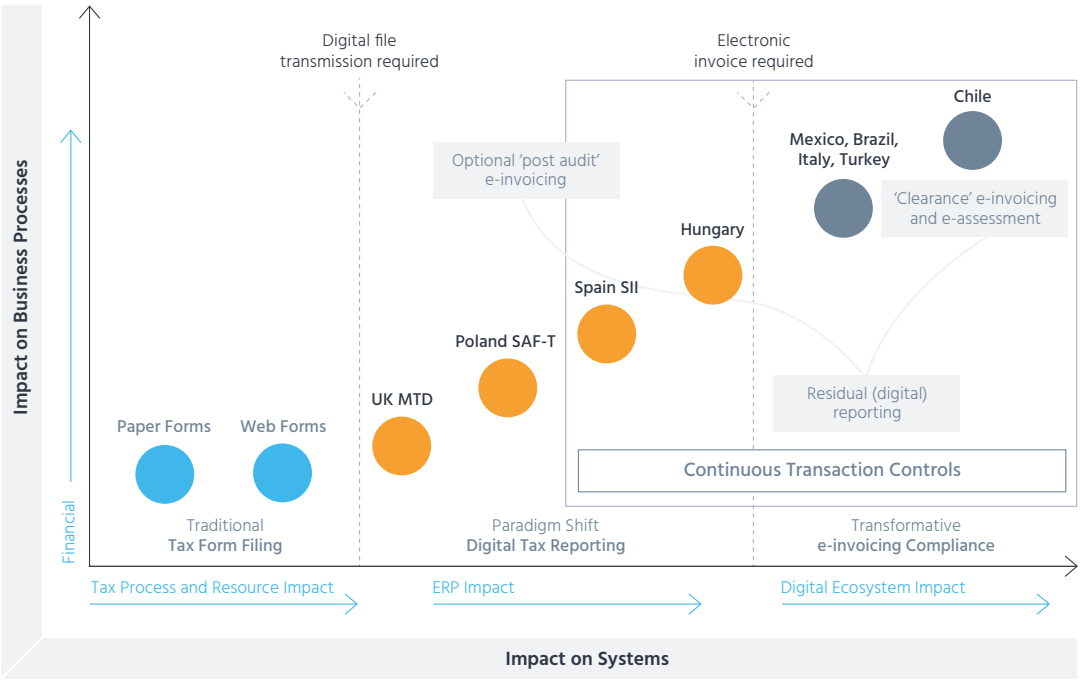
FIGURE 24: Italian VAT control requirements

Holistic	Invoice origin country	E-invoicing method	Mandatory transactional VAT reporting	Aggregate VAT returns	Invoice Destination Country
SUPPLIER	Domestic	Mandatory SDI clearance	N/A – Spesometro discontinued	Annual VAT returns	BUYER
	Intra-community outbound	SDI clearance *or* one of the options from the VAT directive	Esterometro – if the invoice is not issued via SDI	Intrastat report (monthly/quarterly) and annual VAT returns	
	Intra-community inbound	Options of the VAT directive apply w/ adjusted buyer invoice	Estermometro – if the invoice is not issued via SDI	Intrastat report (monthly/quarterly) and annual VAT returns	
	Export invoice	Options of the VAT directive apply	Esterometro – if the invoice is not issued via SDI and if no customs declaration is issued	Annual VAT returns	
SUPPLIER	Import invoice	Validate supplier signature where present	Goods: Customs declarations. Services: Issue VAT-adjusted buyer invoice Esterometro – if the invoice is not issued via SDI and if no customs declaration is issued	Annual VAT returns	BUYER

As the results of these first countries implementing CTCs become known – and if they are as encouraging as those published in Latin American countries – it is realistic to expect that more countries in Europe will follow their example. Such broader adoption of CTCs is also likely to impact other countries outside of Europe that have historically been inspired by European legislation, for example, Australia, South Africa, the 'Maghreb' countries in North Africa, Israel, etc.

Also in Europe, different forms of continuous VAT controls will often coexist (at least for the foreseeable future) to form an end-to-end audit package, allowing the tax authorities to match data about transactions from different periodic, real-time and near-real-time sources.

FIGURE 25: How digital reporting schemes that are now applicable in various countries differ from one another



Penalty for non-compliance with invoicing and accounting obligations in EU countries

EU member states may freely decide what penalties to impose for non-compliance with VAT or accounting law requirements, since the VAT Directive does not regulate this area. Non-compliance with invoicing requirements may lead to severe consequences in some EU member states. Consequences for non-compliance with invoicing rules, including invoice content, integrity and authenticity (I&A), and storage rules, range from penalties per incorrect invoice, penalties in bulk, penalties depending on the VAT amount or total amount of the invoice, through individual responsibility of the company's personnel (for example, members of the board or financial officers), to criminal law implications. A couple of EU member states lack precise regulation on this matter and instead the consequences for non-compliance are imposed by the tax authorities or administrative courts after their assessment of the case at hand. To give a couple of examples: Cyprus imposes a fee of 85 EUR for each incorrectly issued invoice; in Spain, incorrect invoices are subject to a penalty of 1 percent of the total amount of all invoices wrongly issued; in Poland, issuing an invoice not in accordance with all legal requirements may amount to a bulk penalty of 219,000 EUR at most; in Slovenia, a penalty ranging between 2,000 EUR and 125,000 EUR may be imposed in case a legal person fails to issue an invoice or fails to provide the authenticity of origin, integrity of content or legibility of an invoice during the prescribed storage period.

B2B E-INVOICING

B2B E-INVOICING

Directive 2010/45: the regime in effect since 2013

Electronic invoicing for VAT purposes was introduced in EU legislation as early as 2001.

In 2010, the EU adopted Directive 2010/45, which modified the then current VAT Directive 2006/112 in relation to invoicing [REF 1]. The Directive 2010/45 has been in force since 2013 and among other things aimed to create "equal treatment" between paper and electronic invoices. The base requirement (unchanged from the previous Directive) of ensuring I&A now explicitly applies to invoices in any form, instead of only to electronic invoices, as was the case under the 2001 Directive.

There is no such thing as meaningful business compliance with an EU Directive since a Directive must be transposed into national legislation in order to have full legal effect. For electronic invoicing, what matters are the local requirements applied by local tax authorities to meet the objectives set by a Directive. These requirements in local VAT laws are influenced by adjacent legal areas, jurisprudence, law enforcement practices, and industry self-regulation.

Legal definitions and requirements, for example the concepts "reliable audit trail between an invoice and a supply" and "EDI" (see descriptions below), may differ among EU member states. More importantly, the legal and business definitions of these concepts are often not identical.

Scope of application: all invoices?

In principle, the invoicing provisions of the VAT Directive apply to all B2B invoices issued in the EU, including VAT-exempted transactions. Within the EU, there are two types of VAT exemptions:

1. Zero-rated transactions, formally called transactions exempt with the right to deduct input VAT; and
2. Fully exempted transactions applicable to certain charities, as well as to postal and other services.

In both cases, an invoice must, in principle, be issued, usually with a reference to the legal basis for the exemption applied. However, member states have a right to release taxable persons from the obligation of issuing an invoice, in which case there are no invoice-specific requirements.

VAT-exempted transactions for which parties are released from the obligation of issuing an invoice are very rare in mainstream business, as are other exemptions for VAT invoices. Since issuing an invoice is not prohibited in either case, most companies would rather not create a system exception for these cases. Only organizations that fall under such releases for a large portion of their invoices might consider taking a system exception into account to avoid creating an invoice altogether.

Even if an invoice is issued in relation to VAT-exempted transactions, the Directive's requirements formally apply in full[3]. The reason for this broad scope of application is that most tax authorities will generally want to be able to assess whether the exemption is justifiably applied and references the correct legal provision.

[3] Cwa 16460: Cen Workshop Agreement "Good Practice: electronic invoicing Compliance" Guidelines (www.cen.eu/work/areas/ICT/ebusiness/Pages/einvoicing.aspx).

B2B E-INVOICING

I&A Freedom of Evidence — the Principal Rule

Directive 2010/45 states that each trading partner (not the trading partners together) determines how to meet the requirement of invoice I&A. This language clearly departs from previous formulations, which created interdependency between a supplier and a buyer. This *de jure* separation, however, does not mean that there is no *de facto* interdependency: in many cases parties need to cooperate and align their compliance methods to ensure a consistent process. Not all member states have unequivocally transposed this freedom of evidence rule.

I&A Business Controls-based Reliable Audit Trail (BCAT)

The principle of "equal treatment" that has been a major impetus to Directive 2010/45 is often associated with a newly introduced method for ensuring authenticity and integrity: "business controls establishing a reliable audit trail between an invoice and a supply" (BCAT). The policy argument behind this language was that this type of I&A evidence was already permitted for paper invoices, so why would it not also be available for electronic invoices?

The 2010 Directive in its recitals talks about proving that a supply actually took place; some commentators have claimed that proving an actual supply relieves a company from having to prove I&A of an invoice. This is a misunderstanding. The recitals merely explain why invoice integrity and authenticity are important requirements: without these features, a tax authority cannot reasonably ascertain that an actual supply took place.

Few member states have gone beyond high-level descriptions of what they will consider as sufficient BCAT evidence. This is logical because the intent of this new option is that it encompasses many different types of business processes. Section 3.4 of the CEN "E-invoicing Compliance Guidelines" [REF 2] provides at present the most authoritative descriptions of different types of BCAT evidence that can be used in different sales and purchase scenarios. To summarize, enterprises relying on BCAT evidence for demonstrating I&A of invoices will generally archive the following components:

1. Internal business records generated during the invoicing processes, i.e. contracts, sales/purchase order, goods receipt/dispatch notes;
2. External documents received during the invoicing processes, i.e. purchase orders, goods receipt notes, dispatch notes, bank statements;
3. Historic master data;
4. Evidence of controls to ensure data quality.

Whatever evidence that needs to be stored must be available during the full storage period, in some cases in electronic form if the invoice is electronic.

I&A Qualified Electronic Signature/Seal option

As one example of a method to ensure I&A of electronic (not paper) invoices, Directive 2010/45 mentions Qualified Electronic Signatures (EU defined standard-based PKI-signatures). Previous versions of the Directive also referenced Advanced Electronic Signatures (which are less strictly defined PKI-signatures). From 1 July 2016, when the EU Electronic Signature Directive 1999/93 was repealed and replaced by the EU Regulation 910/2014 (the so-called eIDAS Regulation) [REF 3], the reference to Qualified Electronic Signatures in Article 233 of the VAT Directive should be read differently.

Since the eIDAS Regulation became fully applicable, all legislation that refers to or requires electronic signatures should be re-interpreted to either continue to read "signatures" where such legislation obviously intended to point to the electronic equivalent of a handwritten signature or read "seals" where the objective was rather to ensure I&A only. Hence, the option to use a Qualified Electronic Signature in the VAT Directive should now be read as at least to include a "Qualified Electronic Seal."

Validation is an important aspect of electronic signatures/seals. Recipients of signed/sealed electronic invoices are sometimes explicitly required by law to validate the signature/seal; however, in most cases, such validation requirements are implicit since both parties must guarantee I&A. Verification of the certificate corresponding to the private key is an indispensable step in signature validation. From 1 July 2016, businesses and citizens may use a Qualified Signature/Seal Validation Service to reliably verify qualified signatures and seals and receive documentary evidence of such verification in a fully automated manner.

eIDAS aims to ensure a more harmonized regulatory framework on electronic identification schemes and trust services in the EU. Different from a Directive, a Regulation applies directly and does not have to be transposed into national law. Among other things, the eIDAS Regulation introduces the concept of electronic "seals," which are specifically created for the purpose of processes like electronic invoicing, where digital signature technology is used to ensure I&A of data without the aim to achieve equivalence with handwritten signatures. A seal certificate can be issued only to legal entities, whereas a signature certificate will be used for physical persons. The concept of Trust Service Provider in the eIDAS Regulation extends beyond issuers of certificates and time-stamping authorities: commercial providers of signing and sealing services (whether creation or validation), as well as providers of electronic registered delivery and signature/seal/certificate preservation services are also subject to stringent requirements.

The "qualified" version of such services, which enjoys full cross-border recognition within the EU member states, requires vendors to undergo an ex-ante assessment and accreditation process, which concludes with the vendor being included on a Trusted List managed by a Supervisory Body.

B2B E-INVOICING

I&A Secure Electronic Data Interchange (EDI) option

As another example of a method to ensure I&A for electronic (not paper) invoices, Directive 2010/45 refers to EDI as defined in Article 2 of Annex 1 to Commission Recommendation 1994/820/EC of 19 October 1994 relating to the legal aspects of electronic data interchange. This Commission Recommendation defines EDI as follows:

"The electronic transfer, from computer to computer, of commercial and administrative data using an agreed standard to structure an EDI message." What trading partners consider as EDI will not necessarily be viewed as EDI by tax authorities: the obvious intent of the European Commission Recommendation is to describe what may be more plainly called B2B automation. While the dividing line may be somewhat artificial, it is clear that systems that are not highly automated, including invoices that are not machine-readable, will generally not be viewed as EDI. Based on the first criterion, technologies such as Web EDI (where one transacting partner manually keys in, supplements and approves invoice data) and manual procedures used in self-billing setups will not be eligible for the EDI compliance option in many countries, even if the trading partners involved consider the transactions in question to be part of their EDI system.

Whichever definition of EDI is used, the concept of EDI is never defined as a security technology. In modern industry definitions, security is not a necessary component of EDI at all: trading partners may very well have discontinued the Value Added Network (VAN) they originally used for their EDI system and instead run the same transactions over the unprotected internet while continuing to refer to the system as EDI.

Importantly, the fact that a system can legally qualify as EDI (which is a definitional matter) says nothing about the guarantee it provides for electronic invoice I&A (which is a compliance matter). For the purposes of ensuring I&A of electronic invoices, a compliant EDI process must be based on an interchange agreement (also called trading partner agreement or EDI agreement) providing "for the use of procedures guaranteeing the authenticity of the origin and integrity of the data." What these procedures should be is not well defined in most member states.

However, tax authorities in several countries have expressed their intention to use the EU-defined model EDI agreement (EU Recommendation 1994/820/EC) as the basis for their assessment. Significantly, article 6 of this model EDI agreement states:

6.1 The parties undertake to implement and maintain security procedures and measures in order to ensure the protection of EDI messages against the risks of unauthorized access, alteration, delay, destruction or loss.

6.2. Security procedures and measures include the verification of origin, the verification of integrity, the non-repudiation of origin and receipt, and the confidentiality of EDI messages. Security procedures and measures for the verification of origin and the verification of integrity, in order to identify the sender of any EDI message and to ascertain that any EDI message received is complete and has not been corrupted, are mandatory for any EDI message.

Traditional EDI systems based on an end-to-end VAN may, depending on circumstances, be considered to meet these requirements. However, systems using the internet need to replicate such extensive security features. If the system owners do not want to use electronic signatures, (which would make the system eligible under the VAT Directive's e-signature compliance option), such security will ordinarily be ensured through point-to-point security mechanisms.

Due to inherent limitations of point-to-point security (the most notable being that it does not offer durable auditability), systems under the EDI compliance option will generally need to include additional security procedures, such as frequent logs and audits in order to guarantee I&A. In addition, in the absence of verifiable security on the data level, the archive and processing system will often need to include additional integrity-enhancing features.

Some EU member states impose additional requirements in relation to the EDI method.

Choosing a cost-effective compliance method for EU invoicing

In summary, there are now four ways to meet the requirement for I&A evidence:

FIGURE 26:

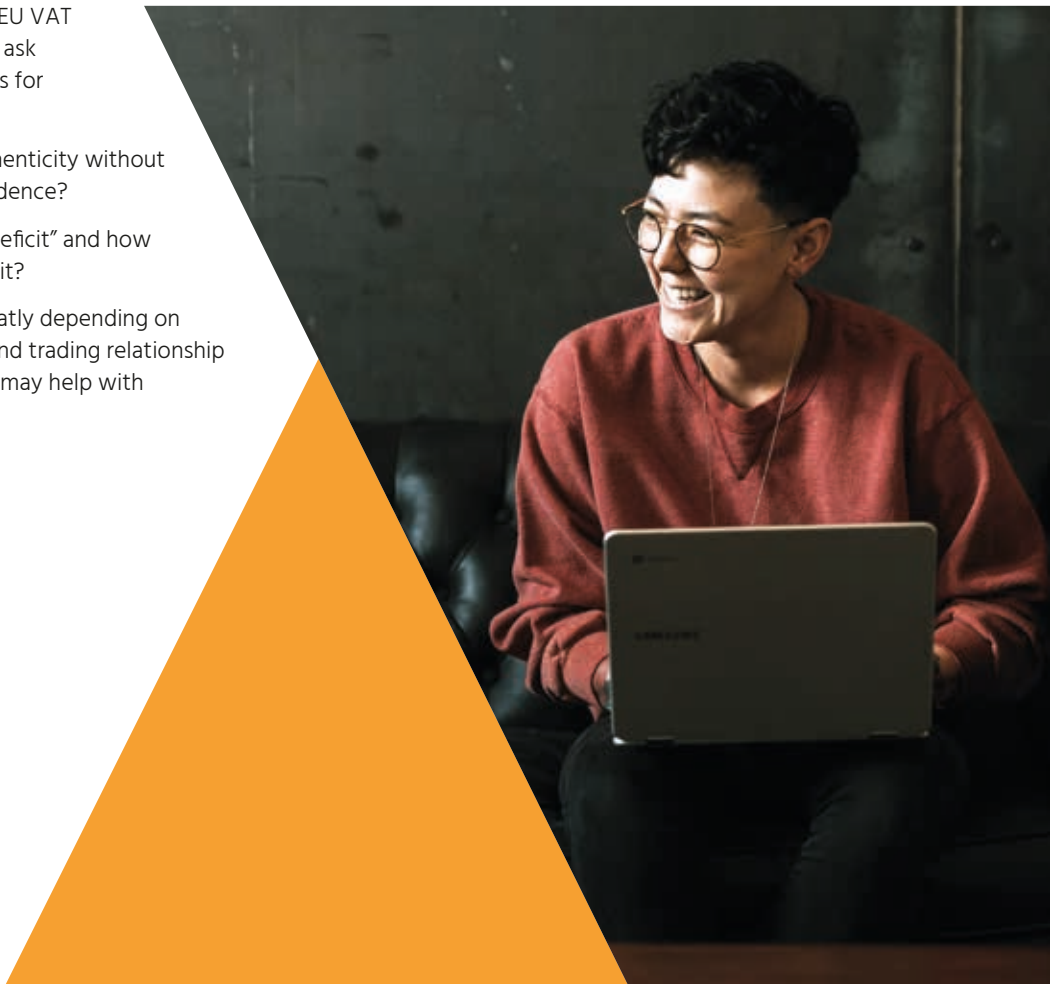
INVOICE TYPE	Any evidence (i.e. the principal 'freedom of evidence' rule of Directive 2010/45)	Business controls establishing a reliable audit trail between an invoice and a supply 'BCAT'*	Qualified Electronic Signatures / Seals*	EDI based on an agreement consistent with EC Recommendation 94/820*
Electronic invoices	Yes	Yes (some member states have issued guidance but always leave the ultimate assessment of adequacy to the taxable person)	Yes (reversal of evidence burden i.e. the tax auditor has to prove that the integrity and authenticity of the invoice are unreliable)	Yes
Paper invoices	Yes (major example: archiving the paper invoice)		No	No

*Since freedom of evidence is the principal rule of Directive 2010/45, these three methods are non- exhaustive examples of ways to ensure integrity and authenticity.

