



## TAX-COMPLIANT GLOBAL ELECTRONIC INVOICE LIFECYCLE MANAGEMENT

A TrustWeaver White Paper October 2016

 **EESPA**  
European E-invoicing Service Providers Association

 **trustweaver**

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## FOREWORD

This annual white paper has, together with the Billentis market report, become one among the few regular publications that enterprises and service providers look forward to as reliable input on key global market trends in e-invoicing and associated topics. The TrustWeaver expert team decided to take a little more time than in previous years to put this edition together – and you will see why when you start reading: in just over a year, the world of e-invoicing has gone through nothing less than a metamorphosis. The deployment of mandatory ‘clearance’ platforms is not just spreading like wildfire throughout the world’s emerging economies, but also many other countries in the world are now moving towards similar approaches.

Given the global economic context, few countries with significant sovereign debt and/or high VAT gaps can afford to miss out on the tax collection and other economic benefits of transaction-oriented reporting of invoice information in real time. Enterprises –particularly those working across several countries– would be well-advised to prepare for a world where not only invoices but also other data with a significant public value will increasingly need to be made available to governments in easily exploitable structured formats.

In previous years we have noted changes in the industry such as the emergence of varying invoice-based financing services. These different trends often reinforce each other – we are already seeing how government clearance systems are being reused not only to tighten fiscal controls but also to serve as a trust anchor to lower transaction costs by driving out remaining inefficiencies. As this document states, what we’re seeing today is likely just the tip of the iceberg.

This edition of the TrustWeaver white paper for the first time tries to explore some of the implications of these megatrends for businesses. It also proposes a first taxonomy of different government approaches, and a helpful overview of the requirement categories and change management challenges that companies can ignore only at their own peril.



A handwritten signature in blue ink that reads "B. Koch".

Bruno Koch  
Billentis

## INTRODUCTION

### THE PROMISE OF GLOBALIZATION

Globalization has spurned 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. Brands like Johnson and Johnson, ABB, Dell and Microsoft to name a few, all view supply chain management as nothing less than vital to their ability to innovate and dominate global markets.

To take full advantage of modern technologies and compete successfully in what is quickly becoming a friction-free global marketplace, businesses must ensure automation of their processes with trading partners. Full automation requires addressing what we believe is the last mile of global electronic invoicing: local tax compliance. This white paper explains the role that local tax compliance plays in successful e-business initiatives and how leading global brands and governments are addressing this need.

### THE ALLURE OF ELECTRONIC INVOICING

Most multi-national corporations strive to consolidate processes and supporting IT systems. They seek fewer platforms for enterprise resource planning, supply chain management and customer relationship management. Paper-based systems and processes are always a red flag.

Automated invoicing initiatives — the “poster child” of paper elimination efforts — address a very messy problem for large organizations. Eliminating paper invoices is very attractive with direct processing cost reductions of up to 90%. For most multi-national companies, some 5 – 25% of invoices are cross-border, the rest are multi-domestic where there is no escape from compliance with local rules in each country whose laws apply. Many corporations increasingly seek to manage such diverse invoice flows from only one or a few central locations to optimize overall process efficiency and effectiveness. Electronic invoicing is often a key enabler for unlocking the larger benefits of end-to-end business process automation.

### LEGALLY CRITICAL DOCUMENTS: ORPHANS OF THE DIGITAL REVOLUTION

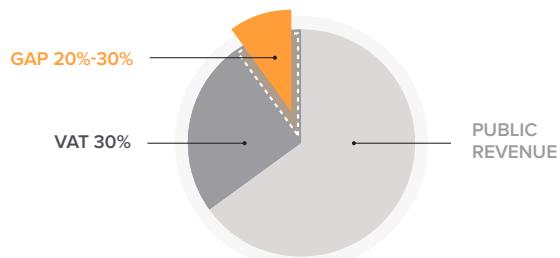
Some types of documents and transactions are not of interest to governments. Enterprises worldwide have in many cases dematerialized such documents many years or even decades ago.

However, other documents such as invoices and other documents with a high legal or financial importance have traditionally had a dual business and public function. Such documents could until fairly recently often not be processed or stored in electronic form only, because legal recognition required them to be on paper. Since the turn of the millennium this has started to change – many countries that previously prohibited the use of electronic media for such documents now permit them under stringent regulatory control mechanisms that are gradually being made compulsory. This new chapter in the evolution of global electronic trade and commerce is unique in that increasingly the majority of investment in the innovation and process transformation that underpins the mandatory adoption of paperless processing of these previous ‘orphans of the digital revolution’ comes from governments rather than business.

## INVOICING AND VALUE ADDED TAX (VAT) COMPLIANCE

Many governments utilize invoices as primary evidence in determining ‘indirect’ taxes owed to them by corporations. These taxes, most of which are known as a value added tax (VAT), are reported and paid in full typically monthly or quarterly. 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% 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.” 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 administrations to audit businesses — but despite such audits, governments often collect 20-30% less VAT than they should due to fraud and malpractice.



### ELECTRONIC INVOICING — DEFINITION

*Electronic invoicing (electronic invoicing) is the sending, receipt and storage of invoices in electronic format without the use of paper invoices for tax compliance or evidence purposes. Scanning incoming paper invoices, or exchanging electronic invoice messages in parallel to paper-based originals is not electronic invoicing from a legal perspective.*

Figure 1 - Measuring the global VAT gap globally

## VAT BASICS

The form, content and/or method of creating or exchanging invoices are 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 VAT system is the closest any region has come to a harmonized VAT system, but even in the EU rules are notoriously complex and diverse.

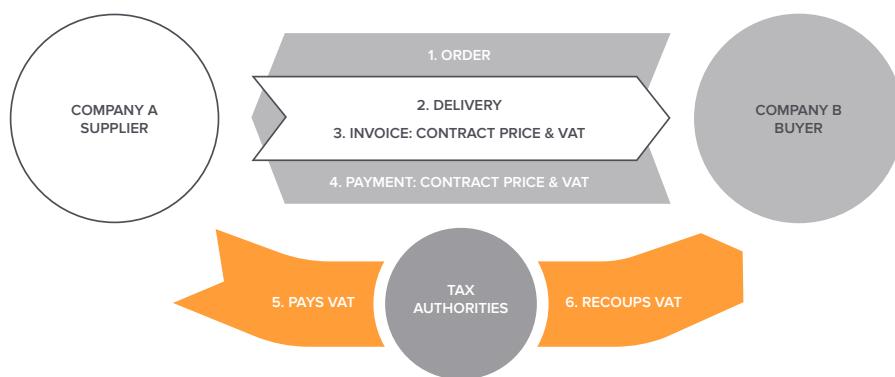


Figure 2 - High-level overview of the main processes involved in VAT collection

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 that end consumer, only businesses can deduct their input tax. Therefore, VAT requirements concerning invoices ordinarily only apply between businesses.

#### THE CONSEQUENCES OF VAT NON-COMPLIANCE

*The consequences of non-compliance with VAT requirements can be significant. As a result, most companies want to be as certain as possible that they can quickly and easily prove VAT compliance to avoid risks including:*

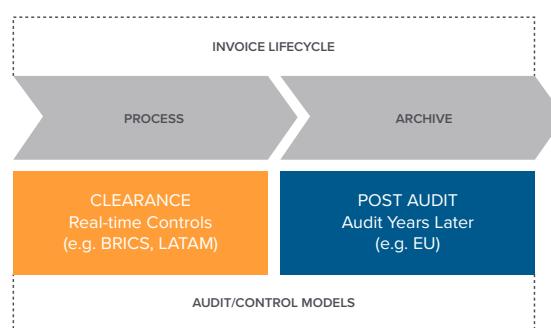
- **Administrative fines.** If a company cannot prove the veracity of invoices, it may be fined. Trading partners who have been drawn into an audit that leads to this conclusion may also be penalized.
- **Sanctions under criminal law.** In some countries, non-compliance with invoicing requirements can 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 administration 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 administration 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.
- **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%, 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 administration that has no credible evidence to the contrary may in extreme cases consider such invoices to have been issued by that supplier's and claim output VAT payment if the buyer reclaimed the corresponding VAT.

## ELECTRONIC INVOICING COMPLIANCE TRENDS

### DEVELOPMENTS IN REGULATORY APPROACHES

Electronic invoicing remains a fast-moving field – primarily because of the rapid evolution of legal requirements, but naturally also because technological progress drives continuous innovation in the business solution space.

In the 2015 edition of this white paper, we stated with some confidence that the field of B2B invoicing is divided, on a high level, between on the one hand countries that have a “post audit” system of VAT requirements for electronic invoicing and, on the other, countries that employ a “clearance” methodology.



This categorization is still relevant, but, a little more than a year later, it is no longer certain that this will remain the most appropriate way of understanding this field.



*Figure 3 - Simplified map showing current distribution of the two major regulatory e-invoicing systems worldwide.*

In a nutshell, this is what happened in the intervening period:

- Clearance systems have kept emerging around the world. More often than not, these are accompanied by regulatory mandates for their adoption, usually within months rather than years.
- Clearance systems that have been in place for some time now have not stopped evolving. In particular, additional documents of tax (e.g. consumer bills) or other public interest (e.g. transport documents or salary statements) are being added to the list of data that must be passed through clearance platforms that were initially reserved for invoices.
- A significant fault line has started appearing among post audit countries: in geographies that face tax collection challenges, experimentation with real-time controls has started, but often stopping short of actually introducing the type of clearance processes commonly found in e.g. Latin America. Countries without major tax collection challenges on the other hand converge towards granting businesses significant implementation freedom.
- Increasing pressure is being put on EU Member States to make sure that public institutions are ready to process and receive electronic invoices by 2018. B2G invoicing mandates have started emerging which enterprises must factor into their decision making about electronic invoicing systems and processes for electronic invoicing.

A deeper analysis of these developments shows an extremely high (and growing) level of complexity among geographies, areas of law, specific legal requirements etc. More than ever, electronic invoicing (and other electronic documents-of-public-interest) compliance is a driver of business process and system fragmentation. category.

## A RAPIDLY EVOLVING REQUIREMENT MATRIX

Business considerations toward creating or maintaining internationally-compliant electronic invoicing should take into account the following principal categories of requirements:

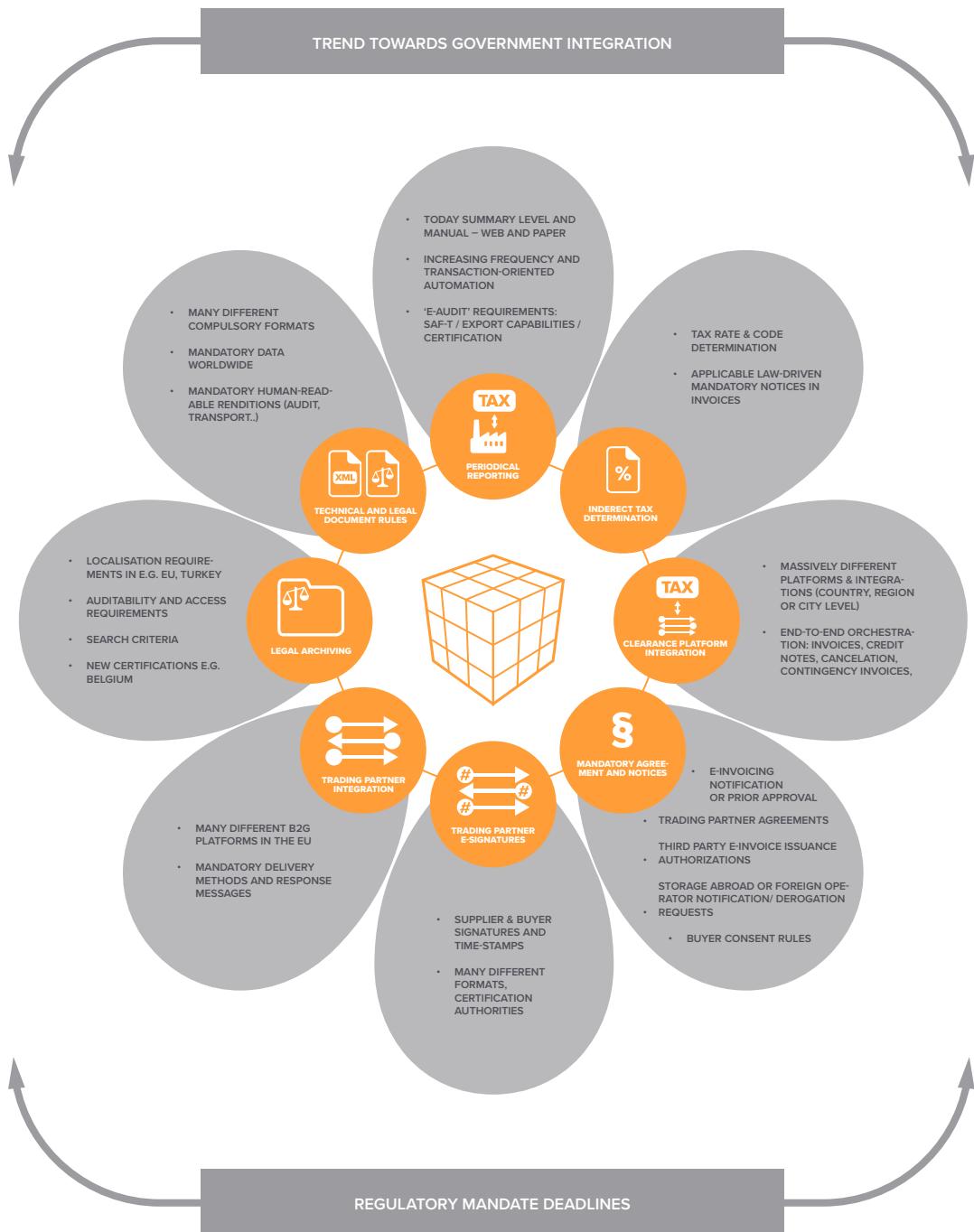
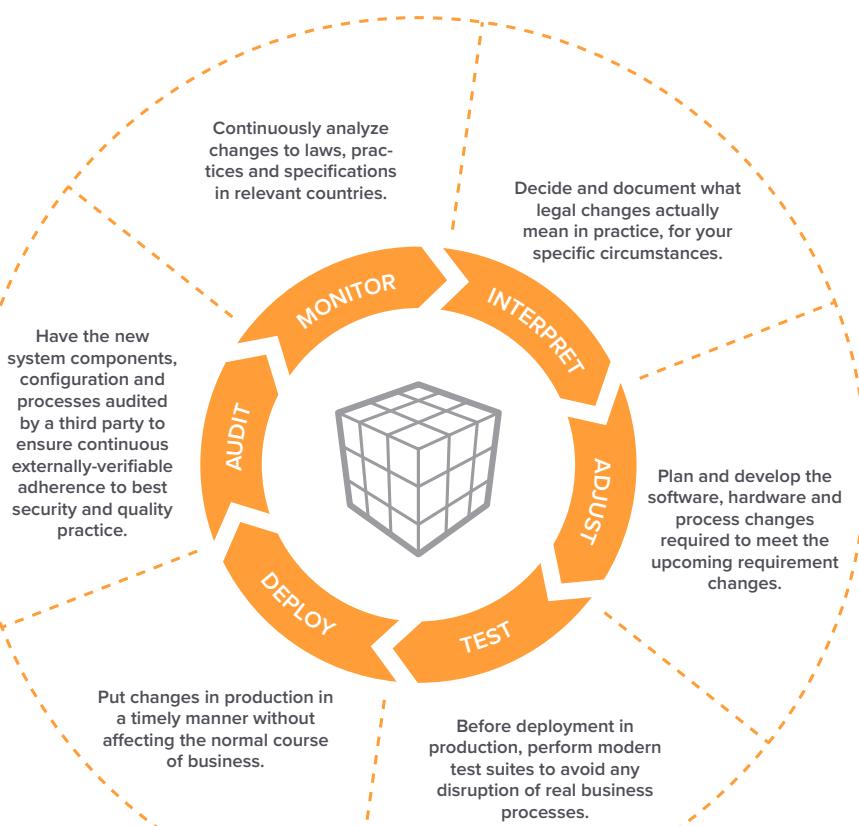


Figure 4 - Principal requirement categories to be taken into account for compliant electronic invoicing across countries.

