Simplerinvoicing

Scheme Specifications

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Release
October 8, 2013
Version 1.0
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Welcome

Dear reader,

Simplerinvoicing has become a reality. From January – September 2013 service providers, ERP vendors and E-invoicing providers together with Logius on behalf of the Dutch Government developed and implemented a scheme that wants to bring electronic invoicing to everybody: consumers, small business, corporates and governments, regardless of their size, sector or industry.

The launch of Simplerinvoicing marks an important milestone in the adoption of e-invoicing in Europe. For the first time in the industry, Simplerinvoicing brings together the industry learnings into a single scheme. A scheme that is truly focussed on the end-user: the trading entities that send and receive electronic documents.

Simplerinvoicing brings electronic invoicing to the software that parties are already using in their invoicing process: ERP and accounting software, E-invoicing service providers and potentially many other services that play an important role in the invoicing process of users. Simplerinvoicing aims to be easy to implement. For software vendors, e-invoicing providers but also for the end-user.

Simplerinvoicing is implemented by a growing number of parties. Parties that recognise that by joining forces the total market for e-invoicing grows from 10-25% towards early 100% in the next couple of years, increasing the opportunity for all parties involved. And the future of Simplerinvoicing is determined by its participants: parties that develop innovative and compelling e-invoicing service on top of Simplerinvoicing and by doing that making the life easier for millions of businesses, governments and consumers.

Invoicing is just the beginning. The roadmap for Simplerinvoicing is already filled with additional functionality: e-ordering, e-cataloging and also supply chain finance. The possibilities are endless.

We hope you join the community of Simplerinvoicing so that the reach of Simplerinvoicing grows towards its ambition: simpler e-invoicing for everyone.

Kind regards,

Simplerinvoicing
1 Introduction

1.1 Purpose of this document

This document describes the Simplerinvoicing Scheme, that is, the organizational, application and technical rules that are required to foster interoperability between participants of the Simplerinvoicing Scheme. Participants are service providers and ERP/Accounting software vendors. Individual Trading Entities are users of the scheme, but not participants.

The Simplerinvoicing Scheme includes specifications of the set of standards and protocols that are used to exchange electronic documents between participants of the scheme.

1.2 Structure and relation to other documents

This document has the following structure:

Section 1 provides an overview of the Simplerinvoicing Scheme.

Section 2 provides implementation guidelines for the use of the UBL2.0 standard, and implementation guidelines for the Transport Infrastructure.

In addition the following documents are part of the Simplerinvoicing document suite:

- Simplerinvoicing UBL Implementation Guidelines for Invoice and Simplerinvoicing UBL Implementation Guidelines for Credit Note: these documents provide an overview of the fields in the UBL2.0 message standard and their use in different Simplerinvoicing messages (currently only invoice credit note are supported).

- Transport Infrastructure Agreement: this document contains the contract that arranges your responsibilities of a Simplerinvoicing Participant vis-a-vis the other Simplerinvoicing participants.

1.3 Audience

Section 1 of this document is targeted at strategic decision makers, product managers and architects that need a high level overview of the Simplerinvoicing Scheme in order to understand how Simplerinvoicing fits in their propositions.

Section 2 of this document is targeted at product managers, architects, developers and anybody designing and/or developing services based on the Simplerinvoicing Scheme.

Readers of section 2 are expected to have working knowledge of internet and security standards including HTTP, XML, SOAP and WS-Security.
1.4 Glossary

A glossary of terms used in this document is provided in Annex A.

1.5 Notational conventions

The keywords "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119 (http://www.ietf.org/rfc/rfc2119.txt).

1.6 Typography

Messages, data elements or parts thereof appear like this.

References to other documents appear like this.

Requirements imposed on Participants implementing Simplerinvoicing in this document have this prefix: REQ S.NN, where S refers to the respective section number and NN to the requirement number and appear like this. Throughout the document also non-numbered requirements are specified. For readability purposes the detailed specifications themselves are not numbered, instead they are referred to by an overarching numbered requirement.

Terminology used in this document that have a specific definition in the context of this document starts with a capital. The definition is provided in Annex A.

Design decisions made in the document are based on the business requirements and design principles underlying the Simplerinvoicing Scheme. Design decisions are listed in Annex B. References in the text to specific design decisions appear like this.

1.7 Versioning

The version of this document is expressed in the date of publication of the document. The version is indicated at the cover page and in the revision history. The versioning of messages is indicated in the namespace identifier.

Changes that result in no change of functionality (e.g. typos, rephrasing and adding examples) can always be made without affecting the version number. For this document this will result in annotation in the revision history table.

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Section 1: Scheme overview
2 High level overview

2.1 Scheme objective

The objective of the Simplerinvoicing Scheme is to enable any Trading Entity to send E-invoices to any other Trading Entity, regardless of its size, industry and sector, and by doing so, create mass adoption of E-invoicing. This increases market potential for the Simplerinvoicing participants.

2.2 Scope

The following aspects are in scope of Simplerinvoicing:

- Definition of roles and responsibilities of the Participants;
- Definition of implementation guidelines and validation rules for the supported document formats (currently invoice and credit note);
- Definition of the interactions between a Sending and Receiving Service, and the minimal processing instructions a Participant should execute;
- Definition of the addressing and identification mechanism used in Simplerinvoicing;
- Definition of the transport infrastructure for the exchange of the E-invoice, Credit Note and Receipt Confirmation;
- Definition of the Directory infrastructure that facilitates discovery of Simplerinvoicing Participants and resolving Identifiers into Addresses;
- Definition of the use of the Simplerinvoicing UBL format in interactions between parties not using the Simplerinvoicing Transport Protocol.

The following aspects are not in scope of Simplerinvoicing:

- The competitive service offerings of Participants to their respective Trading Entities;
- Communication between a Trading Entity and its Service Provider;
- Compiling and authorization of the E-invoice;
- Disputing the invoice content;
- Payment of the E-invoice;
- Storage/e-archiving;
- Detailed functionality for related E-invoice- and e-business messages (this functionality will be supported in due course).

2.3 Design principles

The Simplerinvoicing Scheme is based on the following design principles:
- **Inclusive**: Is based on the inclusive paradigm. Therefore, it is targeted towards businesses of all sizes and industries, including micro-SMEs, SMEs, corporates, governments, both in sending and receiving roles (Trading Entities) and consumers;

- **Universal reach**: Simplerinvoicing has the ambition to be a game changer in e-invoicing. An important precondition to change the status quo and radically accelerate the adoption of e-invoicing, especially among SMEs, universal reach (on the receiving side) from day 1 is a precondition;

- **Low barriers**: Takes into account the existing business processes already implemented by these Trading Entities. The Simplerinvoicing Scheme leverages existing business processes of service providers already active in this domain, including E-invoicing Service Providers and vendors of ERP or accounting software (referred to as Software Solution) or other software vendors in this domain to the mutual benefit of all parties involved;

- **4-corner model**: Is based on a 4-corner model, describing the following 4 roles: a sending and receiving Trading Entity and a sending and receiving Service Provider role. The 4-corner model describes two separate concepts. Firstly, it describes the way end-users interact on a technical level (through intermediary service providers). Secondly it assures trust in the network while Participants take responsibility for their respective end-customers and protect the rest of the network from any infringements by those end-customers;

- **Based on open standards**: Re-uses where possible existing open standards, such as UBL 2.0 for the E-invoice and Credit Note combined with a PDF original invoice and the work done in CEN (CEN Workshop Agreements) and PEPPOL;

- **Multilateral agreement**: Is based on a multilateral agreement structure that enables new Participants to engage in the model without having to engage into numerous bilateral agreements with all other parties involved;

- **Addressing mechanism**: Supports the use of an identification and addressing mechanism independent of the Service Provider, to prevent lock-in and support ‘address portability’ if required by the Trading Entity;

- **Legal compliance**: Is compliant with the applicable tax regulation in Europe;

- **Other business documents**: The Simplerinvoicing Scheme should support extendibility towards other business document types.

### 2.4 The 4-corner model

The Simplerinvoicing scheme enables the exchange of E-invoices between a Sender and a Receiver (referred to as Trading Entities). Both Sender and Receiver can select a
Service that helps them to send and/or receive E-invoices via the Simplerinvoicing scheme. The Service is offered by a Simplerinvoicing Participant.

The following terminology is used in this 4-corner model:

**Sender / sending Trading Entity:** is the role in the 4-corner model that creates an E-invoice and sends it to a receiving Trading Entity, based on a contractual agreement between the Sender and the Receiver.

**Receiver / receiving Trading Entity:** Is the role in the 4-corner model that receives and processes the E-invoice from a Sender.

**Sending Service:** is the role in the 4-corner model that enables the Sender to send E-invoices to other Trading Entities that use the Simplerinvoicing network.

**Receiving Service:** is the role in the 4-corner model that enables the Receiver to receive E-invoices from other Trading Entities that use the Simplerinvoicing network.

**Participant:** A Participant is a party that participates in the scheme and either offers a Sending Service, a Receiving Service or both.

Figure 1: 4-corner model in Simplerinvoicing

Note that certain Trading Entities may decide to become a Participant in the model, effectively taking on a Sending or Receiving Service themselves.
2.5 Simplerinvoicing Participation & use of the Simplerinvoicing UBL format

This paragraph is based on design decision 0001 - Adoption of the Simplerinvoicing UBL format.

Distinction is made between two different ‘service levels’ a Simplerinvoicing Participant may offer. These service levels are clearly communicated by the Simplerinvoicing Participant to the Trading Entity so that the Trading Entity knows which service level he can expect:

- **‘Simplerinvoicing LITE™’**: A party adopts the Simplerinvoicing UBL format, and exchanges this format via existing channels, for example, via e-mail;

- **‘Simplerinvoicing FULL™’**: In addition to adopting the Simplerinvoicing UBL format, a party also participates in the Simplerinvoicing Scheme as a Participant by using the Simplerinvoicing Transport Infrastructure to exchange the Simplerinvoicing UBL.

