PEPPOL
PAN-EUROPEAN PUBLIC PROCUREMENT ONLINE

PEPPOL

DEMONSTRATOR CLIENT

User Guide

Version 0.9.1

PEPPOL 2010-11-15

Borderless eProcurement

Let's make it happen!

cip competitiveness and innovation framework programme 2007-2013

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1. Document Information

1.1. Document History

Date	Version	Initials	Changes
2009-04-13	0.1.0	CDP	Initial
2009-04-29	0.6.0	JRR	Corrections
2009-10-16	0.7.0	JGB	Updates
2010-05-28	0.8.0	JGB	Updates and corrections
2010-09-13	0.9.0	JGB	Updates, new features and thorough review
2010-11-15	0.9.1	JFA	Updates

1.2. Editors

Initials	Name	Company
CDP	Carlos Dávila Pino	Alfa1lab
JRR	Jorge Reátegui Ravina	Alfa1lab
JGB	José Gonzales Biminchumo	Alfa1lab
JFA	Joan Farfán Armas	Alfa1lab

2. Background to the client

The PEPPOL project uses PEPPOL transport architecture to exchange business documents. Communication between trading partners will be based on the CEN BII profiles. That includes using collaborations to control process flow (communication) and CEN BII data models mapped into UBL documents. This demonstrator client was created to demonstrate some aspects of these technologies and how to implement them.

2.1. PEPPOL Transport architecture

The client implements the PEPPOL lightweight protocol for connecting different clients to different Access Points. It also demonstrates use of identifiers to identify uniquely trading partners within the PEPPOL network.

2.2. CENBII Profiles

The client also implements parts of the CENBII profile concept. The focus is on the collaboration aspect of the profile and the client demonstrates how it can be implemented by use of process description language (presented in BPEL) and somewhat "*generic*" BPEL execution engine. For more information http://spec.cenbii.eu/

3. The Demonstrator client

The demonstrator client is an application created to collaborate in the process of the business transactions.

The system has implemented main features like the creation of business document, xml/csv/odf importing, and validation based on schematron and the use of the transport library to send documents.

3.1. How to install

To configure the application on your local machine follow these steps:

Download *DEMOClient.zip*, for information about latest version contact PEPPOL development team.

Unzip the file to local directory.