The requirement matrix is also anything but static: laws and associated technical specifications inevitably change over time. Therefore, an electronic invoicing strategy must take into account the need for compliance change management. Figure 5 describes the principal components of a typical compliance change management process:



*Figure 5 - Fragmented legal requirements require strict compliance change management.*

### REAL-TIME CONTROLS: A CLEAR BUT HETEROGENEOUS TREND

There is one clear mega-trend among global electronic invoicing requirements: deep transaction-oriented integration of e-business systems with public authorities is quickly becoming the norm. If this trend continues, it will not be an exaggeration to say that it will dramatically change trade as we know it.



*Figure 6 - ‘Clearance’-type approaches to government controls of invoices and other legal documents is the likely winner.*

The primer on clearance systems presented further down in this document describes the principal common features and differences among countries that we consider to have a ‘clearance’ system today. It must however be noted that the real-time control methods that are now starting to appear in countries that are currently viewed as having a ‘post audit’ system may be quite different – indeed, the trend in some European countries is to design real-time controls rather as an automated version of VAT reporting which is designed based on e-audit components such as the Standard Audit File for Tax (SAF-T).

*“Deep transaction-oriented integration of e-business systems with public authorities is quickly becoming the norm.”*

These European real-time control systems can be viewed as a logical extension of the idea that one can draw reliable conclusions from the audit trails generated by one trading party’s internal control processes – in other words, the trend in Europe may, at least initially, stop short of requiring the supplier and the buyer to independently submit real-time transaction information.

#### CLEARANCE MODEL IN E.G. LATIN AMERICA



Figure 7 - Most real-time transaction control systems at present (mostly in emerging economies) rely on transaction information provided by the supplier and the buyer, progressively building up a record that provides independently verifiable confirmation that a supply has actually taken place. In this model, the tax administration can from a business-to-business integration perspective be viewed as truly a ‘third trading partner’ in every transaction between the supplier and the buyer. For a more detailed description of each numbered step in this image, see Figure 9.

#### EMERGING REAL-TIME CONTROL MODEL IN THE EU

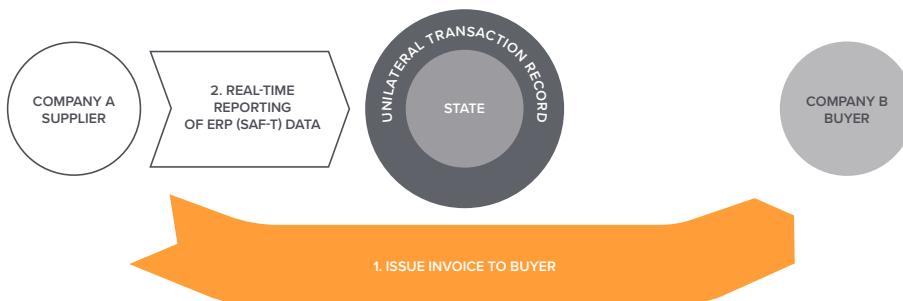


Figure 8 - By contrast, real-time control systems that are appearing in the European Union are often based on a transaction record built up in the supplier’s ERP or equivalent IT system.

Over time we will likely see a variety of approaches to transaction-oriented tax controls on invoices and other documents. For example, it is inevitable that the platforms that governments are rapidly adopting to receive and process electronic invoices from suppliers in public procurement transactions will start to be re-used for specific types of real-time controls: in Italy, for example, the B2G platform can from 2017 be used by suppliers for creating, sending and reporting their B2B invoices in one go.

This general trend is already massively impacting the very fabric of world trade.

**1. Convergence of clearance and B2B exchange standards:** Many B2B transactions will over time have the government clearance platform as a “third trading partner”, and the 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.

**2. 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 a 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.

**3. 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 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 & authenticity, file format, clearance platform exchange orchestration, clearance platform authentication).

**4. 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 – just a few examples:

- In Mexico, salary statements must be cleared just like invoices.
- In a number of Latin American countries, certain information about the financing of an invoice (e.g. 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 administration.

## TOWARDS A ‘LAW ENFORCEMENT CLOUD’?

We are predicting that compulsory real-time controls on transactions of many different kinds will play a very important part in the race towards national fiscal prosperity that is fueled by globalization. This will bring about a lot of changes in the way businesses conduct their processes, internally and with each other – and what we see today is probably just the tip of the iceberg. Now that the value of real-time controls is consid-

ered to be demonstrated by many tax administrations, there will be no holding back in the deployment of emerging technologies to optimize and broaden these controls. Blockchain, artificial intelligence and other major technological developments may very well replace current approaches in short order as governments refine their understanding of how to build what amounts to giant economic eavesdropping machines. Contrary to personal data, whose protection is anchored in constitutions and human rights conventions, this constant granular monitoring of global flows of goods, services, money and data will often be based on existing, well-accepted government access and audit rights which, even if the scale and frequency of access change dramatically, no-one can successfully object to on legal grounds. What we are seeing today may very well be the contours of an emerging, massively heterogeneous ‘law enforcement Cloud’ that will be an integral part of many day-to-day activities of future generations.

## BUSINESS TRENDS

When analyzing what the future may bring – which must be a critical component of any company’s strategy considerations – it is important to take into account one very significant private sector trend that will impact how compliance will be managed as a topic in the future.

The internet and associated technologies have dramatically changed the business-to-business integration methods that have in the past thirty years evolved among larger businesses: old-school peer-to-peer Electronic Data Interchange (EDI) is still going strong, particularly in longer-term relationships between larger enterprises, but these interchange methods are now being supplemented and sometimes replaced with Cloud-based platforms that offer end-to-end procurement or order-to-cash process support that allow enterprises to connect more types of trading partners more flexibly. Many vendors in the B2B space have started adopting network-based rather than peer-to-peer approaches to trading partner management. This document does not have the ambition to analyze market trends among B2B integration and similar vendors; rather, we are mentioning this emergence of hosted transaction platforms because the concept of end-to-end business process management in the Cloud has far-reaching consequences for electronic invoicing compliance: until fairly recently, enterprises could manage VAT compliance through a combination of internal experts and tax advisers – tax experts would monitor legal evolution and work directly with the business and IT to ensure the necessary compliance change management. As the ownership of the business process moves to vendors of hosted end-to-end business processes, enterprises can no longer manage compliance the way they did when most of the IT and processes were still within their direct control. Consequently, enterprises and vendors must work out between them who carries responsibility for specific compliance maintenance tasks. Depending on the regions for which an enterprises seeks to implement a vendor’s B2B services, the vendor will often be under pressure to take over the management of compliance with requirements that are closely associated with the functionality it provides.

## BUSINESS PROCESS CLOUD VS LAW ENFORCEMENT CLOUD?

One possible conclusion from the previous two main sections is that two fundamental types of heterogeneous Cloud-based concepts are emerging –a ‘law enforcement Cloud’ and a ‘business process Cloud’– that together will be very influential in shaping the way companies will conduct their processes and communicate with one another going forward. How these two process environments can coexist productively will require a serious international conversation about convergence or harmonization in areas such as authentication, data standards, terminology, liability and service levels.

## 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 ex post audit is to establish that a company's accounts accurately reflect all the actual sales/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 administration must be able to verify that invoices they audit 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 administration must be able to interpret invoices they audit: the **legibility** of invoices must be guaranteed.
- To confirm that VAT has been correctly administered, reported and paid, a tax administration 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 administrations 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 actually took place. 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 electronic 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 (physical elements, warehouse data, trade documents etc.) 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 M&A activity, reorganizations etc.
- Processes are adjusted constantly as trading partners, production methods etc. 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 adjustments as well as large-scale strategic overhauls becoming more and frequent in response to very rapid advances in information and communication technologies.

## 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 call them that. In modern times, these records are retained in a company's accounting system — either a software package or online service or a more complete Enterprise Resource Planning (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 himself 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 e.g. purchase orders) other than the invoice, which is compulsory, but if they do they should generally store these as well.

### WHY WOULD A TAX ADMINISTRATION 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 (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 sufficient to ascertain integrity and authenticity because the invoice lifecycle does not begin with 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 (e.g. 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 rarely suffices by itself—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 (e.g. 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 which allow a potential wrongdoer to generate such data within a reasonable time-frame: 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 is 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/or 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.

## THE BUSINESS ECONOMICS OF RETROSPECTIVE TAX AUDITABILITY

The enforcement of tax law is in nearly all countries a matter of national law without much influence from supranational bodies. In particular the actual performance of a tax audit and the criteria applied to judge whether a company complies – or not – are often regulated exclusively on the national level. National tax law often provides the general framework and base rules for such activities, but in a real-life audit situation an auditor must very frequently interpret applicable legal requirements in the context of an almost infinite number of business practice possibilities. Technology and process expectations on which such practical audit decisions are based can be influenced by

the often unique local fabric of public and private law, law enforcement processes and business practice that has evolved over many centuries and which are much harder to change than primary law. Naturally, negative decisions made in an audit process can be appealed in nearly all countries, but few administrative courts are sufficiently responsive for formal legal recourse to be a meaningful parameter from a business economics perspective: the time to a final decision is often measured in years. Businesses therefore generally tend to avoid taking interpretation risks in relation to tax law.

Where a taxable person has an explicit obligation to demonstrate the integrity and authenticity of an invoice, the burden of proof for such invoice validity during the legal storage period is logically placed upon the taxable person. As we have seen above, if an invoice is complete and its integrity and authenticity can be ascertained, such proof will in many countries routinely be viewed as adequate and invoices are presumed to reflect actual supplies. However, the integrity, authenticity, legibility and completeness of an invoice do not by themselves conclusively prove a supply. Therefore, despite the correct appearance of an invoice, a tax administration may in certain circumstances decide to subject a company to more pervasive audits.

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

In many countries, the tax administration can also audit a taxable person's local trading partner(s) if the evidence available at 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/or loss of the buyer's right to deduct input VAT, companies can run a reputational risk if they do not ensure a sufficient level of auditability for VAT purposes.

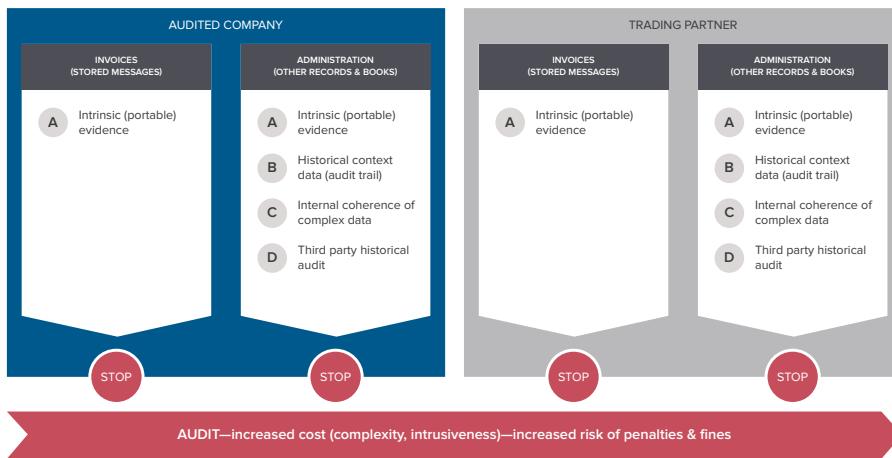


Figure 9

## A SHORT HISTORY OF EX-POST AUDITABILITY OPTIONS

### BEFORE THE INFORMATION AGE — THE CLASSIC EVIDENCE SCENARIO

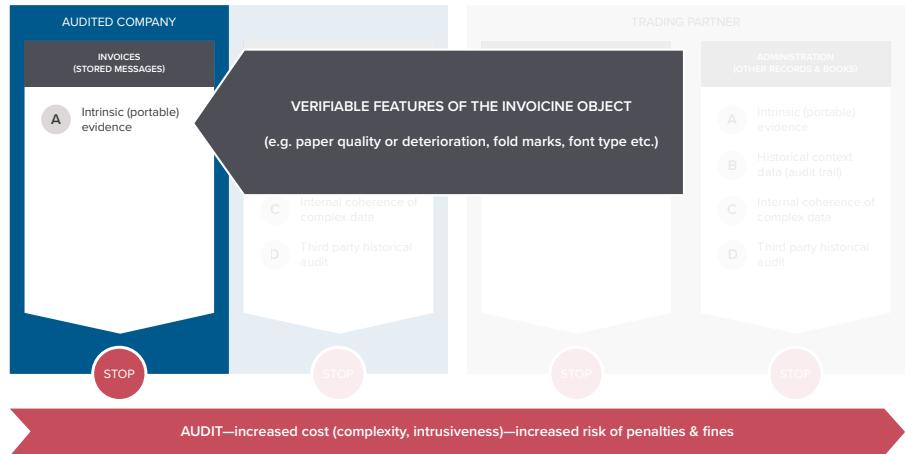


Figure 10

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 his 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 due to the fact that 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 in itself 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 book-keeping 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 cheques 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 would not happen routinely due to the relatively high trust level of the paper invoice system.