The difference in Service Levels is as follows:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Simplerinvoicing Lite™</th>
<th>Simplerinvoicing Full™</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receive invoices in your software without manual entry</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Send and receive e-invoices in Simplerinvoicing UBL format</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Enhanced security and reliability of transfer</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Instant discovery of buyers (using directory)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Guarantee of authenticity and integrity for tax audit purposes</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 1: Simplerinvoicing LITE™ vs Simplerinvoicing FULL™

2.5.1 **‘Simplerinvoicing LITE™’**: Adopt the Simplerinvoicing UBL format

The Simplerinvoicing UBL format is based on the PEPPOL BIS profiles, which is again based on the UBL 2.0 standard for the E-invoice and Credit Note and the CEN BII Implementation Guidelines for the core procurement documents.
Parties are free to use the Simplerinvoicing UBL format to exchange E-invoices via any channel. Parties that communicate that they use the Simplerinvoicing UBL format should communicate clearly:

- To the Sending Trading Entity:
  - The Simplerinvoicing UBL format is only used as the data format;
  - The Simplerinvoicing UBL Invoice is not delivered via the Simplerinvoicing Transport Infrastructure;
  - The Trading Entity cannot make any claim regarding deliverability, confidentiality and integrity under the Simplerinvoicing Scheme.

- To the Receiving Trading Entity:
  - The Simplerinvoicing UBL format is only used as the data format;
  - The Simplerinvoicing UBL Invoice is not received via the Simplerinvoicing Transport Infrastructure;
  - The Trading Entity cannot make any claim regarding deliverability, confidentiality, authenticity and integrity under the Simplerinvoicing scheme.

Parties that use the Simplerinvoicing UBL format this way MAY use the ‘Simplerinvoicing LITE’ label in their communication towards Sending and Receiving Trading Entities as defined in chapter 10.

If a party chooses to use the ‘Simplerinvoicing LITE™’ label, the party MUST adhere to the ‘Simplerinvoicing LITE™’ Terms & Conditions (see paragraph 3.1.5).

The ‘Simplerinvoicing LITE™’ label only covers the use of the Simplerinvoicing Implementation Guidelines for the UBL 2.0 standard.

2.5.2 ‘Simplerinvoicing FULL™’: Become Participant in the Scheme

Becoming a Participant in the Scheme allows the Participant to develop a Sending or Receiving Service under the Simplerinvoicing Scheme rules. This Sending or Receiving Service enables secure delivery of E-invoices through the Simplerinvoicing Transport Infrastructure.

This provides the following guarantees to the Trading Entities:

- E-invoices are exchanged between the Simplerinvoicing Sending Service and Receiving Service in the Simplerinvoicing UBL format, allowing them to automatically process such invoices into their systems;
- A technical acknowledgement is sent to the Sending Service when the Receiving Service has received the E-invoice. More detailed status reporting will be added in the future (Receipt Confirmation). For now, the delivery of the UBL documents to a Receiving Service is technically guaranteed by the PEPPOL infrastructure;
- The E-invoice has not been changed during transport between the Sending and the Receiving Service;
- The Sending Trading Entity can be identified by the Sending Service.
Simplerinvoicing does not require the Sending Trading Entity to authenticate using certificates. Trading Entities have a contractual relationship with a Simplerinvoicing Service Provider and the Sending Trading Entity has been authenticated by the Sending Service.;
- Parties that abuse the Simplerinvoicing network can be blocked from sending in E-invoices through the Simplerinvoicing network by their respective Sending Service and by all the Receiving Services. See chapter 3.7 for further rules on blocking Trading Entities;
- Can reach all other Trading Entities that are user of the Simplerinvoicing Scheme (assuming Trading Entities agreed on delivery via Simplerinvoicing) amongst each other.

Parties that are reachable under the Simplerinvoicing FULL™ implementation via a Simplerinvoicing FULL™ Participant are allowed to use the Simplerinvoicing FULL™ label in their communications under the conditions listed above. Such parties include:

- Software vendors or service providers using the services of a Simplerinvoicing FULL™ participant to send or receive Simplerinvoicing UBL documents, but not acting as a Participant themselves.
- Different sub entities of one party can be accessible via one e-business portal (e.g. the Dutch government is accessible via Digipoort). In this case the exchange of UBL documents between the e-business portal and the different sub entities is done via party specific channels. The e-business portal can deliver the UBL document to or receive it from a Simplerinvoicing FULL™ Participant.
3 Description of the Simplerinvoicing Scheme

This chapter describes the roles and responsibilities of Participants in the Simplerinvoicing Scheme using ‘Simplerinvoicing FULL™’.

Figure 2: Simplerinvoicing Operating Model

3.1 Roles and responsibilities

3.1.1 Trading Entity
The end-users of the Simplerinvoicing Scheme: these are the parties that do business with each other and want to exchange an invoice. Trading Entities have a contract with a Participant in the Simplerinvoicing Scheme. Below specifications apply to ‘Simplerinvoicing FULL™’.

- Trading Entities are responsible for taking all necessary steps to check and approve the content of the E-invoice and satisfy themselves that it can be relied on as being accurate and complete;
- The Sending and Receiving Trading Entities agree to deliver the E-invoice through ‘Simplerinvoicing FULL™’. This can, for example, be done by exchanging the Simplerinvoicing Address of the receiving Trading Entity. This does not necessarily have to be an explicit agreement;
- All commercial and legal terms relating to the commercial transactions to which the content relates are solely a matter for the Sender and Receiver;
- The Trading Entities have business processes in place that are compliant with VAT regulations regarding E-invoicing.
3.1.2 Simplerinvoicing Participants

Below specifications apply to ‘Simplerinvoicing FULL™’. Participants have the following responsibilities under the Simplerinvoicing Scheme:

- Participants MUST offer (develop or source) a Sending Service, a Receiving Service or both in compliance with the specifications provided in this document;
- Participants SHALL be liable for the value proposition, service level and support services related to their E-invoice service primarily to their own Trading Entities. The cooperation subject to the Simplerinvoicing Scheme is not subject to any specific availability or usability demands based on agreements with the Trading Entities;
- Participants SHALL meet the Service Levels as described in paragraph 7.3.
- Participants SHALL name a technical contact person, who shall act as the primary contact point between the Participants in all matters related to the availability and usability of the service between the Participants;
- Participants SHALL have service quality and development meetings as needed. Such meeting shall handle commercial and technical development measures related to the service;
- Participants SHALL ensure authenticity of their trading entities by having a contractual agreement with that Trading Entity with at least the following information: an address (corresponding with the address where the Trading Entity is registered) and a bank account number (IBAN).

Data Security

- Participants SHALL be liable for securing that their respective information systems, which produce, transfer, receive and process E-invoice messages, are adequately protected against any infringements of data security.
- The Scheme Authority has the right to request evidence of the adequacy of the Data Security measures. This can be through an audit report or other generally accepted means.

Limitation of Liability

- Participants SHALL be solely liable for its own services and all related liabilities to its respective end-customers. Neither Participant shall be liable to the other for damages, which are a result of matters that a third party is responsible for (e.g. damages which result from the actions of the other Participant, Trading Entity, another service provider, or hardware, software or data communications for which the above mentioned are responsible for);
- Participants SHALL hold the other harmless from claims from its respective partners and end-customers;
Participants have the following responsibilities under the Simpler invoicing Scheme in their **Sending Service role**:

- Provide E-invoices in the agreed form and content;
- If conversion is done by the Sending Service, ensure that during conversion, the business content of the E-invoice is not changed;
- Ensure that the Simpler invoicing UBL document is compliant with the Simpler invoicing UBL specifications;
- Use the Simpler invoicing Transport Infrastructure to deliver the E-invoice to the Receiving Service;
- The Sending Service is responsible for the data transfer until the Receiving Service has sent a Receipt Confirmation to the Sending Service;
- Carrying out these tasks with the necessary authority and consent of the Sending Trading Entity;
- The Sending Service must be able to identify the Sending Trading Entity in his system and block invoice streams from that Sender when required.

Participants have the following responsibilities under the Simpler invoicing scheme in their **Receiving Service role**:

- Use the Simpler invoicing Transport Infrastructure to receive the E-invoice from Sending Services;
- Transmit to the Receiving Trading Entity E-invoices received from the Sending Service;
- If conversion is done by the Receiving Service, ensure that during the conversion process, the content of the E-invoice is not changed;
- If agreed, carry out checks and controls for legal and VAT compliance under its Customer agreement;
- The Receiving Service will validate E-invoices that are received from the Sending Service, and send the result of this validation to the Sending Service (Receipt Confirmation). See paragraph 7.3 for details on service levels;

3.1.3 **Simpler invoicing Transport Infrastructure**

The transport of documents between Simpler invoicing Participants in the Simpler invoicing FULL™ model is done using the PEPPOL Transport Infrastructure.
PEPPOL (Pan-European Procurement Online) is a Pan-European network of service providers involved in procurement, ordering, e-invoicing and other B2B e-business services. PEPPOL connects these parties using a multilateral network.

Simplerinvoicing only uses the Transport Protocol from OpenPEPPOL and the PEPPOL Directory Infrastructure and the Simplerinvoicing UBL format is compatible with the PEPPOL standards for e-invoicing and Credit Notes (BIS5a profile).

Therefore Simplerinvoicing Participants MUST implement PEPPOL connectivity. By joining Simplerinvoicing, Participants automatically also become a member in OpenPEPPOL, the association overseeing the PEPPOL specifications.

There are open-source and commercial solutions available that may support the implementation of PEPPOL connectivity.

3.1.4 Simplerinvoicing Authority

Supervises that the services provided by the Simplerinvoicing Participants are provided in compliance with the Simplerinvoicing Scheme. The Scheme Authority manages any technical facility required to operationalize the Scheme, oversees entry and access of Participants, intermediates in case of disputes between Participants and facilitates and governs the change process of the Simplerinvoicing Scheme Documentation.

3.1.5 Parties using ‘Simplerinvoicing LITE™’

If a party chooses to use the ‘Simplerinvoicing LITE™’ label, the party SHOULD adhere to the ‘Simplerinvoicing LITE™’ Terms & Conditions. These include:

- Updates of the standard are implemented regularly. Updates are implemented no later than 6 months after release of the new UBL specifications;
- Parties will make the benefits of Simplerinvoicing LITE™ clear to their Trading Entities in line with the benefits communicated in Table 1.
- Parties will act in a way that does not harm the Simplerinvoicing brand;

Parties not compliant to above requirements will be enforced to remove the ‘Simplerinvoicing LITE™’ brand from their services, including websites, mailings, and other expressions.