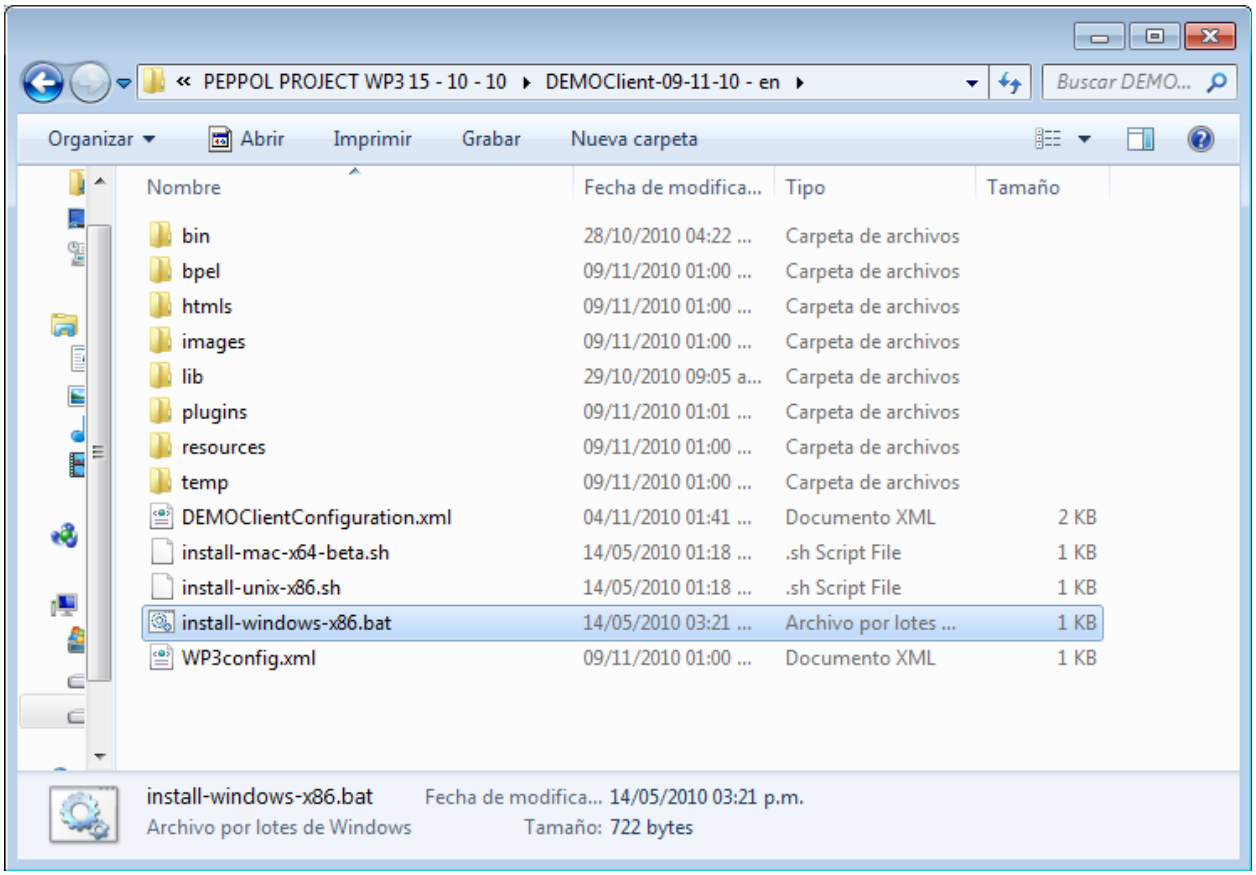

Figure 1: Content of a binary folder

3.2. Windows installation

Double click on install-windows-x[VERSION].bat.

A new command window will appear to generate the executable.

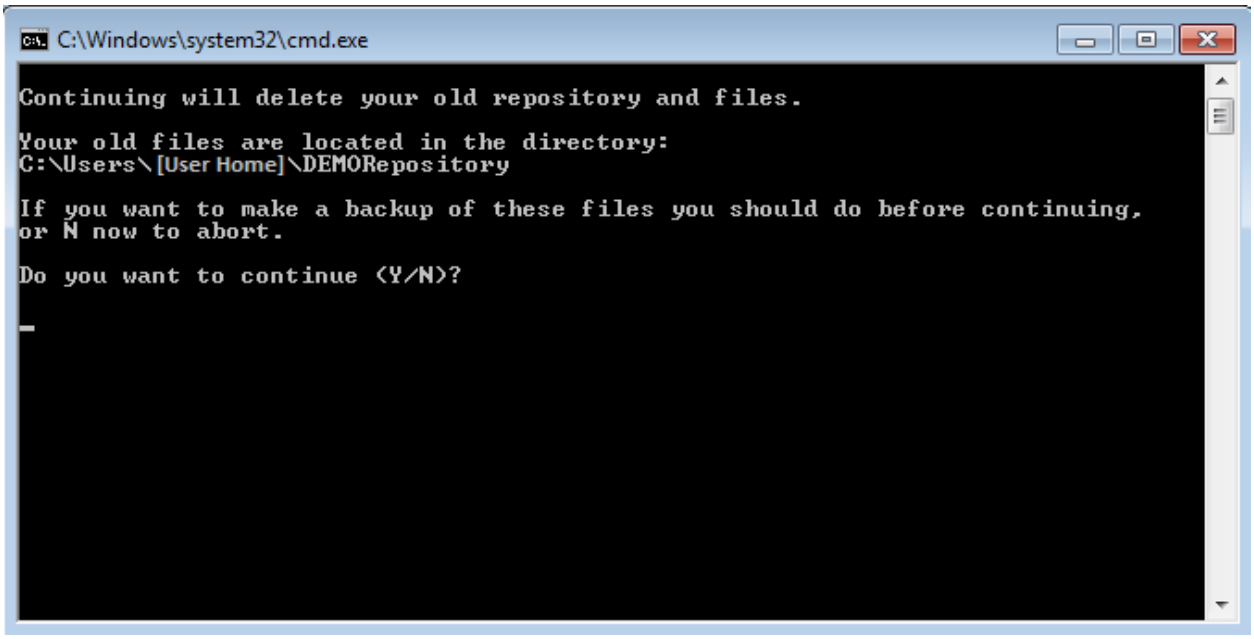

Figure 2: Running installation

After the installation you will see a new file "*DemoClient-windows-x[VERSION].bat*", double click to execute it.