To assess their compliance with EU VAT requirements, businesses should ask themselves two simple questions for any invoice:

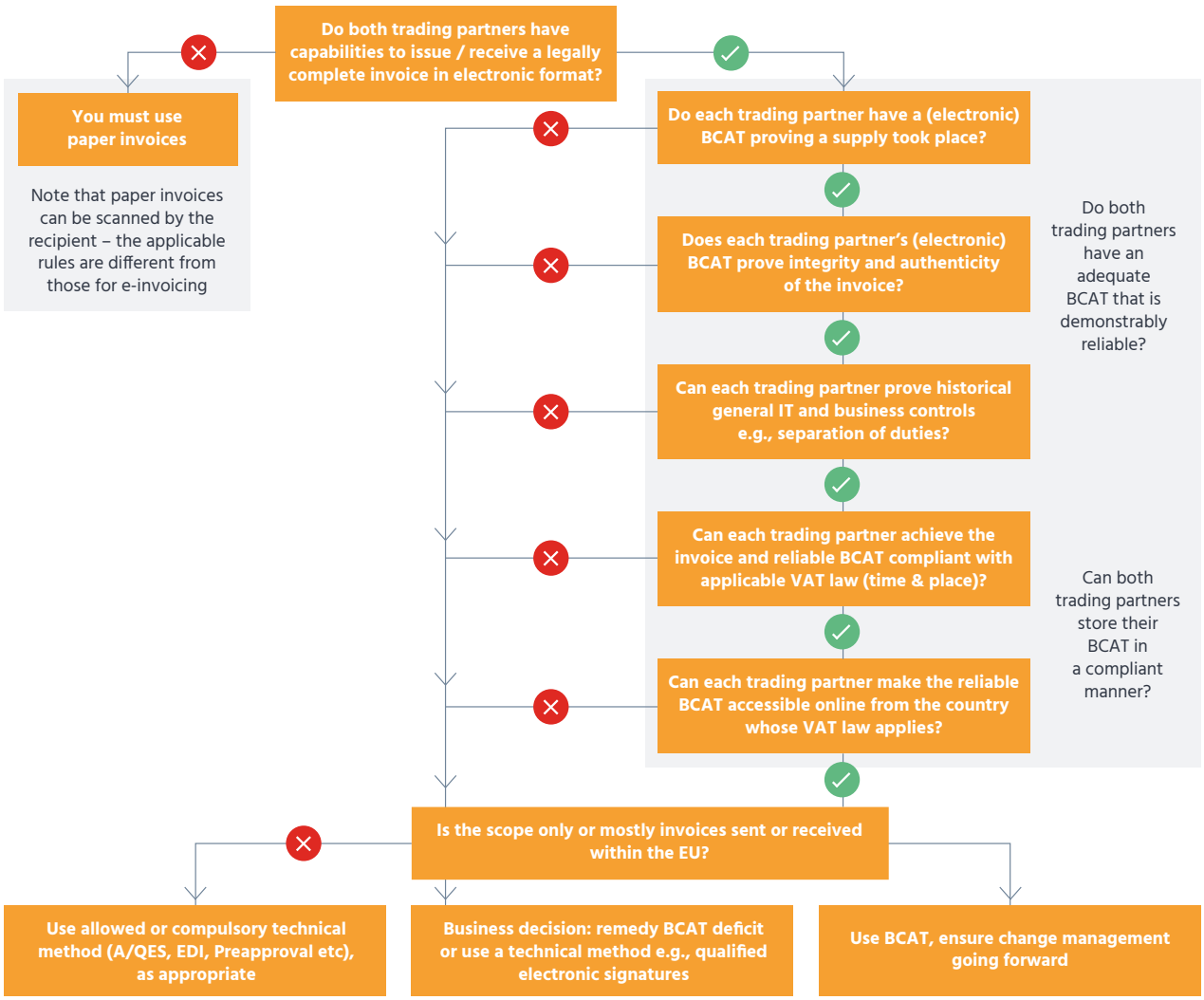
1. Can I prove integrity and authenticity without any additional controls or evidence?
2. If not, what is my "evidence deficit" and how can I cost-effectively remedy it?

What is cost-effective varies greatly depending on circumstances. Every company and trading relationship is different. Figure 14 on page 30 may help with these choices.



B2B E-INVOICING

FIGURE 27: Compliance choice diagram for companies with major trading relationships in the EU (BCAT = business controls-based audit trail)



Notes:

1. "Proving a supply took place" is not enough for compliance, but, logically, a requirement for businesses that want to avail themselves of the option to use "business controls establishing a reliable audit trail between an invoice and a supply" for proving invoice I&A. This evidence must in many EU member states be in electronic form.
2. In addition to proving a supply, the BCAT must prove I&A of the invoice. In other words, a BCAT can prove a supply but not contain sufficient evidence of I&A of all tax-relevant data of an invoice. The BCAT must therefore, in addition to proving a supply and being in electronic form, contain enough information to corroborate the I&A of all tax-relevant data.
3. The word "reliable" in the definition "business controls establishing a reliable audit trail between an invoice and a supply" means that the BCAT must, in addition to being complete, also consist of trustworthy components. Data cannot be used as evidence of the reliability of an invoice if it is not demonstrably reliable itself. For most self-generated BCAT evidence, this means that internal control measures at the time of the supply must be proven. For externally generated BCAT evidence, access to that third party's portal could be enough. Such evidence may also be reliably electronically signed, or be presented together with historical transport and archive security data.
4. EU member states are free to have their own technical, security and other archiving requirements, and different mandatory archiving periods apply throughout the EU. Invoices sent or received under the VAT law of an EU Member State must also in most cases be physically stored in either the country whose law applies or another Member State, optionally subject to prior notification to the territorially competent tax authorities.
5. The electronic invoice must be accessible online from the country whose VAT law applies to that invoice; this is a legal rule in case of archiving abroad, and a practical consequence of the applicable rules in all other cases (it is hard to imagine how a tax auditor can audit an electronic invoice that is not accessible through an electronic interface). Because the majority of EU member states have opted to require the evidence guaranteeing I&A in electronic form when the invoice is electronic, the above equally applies to the relevant BCAT.

Transposition of VAT directive 2010/45

The table below shows how the Member States have implemented, and sometimes gone beyond, the EU VAT Directive in to national legislation.

FIGURE 28:

	Austria	Belgium	Bulgaria	Croatia	Cyprus	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Ireland	Italy	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Poland	Portugal	Romania	Slovakia	Slovenia	Spain	Sweden	United Kingdom
I&A freedom of evidence transposed	✓	✓	✓	✓	✓	✗	✓	✓	✓	✗	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
BCAT mentioned	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓
EDI mentioned	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓
QES mentioned	✓	✓	✓	✓	✓	✓	✗	✗	✗	✓	✓	✗	✓	✗	✓	✓	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗	✓
If e-invoice, I&A must be electronic	✓	✓	✗	✗	✓	✓	✗	✗	✗	✓	✗	✓	✓	✓	✓	✗	✓	✓	Upon request	✗	✗	✗	✗	✗	✓	✓	✗	✗
Other options/ additional requirements	1	✗	✗	✗	✗	2	✗	✗	✗	3	✗	4	5	6	7	✗	8	✗	9	✗	✗	10	11	✗	✗	12	✗	13

Notes:

1. Certain Advanced Electronic Signatures and invoices delivered through a "Business Service Portal" and PEPPOL are also mentioned as methods for ensuring the I&A of the invoice. Evidence of ensuring I&A must be stored in electronic form in case of EDI and e-signatures but not in the case of BCAT.
2. One of the examples for ensuring I&A is an electronic "mark," based on a qualified system certificate issued by an accredited provider of electronic services (e-marks can be issued to legal persons).
3. Summary statement in EDI required, other detailed EDI requirements exist. France also permits a specific French electronic signature, the so-called Référentiel Général de Sécurité (RGS).
4. Advanced Electronic Signatures and marking using special safe appliances are also examples of means ensuring I&A.
5. Invoicing software used for the creation of invoices must be notified to the tax authorities, and it must perform certain functions, including real-time reporting of invoice data for domestic transactions. Exemplary methods for meeting the archiving requirements are listed in the legislation.
6. The text of the law implies that the BCAT option is obligatory and only the guidance note explains that the methods which were used under the previous regime are also accepted.
7. A digital signature based on a qualified certificate and a cryptographic key system (using the locally approved hardware) is also mentioned as a method for ensuring the I&A of e-invoices. Italy has obtained a derogation to relevant provisions in the VAT Directive in order to implement a mandatory clearance e-invoicing regime. The e-invoicing orchestration runs through a state-operated platform, Sistema di Interscambio (SDI); any domestic invoices that are sent or received outside of this platform are not considered as fiscally valid.
8. Advanced Electronic Signatures is also an example of means ensuring the I&A of e-invoices.
9. The Tax Commissioner may require that the data guaranteeing the I&A of invoices also be stored by electronic means.
10. Advanced Electronic Signatures is also an example of means ensuring the I&A of e-invoices. Software producing e-invoice data must be certified by the tax authorities (with some exceptions). Taxable persons established in Portugal must communicate certain invoice data to the tax authorities.
11. Local service providers of e-archive services to Romanian customers must obtain an authorization for an e-archive administrator and for database from the Ministry of Information Society.
12. A "recognized signature" (an Advanced Electronic Signature based on a qualified certificate without hardware implemented SSCD) is also mentioned as a method for ensuring the I&A of e-invoices. Prior consultation with the Spanish tax authorities is required in case of using other methods than those explicitly mentioned in the legislation. Taxpayers must report invoice data to the tax authority in near real-time through a platform known as *Suministro Inmediato de Informacion* (SII). Additionally, it is mandatory for subcontractors of the public administration to use a specific invoicing platform, known as FACeB2B, to issue invoices to the main contractor for the supplies of goods and services rendered within the context of a public procurement contract.
13. No examples for ensuring the I&A are given in the VAT law but are communicated in a Public Notice.

B2G E-INVOICING

B2G E-INVOICING

Trend toward mandatory B2G e-invoicing

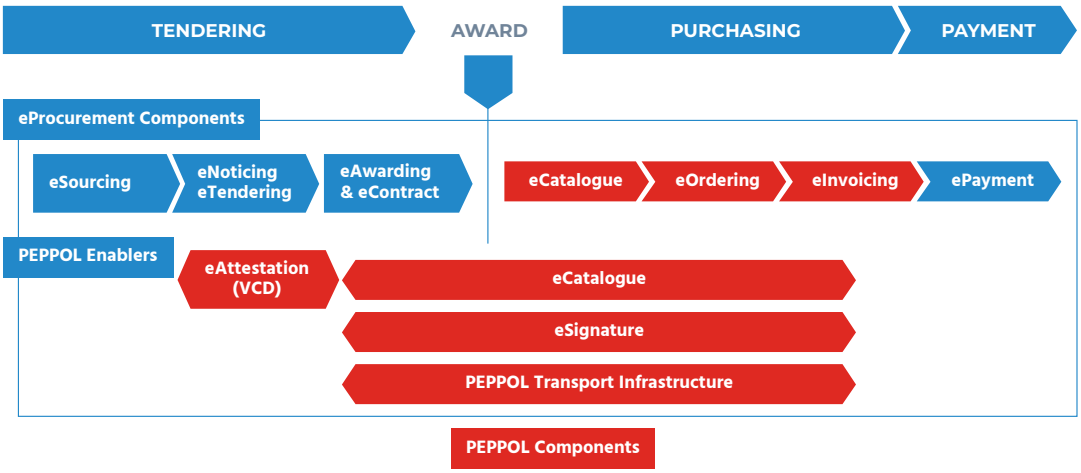
The EU has in recent years focused a lot of its attention in relation to e-invoicing on invoices for public procurement transactions – both in pursuit of process optimization in the government sector and also to provide a boost to the adoption of electronic invoicing between businesses.

A comprehensive package of policy and more practical measures was introduced by the EU Commission, whereby all EU member states' public administrations will had to be able to receive e-invoices at least for public procurement transactions by November 2018 or by April 2019, with the possibility to extend by one extra year for sub-central authorities (through Directive 2014/55/EU on electronic invoicing in public procurement). At the same time, several EU member states are also pushing ahead with mandatory e-invoicing for B2G. Examples of countries that have for some years required suppliers to invoice electronically to the public sector are Spain, Italy and Slovenia, which have created technical platforms and associated specifications that simply mandate Qualified Electronic Signatures and specific transmission methods for suppliers that invoice the public sector. Several countries take the opportunity to mandate B2G electronic invoicing when implementing the Directive 2014/55/EU; examples are Sweden, Croatia, and Estonia.

Directive 2014/55/EU furthermore lays a foundation for technical standardization of the content of B2G e-invoices – both semantically and in terms of specific supporting syntaxes. The public administration and certain other public bodies in EU member states had or will have – by April 2019 the former and by April 2020 the latter – to accept electronic invoices that conform to the new standard (European standard on electronic invoicing) created by the European Committee for Standardization (CEN).

The evolution toward interoperable EU-wide electronic public procurement is also expected to be aided by the increasing uptake of PEPPOL in member states. The PEPPOL project was initiated in 2008 and focused on a way for diverse national e-procurement systems in the EU member states to interconnect, thereby supporting the notion that the public sector should be able to select and easily conduct business with vendors from any Member State. PEPPOL is essentially a stack of specifications that ensure this interoperable exchange of electronic procurement documents through, among other things, the concept of service providers acting as "access points." Since 2012, PEPPOL is run by the non-profit association OpenPEPPOL.

FIGURE 29: A schematic overview of a typical e-procurement process, with the core PEPPOL elements marked in red*



*Source: www.peppol.eu

PERIODIC VAT REPORTING IN THE EU

PERIODIC VAT REPORTING IN THE EU

Background: reporting types

As described in the introduction to this chapter, many member states have started the digitization of their VAT regimes by transforming the way VAT returns are submitted. In principle, a company must submit VAT reports in countries where it performs transactions and where, consequently, it is obligated to register for VAT. Companies with operations in the EU have different kinds of reporting obligations depending on the types of transactions they perform.

The production of these reports is often managed in the same process and must leverage the same data sources to ensure consistency, but not all these reports are requested for VAT enforcement purposes. In addition to the classic VAT return, companies may also have to submit:

- Statistical reports to track movements between EU member states (for example, Intrastat).
- Listings to track B2B sales to other EU member states (ESL).
- Summary statements.
- Country-specific reports.

Flavors of VAT and associated reporting obligations

Traditionally, VAT returns are forms with boxes in which the taxpayer can specify the taxable amount and/or tax amount per type of transaction. The level of specification, and thus the number of boxes to complete, differ per country – to the left is an example from France.

Starting with Portugal in 2008, a growing number of EU Member States are adopting variations of the OECD's Standard Audit File for Tax (SAF-T), which is an international standard for electronic exchange of reliable accounting data from organizations to a national tax authority or external auditors. SAF-T reports may have to be provided on demand or periodically. Over time, classic VAT returns may be replaced by SAF-T reports.

The importance of reconciliation: a taxpayer is responsible for ensuring consistency among VAT accounting, VAT returns, SAF-T reports and Intrastat reports.

PERIODIC VAT REPORTING IN THE EU

Reporting frequency

The reporting frequency generally depends on the type of report, country, threshold, etc. – for example:

- VAT return: monthly, bi-monthly, quarterly, annual.
- EC Sales: monthly, quarterly.
- Intrastat: monthly.
- Country specific: monthly, quarterly, annual.
- SAF-T: monthly, annually, on-demand.

SAF-T

As explained in the OECD documentation around SAF-T, this instrument was designed to aide tax administrations in auditing for both direct (income) and indirect taxes. The SAF-T standard covers the 'full set of business and accounting records commonly held by taxpayers' The standard includes the following datasets:

1. General Ledger.
2. AR (master data and invoices).
3. AP (master data, invoices and payment).
4. Goods movements.
5. Fixed assets.
6. Inventory.

SAF-T is a very flexible standard in that it does not impose a specific technical file format, submission method (push or on-demand) or frequency. It is also entirely optional for OECD Members to adopt or adjust. This flexibility is a considerable force but also represents a weakness: no two country implementations of SAF-T are identical. As a result, it is difficult for international companies to meet SAF-T requirements without multiple country-specific procedures. Another challenge that many companies experience with producing full SAF-T reports is that the instrument's broad scope, including both transactional and non-transactional data, will more often than not require data for a single report to be extracted from multiple enterprise systems. Large companies that manage many legal entities and often several ERP systems in parallel may find it difficult to combine such data for SAF-T reporting purposes. Very small companies, on the other hand, may not have all the required data in computerized format.

SAF-T requirements are still being adopted in EU member states and countries in other regions are actively considering introducing it. SAF-T was originally designed to facilitate controls in a post-audit world and cannot easily be adjusted to serve as a robust basis for CTC-type data transmission by companies. However, it is not incompatible with CTCs and could well evolve to complement these, because SAF-Ts allow the periodic transfer or on-demand provision of several datasets that cannot – or cannot easily – be harvested from companies' transaction flows.

EU COUNTRY PROFILES

EU COUNTRY PROFILES

Austria (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Austria.
- Such examples include eIDAS conformant Qualified Electronic Signatures, Seals or "certain Advanced Electronic Signatures" when based on a certificate verifiable via the *Signaturprüfdienst* (signature audit/verification service) of the RTR or comparable foreign body. "Proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation and business controls-based audit trail linking an invoice and a supply are also among the alternatives listed in the legislation. Invoices delivered via the Federal Service Portal (*Unternehmensserviceportal,* USP), and PEPPOL are also mentioned as methods for ensuring I&A.
- Evidence of ensuring I&A must be stored in electronic form when relying on EDI and electronic signatures for compliance purposes, but not when relying on the business control option.
- Electronic invoices may generally be stored abroad without notification, provided that the tax authority is given online access.
- For B2G invoices, all Austrian suppliers (and foreign suppliers that have technical means) are obliged to send electronic invoices. Austria mandates the use of the Federal Service Portal (USP), the central processing e-invoicing platform of the federal government to receive e-invoices. E-invoices based on the Austrian national e-invoicing format "ebInterface" as well as PEPPOL e-invoices are sent to the Austrian federal government through the Federal Service Portal. The latest amendment of the act on public procurement (*BVergG* 2018) transposed the Directive 2014/55/EU into national legislation which mandates the receipt of e-invoices by the central government authorities (the sub-central government authorities will have an additional year (April 2020) to comply with the Directive, as permitted by the Directive).
- VAT reporting in Austria is governed by the national VAT law (*Umsatzsteuergesetz* 1994). Returns in Austria can be filed on a monthly basis or quarterly for businesses with supplies above a certain threshold, as well as annually. VAT returns should be submitted electronically, and an XML format can be used. Submission in paper form is possible where technical equipment is lacking.
- Since 2009, Austrian VAT authorities have implemented the OECD SAF-T format. At present, it is only required on demand by tax authorities, usually prior to a tax audit by the Austrian Ministry of Finance *(Bundesministerium für Finanzen)*.

Belgium (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Belgium. It can be demonstrated for example by means of a business controls-based audit trail linking an invoice and a supply, by Advanced Electronic Signatures or by "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation.
- Electronic invoices may be stored abroad without notification, provided that the tax authority is given online access.
- From 1 April 2019, parallel to the transposition of the Directive 2014/55/EU, all Belgian government bodies are obliged to be able to receive and process e-invoices within public procurement. At a later stage, it is expected that all invoices will be issued electronically. Not withstanding this, based on prior decisions of both the Federal and regional authorities, mandated B2G invoicing already applies in specific situations.
- VAT reporting in Belgium is governed by the VAT Code, 1969 *(Code de la taxe sur la valeur ajoutée)*. VAT returns must normally be submitted on a monthly basis, quarterly for businesses below a certain threshold (2.5 million EUR) as well as annually, Annual Customer Listing (*'Jaarlijkse Klantenlisting'*, unless subject to the exemption scheme for small businesses or to VAT exemption). All VAT returns are filed electronically using the *Federale Overheidsdienst Financien* (FOF) secure access web application 'INTERVAT'. Filing can be via entering data on-screen, or XML file upload. In specific circumstances where it is not possible for an electronic submission to be made, a paper declaration might be accepted instead.

Bulgaria (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Bulgaria. Qualified Electronic Signature, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation and business controls ensuring an audit trail linking an invoice and a supply are listed as examples.
- When using a service provider, an agreement for the outsourcing of issuance of electronic invoices is required whereby certain content is recommended for this agreement (for example, describing the process for issuance of electronic invoices).
- It is explicitly required to store all tax documents issued or received by a taxable person in their original form.
- Electronic invoices may be stored abroad without notification, provided that the tax authority is given online access.
- B2G e-invoices must be accepted by the governmental bodies in line with Directive 2014/55; suppliers however have no obligation to issue e-invoices.
- VAT reporting in Bulgaria is governed by the Bulgarian VAT Act (*ЗАКОН за данък върху добавената стойност,* 2006). VAT returns are submitted monthly via the secure NRA web portal, for which a Qualified Electronic Signature is required.
- In addition to the required VAT return, all taxable persons in Bulgaria must submit sales and purchase ledgers. These ledgers are filed concurrently with the VAT return, and the data populating these documents should match the data seen on the VAT return.

Croatia (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Croatia. Qualified Electronic Signature, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation and business controls ensuring a reliable audit trail linking an invoice and a supply are examples of accepted means for ensuring authenticity and integrity of the invoice.
- Electronic invoices may be stored abroad, provided that the tax authority is notified and given online access.
- Directive 2014/55/EU has been transposed in Croatian law and its scope has been extended, as of 1 July 2019, to making e-invoicing in public procurement mandatory for suppliers.
- VAT reporting in Croatia is governed by the national VAT Law *(Zakon o porezu na dodanu vrijednost)*. VAT returns in Croatia can be submitted on a monthly or quarterly basis. Electronic filing of VAT returns and payment has been mandatory in Croatia since 2013. The relevant forms can be obtained via the Croatian tax authority website and are submitted in an XML format using the tax authority's online portal *(ePorezna)*. In conjunction with their VAT returns, taxable persons in Croatia must submit incoming purchase invoices (U-RA form) electronically. This requirement exists for both domestic taxpayers and foreign taxpayers who have a Croatian VAT number.

