Annexe I: Project plan *Peppol for the masses*

In this project, we will develop three things: a demo of a graphical user interface in which the user is guided to trust certain invoices and distrust others (milestone 1), an implementation of AS4 in PHP, with integration into Nextcloud (milestones 2, 3 and 5), and a resigning gateway that can be used to seamlessly connect instances of said AS4 implementation to the live Peppol network (milestone 4). Each of the milestones is weighted at 10,000 euros (total requested amount: 5 * 10,000 = 50,000 euros).

1. Trust User Interface for both sender and receiver

The graphical user interface in which the user is guided to trust certain invoices and distrust others

Milestone(s)

- sender can safely pick a recipient from a list of known and verified contacts
- if relaying through a gateway was necessary (e.g. the recipient has no self-hosted verifiable identity), these will be clearly indicated to both sender and receiver
- invoices from non-trusted senders will be marked as spam and hidden from the inbox
- in the inbox, recipient can clearly see the credentials of the sender
  1. self-hosted or gateway-certified
  2. backed by a government's company registry or not

Amount

10,000 EUR

2. Hybrid sender

Implementation of a hybrid AS4-Direct / Peppol sender (client) in PHP

Milestone(s)

- AS4 client (based on generic SOAP client library)
- Recipient details discovery (Peppol ID directory lookup)
- Passing the official AS4 compliance tests for sending
- Option to send to self-hosted non-Peppol recipient identities

Amount

10,000 EUR

3. Hybrid receiver

Implementation of a hybrid AS4-Direct / Peppol receiver (server) in PHP

Milestone(s)

- AS4 server (based on generic SOAP server library)
- Service Metadata Publisher, to announce the endpoint details for a Peppol ID.
- Passing the official AS4 compliance tests for receiving
- Option to receive from self-hosted non-Peppol sender identities
- Sender identity / signature verification for Peppol ID's and self-hosted ID's

Amount

10,000 EUR

4. Re-signing gateway

Implementation of a server that forwards AS4 messages, replacing the XML signature on-the-fly

Milestone(s)

- forwards an invoice from a whitelisted sender, replacing the sender signature with a sending-gateway signature, thus making the invoice Peppol-compliant if the sending gateway's cryptographic key pair is officially certified.
- Know-Your-Customer implementation, showing ability to check sender identity against two or three different national company registries.
- re-signs and forwards SMP registrations on behalf of whitelisted receivers.

Amount

10,000 EUR

5. Nextcloud integration

Integration of the code modules from milestones 2 and 3 into a Nextcloud app

Milestone(s)

- the leading open source self-hostable personal cloud system Nextcloud does not yet support sending and receiving them via Peppol's SOAP-based AS4 protocol.
- we will package the sender and the receiver modules as a Nextcloud app, directly installable for existing Nextcloud self-hosters from the Nextcloud app store.
- demo the integration and the full sender-to-receiver flow in a screencast..

Amount

10,000 EUR