3.2 Entry criteria

This section applies to Participants in the Simplerinvoicing Scheme using ‘Simplerinvoicing FULL™’.
To become a Participant, a party MUST:
- Sign the Simpler invoicing Multilateral Interoperability Agreement vis-à-vis the Scheme Authority;
- Complete and sign the PEPPOL Membership Form.
- Comply with the requirements in the Simpler invoicing Multilateral Interoperability Agreement, its annexes and the Simpler invoicing Scheme Specifications;
- Prove its ability to function in the Simpler invoicing Scheme through self-certification using a self-certification tool provided by the Scheme Authority.

3.3 Supported document formats

This paragraph is based on design decisions:
0012: Use of CEN BII Profiles for the E-invoice and the Credit Note
0011: UBL 2.0 standard for the E-invoice and Credit Note UBL Representation
0005: Envelope
0006: Attachment handling
0009: Supported document types

“Simplerinvoicing FULL™” supports the exchange of E-invoices and Credit Notes. In addition, visual representations of the document can be sent as an attachment to the Simpler invoicing UBL. Also industry specific attachments can be sent by embedding them in the Simpler invoicing UBL document (i.e. this is also known as the ‘enveloping method of the UBL 2.0’).

3.3.1 E-invoice
The E-invoice is exchanged between a Sending Service and a Receiving Service in the Simpler invoicing UBL format.
In addition a PDF representation of the same invoice MAY be sent that contains at a minimum all data elements required for an invoice to be VAT compliant.
The UBL representation of the invoice (and optionally a PDF invoice) is sent in the attachment element in the UBL data element (See paragraph 8.3).
When using the “Simplerinvoicing LITE™” or “Simplerinvoicing FULL™” label, the Implementation Guidelines for the Simpler invoicing UBL MUST be used.

3.3.2 Credit Note
The Credit Note is exchanged between a Sending Service and a Receiving Service in the UBL 2.0 format, according to the CEN BII profile (see chapter 9).
In addition a PDF representation of the same Credit Note MAY be sent that contains at a minimum all data elements required for a Credit Note.

The UBL representation of the Credit Note (and optionally a PDF Credit Note) is sent in the attachment element in the UBL data element (See paragraph 8.3).

When using the ‘Simplerinvoicing LITE™’ label, the Implementation Guidelines for the Simplerinvoicing UBL MUST be used.

When using the ‘Simplerinvoicing FULL™’ label, the Implementation Guidelines for the Simplerinvoicing UBL MUST be used.

### 3.3.3 Attachments

Simplerinvoicing uses the Attachment functionality of the UBL 2.0 standard. UBL specifies that an attachment of any form can be carried in the data element: `<cac:AdditionalDocumentReference>`.

A Simplerinvoicing UBL document SHALL NOT contain more than 10 attachments. The processing of Simplerinvoicing UBL messages up to 10MB is guaranteed. For larger message size, bilateral arrangements MAY be made between the Sending Service and the Receiving Service.

Attachments can be sent in two ways: as an URI to a resource containing the specific attachment in the `<cac:ExternalReference>` element or as an embedded document in the `<cbc:EmbeddedDocumentBinaryObject>`. For detailed implementation guidelines of the Attachment element, see the Simplerinvoicing UBL Implementation Guidelines for the E-invoice and the Credit Note.

When using the ‘Simplerinvoicing FULL™’ label, the Attachment specification MAY be used by a Sending Service. The Receiving Service MUST be able to extract the Attachment and if required pass it on to the intended receiving Trading Entity.

| REQ 1.01: | A Simplerinvoicing UBL document MAY contain at least 1 attachment. |
| REQ 1.02: | The total size of a Simplerinvoicing UBL document SHOULD NOT exceed 10 MB in size. |
| REQ 1.03: | A Simplerinvoicing UBL document SHALL NOT contain more than 10 attachments. |

### 3.3.4 Industry specific attachments

Industry specific attachments may be sent alongside the Simplerinvoicing UBL Document. The processing of such an attachment MUST be bilaterally agreed upon between the Sending and Receiving Service Providers and their respective Trading Entities.
When using the ‘Simplerinvoicing LITE™’ label, the attachments MAY be used.

When using the ‘Simplerinvoicing FULL™’ label and the use of Attachments is agreed between parties, the Simplerinvoicing attachment mechanism MUST be used.

**REQ 1.04:** All Receiving Services MUST accept the Simplerinvoicing UBL document as specified in chapter 9.

**REQ 1.05:** Receiving Services MAY accept additional Industry Specific Attachments, if the Receiving Trading Entity requires such attachments for their processing.

### 3.4 Identification and Addressing

This paragraph is based on design decisions:
0002: Identification Schemes
0004: Addressing
0003: Directory

#### 3.4.1 Identifier schemes

Trading Entities use different Identifier Schemes (e.g. VAT numbers, GLN, e-mail identifiers or other schemes). Simplerinvoicing supports resolving different Identification schemes into the connectivity details (Metadata) of a Trading Entity (in case this Metadata is not already available).

It is the responsibility of the Participants to register one or more Trading Entity Identifiers in the Directory and link it with the Receiving Trading Entity’s connectivity details.

The function of the Directory is to enable Sending Services to translate a Trading Entity Identifier into the Metadata that can be used to deliver documents to a receiving Trading Entity (via his Service Provider) using the Simplerinvoicing Transport Infrastructure. More information on the Directory and the way identifiers are stored in this Directory is provided in chapter 8.

Simplerinvoicing supports all the identifier schemes that are supported by PEPPOL. see document reference REF 05. These identifier schemes include at least the following:

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL:VAT</td>
<td>Dutch VAT numbering scheme</td>
</tr>
<tr>
<td>NL:KVK</td>
<td>Dutch Chamber Of Commerce issued organisational number</td>
</tr>
</tbody>
</table>
### Table 2: Identifier schemes in Simplerinvoicing

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL:OIN</td>
<td>Dutch identification for government agencies</td>
</tr>
<tr>
<td>GLN</td>
<td>A GLN number issued by GS1</td>
</tr>
<tr>
<td>IBAN</td>
<td>IBAN identifier for a bank account</td>
</tr>
<tr>
<td>BIC</td>
<td>BIC identifier for a financial institution issued by SWIFT</td>
</tr>
</tbody>
</table>

Note: Trading Entities with more than one identifier of any type can register all their identifiers in the Directory. For example, parties can register multiple VAT numbers in the Simplerinvoicing Directory.

#### 3.4.2 Receive Metadata for a Trading Entity

The Simplerinvoicing Identifier of the Trading Entity can be resolved by a Sending Service or Receiving Service into the Metadata for that Trading Entity given a specific document type (different document types can be routed to different Receiving Services). This Metadata consist of the following information:

- URI that can be used to establish secure connection;

#### REQ 1.06
Simplerinvoicing Participants offering a Sending or Receiving Service MUST validate and register Simplerinvoicing Metadata to any Trading Entity that wants to send or receive Simplerinvoicing UBL Documents through the Simplerinvoicing Scheme.

#### REQ 1.07
Simplerinvoicing Participants offering a Sending or Receiving Service MAY assign multiple Trading Entity Identifiers for Trading Entities that wants to send or receive Simplerinvoicing UBL Documents through the Simplerinvoicing Scheme.

#### REQ 1.08
Simplerinvoicing Participants offering a Sending or Receiving Service SHOULD resolve Trading Entity Identifiers into Simplerinvoicing Metadata in order to deliver Simplerinvoicing UBL Documents through the Simplerinvoicing Technical Infrastructure.

#### 3.5 The Simplerinvoicing Directory

This paragraph is based on design decision:

0003: Directory
The Simplerinvoicing Directory provides Participants information on whether a specific identifier is reachable under Simplerinvoicing or not. The purpose of the Directory is to:

- Resolve Identifiers into Metadata.
- Discovery of Trading Entities reachable through the network.

The Directory consists of 2 components that seamlessly work in tandem:

- The SML (Service Metadata Locator) is a DNS based directory service that links an identifier of a Trading Entity uniquely to a domain name where Metadata for that Trading Entity can be obtained (URL to an SMP, Service Metadata Publisher);
- The SMP is a service that is either implemented by the Participant itself or the Simplerinvoicing central SMP is used, that provides the connectivity Metadata.

The SMP part of the Directory contains at least the following information:

- URL of the Receiving Service that processes the document on behalf of the receiver;
- Type of documents that can be processed by the receiver;
- Certificate of the Receiving Service, used by the Sending Service to verify the authenticity of the Receiving Service.

The data in the directory is maintained by Receiving Participants, each Participant maintaining the data regarding their own Trading Entities.

The high level functioning of the Directory is described in chapter 8.

| REQ 1.09: | Simplerinvoicing Participants offering a Sending or Receiving Service SHOULD implement the functionality to resolve Identifiers into Metadata as specified in paragraph 8. |
| REQ 1.10: | If a Trading Entity uses multiple Service Providers, each participating in the Simplerinvoicing network, the Trading Entity SHALL decide which Service Provider manages which Identifier (hence invoices routed to that identifier will be received in the service provider registering the identifier). |
| REQ 1.11: | Simplerinvoicing Participants offering a Sending or Receiving Service SHOULD implement the functionality to maintain their Trading Entity information in the Directory. |
| REQ 1.12: | Simplerinvoicing Participants offering a Sending or Receiving Service SHOULD cache the Metadata. |

3.6 ‘One-leg-out E-invoices’

This paragraph is based on design decision:
0007: One-leg-out E-invoices
A Sending Service may deliver Simplerinvoicing UBL Documents using e-mail (or other channel), if the receiving Trading Entity is not addressable, not able or not willing to receive Simplerinvoicing UBL Documents through the Simplerinvoicing scheme (as determined by the directory look-up). A valid e-mail address of the Receiving Trading Entity is provided by the sending Trading Entity and the Receiving Trading Entity has agreed with the Sending Trading Entity to receive Simplerinvoicing UBL Documents via e-mail. This is the Simplerinvoicing LITE™ implementation.