Cyprus (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Cyprus. Qualified Electronic Signature, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation and business controls ensuring a reliable audit trail linking an invoice and a supply are examples of means ensuring authenticity and integrity of the invoice.
- It is explicitly stated in the legislation that if an invoice is in electronic form, data ensuring the authenticity and integrity of the invoice must be stored by electronic means.
- Storage abroad is allowed only in the EU and in countries with which Cyprus has a relevant tax assistance treaty, subject to prior notification and online access.
- Cyprus transposed Directive 2014/55/EU into national law in June 2019. Fully in line with the Directive, the Cypriot government is obliged to receive e-invoices, but its suppliers are free to send their invoices in any form. The non-central authorities are using the extra year until April 2020 for compliance with the Directive. A central government portal (ARIADNI), has been developed and e-invoice samples in line with the European Norm have also been finalized.
- VAT Reporting in Cyprus is governed by the national VAT Act (N. 95(I)/2000 *ΝΟΜΟΣ ΠΟΥ ΠΡΟΒΛΕΠΕΙ ΓΙΑ ΤΗΝ ΕΠΙΒΟΛΗ ΚΑΙ ΕΙΣΠΡΑΞΗ ΤΟΥ ΦΟΡΟΥ ΠΡΟΣΤΙΘΕΜΕΝΗΣ ΑΞΙΑΣ*) and regulations. Returns are filed electronically via the TAXISnet system on a quarterly or monthly basis.
- Northern Cyprus is a disputed territory largely controlled by Turkey (which is the only nation to recognize Northern Cyprus as an independent state). Due to its disputed status, it is currently exempt from EU legislation, including the VAT Directive. As a result, Northern Cyprus has introduced its own VAT rules.

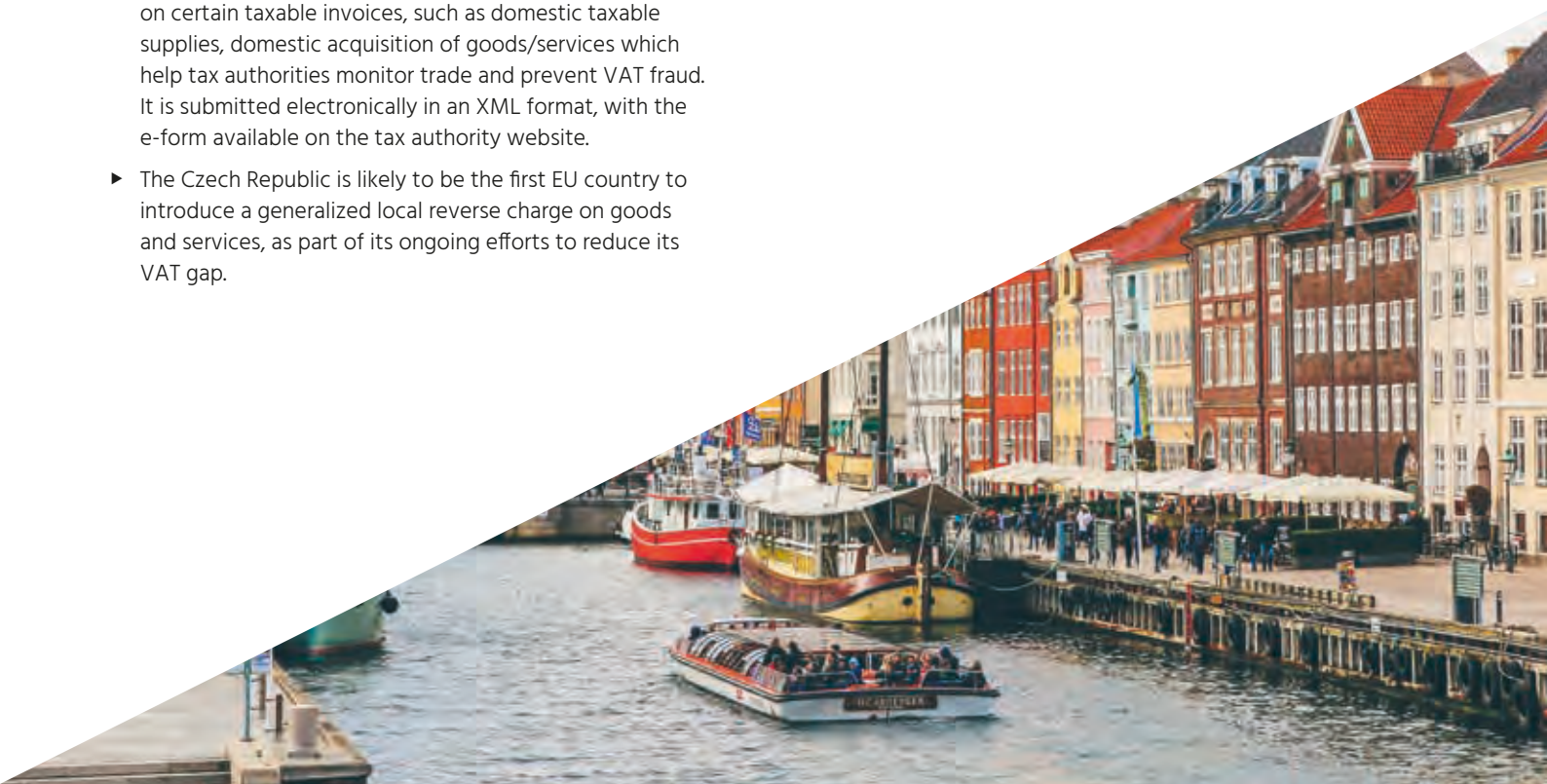
EU COUNTRY PROFILES

Czech Republic (post audit)

- The Czech Republic accepts business controls ensuring a reliable audit trail linking an invoice and a supply, Qualified Electronic Signature (certificate issued to a natural person), and Qualified Electronic Mark/Seal (certificate issued to a legal person). "Proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation is also allowed.
- When using a service provider, it is required to explicitly authorize the outsourcing of invoice issuance. If the authorization is in electronic form it must be signed with a Qualified Electronic Signature.
- Timestamping is not legally required but widely adopted.
- Evidence of ensuring I&A of electronic invoices must be stored in electronic form.
- Electronic invoices may be stored abroad, provided that the tax authority is notified and given online access.
- Directive 2014/55/EU has been transposed in the Czech Republic since October 2016, through the Public Procurement Law. A nationwide platform, *Národní elektronický nástroj* (NEN), covering the entire e-procurement lifecycle at all levels of public administration is in place.
- VAT reporting in the Czech Republic is governed by the national VAT Act (*Daň Z Přidané Hodnoty*, ZDPH). VAT returns are generally filed on a monthly basis, or quarterly subject to certain conditions. Czech VAT returns must be submitted electronically in an XML format through the tax authority's online portal (*Daňový* portal).
- A control statement must also be submitted alongside the VAT return for selected entities. This includes details on certain taxable invoices, such as domestic taxable supplies, domestic acquisition of goods/services which help tax authorities monitor trade and prevent VAT fraud. It is submitted electronically in an XML format, with the e-form available on the tax authority website.
- The Czech Republic is likely to be the first EU country to introduce a generalized local reverse charge on goods and services, as part of its ongoing efforts to reduce its VAT gap.

Denmark (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Denmark. The I&A of electronic invoices may be achieved, for example, by means of a business controls-based audit trail linking an invoice and a supply.
- A description of the electronic invoicing and electronic storage system must be stored either electronically or in hard copy.
- Electronic invoices may be stored abroad in any of the Nordic countries (as there is an instrument of mutual tax assistance with these countries) or in any EU Member State provided that the invoice can be printed without adjustment from the ERP system in Denmark, and subject to prior notification.
- B2G electronic invoicing is mandatory.
- VAT reporting in Denmark is governed by the national VAT law *(Bekendtgørelse af merværdiafgiftsloven)*. VAT returns in Denmark can be submitted monthly, quarterly or bi-annually dependent on annual turnover. New businesses must file VAT returns quarterly for at least 18 months. Businesses must submit their returns online by logging onto the E-tax for Businesses Portal *(TastSelv Erhverv)*.
- Denmark has only a single 25 percent rate of VAT, which applies to all goods and services that are not zero-rated. It is the only EU country without reduced rates of VAT.



Estonia (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Estonia.
- A major reform to the Accounting Act came into force on 1 January 2017, aimed at boosting electronic invoicing adoption in the country. The amendment included a requirement to use machine-processable formats in all B2B electronic invoicing, provided the costs to implement such feature are not commercially disproportionate for the taxpayer. The Act incorporates the concept of "handler of machine-processable source documents" (i.e. e-invoices), which includes service providers offering certain electronic invoicing functionalities (for example, conversion of invoice data into a machine processable e-invoice).
- Electronic invoices may be stored abroad provided they can be submitted at the request of the tax authority within a reasonable period.
- Electronic invoicing is mandatory for the public sector since March 2017. As of 1 July 2019, it is mandatory for all suppliers to submit machine-processable invoices (e-invoices) in relation to B2G transactions.
- VAT reporting in Estonia is governed by the national VAT Act *(Käibemaksuseadus)*. VAT returns are filed on a monthly basis (unless otherwise authorized), and can be submitted either by manual input, or by uploading an XML or csv file to the tax authority's online portal *(X-Tee)* with a machine-to-machine interface. The VAT return may also be filed on paper if the person has been liable for VAT for less than twelve months or if less than five invoices are included in the VAT return.
- Estonia also requires an appendix to the VAT return to be submitted (KMD INF). Both B2B and B2G invoices issued and received shall be recorded in this supplement, except for certain special arrangements provided for in the VAT Act. There is no obligation to declare invoices for B2C transactions.
- From September 2019, electronic tax services will be available as a self-service environment, where users are able to customize their experience by creating a desktop tailored to their liking.

Finland (post audit)

- I&A of the invoice needs to be ensured, with business controls-based audit trail linking an invoice and a supply being mentioned as an example of how to meet this requirement. In practice, any electronic invoicing process that meets reasonable business requirements is accepted due to the Finnish tax authority's ability to use means extraneous to the processes of taxable persons to monitor transaction flows.
- Requirements for storage exist, and the use of WORM devices has often been recommended to ensure robustness.
- Electronic invoices may be stored abroad in other EU countries, provided that the tax authority is given online access. Storage outside the EU is possible upon meeting additional conditions.
- Finland has transposed the Directive 2014/55/EU into national law, making it mandatory for central government to receive e-invoices; sub-central entities will comply with the Directive one year later, in April 2020. By April 2020, in the government's effort to increase the use of e-invoicing between public as well as private entities, this law will require public procurement entities and private traders to guarantee their ability to also send electronic invoices in line with the European Standard upon request by other traders and procurement entities.
- VAT reporting in Finland is governed by the national VAT Act *(Arvonlisäverolaki 1501/1993)* and regulations. Returns are generally submitted on a monthly basis, although quarterly or annual reporting regimes exist for smaller traders and certain categories of business. Returns must be submitted electronically.

EU COUNTRY PROFILES

France (post audit)

- To ensure electronic invoice I&A, France accepts Qualified Electronic Signature, *Référentiel Général de Sécurité* (RGS, a specific French electronic signature which is not qualified and not accepted in other EU member states), "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation subject to summary statements and "partner file" requirements, as well as business controls-based audit trail linking an invoice and a supply.
- France has not explicitly transposed the "any other means" option of Directive 2010/45, but rather expects methods that are not Qualified Electronic Signature or EDI to be classifiable as business controls-based audit trails linking an invoice and a supply.
- The French and German working groups for e-invoicing (FR: FNFE-MPE; DE: FeRD) have jointly developed an e-invoicing standard format called Factur-X, which is a hybrid invoice structure that allows for both XML and PDF.
- French law assumes symmetric use of compliance methods, i.e. that both trading parties use the same method.
- When using a service provider, it is required to authorize the outsourcing of invoice issuance. Such an outsourcing mandate/authorization can be either explicit or tacit, however an explicit authorization remains recommended. If the mandate is tacit, an outsourcing statement ("issued by... on behalf of...") should be included in the content of each invoice. The service provider can be established abroad, however, stricter rules apply to the outsourcing mandate/authorization when the service provider is established in a country that does not have a mutual tax assistance treaty with France.
- Electronic invoices may be stored abroad in other EU member states, provided that the tax authority is notified and given online access.
- B2G electronic invoicing has gradually become mandatory. The entry into force of this requirement is taking place in stages, having started on 1 January, 2017 with large companies invoicing the public sector, applying as of 1 January, 2019 to companies with 10 to 250 employees and ending by 1 January, 2020 with micro companies, with less than 10 employees. The government has made available a free portal to this end, *Chorus Portail Pro*.
- On 27 September 2019, the French government announced its intention to extend the B2G e-invoicing mandate to also cover B2B transactions. If the current Finance Bill for 2020 is adopted and no subsequent delays occur, the mandate will start its roll-out on 1 January 2023 and be fully applicable to the entire economy by 2025. The details of the e-invoicing reform are yet to be decided and published, but the Finance Bill indicates that the country is most likely set to become a clearance jurisdiction.
- VAT reporting in France is governed by the national VAT Law (Taxe sur la valeur ajoutée 1954). VAT returns in France can be filed on a monthly, quarterly, or seasonal basis (for transactions carried out an occasional or seasonal basis). VAT returns are submitted online through the tax authority portal.
- France introduced its version of SAF-T, known as Fichier des écritures *comptables* (FEC) in January 2014, to align with the national chart of accounts. While it is a deviation from the global OECD standard, it shares the same principles. It is used as a tax authority control whereby in the event of a tax audit, businesses must submit their financial data on request, in txt format.

Germany (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Germany, which include the business controls-based audit trails linking an invoice and a supply as well as Qualified Electronic Signature and "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation.
- Specific archiving requirements apply; regulated in the GoBD guidelines.
- Electronic invoices may be stored abroad in other EU member states, provided that the tax authority is notified and given online access. Storage outside the EU may also be allowed but subject to prior approval.
- B2G e-invoicing has been mandatory since November 2018 for public authorities at the federal administration level. On the federal state level, the Directive 2014/55/EU is largely transposed into supplementary legislation and the specific dates for the implementation of electronic invoicing can be extended until at the latest April 2020. From 27 November 2020, suppliers to public entities must issue their invoices electronically. The new ZUGFeRD 2.0 format was published in March 2019.
- VAT reporting in Germany is governed by the German VAT Law (UStG 2005). Periodic preliminary VAT returns are due on either a monthly or quarterly basis, as well as annually. All VAT returns are filed using the tax authority's secure web filing portal *Elster*. Filings can only be affected by means of a process resulting in the generation of an electronic certificate.

Greece (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Greece. It can be demonstrated for example by Advanced Electronic Signatures, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation, business controls ensuring an audit trail linking an invoice and a supply, as well as the use of special local electronic tax equipment, and settlement of transactions through a payment service provider operating under the supervision of the Bank of Greece.
- When using a service provider, it is required to put in place a prior agreement on the outsourcing of invoice issuance. Such an agreement can be evidenced by any method.
- It is explicitly stated in the legislation that evidence of ensuring I&A must be stored in electronic form.
- Electronic invoices may be stored abroad without notification, provided that the tax authority is given online access.
- The transposition of the Directive 2014/55/EU into Greek law was adopted in the first quarter of 2019, making it mandatory for the central government to receive e-invoices, whereas for local authorities the deadline for the transposition is April 2020. Secondary legislation will have to be implemented about the adoption of the semantic model of the e-invoice and the architecture of B2G e-invoicing. The government is considering joining the PEPPOL network and adopting a 4-corner model.
- VAT reporting in Greece is governed by the national VAT Act *(Νόμος 2859/2000, Κύρωση Κώδικα Φόρου Προστιθέμενης Αξίας)*. Returns are submitted on a monthly or quarterly basis. They can be submitted electronically through the IAPR portal.
- In addition to VAT returns, VAT taxpayers are required to submit a monthly report on their domestic sales and purchases, referred to as the *ΜΥΦ* "Status of Suppliers and Customers Transactions" to the AADE in an electronic format (expected to be abolished with the introduction of the new electronic books of myDATA scheme).

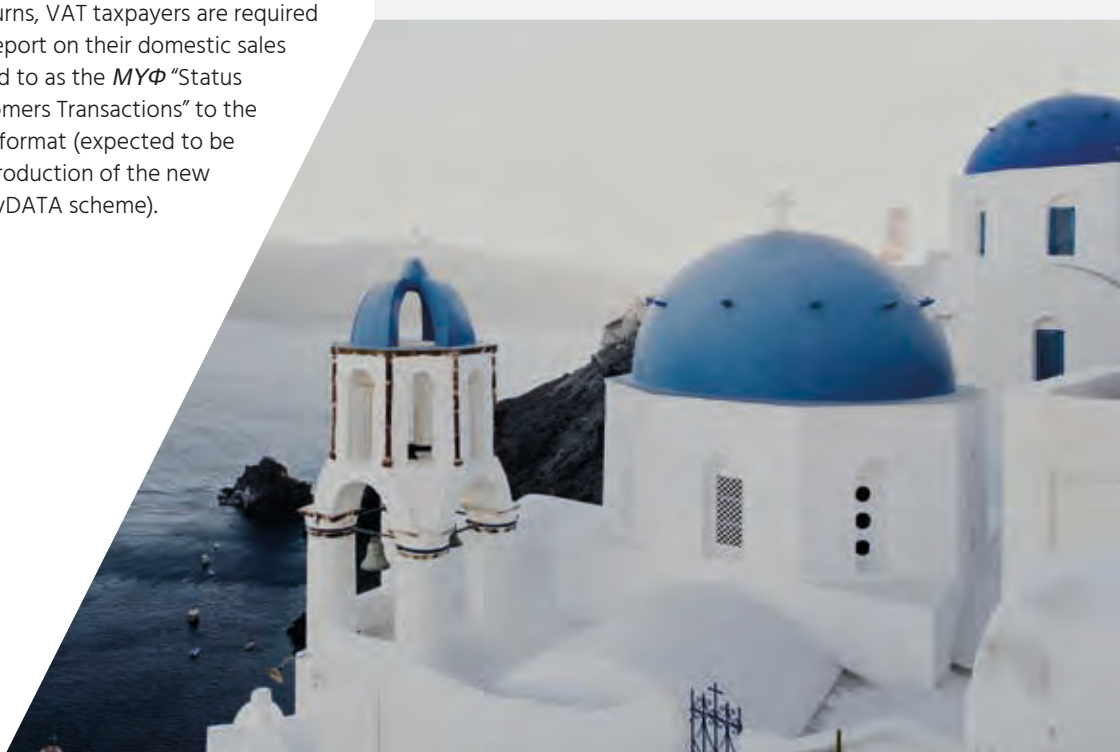
Deep dive:

Greece's deliberations in mid-2018 over the introduction of CTCs in the form of either an e-invoice clearance or e-reporting mandate have been crystalized and resulted in the formation of a CTC system that is closer to the latter.

On 1 August 2019, the Independent Authority of Public Revenues (IAPR) published the technical specifications of the new CTC system called myDATA ("My Digital Accounting and Tax Application"), which is also the name of the government portal on which the CTC system operates. The myDATA scheme is a combination of e-reporting obligation and maintenance of online ledgers: mandatory submission in real-time or periodically of transaction and accounting data to the myDATA platform, which in turn populates a set of online ledgers maintained by the tax authority. Taxable persons will be required to ensure consistency between their tax returns and the online books, and any resulting discrepancies may trigger a tax audit. The prospective myDATA scheme does, however, not include a legal requirement for the invoice exchanged between the supplier and the buyer to be in electronic form.

The myDATA scheme applies to Greek taxable persons who maintain accounting records in accordance with the law on Greek Accounting Standards, and it covers all domestic and cross-border transactions for B2B, B2C and B2G.

The myDATA scheme proposal was open to public consultation until 6 September 2019; at the time of publishing of this report, no response has been released by the IAPR on the feedback received by the industry and other stakeholders on the scheme. It is expected that myDATA will be introduced as a pilot in Q4 2019 and be fully operational by the beginning of 2020.