With these inherent levels of invoice auditability, tax administrations 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

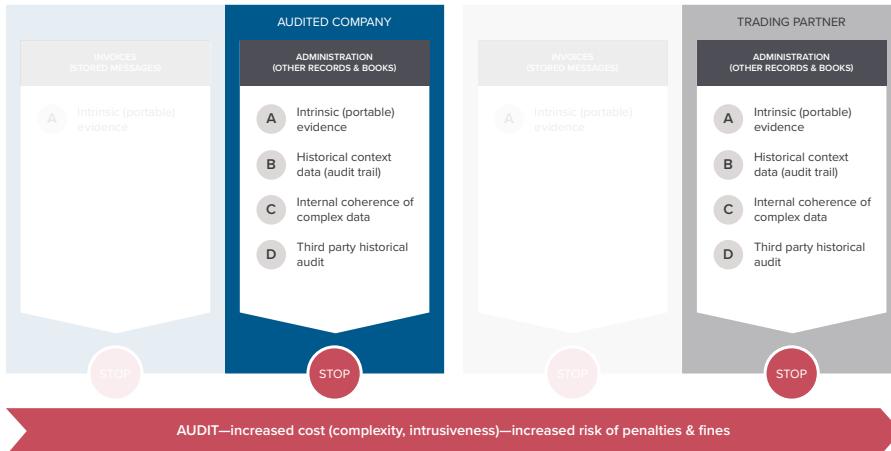


Figure 11

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 e.g. 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 which 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 had also evolved and, especially for larger companies, quickly became subsumed into Enterprise Resource Planning (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 could make 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" and, somewhat later, it would be allowed to scan 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 administrations. Neither the stored invoice message nor the accounting system by themselves 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 administrations 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 bifurcation 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 (e.g. PDF files) were created in electronic format they could easily be exchanged electronically (e.g. via email), but such images merely served as ‘copy’ information while the paper continued to be the formal tax invoice.

### PAPERLESS INVOICING

With the introduction of fully paperless invoicing as an option under VAT laws, the bifurcation noted in the previous section created a tension among VAT law enforcement approaches. From this tension emerged three distinct approaches to VAT auditability:

#### 1. PKI-based Electronic Signature — dematerializing the classic evidence scenario

This method is, in a sense, 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 as regards 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.

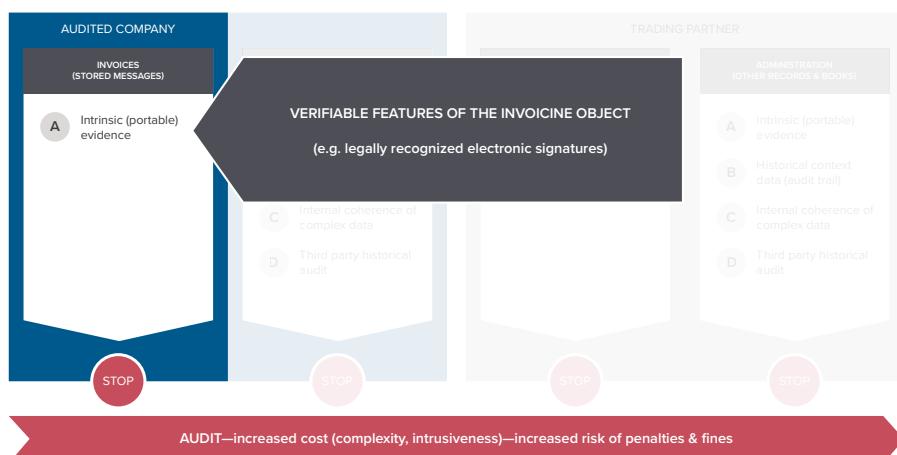


Figure 12

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 (e.g. 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.

## 2. EDI — deriving evidence from the exchange process

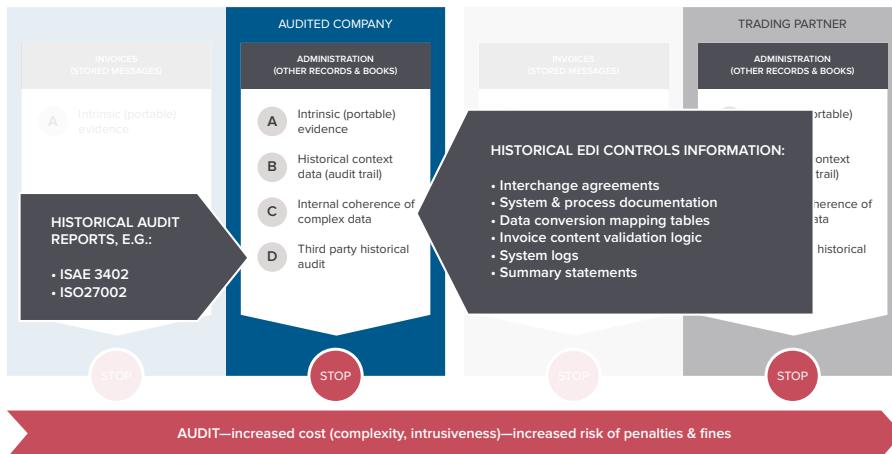


Figure 13

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 lacunae 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.

Due to the fact that 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 (e.g. sent/received logs; mapping tables where invoices are converted; 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 (e.g. 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.

### 3. Audit trail — the business process is the evidence

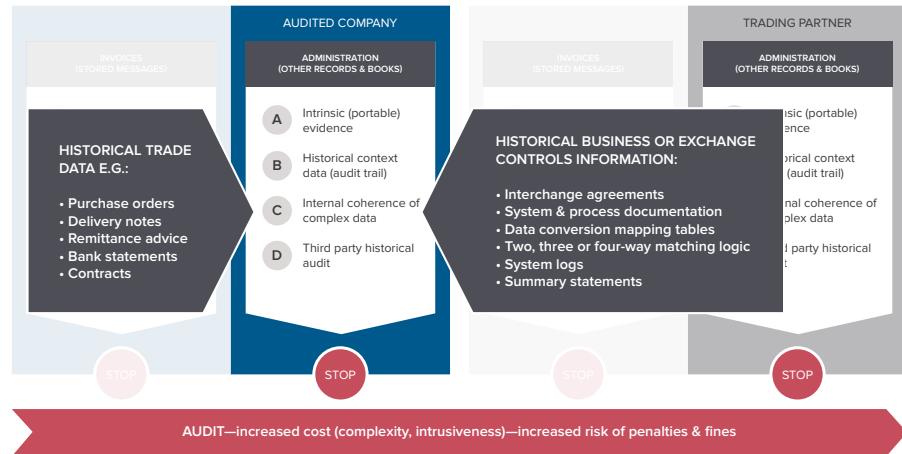


Figure 14

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.

## CLEARANCE SYSTEMS

Figure 15 shows a number of high-level features and processes that many clearance systems have in common. It should however be noted that this commonality is limited in practice; many countries with a clearance system have implemented variations on these ‘standard’ processes (see deep dive below). Below is an explanation of each numbered step:

- 1. OK to issue?** Typically the process starts with the supplier sending the invoice in a specified format to the tax administration or an 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 — it is unusual for clearance systems to allow the initial signature to be created with a service provider’s signing key (Turkey being a notable exception).
- 2. Cleared for issuance.** The tax administration or its agent (e.g. an accredited or licensed operator) will typically verify the signed supplier invoice, register it under a unique identification number and apply its own signature (and sometimes time-stamp) on it. The resulting cleared invoice is returned to the supplier. In some alternative ‘lite clearance’ cases, the tax administration or its agent simply provide a unique identification number or code that the supplier must add to the invoice.
- 3. Issue invoice to buyer.** Upon clearance, the invoice is sent or made available to the buyer. We call this approach “hard clearance” as the supplier MUST obtain clearance before sending the invoice to the buyer. Recently some new clearance countries allow for “soft clearance” whereby suppliers are allowed to send the signed invoice to the buyer without clearance, but the supplier has a limited amount of hours to clear the invoice. Counter-intuitively, in some clearance countries there is no requirement for the invoice exchanged between business partners to be the cleared electronic invoice; in a good number of cases it is actually possible to issue a paper representation that simply links to this electronically cleared invoice through e.g. a barcode.
- 4. Validate clearance.** Upon receipt of the invoice, the buyer is often obligated or encouraged to check with the tax administration or its clearance 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, whereas clearance check is done at the tax administration or agent.
- 5. Confirm clearance.** If the buyer has used an online system to perform the validation described in the previous step, the tax administration or agent will return an OK/not OK response to the buyer.

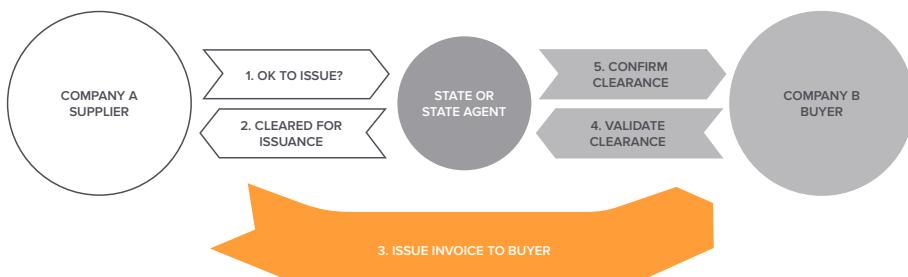


Figure 15 - High-level common e-invoice processes in clearance countries



## PRIMER ON CLEARANCE SYSTEMS

### A TAXONOMY OF CLEARANCE MODELS IN GLOBAL B2B ELECTRONIC INVOICING

While conceptually the clearance process looks simple, our experiences after having investigated many countries show that there are several fundamental clearance flavors, even inside countries. This section proposes a taxonomy of clearance models that can help electronic invoicing practitioners in discussions on global compliance.

First of all, a detailed analysis requires us to introduce the concept of electronic invoicing regime, in addition to electronic invoicing at country-level. The reason is that countries increasingly have different electronic invoicing systems. 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 these are each 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. Turkey last year 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. Another example: Ecuador has two co-existing regimes, with both hard clearance and soft clearance (see below).

The end-to-end clearance process can be summarized into 3 main steps: signing the e-invoice, transmission to the tax administration (TA), TA clearance and complementary operations. Below we provide more detail how regimes allow delegation of these steps to third parties.

Chile and Turkey allow delegation of signing to any third party 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 allow any Brazilian legal entity holding a certificate to handle the transmission to the TA. Peru, Colombia, Turkey, South Korea and Taiwan have regulated the delegation of transmission of the invoice to the TA to accredited service providers (state agents). As for TA authorization of invoices, in most clearance regimes the TA is directly responsible for central clearance. Exceptions are Russia and Mexico, where the TAs 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 cancelation. In Mexico, while the clearance process is delegated, cancelation is centralized at the TA. 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, e.g. archiving.

An additional dimension as regards technology is homogeneity, i.e. whether the same technology can be used to access any clearance points. 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. Due to the lack of homogeneity among Russian state agents, interoperability has not been possible. Therefore, the Russian TA has recently regulated a centralized state-agent to which all other state-agents must be connected in order to ensure e-invoice exchange between suppliers and buyers.

A technical aspect to consider is the clearance result returned by the TA. This could

be a convenient artifact that simplifies the process of validating whether the e-invoice was actually cleared at the TA. A good practice is shown by Mexico and Russia, where a returned artifact is cryptographically protected with authenticity and integrity that can be verified without contacting the TA – a process that can be easily automated. In other regimes, no token is returned or the returned token is not protected; in these regimes the TA 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 TA or State Agent like in Brazil NFS-e, Russia and Turkey. Other regimes put that responsibility on the supplier – this is the case in e.g. 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. In Turkey, the TA forces its agents to implement web services for delivery.

While in many cases the buyer has the possibility or obligation to verify that an invoice has been cleared upon issuance, 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, Temel invoices are supplier-side only whereas Ticari invoices allow a buyer to accept or reject the invoice for a limited period of time 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.

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

Finally, we note that while many countries still use the term “electronic invoicing”, the actual scope goes beyond just invoicing and may today cover other documents related to same transaction such as credit/debit notes, delivery notes, waybills, ledgers, and accounting documents. Actually, some countries have changed the “e-invoice” term. In Russia, the framework is actually called electronic document exchange. In Chile the term Electronic Fiscal Document is used.

We notice a general trend in clearance countries that tax administrations – in their efforts to gain more control over VAT revenue sources and prevent tax evasion – are extending their mandates to cover more fiscal documents that must include regulated content 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 administrations are demanding accreditation and 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.

## ARCHIVING CONSIDERATIONS

This white paper describes the proliferation and complexity of different models for regulating electronic invoicing around the world. While just a few years ago one may have been justified in believing that uniformity of approaches was in reach within regions like the European Union, the economic uncertainties that make tax collection such a major factor in today's geopolitical situation have severely reduced the probability of regulatory convergence in any part of the world.

It is however important to note that archiving rules are less affected by this extreme fragmentation of rules concerning the actual invoicing process; indeed, while requirements as regards archiving also differ from country to country, archiving – which obviously is focused on keeping tax-critical information available to tax administrations once such information has served its purposes in the actual transaction process – is by its very nature less conducive to the types of fundamentally different requirements that exist around the actual invoicing process. Consequently, archiving is also a much better candidate for taking a 'superset' approach to the requirements of all applicable laws in one system, without a significant need for logic to apply certain types of functionality to some categories of invoices and not other. In other words, it is possible to use a single archiving approach (and from a logical perspective: a single archive) across any business's operations. This feature makes the archive – the end point of all transactions, no matter how diverse – a good starting point for a concrete evaluation of a company's electronic invoicing strategy.



*Figure 16 - A good legal archive can serve as the common end point of all electronic (and scanned paper) invoicing transactions anywhere, making it an excellent starting point for a company's electronic invoicing strategy.*

To take such a superset approach, the following high-level categories of archiving requirements must be considered:

**COMPLIANCE DOCUMENTATION** – the archive system should have comprehensive documentation so that an auditor can ascertain the overall compliance of the archive and associated processes. This documentation must be maintained over time and changed if laws, systems or processes evolve.

**STRONG LOGICAL SEPARATION OF LEGAL/VAT ENTITIES** – there must be adequate separation among the logical areas where data for each VAT-relevant legal entity in a corporation is archived. It should be possible to restrict auditor access to one such legal entity.

**SEARCH ON MANDATORY INVOICE CONTENT** – an auditor must be able to search on key mandatory fields.

**SEARCH ON DATE RANGES, TRADE PARTNERS ETC** – an auditor must be able to search for invoices between certain dates, and by trading partner.

**INVOICE PRESERVATION** – where applicable, country-specific requirements for applying specific procedures for the long-term verifiability of archived e-invoice must be met.

**INTEGRITY & AUTHENTICITY EVIDENCE FEATURES** – an auditor should be able to verify the integrity and authenticity of archived invoices through stored data other than the invoice itself. Depending on the applicable law, this typically concerns electronic signatures and/or audit trail documentation; either of these evidence types may be mandatory or part of a company's choices as to how to meet VAT requirements. It is generally important that the evidence for compliance with core VAT electronic invoicing requirements be archived under the same security practices as the invoice itself. Such core evidence should also be capable of being presented in a similar manner and time frame as the invoice, and ideally through the same graphical interface.

**STORAGE PERIOD** – logic must be available to retain invoices for as long as required under tax, commercial and accounting law, but not exceeding that period in order to ensure conformity with privacy legislation.