This functionality allows the receiving Trading Entity to receive Simplerinvoicing UBL Document, enabling Straight Through Processing of Simplerinvoicing UBL Documents into their systems or alternatively process the PDF representation of the Simplerinvoicing UBL Document.

Delivery of Simplerinvoicing UBL Documents via e-mail is on a best-effort basis. Delivery of a Simplerinvoicing UBL Document via e-mail involves the risk that the Simplerinvoicing UBL Document ends up in a spam filter, are technically undeliverable or are delivered with a delay. Best-practices for improving e-mail deliverability are provided in chapter 6.

To create a consistent user experience related to the Simplerinvoicing brand, the e-mail SHOULD comply with the guidelines specified in chapter 6.

```plaintext
REQ 1.13: To create a consistent user experience related to the Simplerinvoicing brand, the email SHOULD comply with the rules specified in chapter 6.
```

### 3.7 Prevent misuse of the Simplerinvoicing network

This paragraph is based on design decision: 0014: Prevent abuse of the Simplerinvoicing scheme

This paragraph describes the protocol for detecting and blocking misuse of the Simplerinvoicing scheme by Trading Entities.

Abuse is used to describe the willful sending of incorrect or misleading documents over the network. Abuse of the network by Trading Entities harms the network and causes damage to participants.

When participants notice any of their respective Trading Entities is abusing the network to send fake-invoices or other abusive documents, it is their responsibility to suspend this Trading Entity.

When a participant is notified of abuse by one of its Trading Entities by another participant, the former must suspend this Trading Entity until the abuse is stopped or the abuse is found not to have taken place.
After the abuse has been proven, the Trading Entity will be permanently blocked and the other participants will be notified of the abuse.

**REQ 1.14:** The sending Service MUST be able to identify Sending Trading Entities in his system and block such a Trading Entity from sending in Simplerinvoicing UBL Documents.

**REQ 1.15:** The Sending Service MUST investigate upon a claim of abuse by a Receiving Service, and suspend sending documents from the suspected Trading Entity during this investigation.

**REQ 1.16:** In case of abuse, Trading Entities SHOULD be blocked from sending in Simplerinvoicing UBL Documents through the Simplerinvoicing scheme to any other Receiving Service.

**REQ 1.17:** Participants offering a Sending or Receiving Service MUST adhere to the protocol for detecting and blocking Trading Entities that abuse the network.

**REQ 1.18:** Participants MUST inform other participants if one of their Trading Entities have been identified for abusing the Simplerinvoicing network. This is done in an out-of-bound manner using the email contact details provided by the Participants.

### 3.8 Handling of disputes between Participants

If any dispute arises between Participants in the Simplerinvoicing scheme regarding the Sending or Receiving Services offered under the scheme the contact for legal notices from each Party, shall, within 14 days of a written request from one party to the other, discuss in a good faith effort to resolve the dispute.

If the dispute is not resolved within 7 days of that discussion, both parties shall contact the Simplerinvoicing Authority. The Simplerinvoicing Authority will discuss with both parties and try to resolve the dispute.

This provision does not prejudice either Party’s right to have urgent litigation cases under this Agreement discussed in summary proceedings.

**REQ 1.19:** Participants MUST adhere to the protocol for resolving disputes in good faith with each other.

**REQ 1.20:** If disputes are not resolved between Participants, Participants MUST contact the Scheme Authority to settle the dispute.
4 Process flow

This chapter describes the roles and responsibilities for Participants in the Simplerinvoicing Scheme using ‘Simplerinvoicing FULL™’.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>Name of a process step – out of scope of Simplerinvoicing is formatted in grey</td>
</tr>
<tr>
<td>#</td>
<td>Name of a process step – in scope of Simplerinvoicing is formatted in black</td>
</tr>
</tbody>
</table>

4.1 Process flow description

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Compile Invoice Data By: Sender</td>
</tr>
<tr>
<td></td>
<td>The Sender compiles the Simplerinvoicing UBL Document Data and sends this data to hisSending Service, using the channels offered by the Sending Service. Note: A Sending Service may offer different mechanisms for retrieving the Simplerinvoicing UBL Document from the Sender, including web-forms, importing of structured files, or, for example a ‘virtual printer’.</td>
</tr>
<tr>
<td>1b</td>
<td>Send Invoice Data By: Sender</td>
</tr>
<tr>
<td></td>
<td>The Sender sends the invoice data to his Sending Service using its own channels. This can take place using direct channels, or using for example an online portal where invoice data can be imported, typed in or for example flipped from a Purchase Order already present.</td>
</tr>
<tr>
<td>2a</td>
<td>Receive Invoice Data By: Sending Service</td>
</tr>
<tr>
<td></td>
<td>The Sending Service receives the invoice data from the Trading Entity, in accordance with the service offered to the Trading Entity.</td>
</tr>
<tr>
<td>2b</td>
<td>Create Simplerinvoicing UBL Document By: Sending Service</td>
</tr>
<tr>
<td></td>
<td>The Sending Service MUST create an UBL representation of the Simplerinvoicing UBL Document in the UBL 2.0 format (see chapter 9), unless this representation is created by the Trading Entity and sent by the Trading Entity to the Sending Service in step 1b. The Sending Service MAY create a PDF representation of the Simplerinvoicing UBL Document unless this representation is created by the Trading Entity and sent by the Trading Entity to the Sending Service.</td>
</tr>
</tbody>
</table>
Service in step 1b. The data contained in the PDF and the UBL representation MUST be identical.

Note that the PDF and UBL representations of the Simplerinvoicing UBL Document MAY be created by the Trading Entity.

The Sending Participant MUST ensure that the Simplerinvoicing UBL Document is according to the Simplerinvoicing UBL format specifications by validating against the applicable XSD.

**2c Request Delivery Address**  
By: Sending Service

The Sending Service SHOULD resolve the provided Receiver Identifier into the Metadata of the Receiving Trading Entity, when the latter is unknown. Detailed steps for directory resolving are provided in chapter 8.

**3 Lookup Delivery Address**  
By: Directory Service

The Directory MUST respond by sending the Metadata of the receiving Service to the Sending Service. Detailed steps for directory resolving are provided in chapter 8.

**4a Determine Delivery Option**  
By: Sending Service

The Sending Service SHOULD determine how to deliver the Simplerinvoicing UBL Document based on the response of the directory:

- If the composed URI identifying the Receiver does not exist in the Directory and the identifier provided is an email address identifier, the receiving Trading Entity is not reachable through the Simplerinvoicing Scheme: SHOULD continue with step 5.
- If the Directory responded with the Metadata of the Trading Entity: MUST continue with step 7.

**Option 1: Delivery via e-mail**

**5 Send Simplerinvoicing UBL Document**  
By: Sending Service

The Sending Service SHOULD compile an e-mail message in compliance with the specifications in chapter 6.

The Sending Service SHOULD send the e-mail message to the indicated Receiver e-mail address, using the normal e-mail mechanisms.

It SHOULD be made clear to Sending and Receiving Trading Entity that ‘Simplerinvoicing LITE™’ is used, and that no claims can be made under the scheme regarding the transport of the message.

**6a Receive Simplerinvoicing UBL Document**  
By: Receiving Trading Entity

The Receiving Trading Entity receives the Simplerinvoicing UBL Document.

**6b Process Simplerinvoicing UBL Document**  
By: Receiving Trading Entity

The Receiving Trading Entity processes the Simplerinvoicing UBL Document (either the PDF representation or the UBL representation).

End of option 1.

**Option 2: Delivery via Simplerinvoicing Transport Infrastructure**
<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td><strong>Send Simplerinvoicing UBL Document</strong></td>
<td>Receiving Service</td>
</tr>
<tr>
<td></td>
<td>The Sending Service establishes a secure connection with the Receiving Service based on the Metadata obtained from the Directory (See chapter 6). The Sending Service sends the Simplerinvoicing UBL Document or the batch of Simplerinvoicing UBL Documents to the receiving Service.</td>
<td></td>
</tr>
<tr>
<td>8a</td>
<td><strong>Receive Simplerinvoicing UBL Document</strong></td>
<td>Receiving Service</td>
</tr>
<tr>
<td></td>
<td>The Receiving Service MUST receive and process the Simplerinvoicing UBL Document or batch of Simplerinvoicing UBL Documents. As part of the communication protocol, the Receiving Service confirms technical receipt of the message (ACK).</td>
<td></td>
</tr>
<tr>
<td>8b</td>
<td><strong>Validate Simplerinvoicing UBL Document</strong></td>
<td>Receiving Service</td>
</tr>
</tbody>
</table>
|      | The Receiving Service MUST check if the Receiver’s Simplerinvoicing Metadata is known by the Receiving Service. The Receiving Service MUST extract the UBL representation of the Simplerinvoicing UBL Document and execute the following validations:  
- Validate its XML against the applicable XSD schema;  
- Validate its XML against the applicable additional files (such as a Schematron file expressed in XSLT). Validation of the security of the message is valid. | |
| 8d   | **Make available Simplerinvoicing UBL Document** | Receiving Service |
|      | The Service makes the Simplerinvoicing UBL Document available to the receiving Trading Entity according to the agreed channels under its customer agreement. | |

End of option 2.
4.2 Process flow diagram

Figure 3: process flow diagram
4.3 Processing instructions

The following validations are done on the message:

- Validation of the Simplerinvoicing UBL document against the Simplerinvoicing UBL XSD and applicable other validation schemas;
- Check if the Receiver’s Simplerinvoicing Address is recognized by the Receiving Service.

If errors are identified during the validation process, the Receiving Service will stop processing the message and contact the Sending Service to report the error in an out of bound manner.

Note: a protocol for automating the reporting of validation errors will be made available soon.
5 Joining Simplerinvoicing

5.1 Becoming a Participant offering Simplerinvoicing FULL™

Participants offering Simplerinvoicing FULL™ MUST in addition to supporting the Simplerinvoicing UBL format also become an access point in the PEPPOL network, hence become a Participant in OpenPEPPOL. The following steps should be taken by such Participants:

1. **Understand Simplerinvoicing**: Participants should consider how Simplerinvoicing fits into their existing service offering and whether the Participant wants to offer Simplerinvoicing LITE™ or also offer the additional benefits of Simplerinvoicing FULL™. Part 1 of this document (chapter 1 – 5) is intended to provide the information needed to make that decision.

