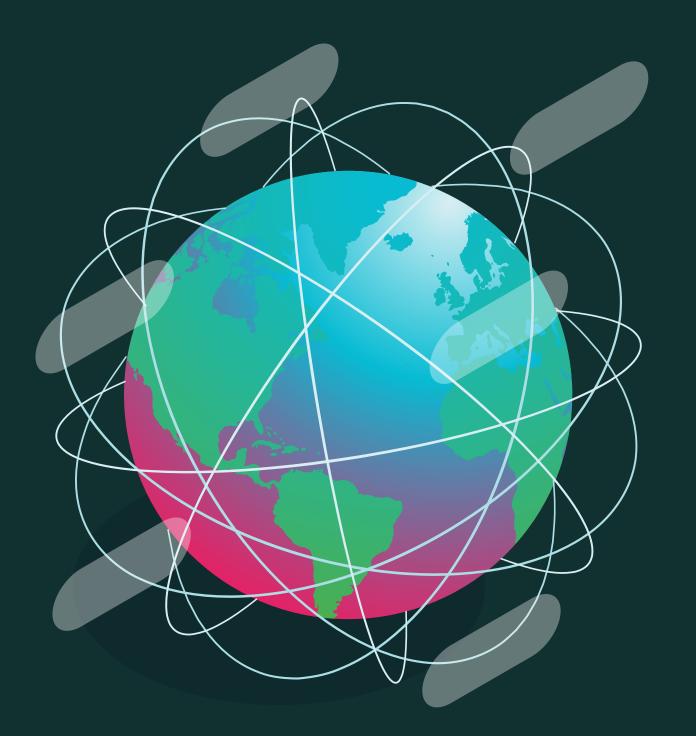
CAPABILITY WISE



HOW DOES THE PEPPOL NETWORK OPERATE?



To ensure that buyers and sellers can successfully exchange business documents across the Peppol network, an established set of rules and specifications must be consistently applied by the Peppol Authorities and Service Providers. These rules and specifications are coursed through the Peppol Interoperability Framework.

The Peppol Interoperability Framework provides governance and architectural frameworks via the Peppol Governance Framework and Peppol Architectural Framework, respectively. These frameworks incorporate policies, requirements, specifications, and legal agreements.





The Peppol Network

The Peppol network complies with the Peppol Interoperability Framework to allow end users to conduct cross-border eProcurement. The network connects different eProcurement systems using a set of common business processes and technical standards.

All access points (APs) are connected using the same electronic messaging protocol and formats. As for security, point-to-point encryption is used to ensure message confidentiality, while digital signatures are used to ensure message integrity across the network.

Once connected to the Peppol network through an access point, government agencies and businesses can quickly and securely connect with other trading partners that are registered on Peppol.





All organisations that participate on Peppol publish their receiving capabilities using a separate service known as the Peppol Service Metadata Publisher (SMP). Receiving capabilities include the supported document types, delivery addresses, and method of transport that are supported for the document types.

In order to ensure that the senders' electronic documents are being received by the correct recipients, all Peppol APs need to know each other and the participants they support. Peppol has created one centralised registration system, known as the Service Metadata Locator (SML), to ensure accurate deliveries.





The SML defines which SMP to use for finding out the delivery details of specific Peppol participants. Moreover, to reinforce the security and integrity of the business transactions being conducted through the network, Peppol relies on a Public Key Infrastructure (PKI) to establish trust and security.

Aside from the centralised SML and PKI-based security, the network hosts more than 100 APs and close to 50 SMPs. These components are brought together by a common set of specifications and a legal framework/set of agreements known as the Peppol Governance Framework.





The Peppol 4-Corner Model

The Peppol network operates using the 4-corner model. This model consists of four distinct components working together to seamlessly exchange procurement data:

- 1. The sender
- 2. The recipient
- 3. The sender's access point
- 4. The recipient's access point





The following occurs when a message is sent via the Peppol network:

- 1. The sender communicates with its AP and provides the invoice data to the AP. The AP then transforms that data into the common format accepted by the network.
- 2. The sending AP uses the Peppol ID of the recipient to find the associated SMP. The sending AP then registers the metadata with the SMP.
- 3. The sender's AP transmits the message to the recipient's AP. The latter then forwards the message to the recipient.
- 4. The two APs communicate to confirm the technical delivery of the message. The receiver's AP then sends a transport acknowledgement back to the sender's AP.



The Peppol Architectural Framework

Peppol's Architectural Framework provides a set ovf technical specifications for its business documents (known as Peppol BIS) and the network itself.

These specifications allow Service Providers to provide the semantic and technical interoperability on behalf of the end users.

Aside from Peppol BIS, the specifications include:

- Packaging and security specifications
- Messaging specifications
- Capability Lookup and Addressing specifications
- Peppol Authority-governed specifications (where approved)



The Peppol Business Interoperability Specifications (Peppol BIS)

Peppol developed its Business Interoperability Specifications (Peppol BIS) to standardise its end-to-end eProcurement processes. Peppol BIS standardises the e-documents being exchanged by Service Providers using the Peppol network.

Peppol BIS implements specifications that are based on the OASIS Universal Business Language (UBL) ISO/IEC 19845 standards. These standards are compliant with the EN1693. Moreover, different message types are available for common pre-award and post-award eProcurement processes.



The Peppol Governance Framework

Peppol's Governance Framework ensures that organisations operating within the Peppol network are abiding by its established legal agreements.

The roles and responsibilities of OpenPeppol, the Peppol Authorities, and the Service Providers are outlined in the following agreements:

- 1. The Peppol Authority Agreement
- 2. The Peppol Service Provider Agreement

The Peppol Authority Agreement covers the general principles of cooperation between OpenPeppol and the various Peppol Authorities.

The Peppol Service Provider Agreement, meanwhile, covers the general principles of cooperation between a Peppol Authority and the Service Providers within its jurisdiction.