**AUDIT ACCESS RIGHTS** – a legal entity under audit must be able to create and remove exclusive auditor access rights.

**STORAGE LOCATION** – rules concerning the physical location of original invoices must be met. Template documentation should be available to facilitate administration procedures for legal entities in countries where exemptions must be obtained to store abroad.

**PRINTABILITY** – an auditor must in many countries be able to print invoices from the archive.

**CONVERSION TO MANDATORY FORMATS FROM ARCHIVE** – where requirements exist for the taxable person to be able to present an invoice in a specified structured format, features should be included that allow such transformation upon an auditor's request.

**VIEWER FOR DIFFERENT STRUCTURED FORMATS** – the archive service should allow legal entities using it to comply with country-specific legal requirements concerning compliant outsourcing to third parties.

**AUTHORIZATIONS FOR OUTSOURCED ARCHIVING** – the archive service should allow legal entities using it to comply with country-specific legal requirements concerning compliant outsourcing to third parties.

**PRIVACY** – in addition to sufficient security tailored to varying data protection laws, the archive service should have a Chief Privacy Officer dedicated to addressing queries and requests related to the rights of data subjects in relation to archived data.

**TAX AUDIT-ORIENTED GRAPHICAL USER INTERFACE** – the archive service should include a Graphical User Interface tailored for use by a tax auditor.

## GRANULAR ANALYSIS

This section describes a number of features based on which e-invoicing regulatory regimes can be compared with one another. Figure 17 and Figure 18 below provide a schematic overview of the principal legal requirement categories and features for many of the countries profiled in this white paper. Below we provide a brief description of the analysis methodology used for rating in each of the categories.

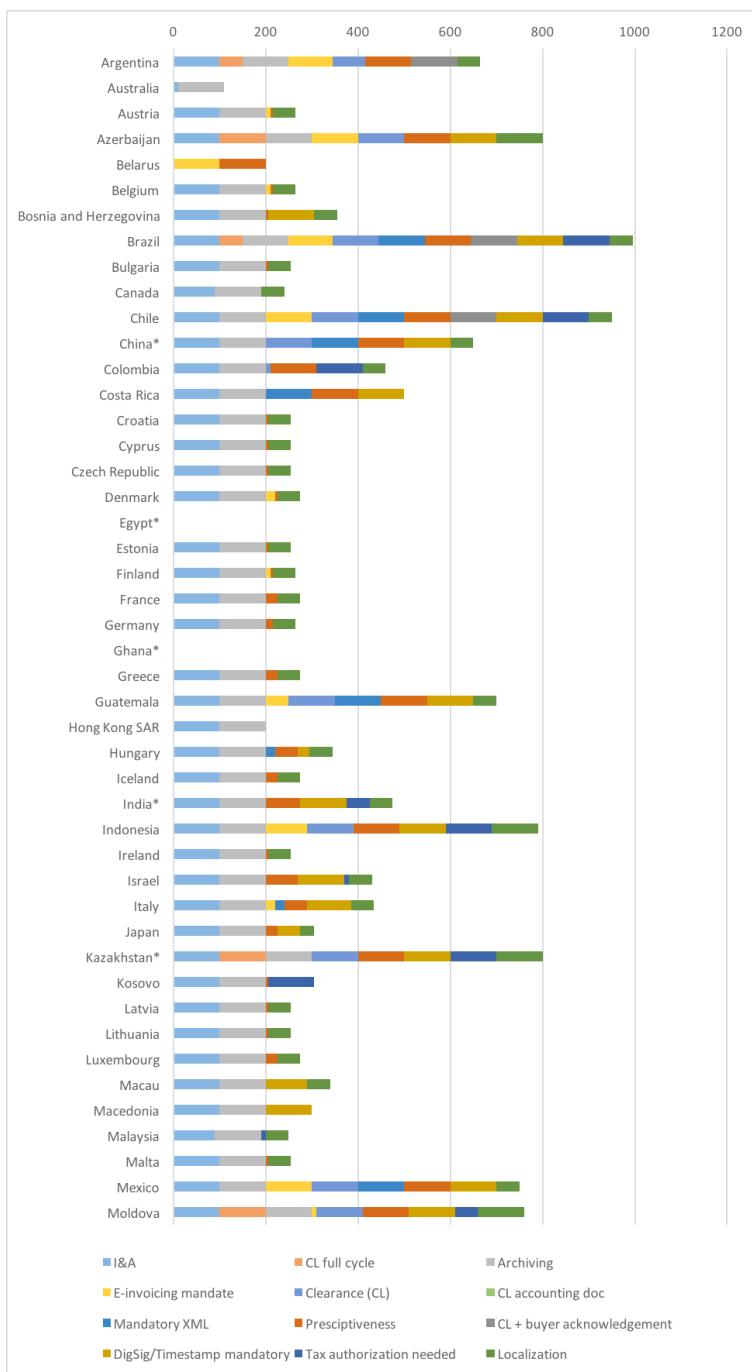


Figure 17

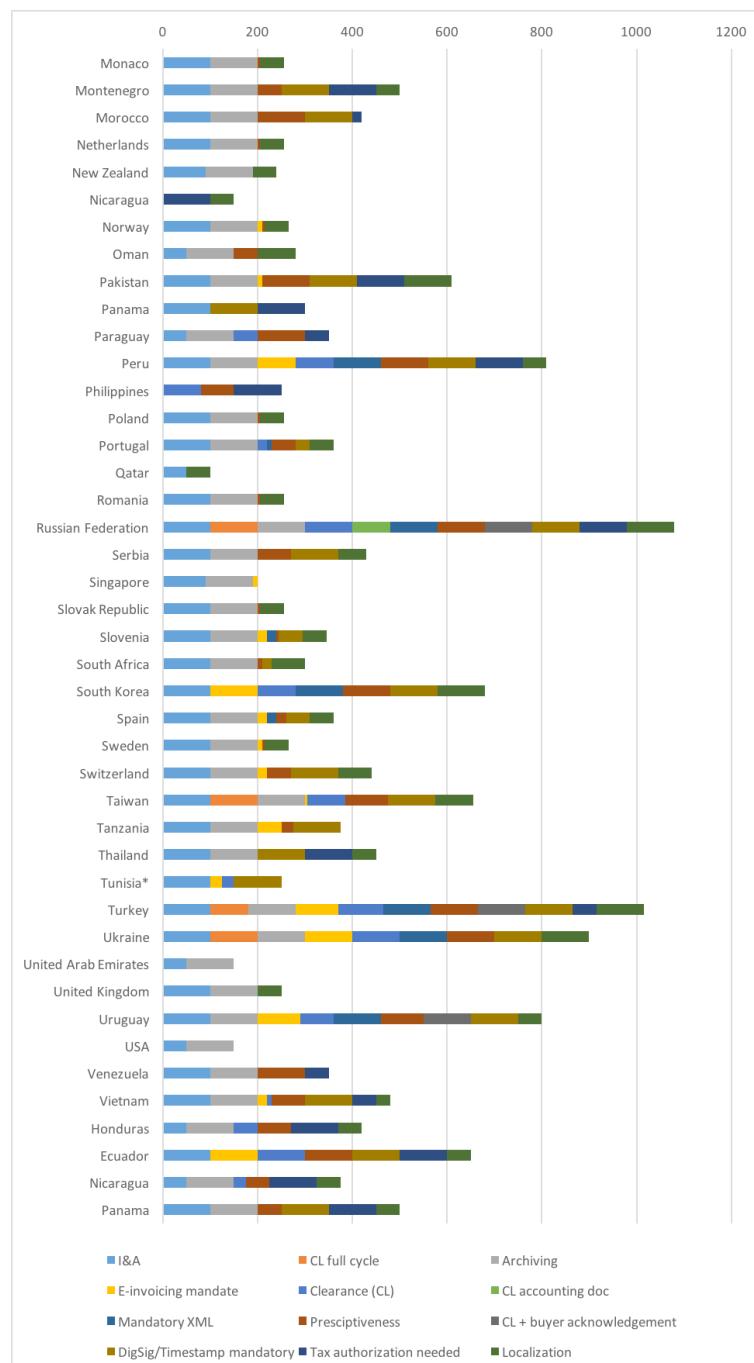


Figure 18

### 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 administration not to seek such evidence.

## CLEARANCE

A value of 100 is allocated if an electronic invoice must be sent to the tax administration 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 before the transaction, or in cases of less intrusive clearance processes e.g. requirements for a code to be fetched from an online tax administration 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 administration 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 administration or its licensed/accredited agent not only clears the invoice but also serves as 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 administration 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 it if such archiving is viewed as more of a formality which the tax administration does 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 electronic invoice original.

## TAX AUTHORIZATION NEEDED

A value of 100 is allocated where a country requires that the tax administration, Finance Ministry or other part of the public administration (including law enforcement) explicitly authorizes a business before it starts sending and/or 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 types of invoices, business processes etc.

## 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 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/TIMESTAMP MANDATORY

A value of 100 is allocated when a country has a hard requirement for an electronic invoice to be digitally signed and/or time-stamped using a Public Key Infrastructure-based time-stamp at some point during its legal life time. A value between 0 and 100 is allocated where such signature or time-stamp requirements are not absolute and can under certain conditions be replaced with technologies and/or 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/or 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.

## COUNTRY PROFILES



### ELECTRONIC INVOICING IN THE EUROPEAN UNION

#### **DIRECTIVE 2010/45: THE REGIME IN EFFECT SINCE 1 JANUARY 2013**

Six years after the entry into force of the Directive 2001/115, which introduced electronic invoicing for VAT purposes in the European Union (EU), Member States in 2010 adopted a Directive 2010/45 which modifies certain provisions of the VAT Directive 2006/112 in relation to invoicing [REF 1]. The Directive 2010/45 entered into force on 1 January 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 integrity and authenticity 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 has to 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. 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 business- to-business 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 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<sup>3</sup>.

VAT-exempted transactions for which parties are released from the obligation of issuing an invoice are very rare in mainstream business, as are exemptions for VAT-able invoices<sup>4</sup>. 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 re-

<sup>3</sup>Member states also have the right to impose the obligation to issue invoices for transactions not covered by the scope of application of the VAT Directive (e.g. transactions with consumers). In that case, however, the VAT Directive also gives them the right not to impose its security requirements.

<sup>4</sup>A known example of an exemption based on jurisprudence is the *Bockemühl* case, where the buyer in a cross-border sale of services could deduct VAT even if not in possession of a compliant invoice.

<sup>5</sup>Some tax authorities have informally stated that they do not consider the requirements for domestic invoices to apply to zero-rated cross-border invoices. Such statements are not enforceable unless they are explicitly stated in a formal tax authority communication.

quirements formally apply in full<sup>5</sup>. 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.

### 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 integrity and authenticity. This language clearly departs from previous formulations which created interdependency between a supplier and a buyer. This de iure 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 integrity and authenticity 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 integrity and authenticity of an invoice. This is a misunderstanding. The recitals merely explain why invoice integrity and authenticity are important requirements: because without these features, a tax administration 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 Electronic 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 integrity and authenticity 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 integrity and authenticity of electronic (not paper) invoices, Directive 2010/45 now only mentions qualified electronic signatures for guaranteeing e-invoice integrity and authenticity; there is no longer any mention of advanced electronic signatures. This reference in Article 233 of the VAT Directive should however be read differently from 1 July 2016, when the 1999 EU Electronic Signature Directive will be repealed and replaced by the so-called eIDAS Regulation.

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 signatures, or read ‘seals’ where the objective was rather to ensure integrity and authenticity only. Hence, the option to use a qualified electronic signature in the VAT Directive should from 1 July 2016 be read as – at least to include a ‘qualified electronic seal’ instead.

**EIDAS REGULATION ARTICLE 35(2):**

**“A qualified electronic seal shall enjoy the presumption of integrity of the data and of correctness of the origin of that data to which the qualified electronic seal is linked.”**

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 have to guarantee integrity and authenticity. 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.

#### I&A — SECURE EDI OPTION

Directive 2010/45 refers, as another example of a method to ensure integrity and authenticity evidence for electronic invoices (not paper), to electronic data interchange (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 business-to-business (B2B) automation. While the dividing line may be somewhat artificial, it is clear that systems which 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/or 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 guarantees it provides for electronic invoice integrity and authenticity (which is a compliance matter). For the purposes of ensuring integrity and authenticity 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.

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 integrity and authenticity 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.

However, tax authorities in a number of 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 (most notably, 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 integrity and authenticity. 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 integrity and authenticity evidence:

	Any evidence (i.e. the principal “freedom of evidence” rule of Directive 2010/45).	Business con- trols establishing a reliable audit trail between an invoice and a supply (“BCAT”).*	Qualified elec- tronic signa- tures/seals.*	EDI based on an agreement consistent with EC Rec- ommendation 94/820.*
Electronic invoices	Yes	Yes (some Member States have issued guidance but always leaving the ultimate assessment of adequacy to the taxable person)	Yes (reversal of evidence burden i.e. the tax auditor has to prove 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 19 below presents a diagram that can help with these choices.

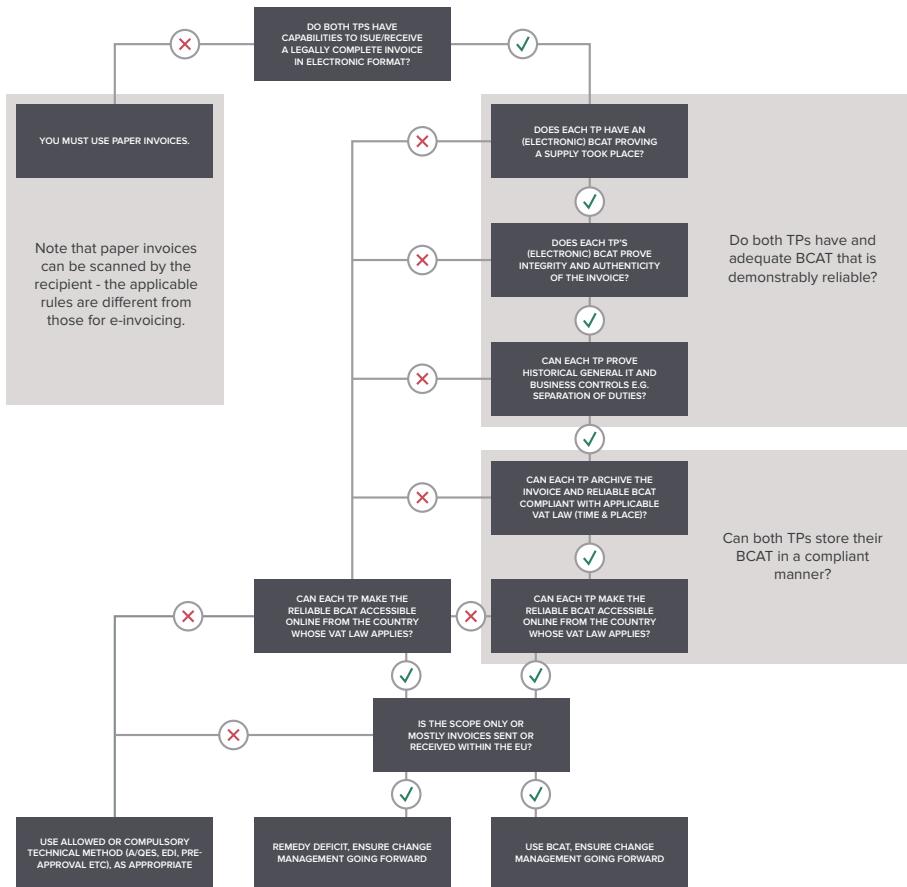


Figure 19 - Compliance choice diagram for companies with major trading relationships in the EU.  
(BCAT=business controls-based audit trail; TP=trading partner)

#### Notes to Figure 19

(i) "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 integrity and authenticity. This evidence must in many EU Member States be in electronic form.