2. **Request membership**: Participants should contact the Simplerinvoicing Authority (via www.simplerinvoicing.org) and indicate the intention to become a member. The Simplerinvoicing Authority will make available the following documents:
   - Transport Infrastructure Agreement (TIA) including its annexes.
   - PEPPOL Membership Form.
   - Terms and conditions of participating in Simplerinvoicing as described in this document.

   As a result of signing the TIA and the PEPPOL Membership Form you will obtain a PEPPOL certificate that can be used in your technical implementation.

3. **Establish PEPPOL Access Point**: Participants should develop the technical capability to interoperate with all other Simplerinvoicing Participants (and also all other PEPPOL participants). There are various ways of establishing technical connectivity:
   - **A.** Choose an opensource component that facilitates this connectivity, such as Oxalis (www.github.com/difi/oxalis) or CIPA (https://joinup.ec.europa.eu/software/cipaedelivery/description).
   - **B.** Develop your own implementation based on the Access Point Specifications provided by PEPPOL. See chapter 7 for more details.
   - **C.** Source an ‘Access Point in the cloud’ from commercial companies, such as Tickstar AB or other companies. They provide a full implementation of an Access Point.

4. **Self-testing**: Participants should test their Access Point implementation with the Simplerinvoicing Test Tool. Your credentials for the Test Tool will be
The Simplerinvoicing Test Tool simulates the behaviour of a Simplerinvoicing Participant by receiving and validating your Simplerinvoicing messages and by sending you Simplerinvoicing UBL documents.

5. On boarding: In this step you on board your Trading Entities into the Simplerinvoicing network. This is done by registering your Participants in the Simplerinvoicing Directory. Credentials for adding your Trading Entities to the Directory will be provided to you upon your request. After this step, your clients are automatically discoverable by the Sending Service based on the identifiers you list in the Directory. More information about the Directory is provided in chapter 8.

5.2 Other mechanisms to become reachable under Simplerinvoicing

Under some circumstances, parties may consider to become reachable under the Simplerinvoicing network, without becoming a Participant in Simplerinvoicing. In such cases, parties may connect their e-invoicing solution via another Simplerinvoicing Participant. Such parties are eligible to use the Simplerinvoicing FULL™ brand in their software, but such parties are not a participant in the Simplerinvoicing scheme.
Section 2: Implementation Guidelines
6 Guidelines for delivery via E-mail

Sending Services may deliver Simplerinvoicing UBL Documents using e-mail, if the receiver is not addressable, not able or not willing to receive Simplerinvoicing UBL Documents through the Simplerinvoicing Scheme, a valid e-mail address of the Receiving Trading Entity is provided by the sending Trading Entity and the Receiving Trading Entity has given consent to receive Simplerinvoicing UBL Documents via e-mail.

This chapter describes the guidelines for delivery via e-mail for Sending Services in the Simplerinvoicing scheme using ‘Simplerinvoicing LITE™’.

### 6.1 Styling guidelines for Simplerinvoicing e-mail delivery

The objective of the Simplerinvoicing Style guide is to provide an optimal and consistent user experience for Trading Entities that are not yet part of the Simplerinvoicing scheme.

#### 6.1.1 Use of the Simplerinvoicing brand

The minimum style requirements are:

- The Simplerinvoicing brand SHOULD have a prominent place in the email;
- The email SHOULD show the company name, address and Simplerinvoicing Address of the Sending Trading Entity;
- The email SHOULD contain a description of the underlying trade.
- The email SHOULD contain the total amount payable;
- The email MAY contain a mechanism for initiating a payment;
- The email MAY contain specific branding from the sending Trading Entity;
- The email MUST contain a Simplerinvoicing UBL as attachment;
- The email SHOULD contain a Simplerinvoicing PDF as attachment;
- The email SHOULD contain a valid URL to a webpage where the Receiving Trading Entity can find more information on Simplerinvoicing;
- The e-mail SHOULD contain a valid URL to a web service where the Receiving Trading Entity can register his e-mail address with a Simplerinvoicing address in the directory.
7 Simplerinvoicing Transport Infrastructure Implementation Guidelines

This chapter describes the Transport Infrastructure for Participants in the Simplerinvoicing scheme using ‘Simplerinvoicing FULL™’.

The Transport Infrastructure used is specified by OpenPEPPOL. This chapter will not provide the technical details on how to implement PEPPOL connectivity, but instead will refer to the required documentation and connectivity options for implementing OpenPEPPOL connectivity. The Simplerinvoicing Transport Infrastructure uses the PEPPOL START profile.

<table>
<thead>
<tr>
<th>Document name</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF 07. START Service Specifications</td>
<td>1.0.1</td>
</tr>
</tbody>
</table>

7.1 Business Requirements on the Technical Infrastructure

The Simplerinvoicing Transport Infrastructure addresses the following requirements:

7.1.1 Integrity

Message integrity ensures that messages are not changed during transport of the message.

Message integrity and the integrity of the security elements are ensured using digital signatures. This allows communication partners to assess message integrity and verify that a message has arrived in its original, unchanged form based on the message digest that is included in the digital signature after validating this signature.

A message identification mechanism is provided. This allows communication partners to identify messages exchanged using unique identifiers. This protects against replay attacks.

7.1.2 Confidentiality

Message confidentiality ensures that unauthorized parties are unable to read the contents of the message.

Confidentiality of the message content at communication time is secured through the use of TLS connections. Message encryption is not supported by Simplerinvoicing.
7.1.3 **Authenticity**

An authentication mechanism can be provided based on using digital signatures of the Sending and Receiving Service. This allows communication partners to authenticate each other based on a digital signature present in each message.

Trading Entities authentication in messages is supported with the use of SAML 2.0 tokens. This enables Participants to make a statement about the authenticity of the sending Trading Entity. Participants can provide this statement themselves or can obtain a statement from an external party.

7.1.4 **Non-repudiation**

The use of digital signatures based on certificates prevents senders from successfully disputing the origin and/or content of messages sent. By mandating digital signatures on response messages, non-repudiation is facilitated.

This prevents senders from successfully disputing the fact that a message has been sent or received. The status of a message is always clear: it is either successfully acknowledged by the receiver or it must be considered as not successfully received.

7.1.5 **Duplicate message detection**

The transport infrastructure facilitates processing in an environment where the receiver may fail to receive Simpleinvoicing messages. Correct handling of duplicate messages is therefore supported.

7.1.6 **Availability**

Availability is arranged in the Simpleinvoicing Service Levels. Temporary unavailability of Receiving Services for whatever reason is handled by the Simpleinvoicing Interoperability Profile.

7.2 **The Simpleinvoicing Interoperability profile**

Simpleinvoicing uses the PEPPOL START profile to establish connectivity between Participants of the network (In PEPPOL Participants are called Access Points). The START profile uses a SOAP 1.1 communication stack based on the WS-I Basic Profile 1.1, using the following SOAP extensions:

- WS-Addressing 1.0
- WS-Security 1.1
- WS-ReliableMessaging 1.1
- WS-Transfer
- SAML 2.0 assertion
The PEPPOL START profile requires Participant Metadata to connect to Participants. This Metadata is obtained by the Sending Service prior to establishing a connection to the Receiving Service.

The exact configuration of the START profile is described by PEPPOL in the ‘PEPPOL START Service Specifications’ version 1.01. It will not be fully elaborated in the Simplerinvoicing Scheme Documentation. Guidelines and reading instructions for PEPPOL Start in relation to Simplerinvoicing may be developed in due course.

### 7.3 Service Levels

The service levels for the Simplerinvoicing Transport Infrastructure are defined by PEPPOL. The following Service Level definitions exist:

**Service Levels for the Sending and Receiving Service (Access Points):**

- **Service Availability:** Service Levels for obtaining the connectivity details of a Receiving Service: PEPPOL Transport Infrastructure Agreement ANNEX 3 – Services and Service Levels, Chapter 4.
- **Response Times:** PEPPOL Transport Infrastructure Agreement ANNEX 3 – Services and Service Levels, Chapter 6
- **Capacity:** PEPPOL Transport Infrastructure Agreement ANNEX 3 – Services and Service Levels, Chapter 7
- **Support Services:** PEPPOL Transport Infrastructure Agreement ANNEX 3 – Services and Service Levels, Chapter 8
- **Reporting:** PEPPOL Transport Infrastructure Agreement ANNEX 3 – Services and Service Levels, Chapter 9

### 7.4 How to become a PEPPOL Access Point

In order to become a PEPPOL Access Point, the following steps should be taken:

1. **Register at Simplerinvoicing Scheme Authority**
   - Register at the Simplerinvoicing Scheme Authority. The Scheme Authority will provide the Participant with a Participant Identifier
2. **Arrange the relevant certificates for becoming a PEPPOL Access point:**
   - Obtain PEPPOL certificates form the PEPPOL Certificate Authority (Currently this is done by DigST)
   - Generate a key pair and let the PEPPOL CA create a certificate with the Public Key
3. For Receiving Services: develop a REST based service that acts as the SMP, and connect the SMP to the SML. As alternative, also the Simplerinvoicing standard SMP can be used.

4. Establish the SOAP WebServices interface based on the START profile.

5. Develop the business services based on the transport infrastructure.
8 Simplerinvoicing Directory Interface Implementation Guidelines

This chapter describes the interactions with the Directory for Participants in the Simplerinvoicing scheme using ‘Simplerinvoicing FULL™’.

Simplerinvoicing uses the PEPPOL directory infrastructure to obtain Metadata for Trading Entity Identifiers.

