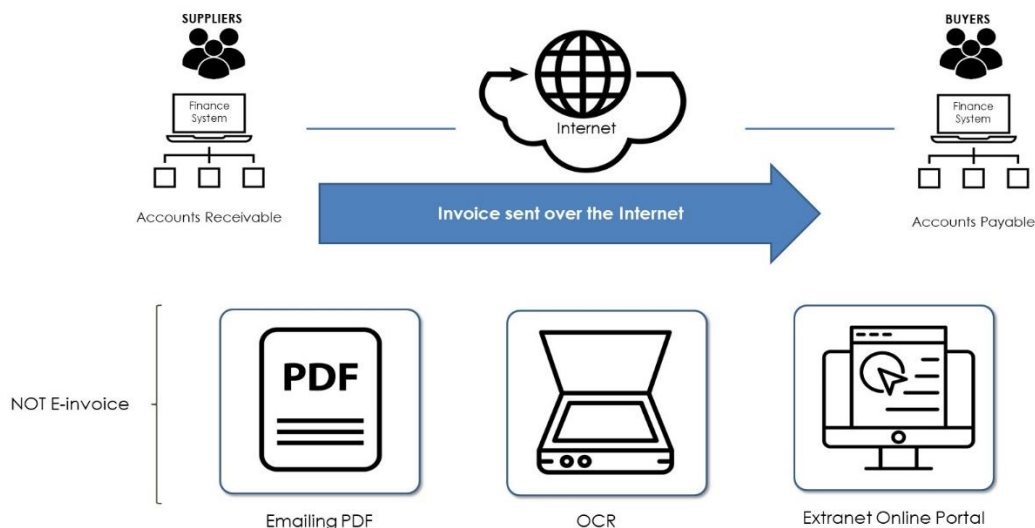


WHAT YOU NEED TO KNOW ABOUT E-INVOICING INITIATIVE

1 OVERVIEW

- 1.1 Electronic invoicing or E-invoicing is the automated creation, exchange and processing of B2B/B2G payment requests between suppliers and buyers using a structure digital format.
- 1.2 Businesses will be able to improve efficiency, reduce cost and get paid faster, transact cross border and have access to new financial options.
- 1.3 The nationwide E-Invoicing network is live on 9 January 2019 which is an extension of the International PEPPOL (Pan European Public Procurement On-Line) network.

2 AREN'T WE ALREADY DOING E-INVOICING?



- 2.1 From the invoice issuers' perspective, the key need is for them to be able to reliably and economically send the invoice to their customers in order to get their payment, earlier. Many is resorted to pushing PDF through emails. While that is convenient and may save cost, the problem such as change of emails address and occasional loss of emails need to be resolved. While it is electronic, it does not allow the senders ability to reap the benefits of what a digital transmission in structured form can provide such as seamless process to ensure the recipient has received invoices and thus lead to faster payment cycles. With invoice being transmitted digitally, suppliers can look forward to new innovative financing options offered by value-added service providers in the future.
- 2.2 From the invoice recipients' perspective, PDF or paper invoices are brought into their systems via data entry or OCR. Some have invested in OCR to ease the pain of data entry. However, OCR scanning accuracy is not 100% error free. Often, because of the possibility of error, human effort may be deployed to check if the data from the documents are transferred properly. In addition, there are still a lot of manual work needed to understand the different formats and label used by the issuer of the invoices. While OCR technology are getting smarter with AI, the PEPPOL network that uses a standard structured format of exchange is a much better option.

- 2.3 There are also a number of organizations that uses an Extranet Online Portal to their business partners to login and provide clean data. This is more commonly done by big buyers; though big issuers of invoice may also have a portal. The portal is a single-sided approach to digitization, mainly benefitting the owner of the portal. It has its advantages as owners of the portal can customize it to meet their needs. However, there will still be operational overheads in managing login accounts and not being able to convince some business partners to use the portal. Big buyers owning such portals should consider how invoices can be received through PEPPOL as this will improved productivity with increased invoice accuracy and less manual work is required due to invoice errors. Dynamic discounts can be explored as well, allowing buyers and suppliers to negotiate discounts based on speed of payment. Big billers owning such portals should consider sending out e-invoices via PEPPOL as it is a surer way for the recipients to capture the data so that payment process can be quickened.
- 2.4 In summary, e-invoice should involve the transmission of data from a supplier in a format that can be entered into the buyer's Account Payable system without requiring any human intervention or data input from the buyer's administrator. By removing paper and manual processing from your current invoicing process, e-invoicing automates the process of integration between suppliers and buyers and regardless of your invoicing software and other business systems.