(ii) In addition to proving a supply, the BCAT must actually prove integrity and authenticity of the invoice. In other words, a BCAT can prove a supply but not contain sufficient evidence of integrity and authenticity of all tax-relevant data of an invoice. The BCAT must therefore, in addition to proving a supply and being in electronic form, contain sufficient information to corroborate the integrity and authenticity of all tax-relevant data.

(iii) 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 sufficient. Such evidence may also be reliably electronically signed, or be presented together with historical transport and archive security data.

(iv) 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 administration.

(v) 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). Due to the fact that the majority of EU Member States have opted to require the evidence guaranteeing integrity and authenticity in electronic form when the invoice is electronic, the above equally applies to the relevant BCAT.

## TRANSPOSITION STATUS OF VAT DIRECTIVE 2010/45 (Gray means yes; Orange means no)

	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																												
Exotic options/requirements	1					2				3	4	5	6	7	8	9		10	11						12	13		

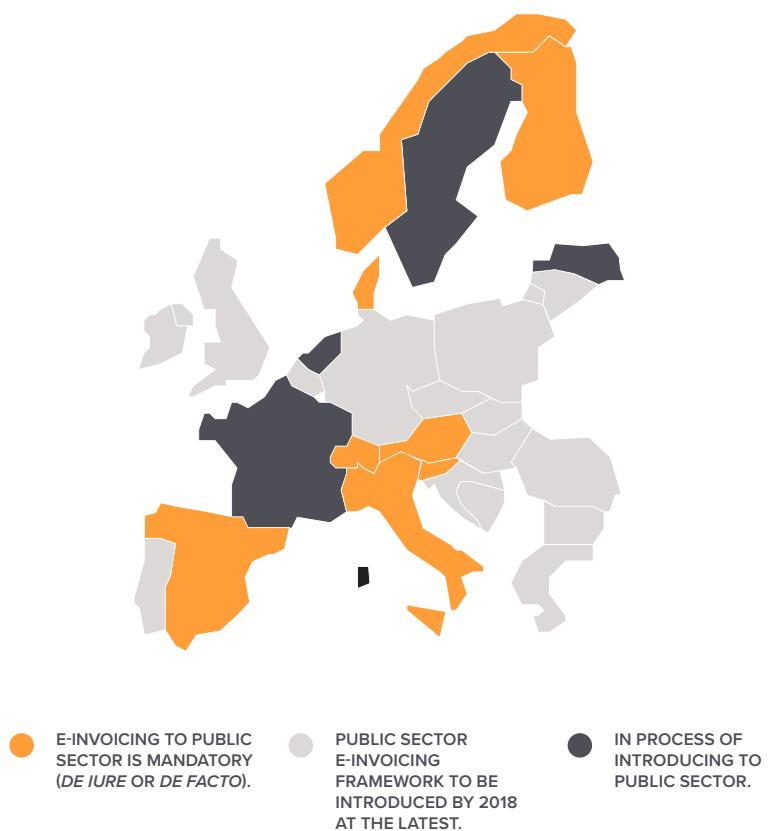
*Figure 20*

## COMMENTS

1. Certain Advanced Electronic Signatures and invoices delivered through a "Business Service Portal" and PEPPOL are also mentioned as methods for ensuring the integrity and authenticity (I&A). Evidence of ensuring I&A has to be stored in electronic form in case of EDI and e-signatures but not in case of the 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.
  4. Advanced Electronic Signatures and marking by the use of 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 authority. Four methods to meet archiving requirements are listed in the legislation, among others application of a time-stamp for storage.
  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, as well as a cryptographic key system using locally approved hardware, is also mentioned as a method for ensuring the I&A of e-invoices.
  8. Advanced Electronic Signature is also an example of means ensuring the I&A of e-invoices.
  9. Late transposition with a retroactive effect. The Tax Commissioner may require that the data guaranteeing the authenticity and the integrity of invoices shall also be stored by electronic means.
  10. Advanced Electronic Signature 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 have to communicate certain invoice data to the tax authority.
  11. Local service providers of e-archive services to Romanian customers have to obtain an authorization for an e-archive administrator and for data base 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 authority is required in case of using other methods than those explicitly mentioned in the legislation.
  13. No examples for ensuring the I&A are given in the VAT law but are communicated in a Public Notice.

## TREND TOWARDS MANDATORY B2G ELECTRONIC INVOICING

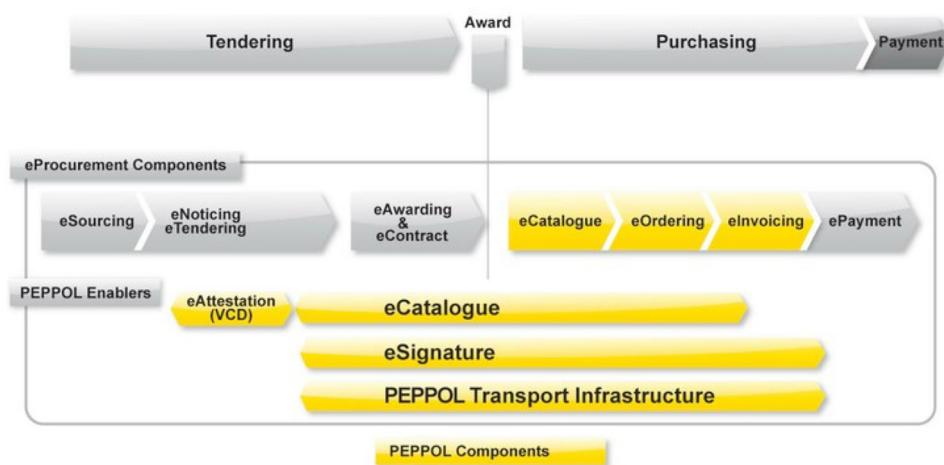
The EU has in the past years focused more of its attention in relation to electronic invoicing on invoices for public procurement transactions – both in pursuit of process optimization and to provide a boost to the adoption of electronic invoicing between businesses. A comprehensive package of policy and more practical measures is being introduced by Brussels, whereby all EU countries' public administrations will need to be able to receive e-invoices at least for public procurement transactions by 2018 (through EU Directive 2014/55). At the same time several EU Member States are also actively experimenting with mandatory electronic invoicing for B2G. Examples are countries like Spain, Italy and Slovenia, which have created technical platforms and associated specifications simply mandating qualified electronic signatures and specific transmission methods for suppliers that invoice the public sector. Other countries take a more flexible approach and stay closer to the integrity and authenticity options provided by the VAT Directive. France is the first country to have taken concrete regulatory steps towards extending the requirement (starting in 2017) for public sector entities to receive e-invoices, to cover also the private sector.



*Figure 21 - Overview of status of electronic invoicing regulation in public e-procurement in the EU. Both France and Estonia have announced 2017 as the start dates for mandatory electronic invoicing to the public sector.*

Directive 2014/55 furthermore lays a foundation for technical standardization of the content of B2G electronic invoices – both semantically and in terms of specific supporting syntaxes. A technical committee (CEN TC 434) of the European standards body CEN is working hard to meet the standards mandate set out in the aforementioned Directive. Once these standards are adopted, the public administration and certain other public bodies in EU Member States must accept electronic invoices that conform to them.

The evolution towards 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’. At the end of August 2012, the PEPPOL project was finalized and its services and responsibilities were taken over by the non-profit association OpenPEPPOL, which continues to evolve the PEPPOL ‘elements’: the PEPPOL Transport Infrastructure; the PEPPOL Business Interoperability Specifications; and the PEPPOL Transport Infrastructure Agreements.



*Figure 22 - A schematic overview of a typical e-procurement process, with the core PEPPOL elements marked in yellow (source: openPEPPOL website, [http://www.peppol.eu/peppol\\_elements](http://www.peppol.eu/peppol_elements)).*

#### 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 specifically, may lead to severe consequences in some EU Member States. Consequences for non-compliance with invoicing rules, including invoice content, 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 (e.g. 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 authority or administrative courts after their assessment of the case at hand. To give a couple of examples: Cyprus imposes a fee of 85 EUR per each incorrectly issued invoice; in Spain incorrect invoices are subject to a penalty of 1% of the total amount of all invoices wrongly issued; in Poland issuing invoices not in accordance with all legal requirements may amount to a bulk penalty of 219,000 EUR; in Slovenia a penalty ranging between EUR 2,000 and EUR 125,000 may be imposed in case a legal person fails to issue an invoice or fails to provide the authenticity of origin, integrity of content and legibility of invoices during the prescribed storage period.

**AUSTRIA (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Austria.
- Qualified Electronic Signature (QES) or “certain Advanced Electronic Signatures” (AES) when based on a certificate verifiable via the “Signaturprüfdienst” (signature audit/verification service) of the RTR or comparable foreign body, are among the examples. Secure 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 “Business Service Portal” and PEPPOL are also mentioned as methods for ensuring integrity and authenticity.
- Evidence of ensuring authenticity and integrity has to be stored in electronic form in case of EDI and electronic signatures for compliance purposes, but not when relying on the business control options.
- 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 obligated to send electronic invoices.

**BELGIUM (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Belgium. Integrity and authenticity can be demonstrated for example by means of a business controls - based audit trail linking an invoice and a supply, by an Advanced Electronic Signatures or by EDI.
- Electronic invoices may be stored abroad without notification, provided that the tax authority is given online access.
- B2G electronic invoicing is expected to be made mandatory in limited scope; a preliminary deadline was set for 2016 but further deadlines have not been communicated. This requirement will only affect Federal and Flemish government authorities, meaning that these authorities must accept electronic invoices; no deadline for mandatory issuance of electronic invoices targeting private suppliers has yet been envisaged.

**BULGARIA (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Bulgaria; Qualified Electronic Signature, EDI and business controls ensuring an audit trail linking an invoice and a supply are listed as examples.
- When using a service provider it is required to put in place an agreement for the outsourcing of issuance of electronic invoices; certain content is recommended for this agreement (i.a. 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.

**CROATIA (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Croatia. Qualified Electronic Signature, EDI and business controls ensuring a reliable audit trail linking an invoice and a supply are examples of means ensuring the authenticity and integrity of the invoice.
- Electronic invoices may be stored abroad, provided that the tax authority is notified and given online access.

**CYPRES (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Cyprus. Qualified Electronic Signature, 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 the 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.

#### **CZECH REPUBLIC (POST AUDIT)**

- The Czech Republic accepts business controls ensuring a reliable audit trail linking an invoice and a supply, Qualified Electronic Signature (certificates 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 QES.
- Time-stamping is not legally required but widely adopted.
- Evidence of ensuring authenticity and integrity of electronic invoices has to be stored in electronic form.
- Electronic invoices may be stored abroad, provided that the tax authority is notified and given online access.

#### **DENMARK (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Denmark. The integrity and authenticity 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 has to 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.

#### **ESTONIA (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Estonia.
- Electronic invoices may be stored abroad provided they can be submitted at the request of a tax authority within a reasonable period of time.
- B2G electronic invoicing will be mandatory as of 1 January 2017.

#### **FINLAND (POST AUDIT)**

- Integrity and authenticity of the invoice needs to be ensured; business controls-based audit trail linking an invoice and a supply is mentioned as an example of how to meet this requirement. In practice any electronic invoicing process that meets reasonable business requirements are accepted due to the Finnish tax authorities' possibility 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.
- B2G electronic invoicing is mandatory, although the scope is limited to invoices issued to certain Finnish government agencies and institutions.

#### **FRANCE (POST AUDIT)**

- To ensure electronic invoice integrity and authenticity, France accepts Qualified Electronic Signature, “Référentiel Général de Sécurité” (RGS, a specific French electronic signature which is not qualified), “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.
- 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 will gradually become mandatory. The entry into force of this requirement will take place in stages, starting from 1 January 2017 with large companies and ending with micro companies by 1 January 2020.

#### **GERMANY (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Germany, which include the business controls-based audit trail method as well as Qualified Electronic Signature and secure 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 of EU may also be allowed but subject to prior approval.
- B2G - Germany published draft law which intends to make the receipt of electronic invoices mandatory for public administration.

#### **GREECE (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Greece. Integrity and authenticity 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 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 (i.e. via e-mail, mail).
- It is explicitly stated in the legislation that evidence of ensuring integrity and authenticity has to be stored in electronic form.
- Electronic invoices may be stored abroad without notification, provided that the tax authority is given online access.

### 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 authenticity and integrity of invoices.
- When using a service provider, an agreement for issuance of invoices has to 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 and provide certain specified information regarding the invoicing system using a specific form provided by the authorities. To this end, it is mandatory for service providers to make certain information available to the taxable person, i.e. name, ID and usage guidelines of the invoicing system.
- Electronic archiving can be performed by one of four prescribed methods, among others by use of a listed archiving service provider or by a defined preservation process (applying an electronic signature and a time-stamp).
- Electronic invoices may be stored abroad in other EU Member States as well as any country with which Hungary has signed a mutual tax assistance treaty, 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, presentation in PDF is not an option for invoices issued in XML format.

### IRELAND (POST AUDIT)

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Ireland. The integrity and authenticity of electronic invoices 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.

### ITALY (POST AUDIT)

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Italy. As regards electronic signatures, Italy accepts the “traditional” EU Qualified Electronic Signatures as well as a so called Digital Signature based on a qualified certificate and a cryptographic key system (using locally approved hardware instead). In addition, the authenticity and integrity can be ensured by “proper EDI” with an interchange agreement based on the European Commission 1994 Recommendation or by business controls ensuring an audit trail linking an invoice

and a supply.