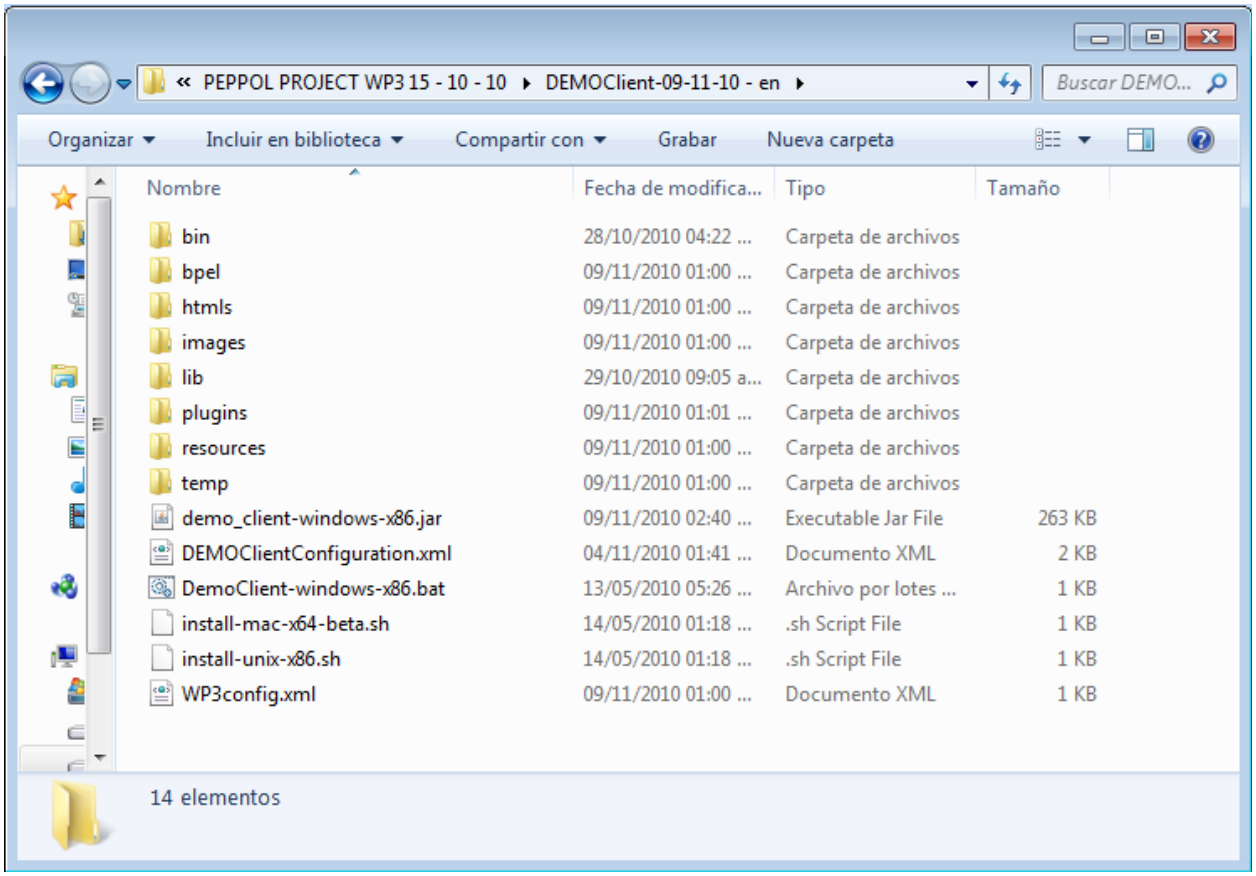

Figure 3: Binary folder after running installation

3.3. Linux installation

First you must give execution permission to the system.

Open a new terminal and write the path of the "*DEMOClient*" folder, then execute this command: ***sudo chmod +x install.sh***

Double click to install.

4. How to configure two “*Demo Client*” in one computer

First run up the application and then look at the name of the repository setting on the title bar.

Run up the executable file of “Demo Client” for second time, not close the first Client.

Select “*Settings/Configuration*” and go to “*Documents*” tab. Write a new name for the new repository in the second text field, then press “*Change Repository*”.