EU COUNTRY PROFILES

Hungary (post audit)

- Qualified Electronic Signatures, business controls ensuring a reliable audit trail linking an invoice and a supply and "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation may be used for ensuring the I&A of invoices.
- When using a service provider, an agreement for issuance of invoices must be executed in advance and in writing. If the authorization is made electronically, it must be signed with a Qualified Electronic Signature. Certain content of the outsourced issuance agreement is prescribed.
- The invoicing system shall ensure sequential and continuous invoice numbering and invoice data export functionality (making certain invoice data available to the tax authority in a prescribed Hungarian XML format).
- A taxable person must inform the authorities about the invoicing systems used using a specific form provided by the authorities. To this end, it is mandatory for service providers of invoicing systems to make certain information available to the taxable person, i.e. name, ID and usage guidelines of the invoicing system.
- Electronic invoices may be stored abroad, however, due to audit practice preferably in other EU member states, subject to prior notification and online access.
- Electronic invoices must be capable of being presented during an audit in a prescribed Hungarian XML or in PDF format, however, presentment in PDF is not possible for invoices issued in XML format due to audit requirements.
- From 1 July 2018, taxable persons must also report invoice data in real-time to the tax authority (NAV) for domestic transactions with minimum VAT amount of 100,000 HUF (approx. 300 EUR). A taxable person can choose to perform real-time reporting of all its invoices, regardless of invoice amount.
- The XML schema for invoice reporting can also be used as an alternative format to satisfy the separate requirement that electronic billing programs be able to export data to the tax authority on demand. As a result, the XML schema allows for the reporting of elements which are not required under the invoice reporting obligation.
- Electronic archiving can be performed by one of the methods listed in the legislation or by any other method meeting the objectives of the law, among others by storing together with an invoice the results of real-time reporting (invoice hash value and tax authority confirmation).
- VAT returns are filed monthly or quarterly and are due on the twentieth of the month after the end of the tax period. The VAT return contains several appendices requiring additional information on transactions such as supplies of new means of transport and metals subject to the domestic reverse charge. Alongside the VAT return taxpayers must also submit a summary report on all domestic purchases with a VAT value of 100,000 HUF.

Ireland (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Ireland. It may be achieved for example by means of a business controls-based audit trail linking an invoice and a supply. The tax authority's guidance note clarifies that methods compliant with the previous rules, that is Advanced Electronic Signatures and "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation, remain accepted methods for electronic invoices.
- When using a service provider, it is required to put in place a written agreement for the outsourcing of issuance of electronic invoices. Such an agreement can be either in paper or in electronic form, no content is prescribed.
- Electronic invoices may be stored abroad without notification, provided that the tax authority is given online access.
- There is no legislation in place that mandates the provision or use of electronic invoicing in the public sector. Electronic invoices in B2G public procurement are supported and provided for on a voluntary basis by each contracting authority or sector. The transposition of the Directive 2014/55/EU was accomplished in June 2019. Ireland officially obtained the status of PEPPOL Authority member in early 2018.
- VAT Reporting in Ireland is governed by the national VAT law (VAT Consolidation Law). VAT returns are typically filed bi-monthly and can be filed monthly, tri-annually, bi-annually, or annually. The VAT return must be uploaded to the Revenue Online Service in an XML format, which must be encoded using UTF-8.
- In addition to the periodic VAT return, all traders are required to complete an annual Return of Trading Details (RTD) form. This form details the total sales and purchases for the year, broken down by VAT rate. This form must be completed at the end of the year.

Italy (clearance)

- Italy is the first EU country that has sought and obtained an exception from the EU Council to make e-invoicing fully mandatory for all types of VAT transactions: B2B, B2G and B2C.
- The e-invoicing mandate entered into force for most domestic invoices on 1 January 2019. Cross border supplies are not embraced by the mandate, but the parties to such transactions may agree to issue and receive e-invoices, in which case they are relieved from the burden to issue a report on cross-border transactions (*Esterometro*, further described below).
- The issuance of an e-invoice is contingent upon the invoice being created in a structured format and transmitted through a state-controlled platform called *Sistema di Interscambio* (SDI), commonly referred to as the Exchange System. Invoices that do not comply with these requirements are not considered as fiscally valid invoices and cannot be used as proof of a VAT supply.
- An extension of the e-invoicing mandate into mandatory exchange of electronic purchase orders was planned for 1 October 2019, but postponed at the last minute. These requirements target purchase orders from the Italian public healthcare sector and foresee their exchange through an extension of the SDI platform, known as *Nodo di Smistamento degli Ordini di Acquisto delle Amministrazioni Pubbliche*, which is commonly referred to as the NSO platform. The data exchanged through the NSO platform must be annotated in the e-invoices related to these B2G supplies.
- In the B2B flow, any means for ensuring I&A of electronic invoices are formally accepted in Italy, although there is a strong market preference for Qualified Electronic Signatures. Freedom of choice for meeting this requirement does not apply to B2G e-invoices, which must be electronically signed.
- If invoice issuance is outsourced to a service provider, the invoice itself must clearly state (currently as a content requirement or as mandatory field in the FatturaPA XML) that it is issued by the service provider on behalf of the supplier. An explicit outsourcing agreement is required and the content requirements for this agreement are listed in guidelines issued by the tax authority.
- There are several specific requirements for the archiving of electronic invoices, notably search criteria, a documented description of the archive and the archiving process (Manuale di Conservazione), as well as a clear delegation plan setting up the responsibility of the archiving process (Responsabile della Conservazione). The SDI platform provides a way to meet these archiving obligations, however, taxpayers who wish to maintain or put in place e-invoice archives that are independent from the state-controlled platform are free to do so.
- Fiscally relevant documents, including invoices, must undergo a preservation process in order to maintain their legal validity during the statutory storage period. All invoices that are stored electronically need to be preserved, which entails hashing and grouping the invoices together in so-called archiving packages that follow a predefined standard. Each archiving package must be signed with a Qualified Electronic Signature and timestamped using a third-party time reference. Using a service provider not established in the EU is prohibited for suppliers that have not had a clean VAT record for at least five years.
- Electronic invoices may be stored abroad in other EU member states as well as in any country with which Italy has signed a mutual tax assistance treaty, subject to prior notification and online access.
- VAT reporting is governed by the Italian VAT law and is administered by the Italian tax authority *(Agenzia delle Entrate)*. VAT returns are filed in respect of calendar quarters *(Comunicazione Liquidazioni Periodiche IVA)*, and there is also an annual return (calendar year basis – *Dichiarazione IVA)*.
- Since 1 January 2019, all businesses resident for VAT in Italy have been required to file a monthly listing of all cross-border sales and purchases *(Esterometro)*. Esterometro must be filed, in XML format, by the last day of the month following that covered by the listing. Esterometro follows a similar schema to the now abolished Spesometro, a quarterly or semi-annual declaration of all sales and purchases subject to VAT, the last filing for which was due at the end of February 2019.
- A simplified annual VAT return *(Dichiarazione Iva Modello Base)* is available for businesses that do not fall subject to specified exclusions, and that meet specified criteria. A summary VAT return (VAT 74-bis) is required to be filed by liquidators of insolvent companies.

EU COUNTRY PROFILES

Latvia (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Latvia. Explicitly mentioned examples are: Qualified Electronic Signatures, business controls ensuring an audit trail linking an invoice and a supply and "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation.
- Electronic invoices may be stored abroad without notification, provided that the tax authority is given online access.
- B2G electronic invoicing is currently voluntary in Latvia. There is a central e-government platform available through which electronic invoices can be submitted to central authorities or municipalities.
- VAT reporting in Latvia is governed by the national VAT Act *(Pievienotās vērtības nodokļa likums)*. Returns are filed on a monthly or quarterly basis.
- The Latvian VAT return includes an appendix to be filed which contains information about the amount of tax on purchases of goods and services received domestically. This report is meant to capture the amount of input VAT included in the VAT return for the taxable period.

Lithuania (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Lithuania. Explicitly mentioned examples are: Advanced Electronic Signatures, business controls ensuring an audit trail linking an invoice and a supply and "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation.
- Regarding outsourcing of electronic invoice issuance, service providers to Lithuanian taxable persons not established in an EU Member State must comply with certain additional requirements.
- It is explicitly stated in the legislation that if an invoice is in electronic form, data ensuring the authenticity and integrity of the invoice must be stored by electronic means.
- Electronic invoices may be stored abroad in other EU states as well as in any country with which Lithuania has signed a mutual tax assistance treaty, subject to prior notification and access upon reasonable notice.
- B2G electronic invoicing has been mandatory in Lithuania since July 2017 for both public authorities and suppliers and takes place through a centralized government portal. On 1 July 2019 Lithuania launched an e-invoicing module for the new national e-invoice standard, which enabled the contracting authorities and entities to receive and process electronic invoices from other EU countries that conform to the European Norm. Since this date, the contracting authorities have been obliged to receive and issue only EN compatible e-invoices. The exchange of e-invoices is operated by the government portal *eSaskaita*. Suppliers may send their invoices to the government through any certified PEPPOL Access Point that uses PEPPOL AS4 Profile.
- VAT reporting in Lithuania is governed by the national VAT Act *(Pridėtinės vertės mokesčio įstatymas)*. Returns can be filed on a monthly, quarterly, or semi-annual basis. VAT returns must be submitted electronically via the Electronic Declaration System (EDS).
- Since 1 October 2016, companies and branches of foreign companies are obliged to submit data on VAT invoices issued and received to the Lithuanian tax authority system i.SAF. The data must be submitted in a standard file in XML format, commonly referred to as "the i.SAF file", on a monthly basis. This i.SAF file is part of a larger SAF-T reporting requirement in Lithuania; however, full SAF-T files are only submitted if demanded by the tax authorities.
- Since 1 July 2019, Lithuania permits businesses with sales of less than 300,000 EUR per year to switch to quarterly VAT returns. Previously, such businesses could only file monthly returns.

Luxembourg (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Luxembourg. In line with the official notes to the VAT Law, Luxembourg accepts Advanced Electronic Signatures, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation as well as any other means.
- When using a service provider, it is required to put in place a prior outsourcing authorization for the issuance of electronic invoices, written form is recommended.
- It is explicitly stated in the legislation that for invoices stored in electronic form the evidence of authenticity and integrity must also be stored in electronic form.
- Electronic invoices may be stored abroad in other EU member states as well as in any country with which Luxembourg has signed a mutual tax assistance treaty, subject to prior notification and online access.
- Luxemburg adopted legislation about e-invoicing in public procurement in May 2019, which is line with the Directive 2014/55/EU. Sub-central authorities will make use of the additional year provided to implement the Directive. E-invoices will continue to be exchanged voluntarily by suppliers to the government and a central PEPPOL access point will continue to be used.
- VAT reporting in Luxembourg is governed by the national VAT Law *(Loi TVA)*. VAT returns can be filed on a monthly, quarterly or annual basis dependent on a business's annual turnover. VAT returns can be filed electronically through the platform for the electronic gathering of financial data (eCDF). Monthly and quarterly VAT returns must be submitted electronically in PDF or XML format via the platform. Annual VAT returns can be filed either electronically by sending a PDF or XML file or in paper format by sending a paper copy of the VAT return to the competent VAT office.
- Luxembourg implemented SAF-T in 2011. It is known as the *Fichier Audit Informatise AED* (FAIA). Businesses must, if requested, submit their financial data electronically in a format that is compliant with AED electronic audit file specifications. FAIA contains all data recorded in an accounting system in an XML format and is divided into four sections: Header, Master file, General Ledger Entries and Source Documents.

Malta (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Malta. Means listed in the legislation as examples are Qualified Electronic Signatures, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation and business controls ensuring a reliable audit trail linking an invoice and a supply.
- For invoices stored by electronic means, the Tax Commissioner may require that the data guaranteeing the authenticity and the integrity of electronic invoices is also stored by electronic means.
- Electronic invoices may be stored in other EU member states provided that the tax authority is given online access.
- The country is in the process of transposing the Directive 2014/55/EU into national law and developing a platform for receiving and processing electronic invoices.
- VAT reporting in Malta is governed by the national VAT Act *(Kapitolu 406 Att dwar it-Taxxa fuq il-Valur Miżjud)*. VAT returns are generally submitted on a quarterly basis and can be submitted electronically via the VAT Online Services portal.

Netherlands (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in the Netherlands. Explicitly mentioned examples are business controls-based reliable audit trail linking an invoice and a supply, Qualified Electronic Signatures and "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation.
- Electronic invoices may be stored abroad in other EU member states as well as in any country with which the Netherlands has signed a mutual tax assistance treaty, subject to online access.
- B2G electronic invoicing (sending, receiving and processing) has been mandatory since January 2017 for central government agencies and since 18 April 2019 for local government and all other contracting authorities.
- Dutch VAT returns are governed by the national VAT Act (*Wet op de omzetbelasting* 1968) and are filed on a monthly or quarterly basis. Digital tax returns can be manually filled out in a secure section of the tax authority's website; there is also the option to submit the VAT return, and other financial reports, in Standard Business Reporting language via the government's *Digipoort* channel.
- The Netherlands is one of only three EU countries to apply the maximum possible threshold of 100,000 EUR to distance sales registration.

EU COUNTRY PROFILES

Poland (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Poland. Qualified Electronic Signatures, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation and business controls ensuring a reliable audit trail linking an invoice and a supply are examples of accepted means.
- Electronic invoices may be stored abroad, provided that the tax authority is given online access. The tax authority must always be informed about the place of storage of invoices through a specific form, no matter if the archive is located in Poland or abroad.
- Poland has adopted a legislation about invoicing in public procurement in line with the Directive 2015/44/EU. As of 1 January 2019, a central platform, (*Plaftorma Fakturowania Elektronicznego,* PEF) is used for the exchange of e-invoices between suppliers and the government.
- Since July 2018, it is mandatory for all taxpayers to submit SAF-T reports with fiscally relevant data to the tax authority. There are seven regulated SAF-T structures in Poland, one of which specifically targets invoice data and needs to be submitted to the tax authority upon request. The delivery methods for the invoice SAF-T file (JPK-FA) is also regulated; taxpayers can either deliver it on a CD/DVD or in XML format through a software connected to the Ministry of Finance; in the latter case the report needs to be signed with a Qualified Electronic Signature.

Portugal (post audit)

- To meet I&A requirements, the Portuguese law states you can use Qualified Electronic Signatures, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation or any business controls ensuring a reliable audit trail linking an invoice and a supply. Until 31 December 2020, Advanced Electronic Signatures can also be used to ensure I&A.
- As of 1 January 2020, electronic invoices must contain a QR code and a unique document code.
- A certification requirement exists for e-billing software that produces the invoice data. Several categories of taxable persons are required to issue and receive invoices through certified software.
- Taxable persons (established/domiciled in Portugal and who perform operations subject to VAT in Portugal) shall communicate certain elements of the invoices to the local tax authorities in real-time or every month. Real-time communication must be done through web service integration, while monthly communication is done by uploading the SAF-T (PT) file.
- Elements of electronic invoices must be capable of being presented in the Portuguese SAF-T format.
- Electronic invoices may be stored abroad in other EU member states, provided that the tax authority is given online access. Storage outside the EU is possible if prior approval from the tax authority is obtained. In either case, the storage must always ensure accessibility and legibility, contain integrity controls and backup copies features, among others.
- A process is ongoing in Portugal to align and consolidate the currently fragmented legislation of electronic invoicing, reporting and archiving. These efforts have started with the publication of the Law-Decree n. 28/2019, but complementary regulations are expected.
- E-invoicing is becoming mandatory for B2G transactions, with a progressive implementation, which started in April 2019, to be completed by the end of 2020.
- VAT reporting in Portugal is governed by the national tax code and multiple regulations issued by the tax authority. The periodic VAT return is filed electronically via software provided by the tax authority, on a monthly or a quarterly basis. Businesses with an annual gross income of 650,000 EUR should file their VAT return on a monthly basis. The VAT rates in the regions of Azores and Madeira are different than the VAT applied in the mainland; taxpayers use a separate annex in the periodic return to report transactions carried out in these regions.
- In addition to the periodic VAT return, taxpayers are required to file an annual return that summarizes the transactions carried out during the year. That return, known as IES, contains information related both to VAT and other taxes.

Romania (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Romania. Qualified Electronic Signatures, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation and business controls ensuring a reliable audit trail linking an invoice and a supply are examples of accepted means.
- It is only permitted to outsource the issuance of electronic invoices to service providers established in a country with which Romania has a mutual tax assistance treaty (in place for all EU member states).
- The tax authority must be notified via registered mail one calendar month prior to outsourcing of electronic invoice issuance.
- Electronic invoices may be stored abroad in other EU member states as well as in any country with which Romania has a mutual tax assistance treaty, subject to notification and online access.
- VAT reporting in Romania is governed by the national Fiscal Code *(Codul Fiscal)*. VAT returns can be filed on a monthly, quarterly, bi-annual, or annual basis. Electronic filing of the VAT return is done via a government portal; to facilitate this, the Romanian National Agency for Fiscal Administration (ANAF) has promulgated the return on a java platform, which allows for XML upload, validation, and submission of the form. Copies of the VAT return in PDF format are also available on the ANAF website.
- VAT payers in Romania must also submit a monthly invoice ledger that provides information related to customers and suppliers, the nature of transactions, and invoice range used. Like the VAT return, this form can also be submitted in XML format via import to a java-based form provided by ANAF, with subsequent submission to a government portal. The country has announced plans to introduce a SAF-T transactional report in 2020.
- Following a notice from the European Commission, the country withdrew requirements related to mandatory VAT split payment.
- Mandatory SAF-T reporting is expected to be introduced in Romania, starting in January 2020 with a pilot for large taxpayers. The goal is full adoption of SAF-T reports by the end of 2020.

Slovakia (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Slovakia, such as Qualified Electronic Signatures, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation and business controls ensuring a reliable audit trail linking an invoice and a supply.
- Electronic invoices may be stored abroad without notification, provided that the invoice is made available in Slovakia upon request by the tax authority.
- Slovakia has submitted a draft law transposing the Directive 2014/55/EU into national legislation for parliamentary approval. The use of a centralized government portal, called *IS EFA*, is envisaged. The implementation of the Directive will consist of three stages: Stage 1 - as of 2021, the receipt of e-invoices will be mandatory for the central government via the IS EFA platform; stage 2 – the mandate will extend to non-central authorities; stage 3 – the issuance of e-invoices will be mandatory for all contracting entities as well as suppliers to the government.
- VAT returns in the Slovak Republic are governed by the national VAT Act *(Zakona č. 222/2004 z. z. o Dani Z Pridanej Hodnoty)*. VAT returns are filed on a monthly or quarterly basis. Electronic filing is possible through a downloadable form-filling program *(eDane)* distributed by the tax authority; this program also accepts import of data in a specified XML format.
- In addition to VAT returns, taxpayers in the Slovak Republic must file the Slovak Control Statement, an invoice ledger for domestic transactions. Taxpayers who do not file VAT returns are exempt from this additional requirement.
- From 1 July 2019, entrepreneurs who accept cash payments must make use of online cash registers that connect directly to the system of the tax authority; this ambitious eKasa program was approved by the Slovak parliament in December 2018.

EU COUNTRY PROFILES

Slovenia (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Slovenia. Means listed in the legislation as examples are Qualified Electronic Signatures, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation and business controls ensuring a reliable audit trail linking an invoice and a supply.
- When using a service provider, it is required to put in place a written agreement for the outsourced issuance of electronic invoices, be it in paper or electronic form (no content is prescribed).
- It is explicitly stated in the legislation that the evidence of ensuring I&A must be stored in electronic form.
- Electronic invoices may be stored abroad, provided that the tax authority is notified and given online access.
- B2G electronic invoicing is mandatory for all suppliers, and a central platform *UJP eRačun* must be used. There are several channels through which suppliers can send their e-invoices to the government portal and by using different market solutions, i.e. through webservices provided by e-invoicing service providers that connect to the government portal, through Bankart webservices provided by banks for e-banking services, and manually through the government web-portal, UJP eRačun.
- VAT reporting in Slovenia is governed by the national VAT Act *(Zakon o davku na dodano vrednost)*. VAT returns are filed either monthly or quarterly. Returns are filed electronically through the eDavki online system; upload of XML files to eDavki is also possible.