- The EDI option is historically not widely practiced in Italy.
- Storage of electronic invoices in electronic form is mandatory; it is optional for invoices that were issued in paper form and for invoices ‘created electronically’ but which do not qualify as electronic invoices (i.e. invoices where the recipient has not accepted electronic invoicing).
- There are a number of specific requirements related to archiving of electronic invoices, e.g. search criteria, a description of the archive and the archiving process (*Manuale di Conservazione*), setting up a clear delegation plan for the responsibility of the archiving process (*Responsabile della Conservazione*), etc.
- Fiscally relevant documents, including invoices, must undergo a preservation process in order to maintain their legal validity during the required 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 pre-defined standard. Each archiving package must be signed with a Qualified Electronic Signature and time-stamped 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.
- If invoice issuance is outsourced to a service provider, the invoice itself must clearly state (as a content requirement) 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.
- 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.
- B2G electronic invoicing is mandatory.

#### **LATVIA (POST AUDIT)**

- Any means for ensuring integrity and authenticity 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.

#### **LITHUANIA (POST AUDIT)**

- Any means for ensuring integrity and authenticity 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.
- In case of outsourcing of electronic invoice issuance, service providers to Lithuanian taxable persons not established in an EU Member State must comply with 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.

#### **LUXEMBOURG (POST AUDIT)**

- Any means for ensuring integrity and authenticity 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 ensuring the authenticity and integrity also has to 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.

#### **MALTA (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Malta. Means listed in the legislation as examples are Qualified Electronic Signatures, EDI and business controls ensuring a reliable audit trail linking an invoice and a supply.
- In the case of invoices stored by electronic means, the Tax Commissioner may require that the data guaranteeing the authenticity and the integrity of electronic invoices shall also be stored by electronic means.
- An agreement for outsourced issuance of invoices must include certain content.
- Electronic invoices may be stored in other EU Member States provided that the tax authority is given online access.

#### **MONACO (POST AUDIT)**

- Any means for ensuring integrity and authenticity 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 other 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.

#### **NETHERLANDS (POST AUDIT)**

- Any means for ensuring integrity and authenticity 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 EDI.
- 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

#### **POLAND (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Poland. Qualified Electronic Signatures, EDI and business controls ensuring a reliable audit trail linking an invoice and a supply are examples of accepted means to ensure the integrity and authenticity of electronic invoices.
- Electronic invoices may be stored abroad, provided that the tax authority is given online access. The tax authority must at all times be informed about the place of storage of invoices, no matter if located in Poland or abroad.

**PORUGAL (POST AUDIT)**

- To meet the integrity and authenticity requirements Portugal accepts Advanced Electronic Signatures, “proper EDI” with an interchange agreement based on the European Commission 1994 Recommendation and any business controls ensuring a reliable audit trail linking an invoice and a supply.
- Certification requirement exist for e-billing software that produces the invoice data.
- Taxable persons (established/domiciled in Portugal and who perform operations subject to VAT in Portugal) shall on a monthly basis communicate certain elements of the invoices to the local tax authorities.
- Prior to dispatch of goods certain data of the transport document must be communicated to the tax authority.
- 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.

**ROMANIA (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Romania. Qualified Electronic Signatures, EDI and business controls ensuring a reliable audit trail linking an invoice and a supply are examples of accepted means to ensure the integrity and authenticity of electronic invoices.
- 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 (which is the case for all EU Member States).
- The tax authority must be notified via registered mail one calendar month prior to outsourcing of electronic invoice issuance.
- It is explicitly stated in the legislation that evidence of ensuring authenticity and integrity has to be stored in electronic form.
- 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.

**SLOVAKIA (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Slovakia, such as Qualified Electronic Signatures, EDI and reliable business processes control audit trails.
- Electronic invoices may be stored abroad without notification, provided that the invoice is made available in Slovakia upon request by the tax authority.

**SLOVENIA (POST AUDIT)**

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Slovenia. Means listed in the legislation as examples are Qualified Electronic Signatures, EDI 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 integrity and authenticity has to 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.

### SPAIN (POST AUDIT)

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in Spain. Business controls can be used to establish reliable audit trails linking invoices and supplies. However, to preserve legal certainty, Spanish law specifically states that EDI (with an interchange agreement based on the European Commission 1994 Recommendation), Qualified Electronic Signatures and “recognized signatures” (an Advanced Electronic Signatures based on a qualified certificate without hardware implemented SSCD) ensure the integrity and authenticity.
- Any taxable person may submit other technological proposals for ensuring the integrity and authenticity to the tax authority.
- Electronic invoices may be stored abroad, provided that the tax authority is notified and given online access.
- B2G electronic invoicing is mandatory for the majority of taxpayers. Public bodies may allow paper invoicing for transactions not exceeding EUR 5,000. A unified entry portal (FACe) handles delivery of the electronic invoice to the applicable public body.

### SWEDEN (POST AUDIT)

- Any means for ensuring integrity and authenticity 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 (e.g. Norway), provided that the tax authority is given online access and is notified. The invoices must be printable in Sweden.
- B2G electronic invoicing: since several years it is mandatory for public government administration to send and receive electronic invoices.

### UNITED KINGDOM (POST AUDIT)

- Any means for ensuring integrity and authenticity of electronic invoices are accepted in the United Kingdom. Examples of methods for ensuring authenticity and integrity are listed in the 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 as long as 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 states and in third countries which respect the European Data Protection principles regarding the storage of personal data. If the third country does not have a mutual assistance treaty with the UK, compliance with EU data protection principles is required. Online access 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.



## ELECTRONIC INVOICING IN OTHER EUROPEAN COUNTRIES

### ANDORRA (POST AUDIT)

- In Andorra the Indirect General Tax, which corresponds to VAT, was introduced as late as 2012. Electronic invoicing is regulated and allowed from that time.
- The law requires authenticity and integrity of the invoice to be guaranteed; there are no technical specifications in the law as to how to meet these requirements.
- Electronic invoices may be stored abroad without notification, provided that the tax authority is given access without undue delay upon request.

### 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 are mandatory for the majority of transactions starting from 1 July 2016.
- Electronic VAT invoices may be created either through the use of a portal of the Ministry of Taxes and Duties or uploaded there through web applications. In case of uploading invoices they must be in XML format and signed with a digital signature.

### BOSNIA AND HERZEGOVINA (POST AUDIT)

- Electronic invoicing and archiving is implicitly permitted based on Accounting Law but not widely used in practice.
- Qualified Electronic Signatures can be used to ensure the integrity and authenticity of invoices.

### ICELAND (POST AUDIT)

- Integrity and authenticity 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 to prior authorization from the tax authority.
- B2G electronic invoicing is mandatory.

### KOSOVO (POST AUDIT)

- The VAT Law allows taxpayers to issue and store invoices in electronic form, subject to prior approval by the tax authority.
- Integrity and authenticity of electronic invoices can be ensured by means of an 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 electronic 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.

#### **MACEDONIA (POST AUDIT)**

- Electronic invoicing is permitted subject to the buyer's explicit consent and the authenticity and integrity of the electronic invoice being ensured by means of a Qualified Electronic Signatures-like 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.

#### **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 Centre and the Special Telecommunications Centre. Presently, the Certification Centre is the main entity issuing all types of digital certificates.
- In July 2016, the Moldovan Security and Intelligence Service issued comprehensive decrees on the operation of service providers. At the time of publication, no private companies have been accredited or included in the public register.
- The issued electronic invoices are stored in the e-Factura system.

#### **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 invoices is required throughout its whole lifespan. This can be achieved by means of a Qualified Electronic Signatures. No specific system/portal/software is prescribed by the law.
- Outsourcing of electronic 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.

#### **NORWAY (POST AUDIT)**

- Authenticity and integrity 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, and that it can be printed.
- 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 EEA countries is possible in certain cases if prior authorization has been obtained from the tax authorities.

- B2G electronic invoicing is in practice mandatory.

### **RUSSIA (CLEARANCE)**

- Electronic invoices must be based on regulated XML schemas/formats and be digitally signed; the signing operation must be performed in Russia.
- The electronic signature is based on a qualified certificate, provided by a state authorized Russian Certification Authority and the necessary authorized software.
- The electronic invoice and confirmation of receipt must be issued and exchanged between the issuer and the recipient via one of the accredited Electronic Document Exchange Operators (EDEO).
- Primary Accounting Documents (PAD) – TORG -12 for goods and Act of Acceptance for services – may also be issued in electronic form using regulated XML schema/format and must be presented in case of an audit. Such documents may be processed through EDEO or directly exchanged between the parties.
- Since early 2016, a new unified XML schema/format can be used for both electronic invoices and PADs. In the past, different schemas/formats were prescribed despite the fact of significant overlap in invoice and PAD contents. The fragmented legacy formats can still be used until the middle of 2017.
- Interoperability between EDEOs is regulated, but not widely commercially available among all operators. Companies are using several operators instead, to reach all their trade partners.
- By the end of 2016, a regulated centralized EDEO should be operating to which all EDEOs must be connected. Such arrangement is expected to ensure interoperability between all operators.

#### **RUSSIA**

*Electronic invoicing for VAT purposes has been permitted since 2012 in Russia. A VAT e-invoice is a file in the established XML schema/format coupled with an electronic signature, which is then transferred via an accredited electronic document exchange operator ('EDEO'). EDEOs are companies that provide services for exchange of open and confidential information via telecommunication channels.*

*The authenticity of origin and integrity of content of the e-invoice must be guaranteed by means of an electronic signature that must be based on a qualified certificate issued by a locally accredited Certification Authority. The signature should be that of an authorized representative of the supplier. Technically, the supplier may however delegate the authority to sign the e-invoice electronically on the basis of a power of attorney. The necessary software/hardware equipment for signing must be located in Russia, either at the supplier's premises or at the EDEO. The party performing the signing operation must have a license to operate crypto equipment and Russian authorities must have a possibility to conduct physical audits and controls, on Russian soil.*

*E-invoices must be stored in the same form and format in which they were issued.*

*Both trading partners must store e-invoices for four years from the end of the accounting period. The law imposes an additional storage requirement on EDEOs: they must store 'the information and data' on the e-invoice exchange for at least four years.*

*The authenticity of origin and integrity of content of an e-invoice must be guaranteed throughout the storage period. Furthermore, the data guaranteeing the authenticity of origin and integrity of content of the e-invoice must also be stored. In addition to the e-invoice it is necessary to store, in particular, technical messages generated by the EDEO(s), the supplier, and the buyer within the e-invoice exchange process, e.g. confirmations and notifications of sending or receipt, the qualified certificate, verification key, etc.*

### **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.
- The integrity and authenticity of invoices shall be ensured and electronic signa-

- tures may be used for this purpose (Advanced Electronic Signatures is sufficient).
- Only local certificates are recognized in practice. It is likely that the legislation will be updated in this regard after July 2016 in order to mirror the eIDAS Regulation.
- Use of service providers is not regulated but occurs in practice.

### **SWITZERLAND (POST AUDIT)**

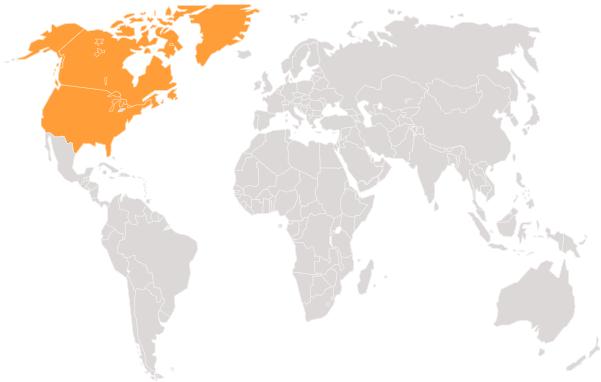
- Switzerland works with the concept of an “Advanced Electronic Signatures” – i.e. not a “Qualified Electronic Signature” - which nevertheless requires a hardware signature creation device, usually a smart card, to ensure the integrity and authenticity of the invoice. Certificates may only be issued by approved Certification Authorities.
- Switzerland has recently introduced the concept of electronic seals for legal persons.
- Third party electronic invoice issuers must be registered in the Swiss company registry.
- 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 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 sufficient. The process/approach of the validation and the results have to 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 Swiss Francs.

### **TURKEY (CLEARANCE)**

- Electronic invoicing has been mandatory in Turkey since April 2014 for certain sectors and under certain conditions. It is also mandatory to exchange electronic invoices when both parties are registered with the Electronic Invoicing application known as the Electronic Invoice Recording System (EFKS) of the Directorate of Revenue Administration of the Ministry of Finance.
- There is since 1 January 2015 also a possibility to electronically issue invoices to recipients that are not registered with the EFKS through the so-called e-Arşiv application. 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.
- 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 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 Revenue Administration, 2) by establishing a qualified and compatible software system on the company’s own servers which is integrated with the EFKS, or 3) by using an accredited service provider that is integrated with the EFKS. Sending or making the electronic invoice available to the recipient is in all cases a function performed by the EFKS.
- Service providers must be registered as taxable persons in Turkey and obtain special integration permissions from the Revenue Administration Office to exchange or archive electronic invoices on behalf of other taxpayers.

## 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).
- 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 subsequent sending the electronic invoice to the buyer.
- Outsourcing of signing of the electronic invoice is allowed to a person authorized by the supplier by virtue of a notarized power of attorney.



## ELECTRONIC INVOICING IN NORTH AMERICA

### 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 to be maintained at all times. 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 electronic invoicing 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 very explicit federal requirements for taxpayers that only keep records in electronic format. In addition to 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 (the Uniform Electronic Transactions Act, 1999). Neither of these instruments are technology specific.
- The Office of Management and Budget (OMB) aims at directing 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 Office of Management and Budget (OMB).



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

The governments of Latin America have been among the first to adopt ambitious programs towards maximizing all the benefits of electronic invoicing. Other than the European Union and other regions, where the emphasis thus 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 administration or agents accredited by the tax administration.
- **Regulation** has made or is making the use of electronic invoicing mandatory in many countries in the region.

### 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 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% 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 down.

### **CHALLENGES FOR MODERN ENTERPRISES ACTIVE IN LATIN AMERICA**

Many companies would like their Latin American electronic invoicing solutions to fit into their international IT and process consolidation strategies so as to leverage global best practices and seamlessly integrate with strategic e-business platforms. These ambitions are stymied by a number of cumbersome characteristics of the Latin American electronic invoicing market.

### **FRAGMENTATION ABOUNDS AND SOLUTIONS ARE PREDOMINANTLY LOCAL**

Tax administrations in Latin America cooperate in different ways, but the fundamental architecture of the regulation and control infrastructure varies significantly from country to country. This means that a company doing business across a number of Latin American countries has to adopt processes and messages that are specific for every jurisdiction. In addition, the legislation often operates from the assumption that companies maintain their own local ERP systems and do not leverage modern network-based process consolidation strategies. These factors, compounded by the speed with which national systems have been put in place and made mandatory, has led businesses to adopt highly localized software-based solutions for integration towards mandatory tax administration-controlled pre-registration services. The deployment time for local companies to set up and operate such software components can be long due to technology integration and onboarding issues.