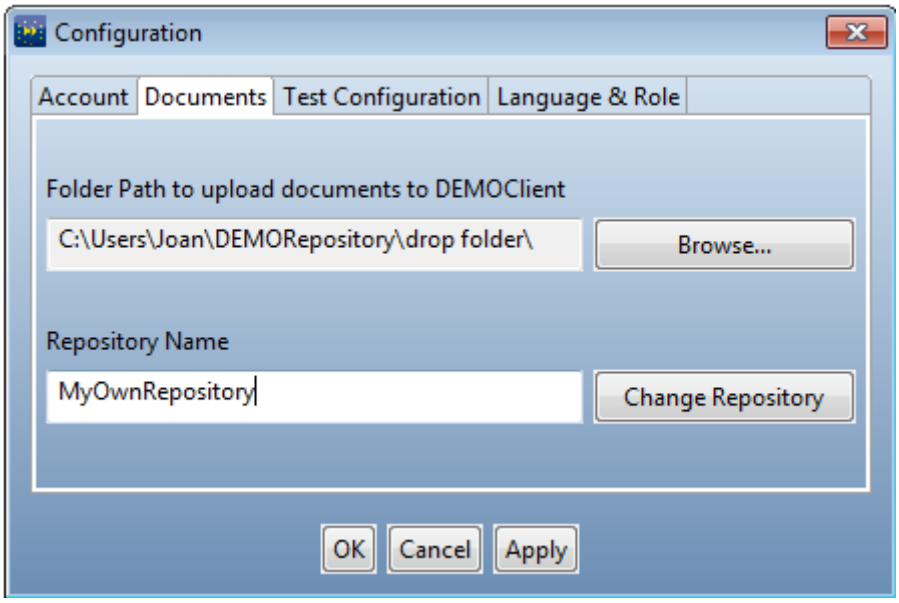

Figure 4: Creating a new repository

The system will shut down; please, execute the .bat file again.

Now have two clients setting in two different repositories.

4.1. Business identifiers

PEPPOL uses **business identifiers** to uniquely identify all actors on the PEPPOL network. The program allows you to set up your own business identifier in order to the transport library accepts it as valid.

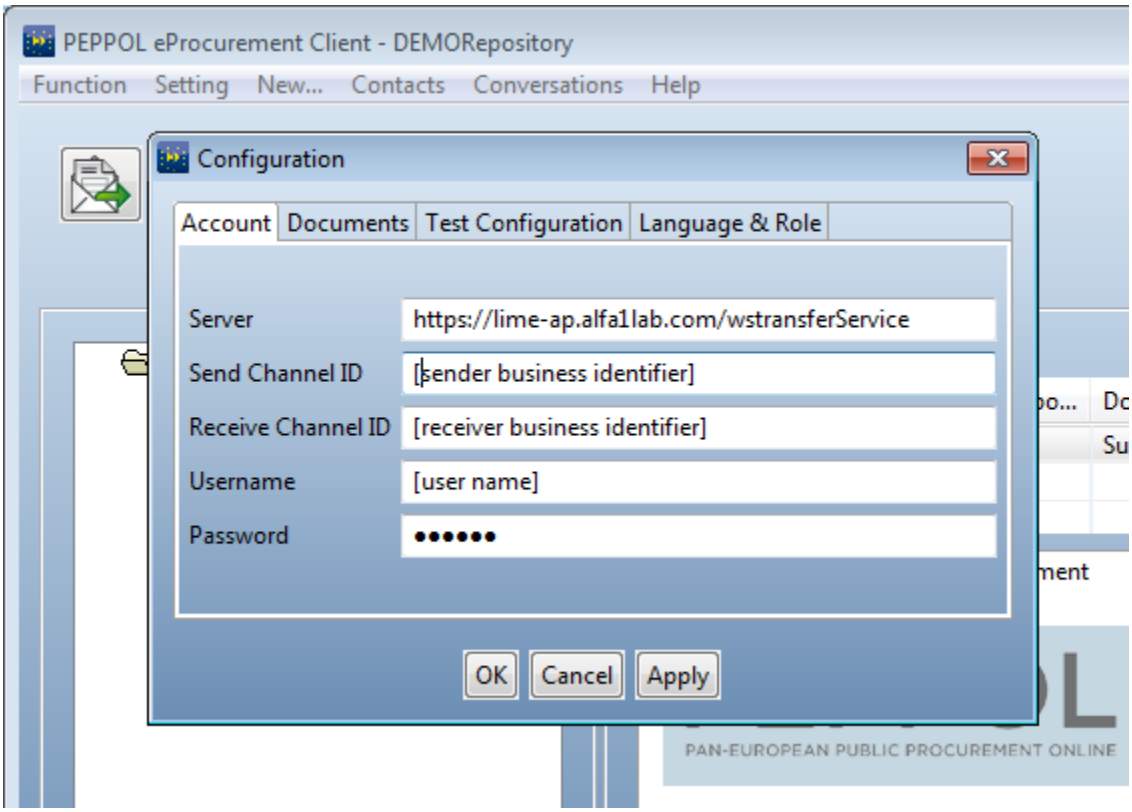

Figure 5: Configuring Business Identifier

4.2. Who is your trading partner?

Now the business identifiers for two clients are in place. With these two clients on the same machine can be possible to play the role of seller or buyer (See text bellow).