Spain (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Spain. Means listed in the legislation as examples are business controls establishing reliable audit trail linking an invoice and supply, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation, as well as Qualified Electronic Signatures and "recognized signatures" (an Advanced Electronic Signature based on a qualified certificate without hardware implemented SSCD).
- Any taxable person may submit other technological proposals for ensuring the I&A to the tax authority.
- B2G electronic invoicing is mandatory for most taxable persons. Public bodies may allow paper invoicing for transactions not exceeding 5,000 EUR. A unified entry portal *(FACe)* handles delivery of the electronic invoice to the applicable public body. Invoices must be submitted to the portal in the mandatory format Facturae. Since 1 July 2018, subcontractors to suppliers to the public administration must submit invoices in electronic form through the FACeB2B framework when the amount of such invoices exceeds 5,000 EUR.
- Certain taxable persons must report invoice data to the tax authority through a platform known as *Suministro Inmediato de Información* (SII) within four business days following the date of issuance. Taxable persons not required to report the invoice data may voluntarily adopt the SII framework to submit this report.
- Electronic invoices may be stored abroad, provided that the tax authority is notified and given online access.
- Most Spanish taxable persons located in the mainland are required to comply with their periodic VAT reporting obligations on a monthly or quarterly basis depending on their turnover. Taxable persons must also file an annual VAT return that summarizes transactions carried out over the year, this obligation is suspended for taxable persons required to comply with the SII.
- Taxable persons exclusively located in the provinces of Alava, Biscay, Guipuscoa or Navarra in Spain, or in the Canary Islands, must file a different periodic VAT return filed with the local tax authority of the corresponding region.

Sweden (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Sweden. The trading partners are free to decide how to meet the requirements.
- Electronic invoices may be stored abroad in other EU member states and countries with which Sweden has a mutual tax assistance treaty (for example, Norway), provided that the tax authority is given online access and is notified. The invoices must be printable in Sweden.
- It has been mandatory for public government administrations to send and receive e-invoices for several years, however B2G e-invoicing is mandatory also for suppliers to the public administration since 1 April 2019. The law covers all supplies made to the public sector but applies only to new procurement contracts (signed after the date of the law's entry into force).
- VAT reporting in Sweden is governed by the national VAT Law *(Mervärdesskattelag)*. VAT returns are filed monthly, quarterly, or annually, depending on annual turnover. Taxpayers should register and file via the tax authority's e-service *(Moms- och arbetsgivardeklarationer)*. If businesses do not file online, they have the option of completing a paper form and sending the return to arrive at the tax authority before the deadline.

United Kingdom (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in the United Kingdom. Examples of methods are listed in the UK tax authority's (HMRC) Public Notice on Electronic Invoicing and include: Advanced Electronic Signatures, Qualified Electronic Signatures, "proper EDI" with an interchange agreement based on the European Commission 1994 Recommendation and business controls which create a reliable audit trail between an invoice and a supply of goods or services. HMRC is also prepared to accept other methods provided the taxable person imposes a satisfactory level of control over the authenticity and integrity of the invoice data. Transport and access security or equivalent process controls are mentioned in relation to this.
- Electronic invoices may be stored abroad in other EU member states and in third countries which respect the European Data Protection principles regarding the storage of personal data. Online access is recommended; access within reasonable time, at a place mutually agreed with the auditor, is required.
- Parallel electronic and paper flows are only allowed for a defined testing period and with prior approval from HMRC.
- National legislation transposing the Directive 2014/55/EU and enacted in the United Kingdom earlier this year mandated government agencies to receive electronic invoices from 18 April 2019. The law sets 18 April 2020 as a deadline for utilities and sub-central contracting authorities to receive e-invoices.
- Since April 2019, businesses operating above the threshold for compulsory VAT registration are required to keep their records digitally and transmit periodic VAT returns to HMRC using MTD (Making Tax Digital)-compatible software; the software will connect to HMRC's MTD interface via API, with VAT returns submitted as a JSON file. This has replaced the previous secure web portal. Taxable persons trading below the VAT registration threshold can still join MTD voluntarily or continue to use the portal instead. The government has committed that it will not widen the scope of MTD to other taxes beyond VAT before the system has been shown to work well, and not before April 2020 at the earliest.

ELECTRONIC INVOICING AND VAT REPORTING IN OTHER EUROPEAN COUNTRIES

ELECTRONIC INVOICING AND VAT REPORTING IN OTHER EUROPEAN COUNTRIES

Andorra (post audit)

- In Andorra, the Indirect General Tax which corresponds to VAT, was introduced in 2012. Electronic invoicing is regulated and has been allowed since then.
- On 8 May 2019, Andorra published the Decree which modifies the Regulation on the obligations of invoicing. This decree requires I&A of the invoice to be guaranteed. Integrity and authenticity of electronic invoices can be ensured by any means at the choice of the taxable person. Qualified Electronic Signatures are listed as an example.
- The issuance of electronic invoices is voluntary, but buyer's consent is required.
- Electronic invoices may be stored abroad without notification, provided that the tax authority is given access without undue delay upon request.
- The obligation to keep invoices by electronic means can be fulfilled through a third party.
- Even though Andorra is not an EU Member State, it aligns with the Directive 2014/55/EU. In terms of B2G, all providers that have delivered goods or rendered services to the government can issue and send electronic invoices.

Belarus (clearance)

- Recent changes to the Tax Code in Belarus introduced a concept of electronic VAT invoices, whereas in the past supporting documents (such as delivery notes of goods and acceptance notes of services) were the basis for VAT deduction.
- Electronic VAT invoices have been mandatory for most transactions since 1 July 2016.
- Electronic VAT invoices may be created either via a portal of the Ministry of Taxes and Duties or uploaded there through web applications. In the case of uploading invoices, they must be in XML format and signed with a digital signature.

Bosnia and Herzegovina (post audit)

- I&A of invoices can be ensured by any means at the choice of the taxable person. Electronic signatures are listed as an example.
- Electronic invoice software has been specifically regulated since 2013.
- Electronic invoices may be stored abroad, subject to online access and prior authorization from the tax authority.

Kosovo (post audit)

- The VAT Law allows taxpayers to issue and store invoices in electronic form, subject to prior approval by the tax authority.
- I&A of electronic invoices can be ensured by means of Advanced Electronic Signatures or Qualified Electronic Signatures, EDI with proper controls in place, or other electronic means adopted by the government or accepted by the buyer.
- Outsourcing of e-invoice issuance and storage to a service provider is allowed.
- Certificates issued by a foreign certification authority are considered equal to local certificates, provided that the foreign certification authority is accredited in an EU Member State, or if the foreign certificates are guaranteed by an EU certification authority.

Liechtenstein (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Liechtenstein. As the eIDAS Regulation is applicable in Liechtenstein an electronic signature can be used; the electronic signature may be based on a certificate issued by a certification authority established in an EU country, but in certain cases, local practices and other considerations may recommend the use of a locally accredited certification authority.
- Electronic invoicing in Liechtenstein is subject to buyer's consent.
- Outsourcing of invoice issuance is possible. An explicit outsourcing agreement is recommended based on common practice, although it is not a requirement by law.
- Electronic invoices may be stored abroad without notification, provided that the invoice remains readable, that the tax authority is given online access and that tax evaluation remains possible.
- In general, the VAT law of Liechtenstein is based on and almost equal to the Swiss law, however the country has an autonomous enactment of the Swiss law. In many areas Liechtenstein has not taken over all detailed provisions of Swiss law, but the Liechtenstein tax authority bases its practice on the detailed provisions of Swiss law.
- Liechtenstein is considered part of the Swiss VAT territory and, as a result, VAT liabilities (excluding import VAT) of taxpayers domiciled in Liechtenstein is to the Liechtenstein tax authority. However, VAT on transactions involving Liechtenstein by other taxpayers is owed to the Swiss authorities.

ELECTRONIC INVOICING AND VAT REPORTING IN OTHER EUROPEAN COUNTRIES

Moldova (clearance)

- Electronic invoicing is run through the state-owned electronic invoicing system e-Factura, which requires registration. When only the supplier is registered, or when a registered buyer has not consented to electronic invoicing, the supplier may still use the e-Factura system for filling in, digitally signing, registering, and printing the invoice.
- Electronic invoices must be signed with electronic signatures; the underlying certificates are managed and issued by the state-owned Certification Center and the Special Telecommunications Center. Presently, the Certification Center is the main entity issuing all types of digital certificates.
- The issued e-invoices are stored in the e-Factura system.

Monaco (post audit)

- Any means for ensuring I&A of electronic invoices are accepted in Monaco.
- When using a service provider, an explicit written authorization, mandat, for outsourced issuance of invoices is required, with specific content requirements.
- Electronic invoices may be stored abroad in EU member states as well as in any country with which Monaco has a mutual tax assistance treaty, provided that the tax authority is given online access and is notified. There are content requirements for such notification and each time the place of storage is changed the tax authority must be notified one month in advance.

Montenegro (post audit)

- The VAT law allows taxpayers to send and receive invoices in "non-material" form, subject to prior approval by the tax authority.
- The integrity, authenticity, availability and readability of the electronic invoice is required throughout its whole lifespan. This can be achieved by means of Qualified Electronic Signatures. No specific system/portal/software is prescribed by the law.
- Outsourcing of e-invoice issuance and storage to a service provider is allowed.
- Qualified certificates issued by a certification authority established in an EU Member State have the same legal effect as local qualified certificates.

North Macedonia (post audit)

- Electronic invoicing is permitted subject to the buyer's explicit consent and the I&A of the e-invoice being ensured by means of a Qualified Electronic Signature – a signature based on a certificate issued by a locally accredited certification authority or by a certification authority established in an EU country.
- Electronic invoices, together with data proving their authenticity and integrity, must be stored locally. Electronic invoices must be stored in their original form in which they have been issued or received.
- Whereas delegation for secondary legislation is included in the law on VAT, further rules on electronic invoicing are currently being developed by the Ministry of Finance of Macedonia.

Norway (post audit)

- I&A of invoices may be ensured by any means at the choice of the taxable person; no examples are mentioned in the legislation.
- Accounting documentation, including invoices, should be kept in a way that ensures protection against unlawful change or loss. It is further required that the documentation can be presented to a state authority during the full storage period in a form that allows for subsequent control, as well as being printable.
- Electronic invoices may be stored abroad in any Nordic country provided that the tax authority has been notified and the invoice is accessible from Norway. Storage in other European Economic Area countries is possible in certain cases if prior authorization has been obtained from the tax authorities.
- B2G electronic invoicing is in practice mandatory.
- VAT reporting in Norway is governed by the national VAT Act *(Lov om merverdiavgift)* and reports are submitted bi-monthly or annually.
- Mandatory SAF-T reporting is to be introduced in Norway, starting in January 2020. The requirement will be applicable to any enterprise with bookkeeping obligations who use electronic accounting systems. Enterprises with less than 5 million NOK in turnover are exempt from the requirement. However, if these enterprises have bookkeeping information available electronically, the requirement will apply to them. Enterprises with a bookkeeping obligation who have fewer than 600 vouchers a year and hold their accounts in a text editor or spreadsheet program are not included in the requirement because these systems are counted as manual solutions and not an electronic accounting system. SAF-T will not replace the VAT return in Norway. The Norwegian SAF-T is an on-demand file.

Russia (clearance)

- Electronic invoices must be issued in a regulated XML schema/format called Universal Transfer Document (UTD) and be digitally signed; the signing operation must be performed in Russia.
- Electronic signatures should be based on a qualified certificate that is provided by an authorized Russian certification authority and a necessary crypto software provided by an authorized software provider.
- Electronic invoices and confirmations of receipt must be issued and exchanged between the issuer and the recipient via one of the accredited Electronic Document Exchange Operators (EDEO). Electronic Consignment Document (ECD) for goods and services must be issued in the UTD format and be presented in case of an audit. Such documents may be processed through EDEO or directly exchanged between the parties.
- Interoperability between EDEOs is regulated, but it is currently not available among all EDEOs. The four major EDEOs have signed interoperability agreements. A centralized EDEO has been introduced to which all EDEOs must be connected in order to ensure full interoperability.
- All entities under the standard system of taxation must use special cash register equipment for the creation, recording and storage of fiscal data. The cash registers must be able to report in real-time each B2C transaction to the tax authority via the Fiscal Data Operator.

Serbia (post audit)

- Serbia has no explicit regulatory framework allowing electronic invoicing for VAT purposes, but the law on accounting and audit in conjunction with the law on electronic documents and law on trade makes it possible to issue valid electronic invoices. An opinion issued by the Ministry of Finance has confirmed that electronic invoicing is permitted. A new Accountancy Law, which will introduce the concept of an electronic invoice, is expected to be adopted by the National Assembly of Serbia by the end of 2019.
- The I&A of invoices shall be ensured, and electronic signatures may be used for this purpose (an Advanced Electronic Signature is sufficient).
- Use of service providers is not regulated but occurs in practice.
- Electronic invoices can be stored abroad, if data protection requirements allow and compliance with these requirements is ensured.

Switzerland (post audit)

- Switzerland has regulated the concept of an Advanced Electronic Signature/Seal – i.e. not a Qualified Electronic Signature/Seal – which nevertheless requires a hardware signature creation device, usually a smart card, to ensure the I&A of the invoice. Certificates may only be issued by approved certification authorities.
- When using a service provider, both for the outsourcing of invoice issuance and for certain receipt functions (in particular signature validation), it is required to put in place an explicit outsourcing agreement. Sector-specific content requirements may apply to such an outsourcing agreement.
- Systematic validation of the signature is only required in cases where the processing of invoices at the receiving side is done automatically. In other cases, random tests may be enough. The process/approach of the validation and the results must be documented.
- Electronic invoices may be stored abroad without notification, provided that the invoice remains readable, that the tax authority is given online access and that tax evaluation remains possible.
- B2G electronic invoicing is mandatory for all transactions where the buyer is a Swiss federal administration body and where the transaction originates from a contract where the value meets or exceeds 5,000 CHF.
- VAT reporting in Switzerland is prescribed under the Federal Act of 12 June 2009 on Value Added Tax (as amended) and the Ordinance on Value Added Tax. Standard VAT taxpayers are required to submit quarterly VAT returns. Switzerland has special requirements around the VAT liability of foreign companies providing electronic services or low value consignments to Swiss consumers.
- Domestic companies are liable to report their global turnover on their Swiss VAT returns, while other taxpayers need only to report their Swiss turnover.

ELECTRONIC INVOICING AND VAT REPORTING IN OTHER EUROPEAN COUNTRIES

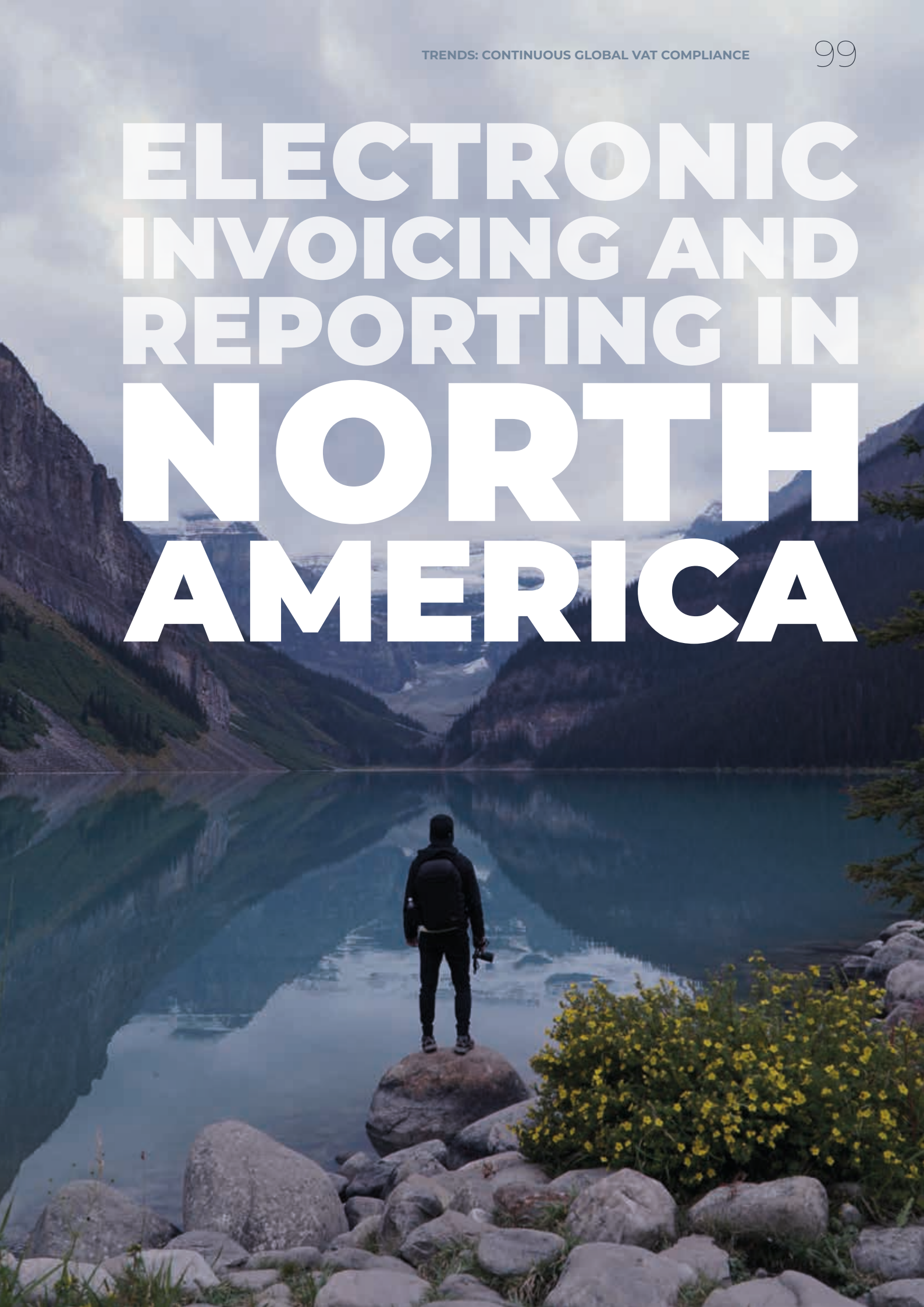
Turkey (clearance)

- Electronic invoicing is mandatory in Turkey for certain sectors and under certain conditions and the Revenue Administration of the Ministry of Finance (TRA) is continuously expanding the scope of mandatory e-invoicing.
- In Turkey there are two types of electronic invoices, e-Fatura and e-Arşiv. It is mandatory to issue e-invoices and send them through the e-Fatura application when both trading parties are registered with the Electronic Invoicing Application of the TRA. If the buyer is not registered with the e-invoice application, then the e-Arşiv invoice should be sent to these taxpayers. The invoice can subsequently be distributed in electronic form provided that the buyer has consented to electronic invoicing. Use of the e-Arşiv application is mandatory for taxpayers conducting sales over the internet and over a certain minimum gross sales revenue.
- General Communique on the Tax Procedural Law (Communique) has been published and the mandatory date for some taxable persons to switch to the e-invoice application is 1 January 2020. Additionally, the Communique determined the scope of taxable persons that are obliged to start e-Arşiv application.
- Electronic invoices issued by companies must be signed with an "e-seal", which is a digital certificate issued by a state-approved certification authority. Electronic invoices issued by private individuals must be signed with either an e-seal or a Qualified Electronic Signature. Special integrators can also sign invoices on behalf of taxpayers with either an e-seal or a Qualified Electronic Signature. Invoices must be submitted in the mandatory UBL-TR format.
- There are three methods that may be used for issuing and storing electronic invoices under the Electronic Invoicing application: 1) by using the official portal of the Directorate of Revenue Administration of the Ministry of Finance (available for e-Fatura and e-Arşiv); 2) by establishing a qualified and compatible software system on the company's own servers which is integrated with the Directorate of Revenue Administration of the Ministry of Finance 's clearance system; or 3) by using an accredited service provider that is integrated with such system.
- Service providers must be registered as taxable persons in Turkey and obtain special integration permissions from the TRA to exchange or archive electronic invoices on behalf of other taxpayers.
- E-waybills will be mandatory from 1 January 2020 for taxpayers conducting sales in some specific sectors, and from 1 July 2020 for taxpayers over a certain minimum gross sales revenue. Dispatched goods must be accompanied by the submitted document or the QR code generated.

Ukraine (clearance)

- Electronic invoicing is mandatory in Ukraine.
- An invoice must be signed with an electronic signature of the supplier's authorized representative, and, where available, with an electronic seal of the supplier. These are based on advanced certificates issued by accredited certification authorities.
- The required electronic invoice format is XML.
- An electronic invoice must be registered in the Unified Register of Tax Invoices (URTI) that is maintained by the tax authority, and that provides the basis for recognition of input VAT.
- In order to be able to register the invoice in URTI, the supplier needs to sign up for electronic document exchange with the tax authority and use special software for submitting the electronic invoice to the tax authority for verification and registration in URTI and for subsequently sending the electronic invoice to the buyer.
- Outsourcing of signing of the electronic invoice is permitted to a person authorized by the supplier by virtue of a notarized power of attorney.

ELECTRONIC INVOICING AND REPORTING IN NORTH AMERICA



ELECTRONIC INVOICING AND REPORTING IN NORTH AMERICA

In the past, Canada and the United States have, together with other common law countries, stood out in international comparisons by providing little regulation in the field of electronic invoicing and by typically placing – in the rules and frameworks that do exist – the emphasis on solid record retention practices instead of on the invoice creation process.