Detailed specifications for the SMP and SML are provided in below documentation:

<table>
<thead>
<tr>
<th>Document name</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF 08. SMP Service Specifications</td>
<td>1.0.1</td>
</tr>
<tr>
<td>REF 09. SML Service Specifications</td>
<td>1.0.1</td>
</tr>
</tbody>
</table>

8.1 Process steps for resolving Identifiers

The process is executed as follows:

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>By:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Create Hashed ID</td>
<td>Sending Service</td>
</tr>
<tr>
<td></td>
<td>The Sending Service uses the Receiving trading Entity Identifier and the code of the identifier scheme to create a hash over this identifier. This results in a [Hashed Identifier]. For example: IBAN:NL11BANK123456 -&gt; ’b-fb5f5093...d35c0d1bea1’</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Compose Target URL</td>
<td>Sending Service</td>
</tr>
<tr>
<td></td>
<td>The Sending Service composes a URL based this hashed identifier that consists of the following components (the cursive, gray part is fixed): http://[Hashed Identifier].iso6523-actorid-upis.sml.peppolcentral.org/[Identifier].</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Request Target URL</td>
<td>Sending Service</td>
</tr>
<tr>
<td></td>
<td>The Sending Service uses the SML DNS service to request this URL (A) and obtain a technical ip-address</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Resolve Target URL</td>
<td>SML</td>
</tr>
<tr>
<td></td>
<td>The SML uses DNS mechanism to resolve th URL and send the resulting URL (B) back to the Sending</td>
<td></td>
</tr>
</tbody>
</table>
Service. The resolved URL points to the Metadata held by an SMP. Example resulting URL:
http://123.123.111.0/[Identifier].

5 Request Metadata URL  
By: Sending Service
The Sending Service requests the information available at the provided URL (C).

6 Serve Metadata  
By: SMP
The SMP provides an XML file (D) containing the Metadata.

7 Establish secure connection  
By: Sending Service
The Sending Service establishes a secure connection based on the provided Metadata.

---

<table>
<thead>
<tr>
<th>Process flow SimplerInvoicing: Obtain connectivity details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sending Service</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
</tr>
<tr>
<td>6.</td>
</tr>
<tr>
<td>7.</td>
</tr>
</tbody>
</table>

Figure 4: Using the SMP and SML to establish secure connectivity

8.2 Process steps for SMP Lifecycle interface

In order to register Trading Entity identifiers in the Directory (technically in the SMP), a
REST based interface and a SOAP based interface is available.

[This interface is currently under development. To be drafted in cooperation with SMP
provider. In the meantime identifiers are registered by the SimplerInvoicing Authority.]
8.3 Implementation Guidelines for SMP Lifecycle interface

[This interface is currently under development. To be drafted in cooperation with SMP provider. In the meantime identifiers are registered by the Simplerinvoicing Authority.]
9 Implementation guidelines Simplerinvoicing UBL

Simplerinvoicing uses the UBL 2.0 standard for exchanging the UBL representation of the E-invoice or Credit Note. It is compatible with the PEPPOL BIS profiles (Invoice & Credit Note). The PEPPOL BIS profiles are specified by PEPPOL:

<table>
<thead>
<tr>
<th>Document name</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF 10. PEPPOL BIS5a profile specifications</td>
<td>3.1.0</td>
</tr>
<tr>
<td>REF 11. PEPPOL BIS5a Guidelines</td>
<td>1.2.0</td>
</tr>
</tbody>
</table>

The Simplerinvoicing UBL Implementation Guidelines are the leading specifications of the Simplerinvoicing UBL. The above specifications for the PEPPOL BIS 5a profile can be used as reference material.

The PEPPOL BIS profile lay the foundation for a usable and implementable core E-invoice and Credit Note, but additional ‘customizations’ are required on top of the guidelines to make it usable in the Simplerinvoicing context. These customizations are indicated with ‘Simplerinvoicing usage’ in the implementation guideline. These customizations prevail above the PEPPOL BIS usage rules. If no Simplerinvoicing usage is provided for a specific element, PEPPOL BIS5a usage rules apply.

9.1 Introduction

Simplerinvoicing UBL specifies the data elements used in an E-invoice and Credit Note. An exact definition of the Simplerinvoicing UBL Implementation Guidelines is provided in the document ‘Simplerinvoicing UBL Implementation Guidelines for Invoice’ and ‘Simplerinvoicing UBL Implementation Guidelines for Credit Note’:
9.2 Versioning

The Simplerinvoicing UBL Implementation Guidelines follow the following versioning policy where x.y.x have the following implications:

- Upgrade of .x: only clarifications. No technical implications
- Upgrade of .y: version upgrade with technical impact but backward compatibility remains.
- Upgrade of .z: version upgrade with no backward compatibility.

9.3 Code Lists used

Within UBL there are a number of data elements that require a specific filling instruction with regards to a code list used. The code lists and the identifier schemes used are listed below. They align with European standards:

9.3.1 Code lists for specific data elements

<table>
<thead>
<tr>
<th>Scheme ID</th>
<th>Ag. ID</th>
<th>Used in</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN/ECE 1001 Subset</td>
<td>6</td>
<td>InvoiceTypeCode</td>
<td>Contains invoice type codes. Simplerinvoicing only uses 380, Commercial Invoice.</td>
</tr>
<tr>
<td>ISO 4217 Alpha</td>
<td>6</td>
<td>DocumentCurrencyCode</td>
<td>3 character currency codes, for example EUR.</td>
</tr>
<tr>
<td>ISO3166-1</td>
<td>6</td>
<td>Country. IdentificationCode</td>
<td>2 character country code</td>
</tr>
<tr>
<td>UN/ECE 5153</td>
<td>6</td>
<td>Taxscheme.id</td>
<td>Code list to identify different types of tax. For Simplerinvoicing VAT is supported.</td>
</tr>
<tr>
<td>UN/ECE 4461 Subset</td>
<td>6</td>
<td>PaymentMeansCode.id</td>
<td>Identifies the payment means code.</td>
</tr>
<tr>
<td>UN/ECE 5305</td>
<td>6</td>
<td>Taxcategory.id</td>
<td>Code list to identify the tax category.</td>
</tr>
</tbody>
</table>

9.3.2 Identifier Schemes

Note: For identifiers used in EndpointID and CompanyID, the Scheme attribute is mandatory, but the SchemeAgencyID is optional.

<table>
<thead>
<tr>
<th>Value</th>
<th>Ag. ID</th>
<th>Used in</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NL:KVK</td>
<td>ZZZ</td>
<td>EndpointID</td>
<td>Code lists to identify the scheme used for</td>
</tr>
</tbody>
</table>
### 9.4 Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REQ 2.04:</strong></td>
<td>Receiving Services MUST be able to receive and validate Simplerinvoicing UBL documents according to their respective XSD.</td>
</tr>
<tr>
<td><strong>REQ 2.05:</strong></td>
<td>Receiving Services MUST be able to receive and validate Simplerinvoicing UBL Credit Notes according to their respective XSD.</td>
</tr>
<tr>
<td><strong>REQ 2.06:</strong></td>
<td>Sending Services MUST be able to send Simplerinvoicing UBL invoices. Before sending, the UBL document MUST be validated according to their respective XSD’s.</td>
</tr>
<tr>
<td><strong>REQ 2.07:</strong></td>
<td>Sending Services MUST be able to send Simplerinvoicing UBL Credit Notes. Before sending, the UBL document MUST be validated according to their respective XSD’s.</td>
</tr>
<tr>
<td><strong>REQ 2.08:</strong></td>
<td>Participants MAY bilaterally (or as a group) agree on customizations to be exchanged between their respective Sending and Receiving Service, or additional data elements on top of the Simplerinvoicing UBL Invoice. Such customizations MUST adhere to the guidelines laid down in the <em>CEN BII Annex C to CWA 16562 – Conformance and Customizations</em>.</td>
</tr>
</tbody>
</table>
10 Styleguide

The Simplerinvoicing logo is registered in the European and Trademark Register and therefore its use is protected.

It is important that the Simplerinvoicing brand is used in a consistent way in communications towards all stakeholders. Parties that are entitled to use the Simplerinvoicing logo SHOULD follow the guidelines in this chapter.

10.1 Use of the Simplerinvoicing labels

The use of the Simplerinvoicing logo is allowed by the following parties:

For Participants offering the Simplerinvoicing FULL™ implementation that fully adhere to the requirements for Simplerinvoicing FULL™ listed in this document and it’s annexes are eligible to use the Simplerinvoicing FULL™ label.

For Parties offering the Simplerinvoicing LITE™ implementation that fully adhere to the requirements for Simplerinvoicing LITE™ listed in section 3.1.5 of this document.

For users of a Simplerinvoicing Participant, such as the Trading Entities or other parties reachable under the Simplerinvoicing Scheme via a Participant, are allowed to use the applicable Simplerinvoicing label, depending on the implementation they use.

10.2 Color scheme

The following color scheme is used in the Simplerinvoicing logo:

<table>
<thead>
<tr>
<th></th>
<th>SI-Purple</th>
<th>SI-White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td><img src="si-purple.png" alt="Purple" /></td>
<td><img src="si-white.png" alt="White" /></td>
</tr>
<tr>
<td>RGB value</td>
<td>108 – 0 – 135</td>
<td>0 – 0 – 0</td>
</tr>
<tr>
<td>CMYK value</td>
<td>72 – 100 – 9 – 3</td>
<td>0 – 0 – 0 - 100</td>
</tr>
<tr>
<td>Web color</td>
<td>#6E0388</td>
<td>#FFFFFF</td>
</tr>
</tbody>
</table>
### 10.3 Rules for the use of the SimpleInvoicing logos

<table>
<thead>
<tr>
<th><strong>SI-White logo on SI-Purple background</strong></th>
<th><img src="image" alt="SI-White logo on SI-Purple background" /></th>
</tr>
</thead>
<tbody>
<tr>
<td>The white logo SHOULD be used in combination with the SI-Purple background.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SI-White logo and name on SI-Purple background</strong></th>
<th><img src="image" alt="SI-White logo and name on SI-Purple background" /></th>
</tr>
</thead>
<tbody>
<tr>
<td>The white logo in combination with the Simplerinvoicing name SHOULD be used in combination with the SI-Purple background.</td>
<td></td>
</tr>
<tr>
<td>The Simplerinvoicing name SHOULD appear directly above, underneath, to the left or to the right of the logo.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SI-Purple logo (and name) on other background</strong></th>
<th><img src="image" alt="SI-Purple logo (and name) on other background" /></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternatively, the SI-Purple logo (with or without the name) SHOULD be used on another background, provided that the contrast between the logo and the background is sufficient to make the logo (and the name) well-visible for the reader.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>SI-White logo (and name) on other background</strong></th>
<th><img src="image" alt="SI-White logo (and name) on other background" /></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternatively, the SI-White logo (with or without the name) MAY be used on another background, provided that the contrast between the logo and the background is sufficient to make the logo (and the name) well-visible for the reader.</td>
<td></td>
</tr>
</tbody>
</table>

### 10.4 Rules for the use of the Simplerinvoicing brand in written text

The Simplerinvoicing name MUST follow the following guidelines when used in written text:

- The first letter of the word MUST be capitalised -> Simplerinvoicing.
- All other letters MUST be lower case.
- The words Simpler and invoicing MUST be written as one single word with no space, hyphen or other separator mark in between.