Next step is to enter information about your trading partner into the client. The contact is the person you want to trade with. You will need that person's name and business identifier. The setup program sets up two identifiers you can use in your tests. To view or create more contacts, please follow these instructions.

Click "*Contacts/Contacts Administration*" in the menu bar.

The "*Contact*" window will appear.

Fill at least the mandatory fields, so the Client can recognize the contacts.

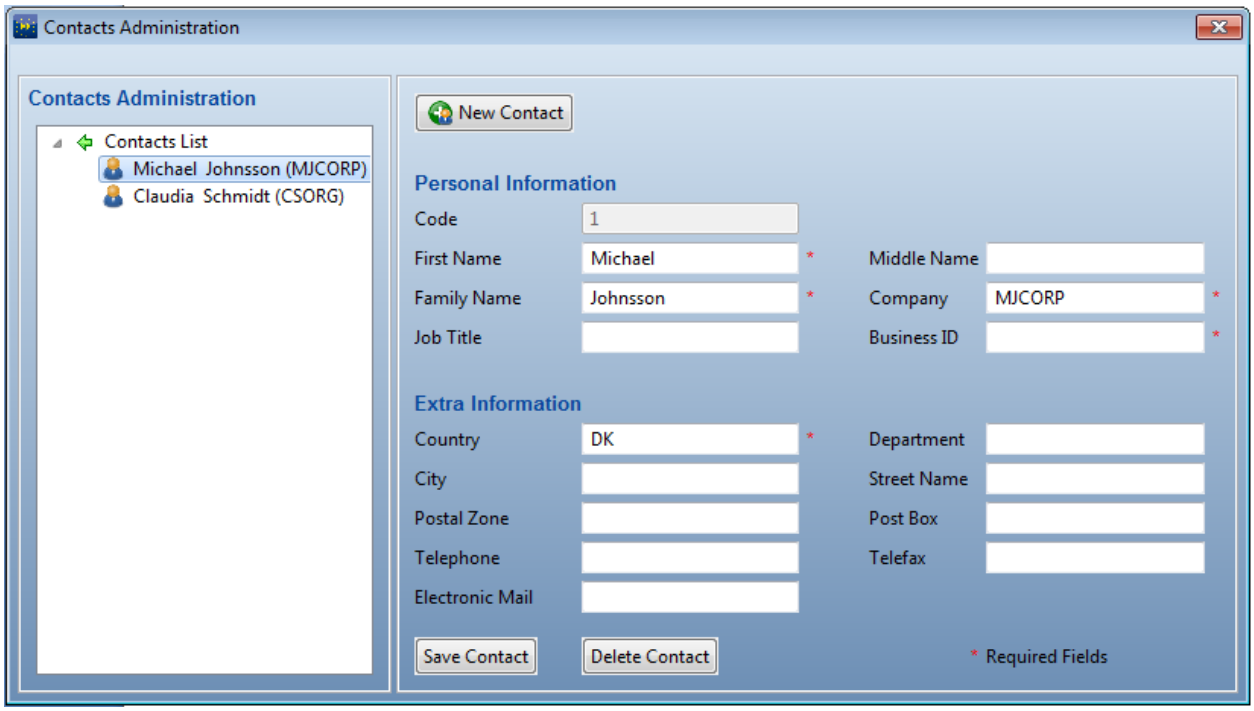

Figure 6: Updating contacts

Note that the two Clients will have the same information about the contacts.

You have now two Clients (Buyer and Seller) in your computer and you can now start communication between them.

4.3. Start communication between two clients.

This prototype supports two CEN BII Profile workflows. The documents sent back and forth are mockup documents for demonstration purposes only, but the workflow is according to specifications.

4.4. The profile stuff

Now it is appropriate to say some words about the CEN BII profiles this prototype implements.