However, as the trend globally has gone in the diametrically opposite direction, with legislators and local tax authorities rethinking the invoice creation process completely, North America is following suit – or at least tagging along. The clearest example is how the collaboration between tax authorities in the Americas is increasing, notably as regards the sharing of financial and fiscal data. In order to combat tax evasion and tax fraud, the Mexican tax authority (SAT) has implemented an extension to the standardized Mexican electronic invoice format to be used in export transactions from Mexico to the US and Canada. By adding an attachment to the cleared Mexican invoice, the so-called "export complemento", the SAT will know who the US or Canadian buyer is, and the US or Canadian tax authority will know with 100 percent certainty who the Mexican supplier is, simply because the export complement has been cleared by the SAT.

Canada (post audit)

- The Canada Revenue Agency (CRA) has issued a series of circulars on electronic transactions and records for income tax purposes. These rules also apply to electronic invoices.
- The relevant processes prior to storage must ensure adequate controls to safeguard the accuracy, security and integrity of the data processed and kept in the system.
- Documentation describing the relevant operating and business systems, including how transactions are processed and records kept and managed, must be available.
- Audit trails must be available during the storage period, including electronic signatures and results from other security measures for the end-to-end process.
- Records should be kept in a manner that ensures accessibility, security, accuracy, integrity, authenticity and reliability. Records should be based on non-proprietary, commonly used data interchange standards and readable with CRA audit software.
- Back-up records are always to be maintained. It is considered good practice to keep back-ups at a location other than the business location for security and precautionary purposes. Storage abroad is permitted only after derogation from the CRA.

United States of America (post audit)

- The sales tax levied in the US operates differently from VAT in that invoices between businesses are not taxed. Instead, the end of the production chain – the final transaction with the consumer – is subject to a tax rate that is often composed of percentages imposed by state, city, county and other administrative bodies. Enforcement of this tax does not revolve around B2B invoices, which explains why the level of requirements for electronic invoicing between companies in the US is lower than that in countries with VAT.
- The US approach to tax recognition of electronic business documents places less emphasis on the transaction and more on record retention. The Internal Revenue Service (IRS) has published explicit federal requirements for taxpayers that only keep records in electronic format. In addition to the requirements for companies to define an inspection and quality assurance program evidenced by regular evaluations, specific requirements apply for the archive.
- Another area of US regulation that affects electronic invoicing is the Sarbanes-Oxley Act (SOX), which, in general, requires companies to ensure high levels of control. The security of important business information is a key enabler of such controls, and electronic signatures are among the techniques that can be used to facilitate SOX audits.
- The basic electronic commerce and electronic signature rules in the US to a large extent follow from the E-Signature Act (Electronic Signatures in Global and National Commerce Act, 2000) and UETA (Uniform Electronic Transactions Act, 1999). Neither of these instruments is technology specific.
- The Office of Management and Budget (OMB) has directed federal agencies to adopt electronic invoicing for B2G procurement by the end of the fiscal year 2018. Federal agencies can either migrate to a designated Federal Shared Service Provider (FSSP) or use an electronic invoicing solution that is approved by the OMB.

ELECTRONIC INVOICING AND REPORTING IN LATIN AMERICA

(MEXICO, CENTRAL AMERICA AND SOUTH AMERICA)

ELECTRONIC INVOICING AND REPORTING IN LATIN AMERICA (MEXICO, CENTRAL AMERICA AND SOUTH AMERICA)

The governments of Latin American countries have been among the first to adopt ambitious programs toward maximizing all the benefits of electronic invoicing.

Unlike the EU and other regions where the emphasis so far has been on transposing time-honored paper-based process and compliance concepts to the electronic environment, Latin America has not hesitated to leapfrog such methods and put in place entirely new control infrastructures made mandatory by regulations:

- The control infrastructures that were put in place generally revolve around the concept of clearance of invoices with the tax authority or agents accredited by the tax authority.
- Regulation has made, or is making, the use of electronic invoicing mandatory in many countries in the region.

Over the last 10 years, the countries that pioneered electronic invoicing systems in the region have been able to bring most taxpayers into their controlled tax enforcement networks and are now focusing on enhancing the management and technical reliability of their systems. Among the common elements of the wave of tax reforms that are sweeping well-established clearance models (for example, Peru and Colombia), one can see the increased involvement of state accredited third-party service providers in the performance of e-invoice clearance operations, to the detriment of systems where the tax authority infrastructure operates as a technical cluster of the e-invoice issuance cycle. Several initiatives are also aiming at simplifying tax fragmentation. The Brazilian parliament is devoting considerable efforts to agree on the establishment of one or two new taxes (a unique VAT being one of them) that will replace the current myriad of nine different federal, regional and municipal taxes that currently levy goods and services transactions.

Non-compliance is not an option

In countries where tax audits often take place many years after the occurrence of a transaction, companies may sometimes get away with a lack of formal invoice compliance if, for example, the audit focuses on other aspects of their financial administration. This is different in Latin America, where electronic invoicing compliance consists of following unambiguous technical specifications and adoption deadlines. In such circumstances, compliance becomes a rather binary proposition: an invoice is either issued or received in conformity with the rules, or it is not. The consequences of issuing or receiving non-compliant invoices are therefore also, in many cases, much more direct and tougher than in other regions. For example:

- Administrative penalties for non-compliance can in certain cases exceed the transaction value. In Brazil, for example, non-compliance with certain rules can be penalized up to 150 percent of the value of the supply.
- Non-compliance is relatively quickly equated with tax evasion, which means that executives of repeat offenders may be imprisoned, and their companies may be temporarily or permanently closed.

ELECTRONIC INVOICING AND REPORTING IN LATIN AMERICA (MEXICO, CENTRAL AMERICA AND SOUTH AMERICA)

Argentina (clearance)

- The tax authority (AFIP) has promoted electronic invoicing for more than a decade already, gradually making it mandatory to issue electronic invoices since 2015, and the scope of the requirement is now covering most taxable persons. During 2018, AFIP reorganized the legislation to clarify and unify the mandate into one single instrument.
- During 2019, the use of electronic credit invoices for SMEs has been implemented in a phased manner based on the economic activity under which they are registered.
- The system is clearance based, whereby an authorization code (CAE) must be obtained from the tax authority before the invoice can be delivered to the buyer.
- Taxable persons must use a digital certificate for authentication toward AFIP's web service to request the issuance authorization code, which must be delivered with the electronic invoice to the buyer.
- The transmission of the invoice for requesting the CAE to the AFIP should always be made in XML format.
- An invoice will be delivered to the client in any format if it complies with the legal content requirements, contains the CAE and is sequentially numbered.
- Validation of the electronic invoices by recipients is mandatory and can be done through the AFIP website or by web service integration.
- Any transport or transfer of goods must be supported by corresponding documentation; either the invoice or alternatively a paper document called Remito must accompany the goods.

Barbados (post audit)

- Electronic invoicing is permitted but not explicitly regulated in the VAT law.
- Under the Electronic Transaction Act, it is implicitly required to ensure the integrity and authenticity of an electronic document, such as an invoice. This can be achieved by means of an electronic signature.
- VAT records must be stored locally in Barbados.

Bolivia (clearance)

- Since 2007 it is permitted for taxable persons to issue electronic invoices on a voluntary basis according to the framework of the virtual invoicing system (SFV) under the supervision of the Bolivian tax authority.
- As of 2016, certain taxable persons are under the obligation to issue e-invoices. However, a new mandatory e-invoicing system (SFE) is being rolled out starting in June 2020, which gradually implements mandatory e-invoicing requirements aiming to cover all domestic suppliers.
- Under the SFE framework the issuer will generate an e-invoice in the required XML format with an e-signature. The e-invoice is validated and registered in real-time.

Brazil (clearance)

- Electronic invoicing is mandatory (although exceptions exist).
- Discussions to simplify the complexity of the current tax system are being held within a working group in the Parliament.
- There are different invoice types and rules for state (NF-e, NFC-e, CT-e, NF3e, among others) and municipality (NFS-e) invoices.
- NF-e, NFC-e and CT-e must be electronically signed; the certificates used for signing must be obtained by a government-accredited certification authority.
- The signed invoice is sent to the geographically competent tax office interface, which performs validation and returns a usage authorization, upon which the invoice can be sent to the recipient.
- Taxable persons may issue other supplementary or auxiliary documents, depending on the supply or the characteristics of the supplier, for example, DANFE , a simplified graphical representation of an NF-e; the Recipient's Statement *(Manifestação do Destinatário)*, which registers the buyer's reaction to the operation described in the invoice; and the Electronic Manifest of Fiscal Documents – MDF-e *(Manifesto Eletrônico de Documentos Fiscais)*, which contains an inventory of the fiscal documents involved in a shipment.
- NFS-e (service) invoices are defined by each municipal system, meaning there are as many frameworks as municipalities in the country. There is an attempt to harmonize all frameworks driven by the Brazilian State Capital Municipalities Association *(Associação Brasileira das Secretarias de Finanças das Capitais -Abrasf)*. Nevertheless, since municipalities may adopt Abrasf's standards voluntarily and partially, the fragmentation remains. In general, the municipal system requires taxpayers using web service integration to issue a provisional service invoice (RPS) that will be converted into NFS-e once cleared by the municipal system.
- No specific regulation covers outsourcing, but service providers are generally allowed.
- Taxable persons must store all fiscal documents.
- Storage abroad is not regulated, but it is generally allowed.

Deep dive:

While Brazil has been successful in replacing paper invoices with electronic invoices exchanged through clearance platforms since 2005, it is widely viewed as perhaps the most complex tax jurisdiction in the world. Although there are plans to simplify and harmonize the tax system over its federative organization, Brazil is still charging its taxpayers with at least five indirect taxes levied on consumption. Among these taxes, the ICMS[4] and the ISS[5] are the most common indirect taxes charged on supplies of goods and services. The ICMS is a VAT-like tax imposed over supplies of goods by each of the 26 States and the Federal District and is documented in an e-invoice called *Nota Fiscal Eletrônica*, which is highly harmonized among the States. On the other hand, the supplies of services are generally taxed by the municipal services tax (ISS or ISSQN), which is imposed by nearly 5,500 municipalities, each of them being free to create its own invoicing framework and regulation around the collection of the services tax.

The complexity of the tax structure across the country brings compliance challenges, as different electronic fiscal documents require different accreditation procedures and technical solutions. The compliance method depends on the type of supply (for example, supply of goods or services), as well as on characteristics of the supplier (for example, electricity suppliers, retailers, transport companies or other businesses). Moreover, it is not uncommon that a single supply requires more than just one document to be issued along with the invoice (for example, the auxiliary document attached to the goods during transport – DANFE).

Apart from the labyrinth that constitutes the Brazilian tax system, the issuance and final destination of electronic invoices generally follow a similar path. In a nutshell, after being authorized by the tax authority to issue e-invoices, a specific XML document is sent by or on behalf of the supplier to the tax authority, which clears and authorizes the issuance of the invoice. Upon receipt of the document, the buyer confirms the integrity and authenticity of the document, validates the authorization protocol with the tax authority and may then use the invoice as a regular fiscal document. Both parties to a transaction are required to store the e-invoices for a period prescribed by law.

[4] Pt: imposto sobre operações relativas à circulação de mercadorias e sobre prestações de serviços de transporte interestadual, intermunicipal e de comunicação; En: tax on the circulation of goods, interstate and intercity transportation and communication services.

[5] Pt: imposto sobre serviços; En: services tax.

ELECTRONIC INVOICING AND REPORTING IN LATIN AMERICA (MEXICO, CENTRAL AMERICA AND SOUTH AMERICA)

Chile (clearance)

- Chile has a mandatory clearance e-invoicing system which has been gradually introduced over a five-year period.
- Since September 2019, it is not mandatory for the issuers of Electronic Tax Documents (DTE) to submit a graphic representation of the electronic invoices to the buyers that are not issuers or recipients of electronic invoices.
- Electronic invoices must be issued in XML format and digitally signed prior to clearance by the tax authority (SII).
- Electronic signatures must be based on certificates issued by locally accredited certification authorities.
- Taxable persons buying goods must report the acceptance or rejection of the invoice or the goods to the tax authority within eight days, starting from the moment of reception of the invoice for clearance by the tax authority.
- Taxable persons issuing electronic invoices must also keep records in electronic form and monthly report invoice data to the SII.

Colombia (clearance)

- Electronic invoicing has been mandatory for all taxable persons since January 2019.
- During 2019, the introduction of the real-time validation or clearance of the legal invoices by the tax authority is scheduled in a phased manner.
- Under this new framework, electronic invoices must be issued in format XML UBL 2.1 and must be digitally signed, before being cleared by the tax authority.
- Each invoice must also include the Technical Control key *(Clave Técnica de Control)*. Its function is to aid in the generation of the Unique Electronic Invoice Code (CUFE) that must also be included in the invoice.
- Upon receipt, buyers must issue an acknowledgment. In addition, a rejection message must be issued when applicable.
- VAT reporting in Colombia is governed by the national tax code *(Estatuto Tributario)*. Taxable persons must submit a periodic VAT return, which is filed electronically on a bi-monthly basis by large and medium sized enterprises. Smaller taxable persons must file the VAT return on a quarterly basis. In addition to the periodic VAT returns, Colombian taxpayers are required to file a monthly return containing all withholdings made during the tax period.
- Taxable persons are also required to file annual reports that include an itemized list of all deductible purchases from which they can claim deductible VAT, as well as similar annual reports on sales.

Costa Rica (clearance)

- Electronic invoicing is mandatory in Costa Rica.
- In 2019, a decree was implemented to harmonize and to compile many of the provisions issued in previous regulations in relation to the electronic invoicing into a single normative framework.
- The decree mandates the use of XML format and includes an explicit obligation to guarantee the I&A of the invoice. The decree is technology neutral as to the method used to guarantee integrity and authenticity.
- The supplier must communicate the XML file to the tax authority immediately after its generation. The tax authority must issue an acceptance or rejection message, which provides tax validity to the document. However, the supplier does not need to wait for the tax authority's response before communicating the invoice to the buyer.
- Upon receipt, a message accepting or rejecting the electronic invoice should be issued by the buyer. These messages must be in XML format and digitally signed in compliance with the established technical requirements. Buyer responses must also be cleared by the tax authority.
- Starting in July 2019, Costa Rica implemented its first full VAT system. Under this new regime, VAT obligations should be reported and submitted electronically via the electronic portal *Administración Tributaria Virtual* (ATV) on a monthly basis.

Ecuador (clearance)

- Ecuador has a clearance system where the mandatory use of electronic invoices for both private and public organizations has been gradually introduced over the last couple of years.
- In order to issue electronic invoices, taxable persons need to register and get authorization from the tax authority (SRI).
- An electronic invoice must be digitally signed and issued in XML format.
- SRI authorizes the issuance of each invoice in real-time and archives a copy of the invoice.

Guatemala (clearance)

- Electronic invoicing is mandatory for certain taxable persons (including, since March 2019, all suppliers to the government) and based on a clearance model.
- Taxable persons for whom electronic invoicing is not mandatory must request prior authorization and fulfil certain legal requirements in order to be allowed to issue electronic invoices.
- Taxable persons must use the services of a *Generador de Facturas Electrónicas* (GFACE), which is a company authorized by the tax authority to act as an intermediary in the electronic invoicing process.
- The taxable persons must send the invoice data to GFACE who includes a security code (CAE) and the issued invoice back to the supplier, who can then communicate it to the buyer.
- Guatemala has approved a modification of the e-invoicing framework, phasing out the current framework to replace it with a new model known as FEL. Under the FEL model, taxable persons are required to use the services of third party "certifiers" who validate each invoice and relay them to the tax authority who makes them available for consultation. Transition to the new framework is done gradually by segment of taxable persons and communicated by notification from the tax authority.

Honduras (clearance)

- Electronic invoicing is based on a clearance model but is completely voluntary.
- Taxable persons that choose to issue invoices electronically must request an authorization from the tax authority (SAR) for each invoice, which is given by granting an Electronic Issuance Authorization Code (CAEE).
- In case of contingency of any of the systems, taxable persons are obliged to use pre-printed invoices acquired from an authorized printing company.
- Technical validation of the fiscal documents to support the tax claim is mandatory for all taxable persons.

Mexico (clearance)

- Electronic invoicing in Mexico is based on a clearance model and is mandatory for all taxable persons.
- Electronic signatures are required for issuing invoices and related documents (Digital Fiscal Documents through Internet, CFDIs); the certificates used for signing must be obtained from the tax authority's (SAT) own certification authority.
- An authorized Certification Provider must be used for a clearance process during which an electronic stamp *(timbrado)* is applied to the CFDI.
- Export invoices are subject to additional requirements and must include a file extension that incorporates information related to international trade *(Complemento de Comercio Exterior)*.
- A new process for cancellation of CFDIs is being rolled out by the tax authority from 2018, whereby the supplier must request and get prior authorization from the buyer in order to cancel a CFDI. Buyers must accept or reject the cancellation request within 72 hours. Silence equals acceptance.
- VAT reporting in Mexico is governed by the Fiscal Code of that county *(Código Fiscal de la Federación)* and the Miscellaneous Fiscal resolutions issued each year by the tax authority. Taxable persons must file periodic VAT returns electronically, via the portal provided by the SAT. In addition to the periodic VAT return, taxable persons must also file a return for VAT withholdings and additional reporting obligations related to VAT. The most important of those reports is the DIOT, which is used to report supplies from third parties.

ELECTRONIC INVOICING AND REPORTING IN LATIN AMERICA (MEXICO, CENTRAL AMERICA AND SOUTH AMERICA)

Nicaragua (post audit)

- Electronic invoicing is optional. The taxable person that chooses to issue invoices electronically is subject to prior authorization from the tax authority for the use of a computerized invoicing system.
- There is no real-time invoice clearance performed by the tax authority.

Panama (post audit)

- During 2018, the tax authority in Panama implemented a pilot program to introduce an e-invoicing mandate based on a clearance model. Several companies from different sectors of the economy have been authorized to implement e-invoicing as part of the program.
- Currently, the electronic invoicing system is in a phase of voluntary massification promoted by the tax authority in which taxable persons must comply with certain requirements in order to obtain the authorization to issue e-invoices.
- The legal invoice exists only in digital form and must be issued in XML format. The invoice must be digitally signed with the taxable person's signature based on a digital certificate.
- Invoices must receive the tax authority's authorization to be considered as legally valid. For B2C transactions and in contingency scenarios, the authorization by the tax authority may happen after the delivery of the invoice to the buyer since a printed copy of the invoice is delivered. For B2B transactions, the authorization must be ensured before the invoice is delivered to the buyer.
- Buyers are responsible for validating that the invoice has indeed been authorized by the tax authority.

Paraguay (clearance)

- Electronic invoicing is permitted in Paraguay under the e-invoicing framework known as the National Electronic Invoicing Integrated System (*Sistema Integrado de Facturación Electrónica Nacional,* SIFEN).
- Taxable persons determined by the tax authorities have the obligation to issue e-invoices unless they opt out in the course of the voluntary phase. Voluntary e-invoicing is possible after obtaining an authorization from the tax authority (SET). The aim is to gradually introduce mandatory e-invoicing.
- Invoices are legally valid only after being communicated and accepted by the tax authority.
- SIFEN requires e-invoices to be sequentially numbered, issued in XML format and to be digitally signed.
- Buyers must validate inbound invoices and express their acceptance or rejection of the document.

Peru (clearance)

- The tax authority (SUNAT) has permitted electronic invoicing for more than a decade. Peruvian legislation does not declare electronic invoicing to be mandatory generally, but SUNAT can make it mandatory for certain taxable persons, individually or in group, through a designation process. After the latest expansion of electronic invoicing that took place in 2018, almost all taxable persons are required to issue electronic invoices.
- From 1 January 2020, all financial institutions issuing credit and debit cards, suppliers of natural gas, joint ventures and other types of irregular societies, will be required to issue electronic invoices as well.
- To be able to use its own system for electronic invoicing the taxable person must receive an authorization from SUNAT.
- The electronic invoice must be issued in XML format and be digitally signed for authenticity, integrity and non-repudiation purposes.
- Each electronic invoice must be sent to SUNAT within 72 hours from it being issued by the supplier. SUNAT validates the invoice by issuing a so-called "proof of receipt." The supplier can subsequently communicate the invoice to the buyer.
- A new framework under which taxable persons must integrate with local operators (known as OSE) instead of SUNAT in order to obtain the proof of receipt of the invoice is currently under implementation.
- VAT obligations in Peru are reported alongside income tax, municipal tax, excise tax, and other tax obligations, using a virtual form. The deadline for this form is variable and is based in part on whether a taxpayer has a preferred status with the tax authority. Additionally, taxable persons should file separate reports for VAT withholdings and for "perceptions" made during the period.