Examples of wrong use: SimplerInvoicing, Simpler-invoicing, Simpler Invoicing.

10.5 ‘Simplerinvoicing LITE™’

Parties entitled for the Simplerinvoicing LITE™ name MUST follow the following rules:
- The entire word Simplerinvoicing LITE™ SHOULD be used. As an alternative, the word Simplerinvoicing MAY be replaced with the Simplerinvoicing logo, directly followed with LITE™
- The word LITE MUST be capitalised to make it a distinct part of the Simplerinvoicing label.
- The unregistered trademark logo ™ MAY be used in combination with Simplerinvoicing LITE.

10.6 ‘Simplerinvoicing FULL™’

Participants entitled for the Simplerinvoicing FULL™ name MUST follow the following rules:
- The entire word Simplerinvoicing FULL™ SHOULD be used. As an alternative, the word Simplerinvoicing MAY be replaced with the Simplerinvoicing logo, directly followed with FULL™
- The word ‘FULL’ MUST be capitalised to make it a distinct part of the Simplerinvoicing label.
- The unregistered trademark logo ™ MAY be used in combination with Simplerinvoicing FULL.
Annex A: Glossary

E-invoice: The E-invoice is a generic term for a dematerialized invoice. It is a document or a data set formally specifying details of a (or part of a) trade and all settlement related information for the (or part of the) trade, explicitly and separately stating the applicable tax.

E-invoice Representation: The format that is used to transfer, process and archive an E-invoice. Simplerinvoicing supports two representations: an UBL representation for machine processing and a PDF representation for human processing.

E-mail Exchange Network: The technical infrastructure that is already in use to send and receive 294 billion e-mails per day. This includes the SMTP protocol and the mechanisms to resolve e-mail address to delivery endpoints.

Metadata: The connectivity details for a specific Trading Entity. The metadata contains at least a URL to which a Simplerinvoicing UBL document can be delivered, the PEPPOL certificate of the Receiving Service and which documents can be received by the Receiving Service. The Metadata is provided by the an SMP.

Participant: a party offering a Sending Service, a Receiving Service or both to one or more Trading Entities. A Participant offers Simplerinvoicing FULL™.

Party: In the context of Simplerinvoicing a party is a party offering e-invoicing services that can send or receive the Simplerinvoicing UBL format but does not support the Simplerinvoicing Transport Infrastructure. Such a Party offers Simplerinvoicing LITE™.

Receiving Service: The technical role fulfilled by the Receiving Participant in the Simplerinvoicing Scheme. The Receiving Service receives Simplerinvoicing messages from a Sending Service, processes it and provides a response to the Sending Service.

Sending Service: The technical role fulfilled by the Sending Participant in the Simplerinvoicing network. The Sending Service sends Simplerinvoicing messages to a Receiving Service and receives and processes the response from the Receiving Service.
Service Provider: A party offering E-invoicing services to its customers, including services that ensures the VAT compliant reception, transmission and archiving of electronic invoices. An E-invoicing Service Provider can become a Participant in the Simplerinvoicing Scheme.

Simplerinvoicing Authority: The organizational body that is responsible for developing and managing the Simplerinvoicing scheme, the on boarding of new Participants and the adherence of Participants to the Scheme.

Simplerinvoicing Scheme: The set of protocols, standards and rules that organizes interoperability between Participants. Participants have to comply with the rules that are laid down in the Scheme.

Simplerinvoicing UBL Document: A document (Invoice or Credit Note) represented in UBL 2.0 compliant with the Simplerinvoicing UBL Implementation Guidelines for the e-Invoice or Credit Note.

Software Solution: a solution used by a Trading Entity that enables Trading Entities to send and receive electronic invoices. A Software Solution can be either deployed on machines of the Trading Entity or can be deployed in a Software as a Service (SaaS) architecture. An Software Solution can become a Participant in the Simplerinvoicing Scheme if they offer a Sending Service.

Transport Infrastructure: the secure infrastructure used by Simplerinvoicing Participants to exchange Simplerinvoicing UBL documents. The Transport Infrastructure ensures the authenticity of the sender and the integrity of the content. The Transport Infrastructure is based on a communication protocol for direct communication between a Sending and a Receiving Service over the internet. No central communication platform is involved.

Trading Entity: The party that engages into a trade with another party and uses a Service Provider or Software Solution to send an invoice using the Simplerinvoicing Scheme. Also called Trading Party.
Annex B: Design decisions

This annex is a working annex that will evolve during the development of the Scheme. It keeps track of the different requirements in the Scheme and how these requirements are filled in.

<table>
<thead>
<tr>
<th>Number</th>
<th>[unique requirement reference]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Principle</td>
<td>[Description of the high level design principle underlying the requirement]</td>
</tr>
<tr>
<td>Description</td>
<td>[Description of the requirement]</td>
</tr>
<tr>
<td>Addressed</td>
<td>[How are these requirements addressed in the Simplerinvoicing Scheme]</td>
</tr>
</tbody>
</table>

Number 0001 Adoption of the Simplerinvoicing UBL format

Design principle The Scheme should have universal reach from day 1 across different industries, business types (G, B, b) and business size (Corporate, SME, micro-SME).

Description - The Simplerinvoicing UBL format MAY be used by parties to exchange invoices in the specified format using different channels;
- It must be clear that in this case the Simplerinvoicing Transport Infrastructure is NOT used and that no claims can be made by parties involved regarding availability, integrity, deliverability, authenticity and confidentiality under the Simplerinvoicing scheme;
- Parties using the Simplerinvoicing UBL should act in such a way that it does not harm or have other negative effect on the Simplerinvoicing brand.

Addressed The Simplerinvoicing scheme allows parties to use the Simplerinvoicing UBL format. Such parties must use the 'Simplerinvoicing LITE™' label in their communication towards end-users.

Parties that are participant in the Simplerinvoicing scheme not only adopt the Simplerinvoicing UBL format but also the Simplerinvoicing Transport Infrastructure. Such Participants should use the 'Simplerinvoicing FULL™' label.

This means that parties outside the scheme can experience the benefits of using the Simplerinvoicing UBL format, and are attracted to be a full user of the Simplerinvoicing scheme using a Simplerinvoicing Participant.

This also implies that ERP vendors may exchange with each other using the Simplerinvoicing UBL, as long as they make clear to their users that they do not use the Simplerinvoicing Transport Infrastructure.
<table>
<thead>
<tr>
<th>Number</th>
<th>0002</th>
<th>Identification Schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design principle</td>
<td>The Scheme should have universal reach from day 1 across different industries, business types (G, B, b) and business size (Corporate, SME, micro-SME).</td>
<td></td>
</tr>
</tbody>
</table>
| Description | • To facilitate universal reach, Simplerinvoicing uses identification schemes already in use by the target market segments;  
• The Simplerinvoicing Scheme supports multiple Identification Schemes, based on the practices already used by Service Providers;  
• At a minimum this includes the following possible identification schemes: Organizational Number (chamber of commerce issued), VAT number, E-mail address, GLN;  
• Trading Entities can use their own Identifier, that they communicate to their Trading Counterparties;  
• The Identifier uniquely identifies the Trading Entity;  
• Such Identifiers MUST be resolvable into a unique Simplerinvoicing Address. |
| Addressed | The Simplerinvoicing scheme supports different identification schemes. Trading Entities can choose the Identification Scheme that fits their needs. The following Identification Schemes are foreseen: VAT nr, Organizational Nr, E-mail, IBAN, GLN. |

<table>
<thead>
<tr>
<th>Number</th>
<th>0003</th>
<th>Directory for addressing and discovering Simplerinvoicing Trading Entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design principle</td>
<td>The Scheme should have universal reach from day 1 across different industries, business types (G, B, b) and business size (Corporate, SME, micro-SME).</td>
<td></td>
</tr>
</tbody>
</table>
| Description | • The Simplerinvoicing Scheme provides a mechanism to resolve an Identifier into the the connectivity details (Metadata) for a specific Trading Entity;  
• The mechanism used for resolving Identifiers into Simplerinvoicing Addresses should be a scalable solution, and it should not be dependent on a single central capability;  
• The mechanism used is secure and ensures the privacy of the Trading Entities and the Participants in the Simplerinvoicing scheme. |
| Addressed | • Simplerinvoicing uses a Directory that resolves Identifiers into Metadata using a DNS-like infrastructure;  
• The Directory has a decentralized nature, where relevant parts of the directory are cached by the Participants offering the Sending or Receiving Service. This significantly reduces the availability requirements and capacity requirement of the Directory;  
• The Directory is a real-time service that provides a response within X seconds of the request;  
• The Directory accepts requests containing an Identifier supported by the Simplerinvoicing scheme and responds with the Metadata of the Service that manages the specified Trading Entity;  
• The Directory has an interface for maintaining Identifiers, Simplerinvoicing Addresses and technical addresses;  
• The data in the Directory is maintained by the Sending and Receiving Participants;  
• Participants can only edit records of they manage. For instance, a Participant can only edit
records that refer to their technical address, and not those records that refer to the technical address of other Participants;
The data in the Directory is salted and hashed using industry standard cryptology.