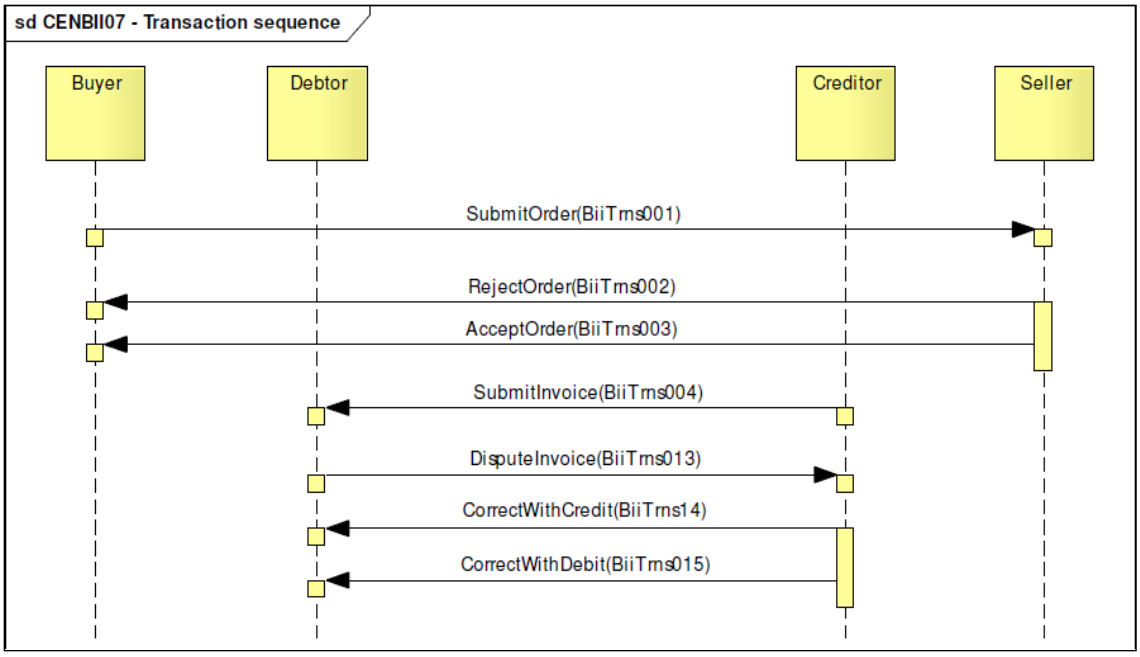

Figure 7: Transaction sequence of BII07 profile

When sending a document using this client, the user must choose which profile to use for communication with his supplier. The implication of that decision does not only affect the document, it places that document in choreography of related documents that can follow. If, for example, a buyer of goods sends an order to his supplier, he will have to choose which profile to use for that communication. That choice describes choreography of documents that can follow the order, as part of communication between seller and buyer.

In this example we use **Profile BII07 – Procurement with Invoice Dispute**, profile of medium complexity that includes order, invoice and supporting documents. The picture above is an overview of flow of documents (transaction sequence in BII terminology) within that profile.