Trinidad and Tobago (post audit)

- Electronic invoicing is not explicitly permitted, nor commonly used as the original invoice form. In practice, electronic copies of paper invoices are used, but the original paper invoices are still maintained for record keeping purposes and treated as the legal document.

Uruguay (clearance)

- Electronic invoicing has been allowed since 2011 under a clearance system and is currently mandatory for certain taxable persons.
- The tax authority (DGI) has introduced a schedule for the gradual introduction of mandatory electronic invoicing, with the aim of completing the entry into force by 2019.
- The invoice must be issued in a prescribed XML format, digitally signed and cleared by the tax authority, which subsequently makes it available for online validation.
- Outsourcing of the issuance, communication and storage of invoices is explicitly allowed in the legislation; use of locally accredited service providers affords the benefit of a "fast track" registration with the tax authority.
- Taxable persons under the e-invoicing regime are permitted to use e-receipts or e-invoices to document the payments received from their customers. These documents must include the legend *Cobranza* (Collection) to differentiate them from the regular invoices issued by the taxable persons.
- VAT reporting in Uruguay is done on a monthly basis by large and mid-sized enterprises. The due dates for VAT returns are variable and are governed by resolution, locally known as *Cuadro General de Vencimientos*.

Venezuela (post audit)

- Electronic invoicing is permitted only for taxable persons operating in certain industry sectors and upon meeting specific requirements.
- Availability, authenticity and integrity of electronic invoices through the entire storage period must be guaranteed, although the fiscal legislation does not impose the use of any specific technology for meeting these requirements and there is no clearance function.
- Outsourcing of the issuance of electronic invoices is explicitly allowed.

ELECTRONIC INVOICING AND REPORTING IN AFRICA

ELECTRONIC INVOICING AND REPORTING IN AFRICA

Despite considerable progress in the general e-commerce domain, paper invoicing remains dominant in Africa, and electronic invoicing is not specifically regulated nor a common practice in most African countries. Some African states, for example, the larger oil producing countries, are trying to implement or enlarge the scope and the rate of VAT which in turn puts focus on invoicing.

Angola (post audit)

- The issuance of electronic invoices through certified software is mandatory for companies with a turnover higher than $250.000.
- The certified software must be produced by an entity established in Angola and export a SAFT-AO file. E-invoices must contain the identification of the certified invoicing software.
- E-invoices must be stored locally.

Ghana (post audit)

- Ghana regulates the use of Fiscal Electronic Devices (FED), which is a mandatory e-invoicing system for taxpayers under the VAT Act. Every taxpayer registered for VAT is expected to integrate with FED by the end of 2020.
- Taxable persons using FED must keep records of transaction details including a printout of a summary sales report generated by the platform.

Kenya (post audit)

- It is possible to issue invoices electronically on a voluntary basis; however, e-invoicing will become mandatory (most likely as a clearance regime) over the course of a transition period.
- A voluntary pilot phase started in June 2019 and by 2020 all traders, manufacturers and suppliers over a certain threshold will be obliged to install electronic tax registers (Control Units).
- Control Unites will communicate invoice data with the new government system, called Tax Invoice Management System (TIMS), in real-time.

Malawi (post audit)

- Electronic invoicing is not explicitly regulated in the law. However, the VAT Act allows taxpayers to maintain electronic copies of VAT invoices to fulfil applicable storage requirements.
- A mandatory electronic invoicing regime will be implemented in phases starting with all B2C transactions using Electronic Fiscal Devices (EFD) in all points of sales, followed by all B2B transactions in the next step.

Morocco (post audit)

- Electronic invoicing has historically not been regulated in the Moroccan tax law and not widely used in practice. In 2018, the concept of electronic invoicing system *(système informatique de facturation)* was stipulated in the Moroccan General Tax Code, however, further guidance is not yet publicly available.
- Taxpayers subject to VAT in Morocco will be obliged to issue and archive electronic invoices using an electronic invoicing system that meets certain technical requirements. The technical details for electronic invoicing systems are not published to date.

ELECTRONIC INVOICING AND REPORTING IN AFRICA

Nigeria (post audit)

- Electronic invoicing is not explicitly regulated. However, an electronic invoice can be considered to be an "electronic record or document" which is governed by the Electronic Commerce and Transactions Law. Currently, electronic invoicing requires the engagement of a local service provider licensed by the Central Bank of Nigeria.
- The Electronic Transactions Bill that regulates electronic documents, including electronic invoices, sets out requirements on their issuance and storage, allowing the use of digital signatures to ensure the I&A of the electronic document.

South Africa (post audit)

- South Africa is one of the first African countries to have specifically regulated, accepted and adopted the use of electronic invoicing.
- Electronic tax invoices can be issued and sent electronically, provided that the rules for electronic documents are adhered to. A digital signature can be used to meet the security requirements.
- Legal requirements demand that electronic invoices be archived locally, although with derogation they can be stored abroad. One of the conditions for derogation to be granted is that the electronic archive is located in a country which has entered into a tax assistance treaty with South Africa.

Tanzania (post audit)

- Suppliers in Tanzania must use a certified EFD for issuing fiscal documents, including invoices. The EFD generates a unique number which is appended to and printed on every invoice issued through the EFD.
- Records may be archived in electronic form and may be stored abroad subject to access and printability in case of an audit.

Tunisia (clearance)

- Issuance of invoices electronically is regulated in the Finance Law since 2016. The envisaged process requires electronic invoices to be digitally signed and registered with the government appointed entity, Tunisie TradeNet.
- Electronic invoicing is mandatory for companies of the Division of Large Enterprises and permitted for other taxpayers.
- A specific electronic invoice XML format and digital signatures are used.

ELECTRONIC INVOICING AND REPORTING IN ASIA PACIFIC

ELECTRONIC INVOICING AND REPORTING IN ASIA PACIFIC

A couple of trends in the field of electronic invoicing have emerged during the last few years in the Asia Pacific region.

Common law legacy vs. clearance country inspiration

One part of the Asia Pacific region is characterized by jurisdictions with a strong common law legacy, such as Singapore, Australia and New Zealand, which typically focuses regulatory measures on record retention. In the context of electronic invoicing, this means that the rules related to electronic invoice issuance are often scarce, whereas more controls exist around electronic archiving and tax reporting. Many of these countries have in recent years started gearing up toward regulating electronic invoicing issuance (notably by adhesion to the PEPPOL system) and associated national standards have been adopted for a wide range of electronic invoicing flows for B2B and B2G scenarios.

On the other side of the spectrum, there are countries that are influenced by Latin American clearance models and where the control infrastructure of electronic invoice issuance centers on government clearance and localization requirements. Examples of jurisdictions with clearance systems are China, Indonesia and Taiwan. Moreover, electronic invoicing is either partially or completely mandatory in some of these countries, and there is a trend of more countries aiming to introduce mandatory electronic invoicing in stages within the coming years. Notable examples are countries such as India and Vietnam.

Indirect tax on the rise

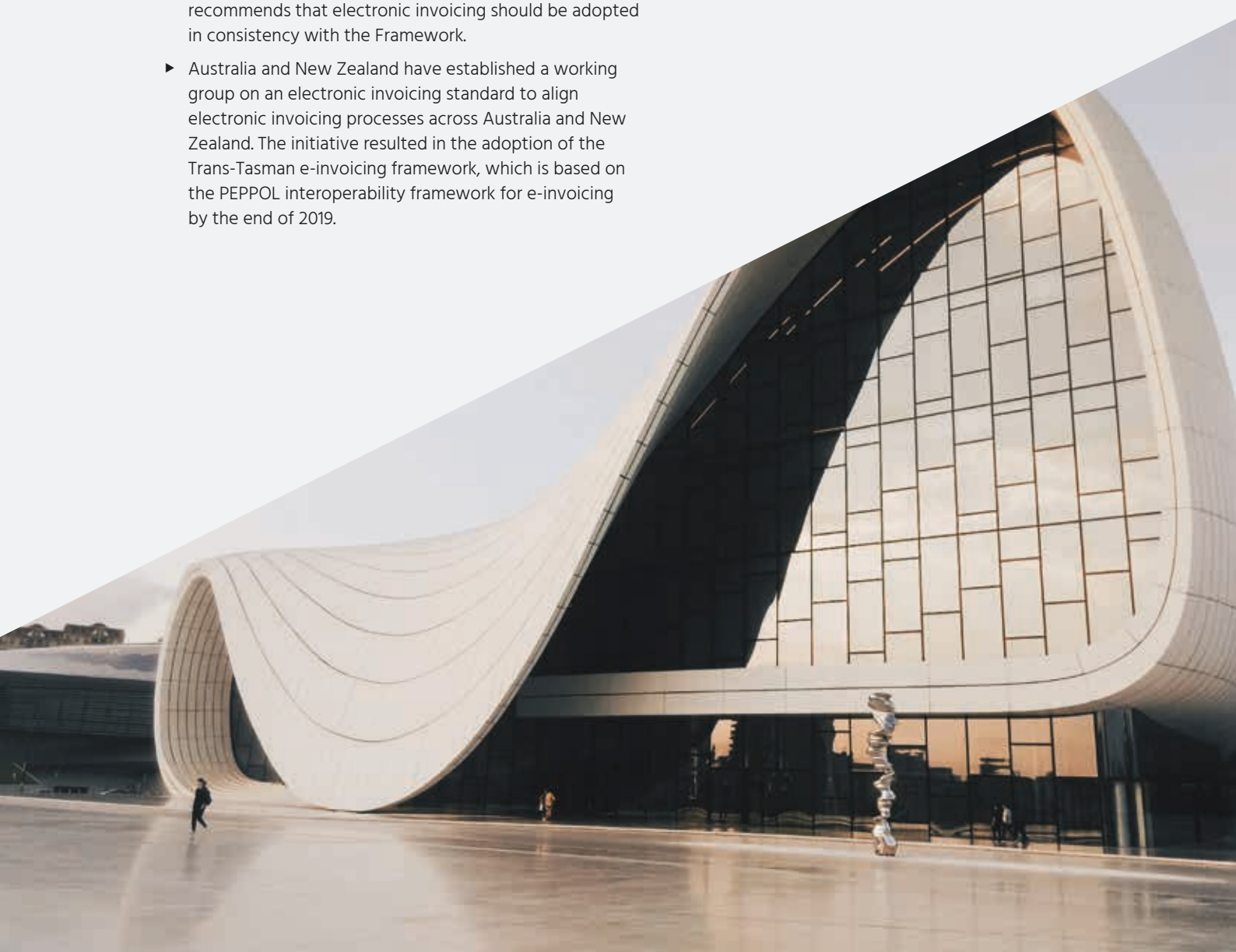
Indirect taxes keep emerging in the Asia Pacific region. In addition to China replacing its Business Tax with VAT in 2016 and the introduction of Goods and Services Tax (GST) in India in 2017, the Gulf Cooperation Council (GCC) executed a VAT Framework Agreement in 2018, ratified by Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE). This framework simultaneously introduced a VAT system in the region. The common framework sets out baseline VAT applicability principles as well as considerations on cross-border transactions. Following this initiative, Saudi Arabia and the UAE implemented VAT regimes in January 2018, while Bahrain followed suit in January 2019. The remaining three member states are however not yet close to implementation, and the estimated timelines for introducing VAT in these countries vary from 2020 to 2021.

Australia (post audit)

- An invoice can be issued and stored in electronic form subject to the I&A of the invoice being safeguarded. The legislation mentions EDI as an example of an acceptable method for issuing an electronic invoice.
- Records stored electronically should be capable of being converted to a readable format, with such examples including a printout, text file, or XML.
- The tax authority requires proper documentation describing the electronic invoicing system and in particular of the archiving system. The system used for record keeping should be secure and a backup procedure is recommended.
- The Australian Digital Business Council and other Governmental bodies had previously introduced an "e-invoicing Interoperability Framework", which provides a set of open standards for electronic invoicing that businesses, especially small sized, can choose to adopt.
- Electronic invoicing is progressively adopted across all levels of government agencies, and the government recommends that electronic invoicing should be adopted in consistency with the Framework.
- Australia and New Zealand have established a working group on an electronic invoicing standard to align electronic invoicing processes across Australia and New Zealand. The initiative resulted in the adoption of the Trans-Tasman e-invoicing framework, which is based on the PEPPOL interoperability framework for e-invoicing by the end of 2019.

Azerbaijan (clearance)

- Electronic invoicing is mandatory.
- The invoice is issued by means of the sub-system Electronic Tax Invoice of the state-owned Automated Tax Information System, which is available in online and offline modes.
- The electronic invoice is delivered to the buyer (if registered as a VAT taxpayer) through the Automated Tax Information System. If not registered, the buyer can request invoices to be printed by the Automated Tax Information System and issued to the buyer in paper form.
- The process is always tied to a physical person, which means it currently cannot be carried out in an automated fashion.



ELECTRONIC INVOICING AND REPORTING IN ASIA PACIFIC

China (clearance)

- The Golden Tax System — the national tax control regime that was introduced over two decades ago — still forms the basis for tax reporting and invoicing in China.
- While electronic invoicing is not yet fully permitted in China, the issuance of e-invoices has been permitted in B2C flows for several years. Electronic invoices are even mandatory in certain core service-based industries (for example, telecommunications and public transportation). Invoices are issued via the national system with hardware/software certified by the tax authority.
- The bulk of VAT special invoices, which are extensively used for B2B transactions, has so far required a paper process, but this is now changing: in 2019 proposals to further reform China's reporting and e-invoicing system have been published and the State Taxation Administration (STA) has already initiated research and tests for the issuance of electronic VAT special invoices.
- Taxable persons may store accounting documents, including invoices, in electronic form, provided that the e-archive meets certain requirements on authenticity and integrity, and the processing system meets certain requirements on functionality and security.

Deep dive:

The journey of digitization of paper processes in China began roughly two decades ago, with the roll-out of a tax control regime called the Golden Tax System, creating a national taxation platform for reporting and invoicing, as well as legislation regulating the use and legal effect of electronic signatures. Electronic invoicing has in the past been introduced gradually in China, starting with the B2C segment, in some cases by mandating large amounts of taxpayers active in public services to issue electronic VAT invoices to their consumers. Invoices are issued via the national system with hardware/software certified by the tax authority.

The prosperity of mobile payments in China has increased the prospect of consumer-facing electronic invoicing. By embedding electronic invoicing functionalities into those commonly used mobile payment applications, electronic invoices can be maintained and verified more easily by users. During 2019, China has taken initiatives to further reform reporting and invoicing, and the STA is creating a nationwide e-invoicing service platform which aims to provide a free-of-charge e-invoice issuance service to all eligible taxpayers within 2019. Research on enabling electronic VAT special invoices (covering the B2G segment) is ongoing.

The first version of an official technical standard for e-invoicing service platforms was recently published by the STA, setting out service and security requirements, data exchange standards, as well as operational requirements, for both self-developed and third-party e-invoicing platforms. This development follows a broader trend in Asia, described under the section "Public procurement (B2G) and the emergence of open networks" on page 18.

India (post audit)

- In July 2017, India implemented Goods and Service Tax (GST) across the country, replacing the majority of the previous indirect taxes levied on goods and services on both federal and state level.
- Electronic invoicing is explicitly permitted for GST. Digital signatures based on the Indian IT Act can be used for ensuring the I&A of the invoice.
- India is currently in the process of introducing an e-invoicing system that will require invoice data to be submitted real-time to a government platform, the GST Network (GSTN). The first phase will include B2B transactions and is expected to be voluntary, possibly in force from January 2020.
- Storage of invoices in electronic form is allowed, subject to requirements such as accessibility.
- GST consists of a unified set of four taxes. The standard combined rate of the GST taxes is 18 percent. The state of Kerala also applies an emergency "Flood Cess" of 1 percent in addition to the State GST since July of 2019.
- Taxpayers are required to electronically file monthly GST returns through the GST Network. India is currently in the process of transitioning from a series of monthly forms (The GSTR-1, 2, 3 and 3B) to the new GST return, the GST RET-1. Alongside the GST RET-1 taxpayers must file the annexes the GST ANX-1 and ANX-2 providing details on sales and purchases. It is expected that the ANX-2 on purchases will be auto-populated based on the ANX-1 of a company's suppliers. It is also expected that as India moves toward its proposed e-invoicing regime that the completion of the ANX-1 and other periodic filings will become increasingly automated. Smaller taxpayers will have the option to file the Sahaj or Sugam (GST RET-2 or RET-3) in place of the RET-1.

Deep dive:

India already allows invoices to be exchanged in electronic format for GST compliance purposes, with much freedom, as a "post-audit" jurisdiction, and few constraints; for example, the invoice must be in PDF format for auditability purposes.

A working group under the Indian GST Council is currently working to change this "post audit" e-invoicing legislation by requiring taxable persons or their service providers to exchange transaction data with the tax authority in real-time via the GSTN. Under the proposed scheme, before issuance of the e-invoice by the supplier, the e-invoice must be authenticated on the government portal through the generation of an Invoice Reference Number (IRN). The IRN number will be generated in real-time and it will also be available for buyers in real-time.

The system envisages authentication only of the IRN, the invoice itself will not be generated on the government portal. In this sense the proposed Indian model is a 'softer' form of clearance-type of CTCs, in that the invoice is not subsequently transmitted to the tax authority for clearance, like the South Korean system. It is modelled very closely to the existing eWaybill system and leverages the same functionality.

The new system will not replace the GST reporting framework, but the IRN must be generated prior to the filing of GST returns, therefore the GST returns cannot be uploaded if there is no IRN. The longer-term vision of the GST Council is that current periodic reporting which requires taxpayers to upload all their invoices to the GSTN portal manually will be eliminated and these reports will be auto-populated according to the figures of the transactions reported in real-time under the new e-invoicing system.

The new e-invoicing system will be rolled out in a phase-wise manner for B2B transactions. Phase 1 is proposed to be voluntary, with roll-out set to start on January 2020. Discussions indicate that the government is considering a threshold for triggering mandatory compliance already from this date. The roll-out is envisaged to gradually cover all taxpayers for B2B e-invoicing, targeting companies of different sizes at different stages.

ELECTRONIC INVOICING AND REPORTING IN ASIA PACIFIC

Indonesia (clearance)

- Electronic invoicing has been mandatory for all corporate VAT taxpayers since 2016.
- Electronic invoices (locally known as e-Faktur, Pajak or e-FP) should be created by applications and systems prescribed by the Director General of Taxation (DGT). These include client desktop applications, web-based applications and host-to-host applications.
- Electronic signatures are required for the issuance of electronic invoices.
- Each electronic invoice must be reported to, and approved by, the tax authority.

Israel (post audit)

- Electronic invoicing is permitted in Israel provided it is prominently stated on the invoice that it is a 'computerized document'.
- The supplier's digital signature is required to ensure the I&A of the invoice.
- Outsourced issuance and signing by a third party are not known or permitted as a concept, but exemptions to this rule may be provided by the tax authority.
- If the supplier's income is derived in Israel, the storage of the accounting system including invoices must be in Israel unless derogation has been granted. The same rules apply to the mandatory backups, to be regularly performed.
- Outsourcing of archiving also requires derogation.

Japan (post audit)

- Although not specifically regulated under the current Japanese Consumption Tax Law (equivalent to VAT), electronic invoicing is permitted in Japan and is starting to become more commonly used in practice.
- The requirements for electronic invoicing must be drawn from the general tax rules on tax-related records and from regulations on the preservation of tax-related records.
- Invoices should be stored in such a way as to guarantee their integrity, authenticity and availability during the storage period.
- Taxpayers who archive electronic invoices must either (a) apply a timestamp on the invoices, or (b) maintain a Storage and Maintenance Guideline document which describes the archiving system in a way prescribed by the tax authority.
- Foreign storage is allowed provided it fulfils the requirements for storage under Japanese law. Online access, human readability and printability must be ensured upon request from the tax authority.
- Outsourcing of invoice issuance and archiving is allowed; no requirements or restrictions apply regarding outsourcing agreements or third-party service provider accreditation and place of establishment.
- A tax reform has been ongoing in Japan since early 2018, introducing the plan of implementing a formal tax invoice *(tekikaku-seikyu-sho)* scheme in October 2023. Under this scheme, only registered consumption taxpayers will be eligible to issue tax invoices. Electronic invoicing will be explicitly allowed for tax invoices subject to the buyer's consent.

Hong Kong (post audit)

- Electronic invoicing is permitted but not specifically regulated and generally mirrors the common law-approach to electronic invoicing.
- The rules published by the Inland Revenue Department in "Admissibility of Business Records Kept in Electronic Form for Tax Purposes" mainly focus on the storage aspects and general controls within companies.
- I&A of electronic records must be maintained.
- Certain recommended audit file presentation formats are published by the Hong Kong Inland Revenue Department.