3 GENERAL BENEFITS OF E-INVOICING



E-invoicing offers the following main business benefits.

- *Improve Efficiency:* Moving from paper to e-invoices will do away to manual data entry which are error prone. It cuts down the need to resolves errors which today involves verifying the information, finding out where the error occurred and possibly resolves conflicts internally and externally. Processes can be streamlined when more of such activities are digitalised.
- *Reduce Cost:* Moving from paper to e-invoices also eliminates or reduces several costs to businesses such as storage and retrieval costs.

- *Get Paid Faster:* E-invoicing can accelerate invoice processing and payment times¹. A common standard would allow quicker validation and reduce payment processing delays. According to Enterprise Singapore's² SME Financing Survey 2017, delays in customer payments was the top finance-related concern. The survey also noted three in five SMEs faced delayed payments from customers.
- *Transact Cross Border:* With the nationwide e-invoicing network, which is global, organizations can easily send e-invoices to participating business partners overseas and achieve the speed of processing similar to what can be achieved domestically.
- *Access New Financial Options:* E-invoicing allows for accurate and near-real time visibility of payment cycles. This enables better business sustainability and growth through efficient cash flow management. It also has the potential to enable more efficient supply-chain financing that could increase working capital and liquidity.

4 HOW PEPPOL E-INVOICING WORKS

4.1 As Singapore's Companies who wish to adopt e-invoicing must subscribe to a certified³ AP Provider of their choice or PEPPOL Ready Service Providers (such as ERP or Accounting solutions on the cloud). Companies then send their e-invoices to their AP Provider or PEPPOL Ready Service Providers, which checks and verifies the receiving company's PEPPOL address through the⁴SMP (address book). The AP Provider then sends the document to the relevant receiving AP Provider, and then onward to the receiving party.

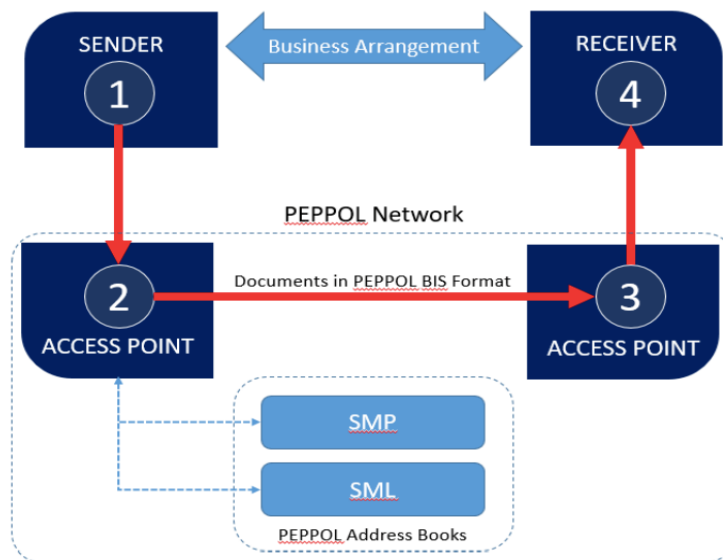


Figure 1: Sending an e-invoice on the PEPPOL network

¹ A 2017 US Federal Reserve Bank of Minneapolis study indicates that about 92% of e-invoices were paid on time compared to 45% of paper invoices.

² The survey was conducted in 2017 by SPRING Singapore, now known as Enterprise Singapore, formed as a result of a merger with International Enterprise Singapore on 1 April 2018.

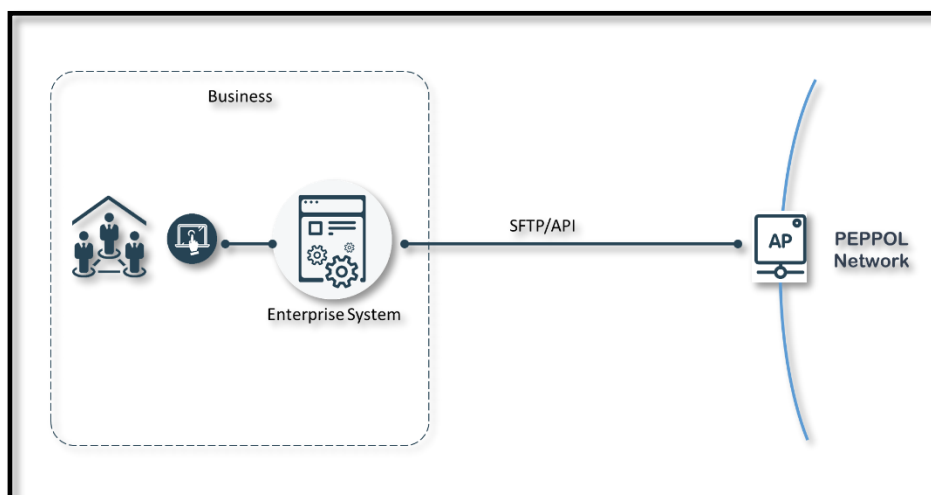
³ Access Points are the nodes which companies route their documents through. Each AP is run by its own provider.