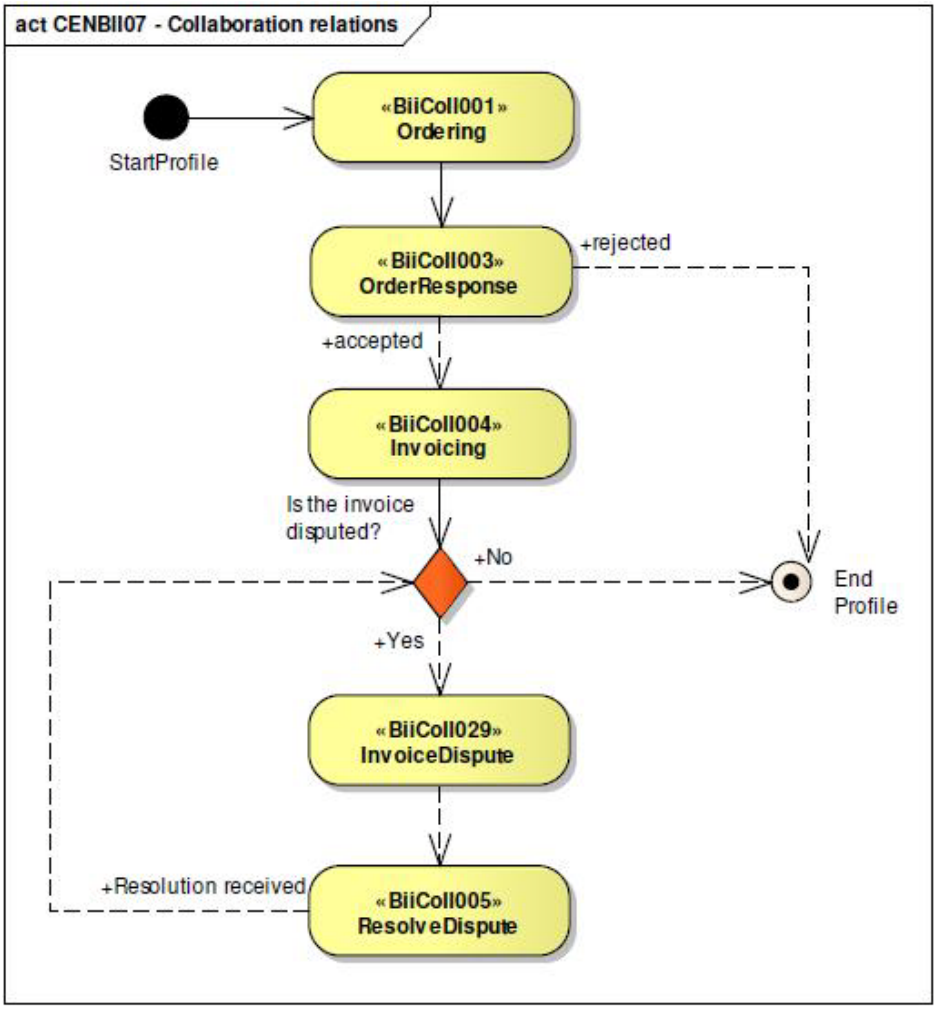

Figure 8: Collaboration relation of BII07 profile

The document flow is partitioned into series of ***collaboration*** that control the flow of documents.

4.5. The “Ordering” business process

The ordering business process implements the two collaborations demonstrated in the pictures below. These are the “**Ordering”** and the “**Order Response”** collaborations:

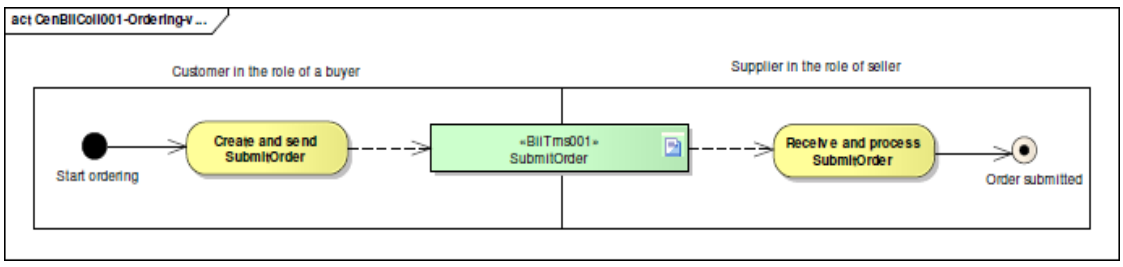

Figure 9: Ordering transport process

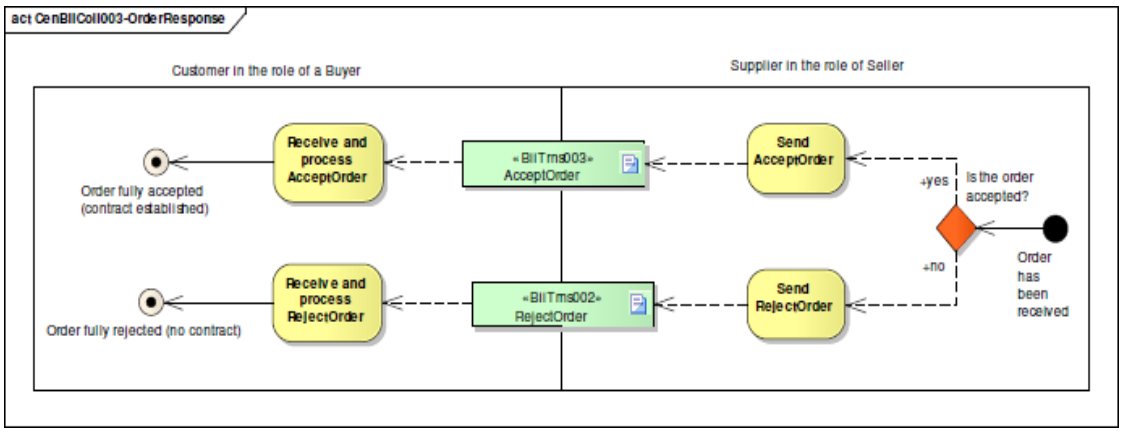

Figure 10: Ordering response transport process

It demonstrates a series of choices that trading partners have to make to come to a conclusion about the order. These choices are supported by information sets (documents) that are implemented by series of document sent back and forth.

- The buyer – “The one who orders stuffs”.
- Now we return the client and start an ordering collaboration according to profile 7.
- To start the communication, just create an **Order** and fill it with the correct information. (NOTE: If you create an Order you will play the role of Customer. Your trading partner that receives the order will play the role of Supplier).
- The order document itself in this prototype is not of great interest. It’s a simplified version of a NESUBL order document that is close enough to a CEN BII order document for demonstration purposes. What is of significance to our exercise are information about the profile used, the document itself and the trading partners.
- To create an “Order” document, select “New…/Procurement with Invoice Dispute/New Order”.