### **SOLUTION PERFORMANCE IS DRIVEN BY LEGISLATION RATHER THAN GLOBAL MARKET METRICS**

Another reason why many modern enterprises find electronic invoicing in Latin America challenging is that the pre-registration requirements create a performance dependency on the tax administration – a regulatory agency with extensive powers, acting as part of a sovereign State. Even when the tax administration does not operate system components fronting tax payers, the accredited private sector vendors providing such services on their behalf (e.g. PACs in Mexico) often view the law rather than customer needs as their ultimate requirement specification. Global best practices in relation to service levels are therefore difficult to uphold in the Latin American market.

### **KEEP TRACK OF CHANGING INVOICE SCHEMAS AND OTHER REQUIREMENTS**

In a continent that has chosen to create an intimate relationship between tax requirements and technical implementation of control infrastructures, many legal changes can impact the way enterprise systems address compliance. In the past five years, the change rate in many Latin American countries' electronic invoicing requirements has been high. It has not been easy for enterprises and their solution vendors to adapt to and test legal changes affecting systems with significant dependencies on backend accounting and logistics systems. This makes Latin American electronic invoicing challenging also from the perspective of implementing industry best practices for change management.

### CLOSE COUPLING WITH PKI DRIVES COSTS AND COMPLEXITY

Electronic signatures based on regulated Public Key Infrastructure components are at the heart of most Latin American electronic invoicing requirements. By controlling the identity of enterprises through accredited or State-operated Certification Authorities, tax administrations can be certain to hold the right enterprise accountable for pre-registered transactions. However, for modern enterprises that want to leverage outsourcing, shared services centers, Cloud services and process consolidation strategies, the legal responsibility to maintain sole control over signing keys often creates challenges. The vast majority of available solutions are based on private keys residing in local software components that have to be installed specifically for this purpose because standard business applications are not designed for this purpose.

### CULTURAL DIVERSITY AND VARYING MATURITY LEVELS

While Latin America has a relatively low level of language diversity, countries' legal and business cultures as well as the maturity of their electronic invoicing systems vary significantly. Approaches to electronic invoicing appear similar at first sight, but this similarity is highly deceptive in real life. A single enterprise with sales or operations across the region needs to take these cultural aspects into account when setting up and running multiple country-specific electronic invoicing solutions.

#### ARGENTINA (CLEARANCE)

- The tax authority (AFIP) has promoted electronic invoicing for a decade already, gradually making it mandatory to issue electronic invoices since 2015; the scope of the requirement now covers most taxpayers.
- The system is clearance based, whereby an authorization code 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 towards AFIP's web service to request an issuance authorization code (CAE) which must be delivered with the electronic invoice to the buyer.
- Invoices must be in XML and follow a sequential numeration.
- Validation of the electronic invoices is mandatory and can be done through AFIP's 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 e.g. by means of an electronic signature.
- VAT records must be stored locally in Barbados.

#### BRAZIL (CLEARANCE)

- Electronic invoicing is mandatory (although exceptions exist) and is based on a clearance system.
- There are different invoice types and rules for State (sale of goods, NF-e and transport, CT-e) and Municipality (sale of services, NFS-e) tax 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.
- In addition to the goods invoice, a DANFE document (a simplified graphical representation of an NF-e) is needed for tracking goods in transit.

- NFS-e (service) invoices are issued by each municipal system. Taxpayers using web service integration must use electronically issued provisional receipts of service (RPS) that will be converted into NFS-e once sent to the municipal system.
- No specific regulation covers outsourcing, but it is generally allowed to use a service provider.

## BRAZIL

*In the last years, Brazil has been making it mandatory to substitute different types of paper invoices called Fiscal Notes with Electronic Fiscal Notes (pt.: Nota Fiscal Eletronica). Which type of electronic fiscal note should be issued depends on the type of tax that must be documented since states and municipalities have their own different requirements. For this reason, as well as from a document perspective, Brazil's system can be divided into three main frameworks:*

1. *Nota Fiscal Eletronica (NF-e) and Nota Fiscal Eletronica Consumidor (NFC-e) for documenting transactions related to circulation (sale) of goods taxed with ICMS at a State level.*
2. *Conhecimiento de Transporte Electronico (CT-e). For documenting the provision of interstate and inter-municipal transport services (also State level).*
3. *Nota Fiscal de Servicios Electronica (NFS-e) for documenting transactions related to ISSQN at a municipal level. The responsibility of collecting the tax for NFS-e falls under the scope of each municipality within the country. Therefore, each municipality has its own legislation and system requirements to issue NFS-e.*

### NF-e/NFC-e and CT-e basic requirements

*At a high level, these three types of invoices follow similar issuance requirements. To issue electronic invoices taxpayers must get previous authorization (pt.: credenciamento) from the tax authority.*

*It is mandatory to use an XML format. Furthermore, the invoice must be signed using a digital certificate issued to the supplier by a certified local Certification Authority. The invoice must be sent to the tax authority who will clear it by issuing an authorization code. An auxiliary document must be issued to accompany the goods in transit. In the case of goods it is named DANFE. For invoices issued by transport companies, the auxiliary document is known as DACTE. Finally, suppliers must communicate the invoice to the buyer after the invoice has been authorized by the tax authority. Taxpayers must archive invoices for 5 years.*

*Upon receipt of the invoice, the buyer must validate it before using it to support the tax declaration. In addition to validation, it is mandatory for buyers of certain industry sectors to issue a message known as Manifestação do Destinatário (en.: Recipient's Manifestation), which documents the buyer's reaction to the operation described by the invoice. It generates a proof only for the tax authority and not between the parties. Such messages can be the following: 1) Confirmation of the Operation; 2) Transaction not performed (e.g. returned goods), 3) Denial of the transaction (e.g. transaction never existed). Each manifestation has a specific legal time frame to be issued counted from the moment of acknowledgment of the existence of the transaction.*

*Finally, taxpayers issuing NF-e and CT-e may also be under the obligation to issue another document called Fiscal Documents Manifest or MDF-e (pt.: Manifesto Eletrônico de Documentos Fiscais). Its purpose is to trace fiscal documents during transport and it is issued by one of the parties to the transaction or by the transport company and is communicated only to the tax authority, but does not constitute an invoice. It must be digitally signed by the issuer (supplier, buyer or the carrier) and authorized by the tax authority where the issuer is registered as a taxpayer. The law establishes an auxiliary document named DAMDFE to accompany the transport as a printed graphical representation of the MDF-e.*

### Nota Fiscal de Servicios (NFS-e)

*The NFS-e framework is heavily fragmented since each municipality has its own requirements. There is an attempt to harmonize all frameworks conducted by the Brazilian State Capital Municipalities Association (pt.: Associação Brasileira das Secretarias de Finanças das Capitais -Abraf). Nevertheless, since municipalities may adopt Abraf's standards voluntarily and partially, fragmentation still remains. All matters related to the issuance of Nota Fiscal de Serviços Eletrônica (NFS-e), are processed within the municipalities' service environments.*

*As a general rule, NFS-e issuance is mandatory for most taxpayers (with some exceptions such as autonomous professionals, e.g. in Rio de Janeiro). In order to issue electronic invoices taxpayers must get prior authorization from the municipal tax authority.*

*The NFS-e is issued via and stored by the municipal system. Taxpayers must input data either manually through the use of the municipal portal or by means of web service integration.*

*When using web service integration, taxpayers must issue batches of provisional invoices called Provisional Receipt of Service or RPS (pt.: Recibo Provisório de Serviço).*

The use of electronic signatures to sign the RPS is mandatory in some municipalities (e.g. São Paulo). In other municipal systems digital certificates are instead needed for web service authentication (Rio de Janeiro) or accessing the municipal portal. Once issued, the RPS must be converted into an NFS-e within a certain period of time established by local legislation. Such legal timeframe varies in each municipal framework. The lack of conversion of the RPS into an NFS-e equals lack of issuance of an invoice and is sanctioned with penalties that usually take the form of fines. XML format is mandatory.

Taxpayers must deliver a printed version of the NFS-e to the buyer unless e-mail delivery is requested.

Taxpayers are obliged to maintain records of both e-invoices and RPS' (cancelled as well as not converted RPS) for a period of five (5) years. While e-invoices can be accessed through the municipal system portals, it is advisable to maintain an archive to ensure compliance with local requirements.

### CHILE (CLEARANCE)

- Chile has a clearance system with gradual introduction of mandatory electronic invoicing; for large companies since October 2014 and with mid-sized and small businesses to be gradually incorporated into the mandatory regime by 2018.
- 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.
- Upon receipt of the invoice, buyers must issue several acknowledgement messages known as "Acuses" in mandatory XML format. These messages must be digitally signed.
- Taxpayers issuing electronic invoices must also keep records in electronic form and monthly report invoice data to the SII.

### COLOMBIA (CLEARANCE)

- The tax authority (DIAN) created a regulatory framework for electronic invoicing in 2007-2009. New legislation was passed during 2015 and is currently being implemented with the aim to be fully operational by January 2017.
- Electronic invoicing is mandatory for all taxpayers notified by the DIAN of their inclusion in the new electronic invoicing framework. Taxpayers that have not been notified may issue electronic invoices on a voluntary basis.
- The new framework is a soft clearance system in which DIAN participates in the process by receiving the invoice from the supplier, but without issuing any kind of authorization of the document.
- Under the new framework, electronic invoices must be issued in XML format and be digitally signed.
- Suppliers must communicate the invoice to the DIAN within 48 hours from the moment of signing.
- Upon receipt, buyers must issue an acknowledgment. In addition, a rejection message must be issued when applicable.

### COSTA RICA (POST AUDIT)

- The tax authority (DGT) introduced electronic invoicing already in 2007, but it is not mandatory currently, nor are there any immediate plans for making it mandatory in the future.
- There is no requirement for tax authority clearance but the invoicing system should be auditable.
- The electronic invoice must be created in a prescribed XML format and digitally signed.
- Upon receipt, a message accepting or rejecting the electronic invoice should be issued. These messages must be in XML format and digitally signed in compliance with the established technical requirements.
- The tax authority has recently published a draft law for public consultation with the aim of introducing mandatory electronic invoicing during 2017, possibly turning the current post audit system to a clearance regime.

**GUATEMALA (CLEARANCE)**

- Electronic invoicing is based on a clearance model and has been mandatory for certain taxpayers in Guatemala since March 2013.
- Taxpayers 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.
- Taxpayers must use the services of a “Generador de Facturas Electrónicas” (GFACE), which is a company authorized by the tax administration to act as an intermediary in the electronic invoicing process.
- The taxpayer sends 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.

**HONDURAS (CLEARANCE)**

- Electronic invoicing is based on a clearance model but is completely voluntary.
- Taxpayers that choose to issue invoices electronically must request an authorization from the tax authority for each invoice, which is given by granting an “Electronic Issuance Authorization Code” (CAEE).

**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.
- To issue electronic invoices taxpayers 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.

**MEXICO (CLEARANCE)**

- Electronic invoicing in Mexico is based on a clearance model and has been mandatory for all taxpayers since 2014.
- 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 administration's (SAT) own Certification Authority.
- An Authorized Certification Provider (PAC) must be used for a clearance process during which the PAC applies an electronic stamp (“timbrado”) to the CFDI.
- Outside the mandatory use of a PAC, taxable persons can outsource electronic invoicing processes (also to non-Mexican service providers).
- The SAT introduced mandatory e-accounting and reporting in January 2015.
- A new “complemento” for international trade (es: Complemento de Comercio Exterior) is mandatory for export invoices.

**NICARAGUA (POST AUDIT)**

- Electronic invoicing is possible, subject to prior authorization from the tax authority for the use of a computerized invoicing system.
- There is no real-time clearance done by the tax authority.

**PANAMA (POST AUDIT)**

- Electronic invoicing has been allowed since 2008 with prior authorization from the tax authority.
- For any electronic transaction with the public administration a digital signature must be used; this also applies to electronic invoices.

### **PARAGUAY (CLEARANCE)**

- Electronic invoicing is permitted in Paraguay with an authorization from the tax authority, unless taxpayers use a cash machine for issuing the invoice, in which case no authorization is required.
- In all cases taxpayers must request a “timbrado” from the tax authority (defined as “the intervention of the tax authority in the document, expressed in numerical characters”).
- There is no requirement for the invoice to be signed or to be in a specific format.
- The tax authority aimed to start the implementation of electronic invoicing through a clearance system during 2016.

### **PERU (CLEARANCE)**

- The tax authority (SUNAT) has permitted electronic invoicing since 2008, under a clearance regime.
- Peruvian legislation does not declare electronic invoicing to be mandatory as a general rule, but SUNAT can make it mandatory for certain taxpayers, individually or in group, through a designation process.
- To be able to use its own system for electronic invoicing the taxpayer 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 reception”. The supplier can subsequently communicate the invoice to the buyer.

### **TRINIDAD AND TOBAGO**

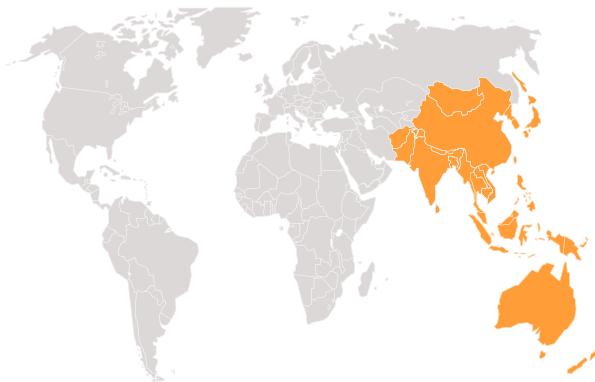
- Electronic invoicing is not explicitly permitted, nor commonly used as the original invoice form. In practice, electronic copies of paper invoices are used, but the original paper invoices are still maintained for record keeping purposes.

### **URUGUAY (CLEARANCE)**

- Electronic invoicing has been allowed since 2011 under a clearance system and is currently mandatory for certain taxpayers.
- 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 first stage started in June 2016 by making the use of electronic invoices mandatory for taxpayers with revenue exceeding 30.000.000 UI.
- The invoice must be issued in a prescribed XML format, digitally signed and cleared by the tax administration, which subsequently makes it available for online validation.
- Outsourcing of the issuance, communication and storage of the invoices is explicitly allowed in the legislation; use of locally accredited service providers provides the benefit of a “fast track” registration with the tax authority.

### **VENEZUELA (POST AUDIT)**

- Electronic invoicing is permitted only for taxpayers 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 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**

Places with a strong common law legacy, such as Singapore and Hong Kong, tend to focus regulatory measures on record retention, which translated to electronic invoicing means that there often are few rules related to electronic invoice issuance, but more controls around the e-archive. Malaysia is a notable example where the archiving requirements have been written in such a way that a digital signature appears to be the only way to fulfil the need to ensure authenticity in the archive, whereas no specific requirements apply to the actual issuance of the invoice.