<table>
<thead>
<tr>
<th>Number</th>
<th>0004</th>
<th>Addressing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design principle</td>
<td>The Scheme should have universal reach from day 1 across different industries, business types (G, B, b) and business size (Corporate, SME, micro-SME).</td>
<td></td>
</tr>
</tbody>
</table>
| Description | - Each Participant must be discoverable in Simplerinvoicing using commonly used identifier schemes;  
- The Simplerinvoicing Identifier uniquely identifies a Trading Entity in the Simplerinvoicing network;  
- The Simplerinvoicing Identifier can be resolved into Metadata containing the logical address used to route messages to the intended Receiving Service;  
- The Simplerinvoicing Address is flexible towards the underlying infrastructure; |
| Addressed | - Simplerinvoicing uses a URI formatted Simplerinvoicing Address. The URI format provides flexibility to the use in the transport infrastructure;  
Simplerinvoicing uses a directory that resolves different Identifiers to a Simplerinvoicing Address, and a Simplerinvoicing Address to a technical address (IP address of the managing Service); |

<table>
<thead>
<tr>
<th>Number</th>
<th>0005</th>
<th>Envelope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design principle</td>
<td>The scheme should allow STP processing of E-invoices and applicable attachments between a Sending and Receiving Trading Entities.</td>
<td></td>
</tr>
</tbody>
</table>
| Description | The Simplerinvoicing Schema specifies the use of a business header or envelope. The envelope is required since the UBL format itself does not contain the Simplerinvoicing addresses of the Trading Entities. Such an envelope must meet the following requirements:  
- The envelope supports identification of Sending and Receiving Trading Entities;  
- The envelope is independent of the exchange protocol used;  
- The envelope has a mechanism to uniquely identify the envelope;  
- It must be possible to process the envelope without processing the payloads;  
- It must be possible to determine processing actions of the individual payloads based on the envelope;  
- The envelope contains payloads of different types, including: Simplerinvoicing UBL E-invoice, PDF E-invoice, Industry specific payloads, other attachments;  
- It must be possible to identify the different payloads in the envelope;  
- The envelope should allow signed attachments. |
### Addressed
- Simplerinvoicing uses a standard SOAP envelope as defined in the PEPPOL START profile.
- Simplerinvoicing uses a directory that resolves different Identifiers to a Simplerinvoicing Address, and a Simplerinvoicing Address to a technical address (IP address of the managing Service).

<table>
<thead>
<tr>
<th>Number</th>
<th>0006</th>
<th>Attachment handling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design principle</td>
<td>The scheme should allow STP processing of E-invoices between a Sending and Receiving Trading Entities.</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>The Simplerinvoicing Schema allows for sending attachments with the E-invoice. The following requirements apply to the handling of attachments:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The attachment must be linked with the content of the Simplerinvoicing UBL;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The method of attachment should be independent of the Simplerinvoicing transport infrastructure;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Different types of attachments are supported, including UBL and PDF;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The Receiving Service must be able to identify the type of the attachment;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The Attachment mechanism must allow for efficient processing of the Simplerinvoicing UBL message.</td>
<td></td>
</tr>
<tr>
<td>Addressed</td>
<td>- Simplerinvoicing uses the attachments mechanism as supported by the Simplerinvoicing UBL;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>0007</td>
<td>One-leg-out E-invoices</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Design Principle</td>
<td>The Scheme should have universal reach from day 1 across different industries, business types (G, B, b) and business size (Corporate, SME, micro-SME).</td>
<td></td>
</tr>
</tbody>
</table>
| Description | The Simplerinvoicing scheme provides a mechanism to send Simplerinvoicing E-invoices to Trading Entities that are not reachable through the Simplerinvoicing scheme, provided that:  
- The Receiving Trading Entity provided a valid e-mail address to the Sending Trading Entity;  
- The Receiving Trading Entity is not reachable through the Simplerinvoicing scheme;  
- The Receiving Trading Entity has given explicit consent to the Sending Trading Entity to use the provided e-mail address;  

The following further requirements apply:  
- The mechanism used should provide 100% reach towards any Trading Entity;  
- The mechanism should have a 'best effort' service level, allowing the Sending Trading Entity to send the E-invoice without responsibilities regarding deliverability, authenticity and integrity;  
- The mechanism uses technology that is already in place by Trading Entities. |
| Addressed | The Scheme uses e-mail as a transport infrastructure to reach Receiving Trading Entities that are not reachable through the Simplerinvoicing scheme;  
It should be clear that delivery via e-mail has a significantly lower service level than delivery via the Simplerinvoicing Transport Protocol. |

<table>
<thead>
<tr>
<th>Number</th>
<th>0008</th>
<th>VAT Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Principle</td>
<td>The Scheme should allow for VAT compliant E-invoicing.</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Use of Secure connectivity to exchange VAT compliant E-invoices to ensure Authenticity of the origin and integrity of the content.</td>
<td></td>
</tr>
</tbody>
</table>
| Addressed | The Scheme uses a Transport Infrastructure that provides mechanisms for authenticating Participants, ensuring integrity during transport and deliverability.  
Based on a secure connection between Participants that enables Participants to receive guaranteed authentic and integer invoices based on appropriate security measures (digital signing). |
<table>
<thead>
<tr>
<th>Number</th>
<th>0009</th>
<th>Supported document types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Principle</td>
<td>The Scheme should support the exchange of E-invoices, Credit Notes and Receipt Confirmations.</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>The following business processes should be supported by Simplerinvoicing</td>
<td></td>
</tr>
<tr>
<td>- E-invoicing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Sending of Credit Notes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Addressed</td>
<td>Simplerinvoicing supports CEN BII Profile 05, that includes a semantic model for an E-invoice and for a Credit Note.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number</th>
<th>0010</th>
<th>Use PDF + UBL for E-invoice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Principle</td>
<td>The Scheme should cater for machine-to-machine and machine-to-person communication in order to cater for the use case where the receiver uses e-mail to receive the E-invoice.</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Use of a human readable format and machine readable format in any invoice exchange.</td>
<td></td>
</tr>
<tr>
<td>Addressed</td>
<td>The E-invoice exchanged between Trading Entities contains an UBL and optionally a PDF representation of the E-invoice. The Sending Participant is responsible to ensure that both representations contain identical information.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number</th>
<th>0011</th>
<th>UBL 2.0 standard for the E-invoice and Credit Note UBL Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Principle</td>
<td>The Scheme should cater for machine-to-machine and machine-to-person communication in order to cater for the use case where the receiver uses e-mail to receive the E-invoice.</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Use of commonly available E-invoice standard for machine-to-machine communication.</td>
<td></td>
</tr>
<tr>
<td>Addressed</td>
<td>It is proposed to support at a minimum the UBL 2.0 Invoice ad Credit Note standard, as defined by OASIS.</td>
<td></td>
</tr>
<tr>
<td>Other alternatives considered:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- UN/CEFACT CII;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- ISO20022;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Given the broad adoption of the UBL standard across Europe, the implementation guidelines that are available and the cross-industry application of this standard, it is proposed to use the UBL2.0 standard.

In the future, few additional formats may be agreed that can be easily converted into each other. The UN/CEFACT CII invoice is such a candidate as both UBL 2.0 and UN/CEFACT CII are based on the same semantic model.

The concept of ‘extensions’ should be considered for the future to allow specific industries or geographies to use specific elements that are common for such industries. This can for example
cater for the needs of HRM or construction related invoices. Such extensions can be exchanged in Simplerinvoicing as an attachment to the core invoice.

<table>
<thead>
<tr>
<th>Number</th>
<th>Use of CEN BII Profiles for the E-invoice and the Credit Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Principle</td>
<td>The Scheme should cater for machine-to-machine and machine-to-person communication in order to cater for the use case where the receiver uses e-mail to receive the E-invoice.</td>
</tr>
<tr>
<td>Description</td>
<td>Develop or reuse implementation guidelines of the UBL 2.0 Invoice and Credit Note</td>
</tr>
<tr>
<td>Addressed</td>
<td>The Scheme uses CEN BII profile 05 'Billing' providing usage rules for the Core Invoice and Credit Note.</td>
</tr>
</tbody>
</table>

Other alternatives considered:
- Profile 23 'Invoice with dispute', profile 08 'Billing with dispute and reminder': given the current scope of the Scheme, currently only the invoice and credit note are considered. Extending the profile in a later phase is possible.
- Develop new implementation guidelines: given the fact that already work is done in developing implementation guidelines for the UBL2.0 invoice and credit note, which are already being adopted in Europe, preference is given to reuse existing work. This aligns Simplerinvoicing with European initiatives.

<table>
<thead>
<tr>
<th>Number</th>
<th>Multilateral Interoperability Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Principle</td>
<td>The Scheme should not impose large barriers for new Participants who wants to join the Scheme: Participants should join once, and connect to all.</td>
</tr>
<tr>
<td>Description</td>
<td>Multilateral Interoperability Agreement</td>
</tr>
<tr>
<td>Addressed</td>
<td>The Scheme is based on a multilateral interoperability agreement between the Participant and the Simplerinvoicing Scheme Authority. No additional bilateral agreements are required for interoperability. The scheme is based on the PEPPOL multilateral Interoperability agreement. In addition to that, the scheme takes into account the elements specified in the EESPA Model Agreement (which itself is based on a bilateral agreements).</td>
</tr>
</tbody>
</table>

Considered alternatives:
- Bilateral agreements: this is left out of scope since it would require new participants in the scheme to engage in bilateral agreements with all other participants in the scheme which conflicts with the principle of ‘join once, connect to all’.

<table>
<thead>
<tr>
<th>Number</th>
<th>Prevent abuse of the Simplerinvoicing scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Principle</td>
<td>The scheme should be a trusted eco-system</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>Description</td>
<td>The Scheme should have a mechanism to block Trading Entities that have misused the scheme, for example by sending fake invoices.</td>
</tr>
<tr>
<td>Addressed</td>
<td>- The scheme requires Participants to be able to identify a sender of E-invoices in his system.</td>
</tr>
<tr>
<td></td>
<td>- The scheme requires Participants to be able to block senders in case of abuse.</td>
</tr>
<tr>
<td></td>
<td>- The scheme provides a protocol for detecting misuse and blocking of Trading Entities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number</th>
<th>0015</th>
<th>Use of the Simplerinvoicing operating model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Principle</td>
<td>The scheme should be a trusted eco-system and enable participants to notify Trading Entities of successfully sent/ received E-invoices</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>The Scheme should have a mechanism exchange documents in a secure fashion and notify counterpart in case of (un)successful delivery</td>
<td></td>
</tr>
<tr>
<td>Addressed</td>
<td>- The scheme provides a protocol for secure exchange of documents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The scheme provides a protocol for the confirmation of receipt of documents using a Receipt Confirmation message.</td>
<td></td>
</tr>
</tbody>
</table>