Kazakhstan (clearance)

- As of January 2019, electronic invoicing is mandatory for all taxable persons.
- Electronic invoicing is conducted via the so-called Electronic Invoicing Information System (EIIS). The EIIS functionality enables the issuance, submission, registration, acceptance, processing, delivery and storage of the electronic invoice.
- An electronic invoice must be issued in an approved format and signed with the supplier's e-signature based on a certificate issued by the Kazakhstan National Certification authority. The invoice is considered issued and sent to the buyer when the EIIS assigns a registration number to the electronic invoice.
- The issued electronic invoice is archived directly in the EIIS, which makes the stored electronic invoice directly available to the tax authority.
- Outsourcing of the taxpayer's activity within the EIIS to anyone other than the taxpayer's employee or structural unit is illegal.

Kyrgyzstan (transitioning to clearance)

- Kyrgyzstan has introduced a pilot project for electronic VAT invoices, which most likely will lead to the implementation of a clearance regime. The pilot project is voluntary for businesses and started on 1 July 2019.
- Electronic signatures are required for the issuance of electronic invoices.
- The Kyrgyzstan State Tax Service (STS) has also announced requirements on electronic tax reporting. Taxpayers with a monthly reporting obligation must submit forms electronically as of August 2019 and taxpayers with quarterly reporting obligations must submit forms electronically beginning in October 2019. The reports must be signed with a Qualified Electronic Signature.

Macau (post audit)

- Neither VAT nor GST is levied in Macau.
- Business entities who engage in commercial and industrial activities or provide services in Macau are subject to Complementary Tax; the law requires taxpayers to maintain and archive accounting documents properly and timely.
- Electronic storage of accounting documents, including invoices, is allowed.
- An electronic invoice signed using a Qualified Electronic Signature is presumed to carry I&A.

Malaysia (post audit)

- From 1 September 2018, the GST regime in Malaysia, which was introduced as late as in 2015, was abolished and replaced with a new Sales and Service Tax (SST) regime.
- Electronic invoicing is permitted in Malaysia also under the new SST regime. An authorization from the Director General of Customers and Excise is needed for foreign storage.
- There are no specific technical requirements on the electronic invoice issuance system; however, the company needs to guarantee that invoices are accessible, secure and can be provided locally if required during an audit.
- I&A are implicitly required, but there is no specific method or technology prescribed by law.

New Zealand (post audit)

- The Inland Revenue Department allows electronic invoicing, subject to appropriate business processes and systems being used. I&A of electronic invoices must be preserved.
- The Electronic Transactions Act contains a presumption of reliability for what would be called Advanced Electronic Signatures in the EU, but there are no hard requirements for electronic signatures or any other specific type of technology or process to be used.
- Derogation is normally required for foreign storage of electronic invoices.
- Australia and New Zealand have established a working group on an electronic invoicing standard to align electronic invoicing processes across Australia and New Zealand. The initiative resulted in the adoption of the Trans-Tasman e-invoicing framework, which is based on the PEPPOL interoperability framework for e-invoicing, expected by the end of 2019.

Oman (post audit)

- Although a member of the GCC and a ratifying party to the GCC VAT Framework Agreement, Oman is not expected to implement VAT until the beginning of 2021.
- Currently, no specific requirements exist for electronic invoice issuance. Under the current Royal Decree on Electronic Transactions it is implicitly required to ensure the I&A of an electronic document, such as an invoice. This can be achieved by means of an electronic signature.

ELECTRONIC INVOICING AND REPORTING IN ASIA PACIFIC

Pakistan (post audit)

- Prior approval from the Collector of Sales Tax is required for electronic invoicing.
- Special procedures have been introduced for the collection of Sales Tax for certain types of suppliers. Certain retailers are required to install and operate a Fiscal Electronic Cash Register and issue invoices to customers only from this device; certain taxpayers (for example, in electric power and natural gas industries) using computerized accounting systems may issue Sales Tax invoices electronically and keep the records electronically in prescribed formats.
- Requirements exist for electronic signatures based on certificates from certification authorities approved by the Certification Council (ECAC).
- In principle, storage must take place at the business premises or at the registered office of the taxable person.

Philippines (post audit)

- Electronic invoicing has been permitted for more than a decade and e-documents should generally have the same value as paper-based. However, in practice a hard copy is still required unless approval from the authorities has been obtained.
- All companies that wish to issue invoices electronically or keep their books in electronic form need to apply for permission to use a Computerized Accounting System (CAS), this system being accredited and closely monitored by the tax authorities. Outsourcing of the CAS is possible; the service provider needs to be accredited by the tax authority.
- The Philippines has launched the Tax Reform for Acceleration and Inclusion (TRAIN) in which several tax reform proposals have been introduced and discussed. The country aims to complete the full shift to an e-invoicing clearance system by the end of 2022 as part of the current administration's digital transformation in tax administration so the government could provide better and faster services to taxpayers.

Qatar (post audit)

- Qatar has not implemented VAT yet. As a member of the GCC and a ratifying party to the GCC VAT Framework Agreement, the proposed timeline for introducing VAT in Qatar is 1 January 2020.
- No specific requirements currently exist for electronic invoice issuance. The current Electronic Commerce and Transactions Law sets out general requirements for so-called data messages, a concept that can be considered to cover electronic invoicing.
- Ensuring I&A of the invoice is an implicit requirement and an electronic signature may be used to this end.
- Electronic invoices can be kept abroad provided that a copy of the electronic invoice is stored in Qatar.

Saudi Arabia (post audit)

- As a member of the GCC and a ratifying party to the GCC VAT Framework Agreement, Saudi Arabia introduced VAT for supply of goods and services on 1 January 2018.
- Electronic invoicing is allowed under the VAT legislation. I&A of electronic invoices are implicitly required; necessary security and adequate controls should be in place to prevent electronic invoices from being tampered with.
- The VAT legislation explicitly allows third parties to issue electronic invoices on behalf of suppliers.
- Electronic invoices must be stored in a system or server that is physically located within the territory of Saudi Arabia. Upon meeting certain additional requirements, taxpayers who have a subsidiary in Saudi Arabia may have their central computer systems located outside Saudi Arabia.
- Saudi Arabia currently requires the filing of periodic VAT returns through a government portal. Taxpayers with annual revenue of over 40,000,000 SAR must file monthly returns, while other taxpayers should file quarterly returns.

Singapore (post audit)

- Singapore generally follows the common law tradition, focusing on storage rather than the issuance of the invoice, with the latter not being specifically regulated in law. The rules published by the Inland Revenue Authority of Singapore (IRAS) in "Keeping Machine-Sensible Records and Electronic Invoicing" mainly focus on the storage aspects and general controls within companies.
- Electronic signatures are mentioned as a possible (but not mandatory) mechanism for ensuring adequate controls.
- Electronic invoices can be stored abroad.
- B2G electronic invoicing is mandatory. As a part of the Singaporean government's plan to make business digital, Singapore launched a nationwide electronic invoicing standard framework in 2018, PEPPOL. Singapore is the first country outside Europe to adopt PEPPOL.
- E-invoices generated in third party electronic invoicing platforms must comply with the IRAS invoicing and record keeping requirements established in the e-Tax guide "Record Keeping Guide for GST-Registered Businesses".

South Korea (clearance)

- Electronic invoicing is mandatory for all corporations and for certain individual taxpayers with supplies over a certain amount.
- Registration with the National Tax Services (NTS) is needed, as well as a "standard authentication" from the National IT Industry Promotion Agency (NIPA) for facilities and systems.
- Electronic invoices must be issued using one of the following methods that are designated by tax law:
  (i) taxpayer's own electronic invoicing system that has been certified and registered with the competent authority;
  (ii) a certified application service provider (ASP);
  (iii) the electronic invoicing system of the NTS.
- The use of an electronic signature is mandatory. In order to fulfil this legal requirement, the taxpayer may either use a certificate issued by the Public certification authority or an e-tax certificate issued by the NTS.
- A summary of the electronic invoice shall be submitted to the NTS in a format prescribed by the NTS.

Taiwan (clearance)

- Electronic invoicing is permitted and has been mandatory since 2015 for certain industries.
- Invoices may be issued using one of three available methods: (1) a Service Platform provided by the Ministry of Finance (MoF); (2) an accredited private system; or (3) an accredited service provider. For the latter two methods, it is required to upload information regarding elements such as issuance, cancellation and return of electronic invoices to the Service Platform.
- Security measures must be in place, including a local digital signature.
- Electronic invoices must be issued following a specific range of electronic invoice numbers provided by the authorities.

Thailand (post audit)

- Electronic invoicing has been permitted since 2012. The Thai Revenue Department introduced a new regulation on electronic or e-tax invoices and electronic receipts in 2017. Subject to the approval of the Thai Revenue Department, taxable persons may prepare, deliver and keep their e-tax invoices or receipts in electronic form.
- Electronic invoices must be digitally signed using a certificate issued by a certification authority approved by the Thai Revenue Department.
- The supplier must submit the electronic invoices to the Revenue Department in XML format for audit purposes.
- Outsourcing of the issuance of electronic invoices is allowed provided the third-party service provider is certified by the Thai Revenue Department.
- The Revenue Department and the Electronic Transactions Development Agency (ETDA) are currently working together to improve and further develop the e-tax invoicing system in Thailand. As a result of this joint effort, new regulation on this topic is expected soon.

ELECTRONIC INVOICING AND REPORTING IN ASIA PACIFIC

United Arab Emirates (post audit)

- As a member of the GCC and a ratifying party to the GCC VAT Framework Agreement, UAE introduced VAT for supply of goods and services on 1 January 2018.
- Electronic invoicing is allowed, provided the authenticity and integrity of the electronic invoice can be guaranteed.
- There is no restriction on place of storage for electronic invoices, however they must always be readily available at the taxpayer's domicile.
- The UAE requires the filing of periodic VAT returns through a government portal and sales must be reported per Emirate. Businesses with an annual turnover of 150 million AED or more must file monthly returns, other taxpayers should file quarterly.
- While VAT is imposed at the national level, VAT sales must be reported per Emirate.

Uzbekistan (clearance)

- Uzbekistan introduced a pilot project for electronic invoices which was carried out between October 2018 and February 2019. The pilot project was mandatory for businesses in the city of Chirchik, Tashkent, Navoi and Syrdarya regions and it is optional from 1 July 2019 for businesses in the entire country.
- As of 1 January 2020, e-invoicing will be mandatory for all businesses.
- Suppliers are required to sign the e-invoice. Service providers acting on behalf of the suppliers are permitted but must fulfil certain legal requirements.
- The State Tax Committee will be the authorized roaming operator for centralized storage, inter-operator transfers and keeping records of e-invoices.

Vietnam (post audit)

- Electronic invoicing is permitted upon approval from the tax authority but is gradually becoming mandatory in phases from 2018 until 1 November 2020, when e-invoicing will be mandatory for all taxable persons.
- Ensuring the I&A of electronic invoices is required; electronic invoices must be digitally signed by the supplier.
- E-invoices must be archived electronically, and taxable persons may choose archiving methods guaranteeing safety, security and integrity during the whole archiving period.
- Service providers meeting certain requirements can provide the contracting parties with e-invoicing solutions.

References

- **Ref 1:** Council Directive 2010/45/Eu of 13 July 2010 amending Directive 2006/112/ EC on the common system of value added tax as regards the rules on invoicing.
- **Ref 2:** Cwa 16460: Cen Workshop Agreement "Good Practice: electronic invoicing Compliance" Guidelines (www.cen.eu/work/areas/ICT/ebusiness/Pages/einvoicing.aspx).
- **Ref 3:** Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.

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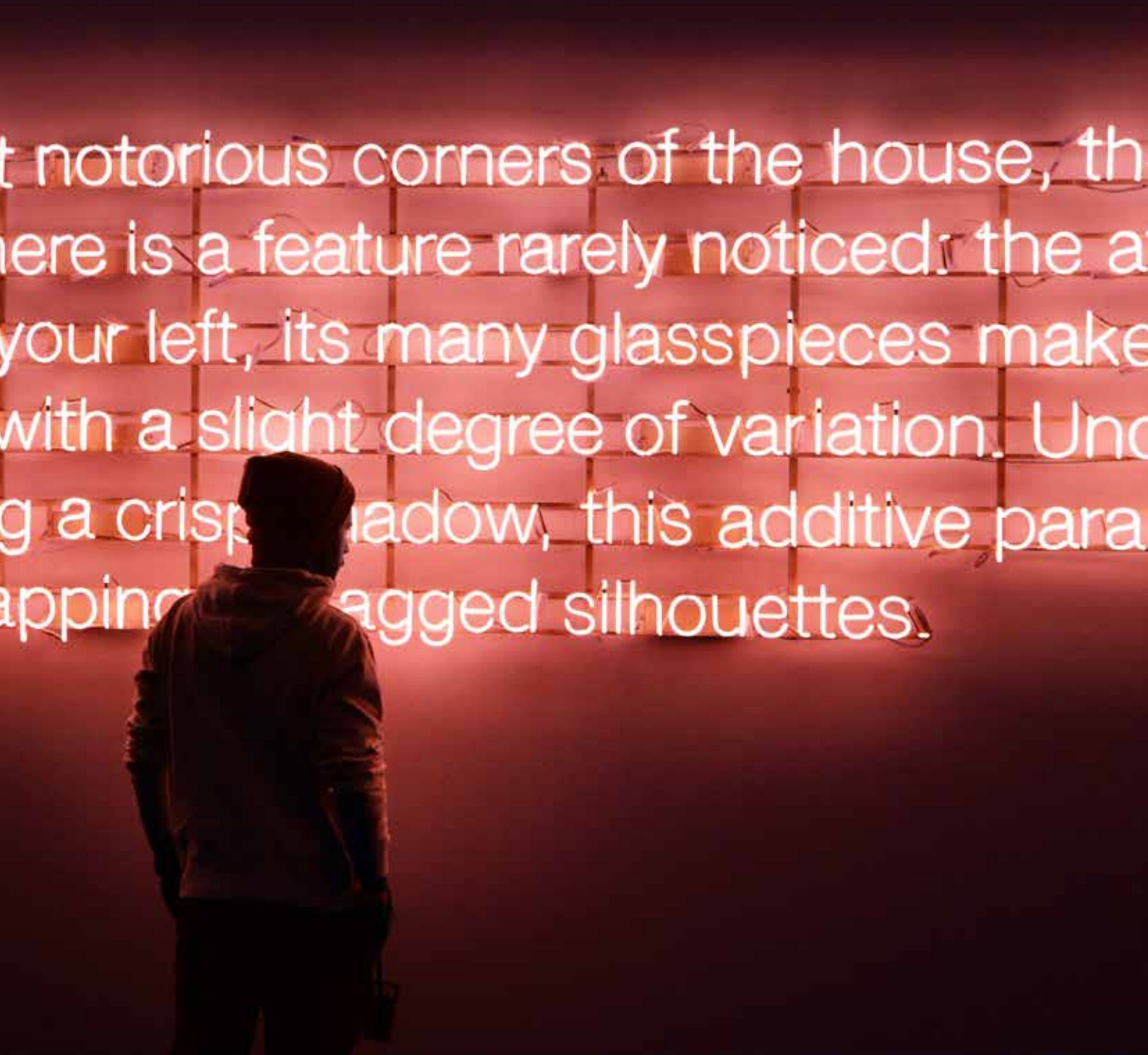
GLOSSARY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here is a feature rarely noticed: the a
your left, its many glasspieces make
with a slight degree of variation. Unc
g a crisp adow, this additive para
appin agged silhouettes.

GLOSSARY

AFIP	Administración Federal de Ingresos Públicos Argentinian Tax Authority
ANAF	Romanian National Agency for Fiscal Administration
AP	Accounts Payable
API	Application Program Interface
AR	Accounts Receivable
ASP	Application Service Provider (India)
B2B	Business to Business
B2C	Business to Consumer
B2G	Business to Government
BCAT	Business Controls-based Audit Trail
CAS	Computerized Accounting System (Philippines)
CEN	European Committee for Standardization
CFDI	Comprobante Fiscal Digital por Internet Digital Fiscal Document through Internet (Mexico)
CRA	Canada Revenue Agency
CT-e	Conhecimento de Transporte Eletrônico Brazilian Transportation Document
CTC	Continuous Transaction Controls
CUFE	Código Único de Facturación Electrónica Unique Electronic Invoice Code (Colombia)
DGI	Dirección General Impositiva Uruguayan Tax Authority
DGT	Director General of Taxation (Indonesia)
DTE	Documento Tributario Electrónico Electronic Tax Documents (Chile)
ECD	Electronic Consignment Document (Russia)
EDEO	Electronic Document Exchange Operators (Russia)
EDI	Electronic Data Interchange
EDS	Electronic Declaration System
EEA	European Economic Area
EESPA	European E-Invoicing Service Providers' Association
EFD	Electronic Fiscal Devices
eIDAS	Regulation (EU) 910/2014 on Electronic Identification and Trust Services for Electronic Transactions in the Internal Market
EIIS	Electronic Invoicing Information System (Kazakhstan)
ERP	Enterprise Resource Planning
EU	European Union
FACe	Punto General de Entrada de Facturas Electrónicas General Point of Entry of Electronic Invoices (Spain)
FAIA	Fichier Audit Informatise AED Fichier Audit Informatise AED (Luxemburg)
FEC	Fichier des Écritures Comptables France's Own SAF-T
FED	Fiscal Electronic Devices (Ghana)
FOF	Federale Overheidsdienst Financien (Belgium Portal for Filing Returns)
FSSP	Federal Shared Service Provider (USA)
GCC	Gulf Cooperation Council
GoBD	German Guidelines for the Archiving of Electronic Books and Documents
GRN	Goods Received Note
GST	Goods and Sales Tax
HMRC	Her Majesty's Reveneue & Customs (UK)
I&A	Integrity & Authenticity
IPT	Insurance Premium Tax
IRN	Invoice Reference Number (India)
IRS	Internal Revenue Service (USA)
IS EFA	Tax Authority's Online Portal (Slovakia)
M&A	Mergers & Acquisitions
MTD	Making Tax Digital (UK)
myData	My Digital Accounting and Tax Application (Greece)
NAV	Hungarian Tax Authority
NEN	Národní Elektronický Nástroj (Czech Republic B2G portal)
NF-e	Nota Fiscal Eletrônica Electronic Fiscal Note (Brazil)
NFS-e	Nota Fiscal de Serviços Eletrônica Electronic Fiscal Note of Services (Brazil)
NIPA	National IT Industry Promotion Agency (South Korea)
NTS	National Tax Services (South Korea)
O2C	Order to Cash

GLOSSARY

OMB Office of Management & Budget (USA)

OSE Operador de Servicios Electrónicos
Operator of Electronic Services (Peru)

P2P Procure to Pay

PEF Plaftorma Fakturowania Elektronicznego
Tax Authority's Online Portal (Poland)

PEPPOL Pan-European Public Procurement Online

PKI Public Key Infrastructure

RGS Référentiel Général de Sécurité
Type of Electronic Signature Recognized in France

RTD Return of Trading Details (Ireland)

SAF-T Secure Audit File for Tax

SAT Servicio de Administración Tributaria
Mexican Tax Authority

SDI Sistema di Interscambio
Exchange System (Italy)

SET Subsecretaría de Estado de Tributación
Paraguayan Tax Authority

SFE Sistema de Facturación Electrónica
Electronic Invoicing System (Bolivia)

SFV Sistema de Facturación Virtual
Virtual Invoicing System (Bolivia)

SIFEN Sistema Integrado de Facturación Electrónica Nacional
National Electronic Invoicing Integrated System (Paraguay)

SII Suministro Inmediato de Informacion
Immediate Supply of Information on VAT

SII Sistema de Impuestos Internos
Chilean Tax Authority

SMEs Small & Medium Enterprises

SOX Sarbanes-Oxley Act

SSC Shared Service Centre

SST Sales and Service Tax

STA State Taxation Administration (China)

STS Kyrgyzstan State Tax Service

SUNAT Superintendencia Nacional de Aduanas y de Administración Tributaria
Peruvian Tax Authority

SUT Sales and Use Tax

TESC Tax Efficient Supply Chain

TIMS Tax Invoice Management System (Kenya)

TRA Turkish Revenue Agency

TRAIN Tax Reform for Acceleration and Inclusion (Philippines)

UAE United Arab Emirates

UJP eRacun Tax Authority's Online Portal (Slovenia)

URTI Unified Register of Tax Invoices (Ukraine)

USP Unternehmensserviceportal
Federal Service Portal (Austria)

UTD Universal Transfer Document (Russia)

VAT Value-Added Tax

X-Tee Tax Authority's Online Portal (Estonia)

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