⁴ Service metadata publishers are akin to localized address books for PEPPOL's network. OpenPEPPOL maintains a master list.

5 HOW TO GET CONNECTED

There are three common scenarios to connect to the PEPPOL network.

A. Business with own Enterprise System



Many businesses have their own financial systems where they have digitalise their accounts payable and accounts receivable activities. They may also be ERP or SCM type systems where invoices are created or captured. To connect to PEPPOL for delivery of e-invoices, these systems will need to be connected to the PEPPOL network via an Access Point. The common way of connecting is via SFTP or API, where the former method is still most popular today.

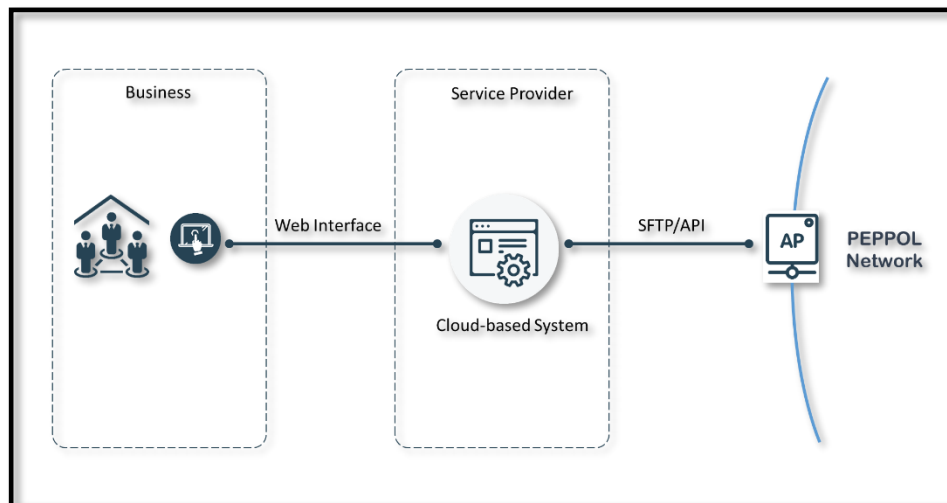
Steps to take:

1. Engage an Access Point provider that provides connectivity option
2. Include a new field in the Enterprise System for business partners PEPPOL ID (the ID that is required when sending an e-invoice)
3. Update the PEPPOL ID on business partner records as they come on-board the network
4. Work with the Access Point provider to map the Enterprise System dataset with PEPPOL dataset to establish the run-time mapping capability offered by the Access Point
5. Work with the Access Point provider to establish the data transfer mechanism via SFTP or API
6. Register your Business on the PEPPOL network through your Access Point.

Common questions:

- a) How much will Access Point providers charge for their service?
 - Access Points providing connectivity service usually use a combination of one-time charge for integration and volume-based tiered pricing for e-invoice transactions. Obtain the pricing from the Access Point providers.

B. Business using Service Provider's solution



There are increasing number of businesses, particularly the SMEs, using cloud-based hosted Enterprise Systems where invoices are generated or captured for processing. These systems will need to be connected to the PEPPOL network via an Access Point. Since the system is owned or managed by the Service Providers or their technology partners, the activity to establish the connection is carried out by them.

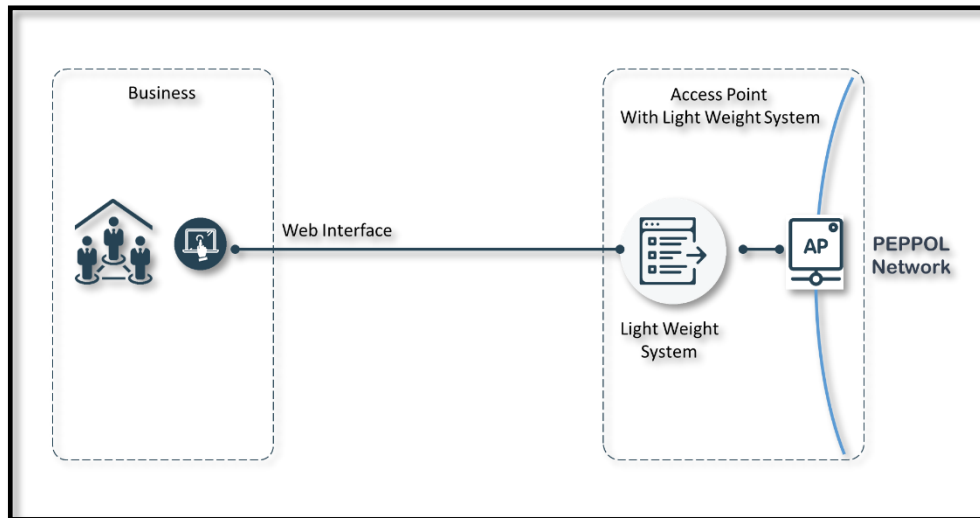
Steps to be taken by Service Providers or their technology partners:

1. Engage an Access Point provider that provides connectivity option.
(Alternatively, become an Access Point provider by working directly with IMDA. Contact us at einvoice@imda.gov.sg for more information.)
2. Include a new field in the Enterprise System for business partners PEPPOL ID (the ID that is required when sending an e-invoice)
3. Work with the Access Point provider to map the Enterprise System dataset with PEPPOL dataset to establish the run-time mapping capability offered by the Access Point.
4. Work with the Access Point provider to establish the data transfer mechanism via SFTP or API.

Steps to be taken by businesses:

1. Check with your service provider the required activation process. This may differ amongst the service providers, both in process and commercial terms.
2. Update the PEPPOL ID on business partner records as they come on-board the network
3. Learn from the Service Provider how to issue e-invoices
4. If your service provider is not PEPPOL Ready, check with them their roadmap and plan accordingly.

C. Business without an Enterprise Solution (or chooses not to integrate with their Enterprise Solution)



Some businesses, particularly the SMEs, may not have embarked on their digitalisation journey with any Enterprise System. There are Access Providers offering Light Weight System at very low cost. The Light Weight System is typically a cloud-based system providing you the ability to enter invoice information to send to the network and receiving capability for your business partner to send e-invoices to you. There will also be a simple customer/vendor database for you to maintain online.

Steps to be taken by businesses:

1. Find out more from Access Points offering Light Weight System.
2. Sign up an account. The on-boarding process will take you through the necessary steps to register your PEPPOL ID.
3. Update the PEPPOL ID on business partner records as they come on-board the network
4. Learn from the Service Provider how to issue e-invoices

6 IMDA AS A PEPPOL AUTHORITY

- 6.1 Following an evaluation of e-invoicing standards, IMDA implemented the Pan European Public Procurement On-Line (PEPPOL) e-invoicing standard, making IMDA the first National PEPPOL authority outside of Europe, and the first National Authority in Asia, to adopt the standard. IMDA and OpenPEPPOL signed a letter of appointment in May 2018 to formalize IMDA as the National PEPPOL Authority in Singapore.
- 6.2 Singapore's network was launched on 9 January 2019. Enterprises and technology solution/service providers are now able to join the network to enjoy the benefits of E-Invoicing. Service providers can now bring on-board their corporate customers.
- 6.3 The following are the key characteristics of PEPPOL:
 - An open standard intended to bridge interoperability across competing business solutions;

- Tried and tested standard, handling millions of transactions across Europe;
- Clear technical and legal frameworks at national and international levels;
- The capability to “connect once, connect to all” – the ability to deal with any other business on the network seamlessly; and
- A single and standardized means of issuing and receiving e-invoices with others on the PEPPOL network

- 6.4 The PEPPOL standard is maintained by OpenPEPPOL, a non-profit international association. It was conceived in the European Union in 2008, with OpenPEPPOL established in 2012. In May 2018, it has 311 members from 32 countries, with 209 Access Points in 26 countries in Europe, North America and Asia, that serve to connect over 150,000 entities. PEPPOL conducted over 90 million transactions between the Access Points in 2018.
- 6.5 As of May 2018, there are more than 10 other PEPPOL Authorities in Europe, mostly run by their respective public sectors. They are: Belgium, Denmark, Germany, Ireland, Italy, Netherlands, Norway, OpenPEPPOL AISBL, Poland, Sweden and the UK.
- 6.6 As Singapore’s PEPPOL Authority, IMDA sets the national rules and specifications that meet Singapore’s domestic requirements. It has appointed Singapore Network Information Centre (SGNIC) Pte Ltd as the Service Metadata Publisher and has certified more than ten PEPPOL Access Point (AP) providers to date. IMDA will also ensure their conformance to the PEPPOL technical and service standards.

Find out more on how you can digitalize your business network with E-Invoicing at invoice@imda.gov.sg!