On the other side of the spectrum are countries that have glanced at the success stories in Latin America and that either intend to implement, or are already well on their way of implementing, clearance-like electronic invoicing systems. In other words, electronic invoicing is partially or completely mandatory and the control infrastructure of electronic invoice issuance centers around government clearance in one way or another. In this category one can find countries such as China, Azerbaijan, Taiwan and Indonesia.

### **TAX REFORMS ON THE RISE**

Malaysia serves as an interesting example of recent legal developments in Asia also by its introduction of a Goods and Service Tax (GST) in April 2015. Indirect taxes are emerging in several Asian geographies where there historically were none.

Several states in the Middle East have publicly announced the introduction of VAT in the near future; under the umbrella of the Gulf Cooperation Council (GCC), the member States UAE, Bahrain, Saudi Arabia, Oman, Qatar and Kuwait have been working towards a simultaneous adoption of VAT. The GCC has agreed on a common framework by means of mutual treaties, the Excise Tax and VAT treaties, which will form the basis for national legislation in each Member State, entering into force within a one to three year period.

The trend towards VAT is not unique for oil-producing countries; the world's biggest manufacturers, such as China and India, have also been reviewing their tax systems during the past years, which in India led to the long-awaited adoption of GST in 2016. (Certain formal steps in the legislature process remain until GST will be in force; speculations predict entry into force between April and October 2017.) India has been struggling with a complex tax structure that has hampered the manufacturing industry by taxing the sale of goods between states and thereby causing a high risk for double taxation. China, while having had VAT in force for a long time, earlier this year decided to increase the scope of VAT, making industries that were previously subject to Business Tax now taxable under VAT instead.

### AUSTRALIA (POST AUDIT)

- An invoice can be issued and stored in electronic form subject to the integrity and authenticity 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; it could be a printout, text file, Excel file, etc.
- The tax authority requires proper documentation describing the electronic invoicing system, and, in particular, of the archiving system.
- The Australian Digital Business Council and other Governmental bodies introduced an “elInvoicing Interoperability Framework”, which provides a set of open standards for electronic invoicing that businesses, especially small businesses can choose to adopt.

### 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.

### CHINA (CLEARANCE)

- Electronic invoicing is not fully permitted in China.
- The electronic invoicing pilot that was launched in 2013 allows certain suppliers to issue electronic invoices to customers.
- The pilot currently allows large size retailers, telecommunication companies, insurance firms and some other industries, upon approval of the tax authority, to issue the so called “normal invoices” (not eligible for claiming input VAT, commonly used only for B2C transactions) electronically to their customers nation-wide.
- Electronic invoices should be in PDF format.
- The authenticity and integrity of electronic invoices must be ensured by means of electronic signatures.
- The tax authority is currently exploring the electronic invoicing model for issuance of VAT “special invoices” (eligible for claiming input VAT, used for B2B transactions).
- An amendment of the Administrative Measures on Accounting Documents came into force in January 2016. The Measures stipulate that a taxpayer 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.
- Upon completion of the tax reform in May 2016 which transforms Business Tax into VAT, more industries are now subject to VAT, for instance catering services, airline services and transportation services, which will enlarge the scope of electronic invoicing in the future.

### CHINA

*China has since 1994 focused on the benefits of using information technologies for tax control through the Golden Taxation Project (“Golden Tax System”) and the “online invoice” system, however still requiring the “online invoice” to be printed (using approved software) and sent in paper form to the recipient.*

*With the roll-out of the electronic invoicing pilot, VAT taxpayers in most provinces/cities wishing to participate in the pilot can apply for permission to issue electronic invoices to consumers.*

*The policy for pre-approval and the process for issuance of electronic invoices may vary between different pilot cities. Generally, the taxpayer should use the VAT invoicing issuance system and hardware/software certified by the Tax Authority. Before issuing the invoices, the invoice numbers to be used are issued by the Tax Authority to the taxpayer through the certified hardware/software. The issued invoices contain two visual stamps which indicate respectively the identities of the supervising tax authority and the taxpayer.*

*Although the pilot has not officially been launched for issuance of VAT special invoices, the tax authority aims to enable electronic invoicing for VAT special invoices in the near future.*

## INDIA (POST AUDIT)

- Currently India has multiple indirect taxes on federal and state levels.
- The following indirect taxes are levied by the central government at a federal level:  
a) Service tax; b) Central Excise Duty for the manufacture of goods, and c) Central Sales Tax (CST) on Inter-State sales of goods (although it is collected and administered at local level).
- State-level VAT is levied by the State governments (i.e. separately regulated in each State) on the intrastate sale of goods.
- At the federal level electronic invoicing is permitted for the Service tax and the Central Excise Duty. Digital signatures based on the Indian IT Act are required for ensuring the integrity and authenticity of the invoice. CST electronic invoicing is not permitted.
- State VAT invoices may be emitted electronically, depending on State legislation.
- The Indian Parliament passed a Goods and Services Tax (GST) bill in August 2016. GST shall apply to the supply of goods and services and the act will replace the current indirect taxes levied on goods and services on both federal and state-level.
- The bill needs to be passed by at least half of the state-level legislative assemblies to be fully adopted. The aim of the Indian government is to implement GST in April 2017.
- The federal government and the state governments will respectively levy the Central GST (CGST) and State GST (SGST) for intra-state transactions; for inter-state transactions, the Federal Government will levy Integrated GST (IGST).

## INDONESIA (CLEARANCE)

- Electronic invoicing has been allowed in Indonesia since January 2014. As of July 2016, electronic invoicing has become mandatory for all corporate VAT payers.
- Electronic invoices (locally known as e-Faktur Pajak, or e-FP) should be created through an application or an electronic system that is provided/approved by the Director General of Taxation (DGT).
- Electronic signatures are required for issuing 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 that it is prominently stated on the invoice that it is a ‘computerized document’.
- The supplier’s digital signature is required to ensure the integrity and authenticity of the invoice.
- Outsourced issuance by a third party is 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. Idem for the mandatory backups (first week of each quarter of a tax year). Outsourcing of archiving also requires derogation.

### JAPAN (POST AUDIT)

- Electronic invoicing is not specifically regulated; however both tax and customs authorities accept electronic invoices in practice.
- The requirements for electronic invoicing have to be drawn from the general tax rules on invoicing and from regulations on 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 time-stamp 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 that it fulfills 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.

### HONG KONG (POST AUDIT)

- Electronic invoicing is permitted but not specifically regulated and generally takes a common law approach.
- 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.
- Integrity and authenticity of electronic records must be maintained.
- Certain audit file presentation formats are published by the Hong Kong Inland Revenue Department.

### KAZAKHSTAN (CLEARANCE)

- Electronic invoicing became mandatory for certain VAT payers engaged in international businesses as of 1 January 2016. It will become mandatory for all VAT payers to use electronic invoices as of 1 January 2017.
- Electronic invoicing is conducted via the so-called Electronic invoicing Information System (EIIS). The EIIS’ functionality provides for 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 to be 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 available to the tax administration.
- Outsourcing of the taxpayer’s activity within the EIIS to any person other than the taxpayer’s employee or structural unit is not envisaged by law.

### 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 so-called qualified electronic signature enjoys a presumption of integrity and authenticity.

### **MALAYSIA (POST AUDIT)**

- Electronic invoicing is permitted in Malaysia.
- No prior approval is required after the entry into force of the new Goods and Services Tax (GST) Act in April 2015. However, authorization from the Director General for the Royal Malaysian Customs (the supervisory body for GST purposes) is still 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 audit.
- Integrity and authenticity are implicitly required by the Electronic Commerce Act, but there is no specific method or technology prescribed by law. Rules related to GST explicitly require integrity and authenticity to be ensured in the electronic archive; a digital signature meets this requirement.
- Outsourcing of legal electronic invoice issuance to a third party service provider - whereby the latter issues the invoice "in name and on behalf of" the supplier - is not envisaged by the law; outsourcing of technical functions, such as applying a digital signature, is however possible.

### **NEW ZEALAND (POST AUDIT)**

- The Inland Revenue Department allows electronic invoicing, subject to appropriate business processes and systems being used. Integrity and authenticity 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.

### **OMAN (POST AUDIT)**

- There is no VAT or Sales Tax in Oman and therefore no requirements for VAT invoicing. Electronic invoicing is practically possible subject to business requirements for commercial invoicing.
- Under the Royal Decree on Electronic Transactions it is implicitly required to ensure the integrity and authenticity of an electronic document, such as an invoice. This can be achieved e.g. by means of an electronic signature.

### **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 (e.g. in electric power and natural gas industries) using computerized accounting systems may issue Sales Tax invoice 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 is permitted since more than a decade, and e-documents should generally have the same value as paper-based documents. However, in practice a hard copy is still required unless an 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 administration.

#### **QATAR (POST AUDIT)**

- There is no VAT/GST in Qatar and therefore tax invoices, including electronic invoices, are not regulated. However, the 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 integrity and authenticity 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)**

- There is no VAT/GST regime in Saudi Arabia and therefore there are no specific legal requirements for electronic invoicing. However, electronic invoices can be considered to fall under the scope of existing rules on Electronic Transactions, Electronic Data and Electronic Signatures.
- It is implicitly required to ensure the integrity and authenticity of electronic transactions and electronic signatures may be used to this end.
- The archiving requirements for electronic documents demand that invoices be stored in Saudi Arabia.

#### **SINGAPORE (POST AUDIT)**

- Singapore generally follows the common law tradition, focusing on storage rather than the issuance of the invoice. The rules published by the Inland Revenue Authority of Singapore 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.

#### **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 (the "NIPA") for the facilities and systems.
- Electronic invoices must be issued using one of the methods that are designated by tax law.
- The use of an electronic signature is mandatory. In order to fulfil this legal requirement the taxpayer may either use (i) a certificate issued by the Public Certification Authority or (ii) 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, since 2015, mandatory for certain industries. Business entities that are registered with a local tax authority are qualified to engage in electronic invoicing.

- Invoices may be issued using one of three available methods: a Service Platform provided by the Ministry of Finance (MoF); an accredited private system; or an accredited service provider. For the latter two methods, it is required to upload information regarding elements such as issuance, cancellation and return of the 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; subject to the approval of the Director General of the Thai Revenue Department a taxpayer may prepare, deliver and keep its 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 relevant information to the Revenue Department on a monthly basis for audit purposes.
- Outsourcing of the issuance of electronic invoices to service providers is currently not envisaged by Thai legislation.

#### **UNITED ARAB EMIRATES (POST AUDIT)**

- There is no VAT or comparable tax in the UAE and no electronic invoicing stipulations in the law, therefore no specific requirements exist for electronic invoice issuance.
- There are provisions in the Electronic Commerce law that can be applicable to electronic invoicing; it is implicitly required to ensure integrity and authenticity under the provisions of this law and electronic signatures may be used to this end.
- There are archiving requirements for electronic documents that apply to electronic invoices.

#### **VIETNAM (POST AUDIT)**

- Electronic invoicing is allowed and will gradually be made mandatory over the coming years. The future mandatory set-up is inspired by the Latin American system and will require taxable persons to register electronic invoicing data both in their own system as well as with the relevant tax authority.
- A pilot project for electronic invoicing was launched in 2015 by the Ministry of Finance and will run until the end of 2016. The pilot is limited to certain enterprises in primarily two cities. It allows the use of electronic invoices that are authenticated by the tax authority.
- Electronic signatures (corresponding to Advanced Electronic Signatures) must be used to ensure the authenticity and integrity of the electronic invoices.
- Service providers meeting certain requirements may be used for issuing electronic invoices. The service provider must report, every six months, to the tax authority the list of firms using its services and the amount of invoices issued.
- The storage solution must allow for the authentication of the origin, the time of issuance and receipt, and the recipients.



## ELECTRONIC INVOICING IN AFRICA

Compared to other continents of the world, paper invoicing remains dominant in Africa and electronic invoicing is not specifically regulated in most African countries. Some African states, especially the oil producing countries, are trying to implement or enlarge the scope and the rate of Value-Added Tax (VAT). These measures are examples of reactions to lower oil prices and are considered a source of stable revenue, decreasing the dependency on the oil production industry.

### **ANGOLA (POST AUDIT)**

- The possibility of issuing and storing invoices solely in electronic form is not explicit in Angolan law but can be deduced from the recently introduced decree on invoices.
- Taxpayers must use “informatic means” that guarantee a sequential and chronological numeration of the invoices.
- All invoices must contain the statement “computer processed”.
- Invoices must be stored locally.

### **GHANA (POST AUDIT)**

- As a general rule, VAT invoices are pre-printed by the relevant authorities, but exceptions can be made. Although not widely used in practice, electronic invoicing and e-record keeping can be approved by the Commissioner General of the Ghana Revenue Authority.

### **MAURITIUS (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.

### **MOROCCO (POST AUDIT)**

- Electronic invoicing is not regulated in tax law and not widely used in practice.
- The law relating to legal data electronic exchange establishes a legal framework for electronic documents, which is also applicable to invoices.
- The integrity and authenticity of electronic documents has to be ensured by an Advanced Electronic Signatures or Qualified Electronic Signatures.
- Electronic invoices can be stored abroad provided that a paper copy is stored in Morocco.

### **NIGERIA (POST AUDIT)**

- Electronic invoicing is not explicitly regulated in the legislation. However, an elec-

tronic 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.

- A new Electronic Transactions Bill is currently at a mature stage in the legislative process in Nigeria. This Bill will regulate electronic documents, including electronic invoices, and set out requirements on their issuance and storage, allowing the use of digital signatures to ensure the integrity and authenticity of the electronic document.

#### **SOUTH AFRICA (POST AUDIT)**

- Electronic tax invoices can be issued and sent electronically provided the rules for electronic documents are adhered to. A digital signature can be used to meet the security requirements.
- Electronic invoicing is only permitted if the trading parties are in agreement; the buyer's acceptance of the process must be in writing.
- Electronic invoices may be stored abroad only upon obtaining derogation. One of the conditions for derogation to be granted is that the electronic archive be 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 Electronic Fiscal Device (EFD) for issuing fiscal documents, including invoices. The EFD generates a unique number (signature), 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)**

- By means of a legislative amendment introduced in 2016, the issuance of invoices electronically is now regulated. The envisaged process requires electronic invoices to be digitally signed and registered with the government appointed entity Tunisie TradeNet, who will include a reference on the electronic document.
- The implementation of this process is being developed by Tunisie TradeNet, a public company working under the supervision of the Tunisian Ministry of Finance.
- B2G electronic invoicing is mandatory for large enterprises.

## **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] CEN Workshop Agreement “Good Practice: electronic invoicing Compliance Guidelines” ([ftp://ftp.cen.eu/CEN/Sectors>List/ICT/CWAs/CWA16460\\_.pdf](ftp://ftp.cen.eu/CEN/Sectors/List/ICT/CWAs/CWA16460_.pdf)).

[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 (<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32014R0910>)



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See how tax manager Erika solved her global electronic invoicing compliance challenges on  
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