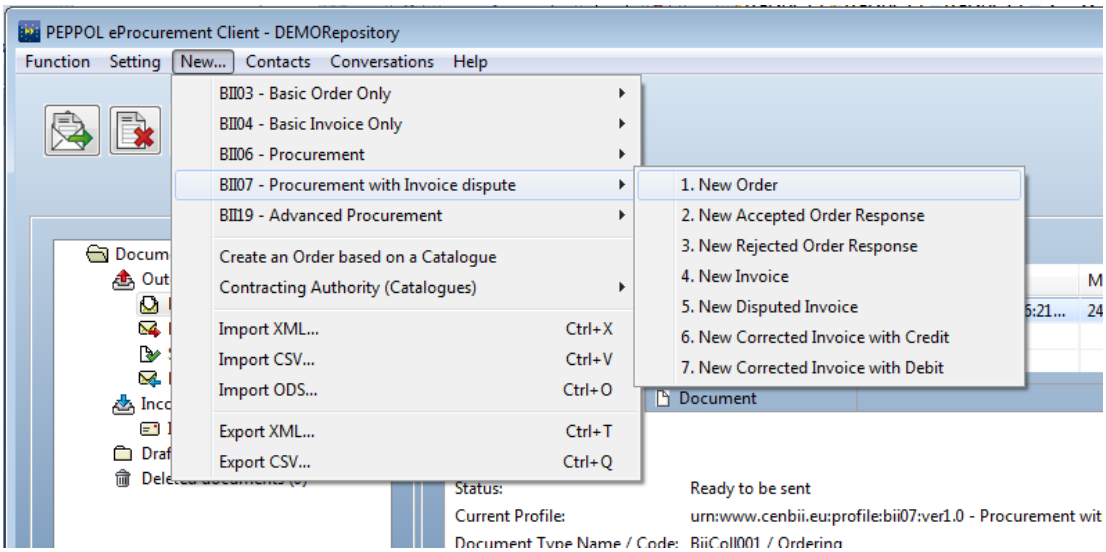

Figure 11: Creating a new Order document

- The entry screen below shows and example order:
- Verify that the "*buyer*" and "*seller*" information is correcting according to your setup.
- If the contacts were configured, so you will be able to select them from a list in an easier way.
- Click "*Prepare to send*" to save de document at "*Pending folder*".

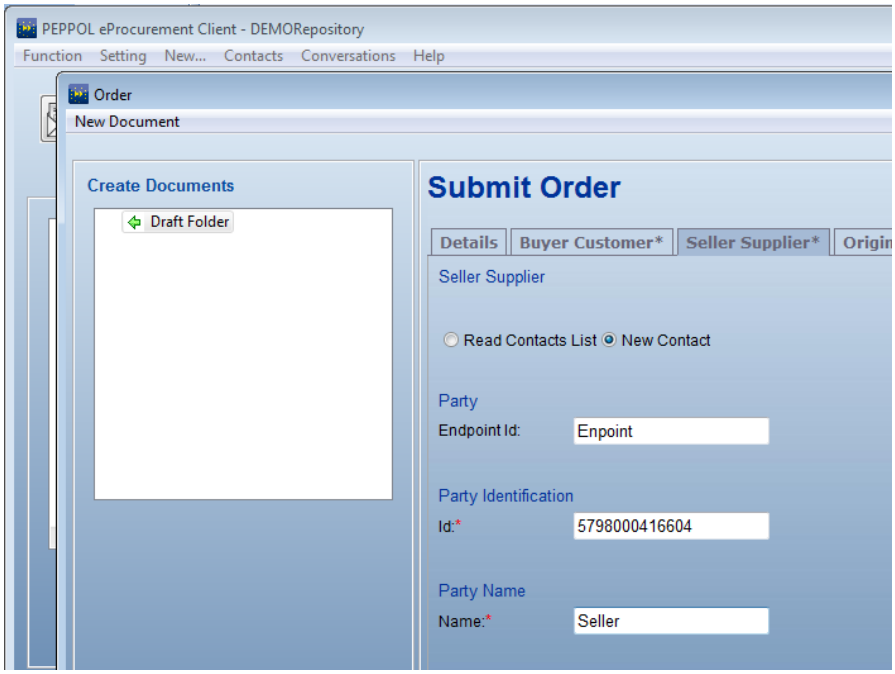

Figure 12: Editing one of the Order tabs

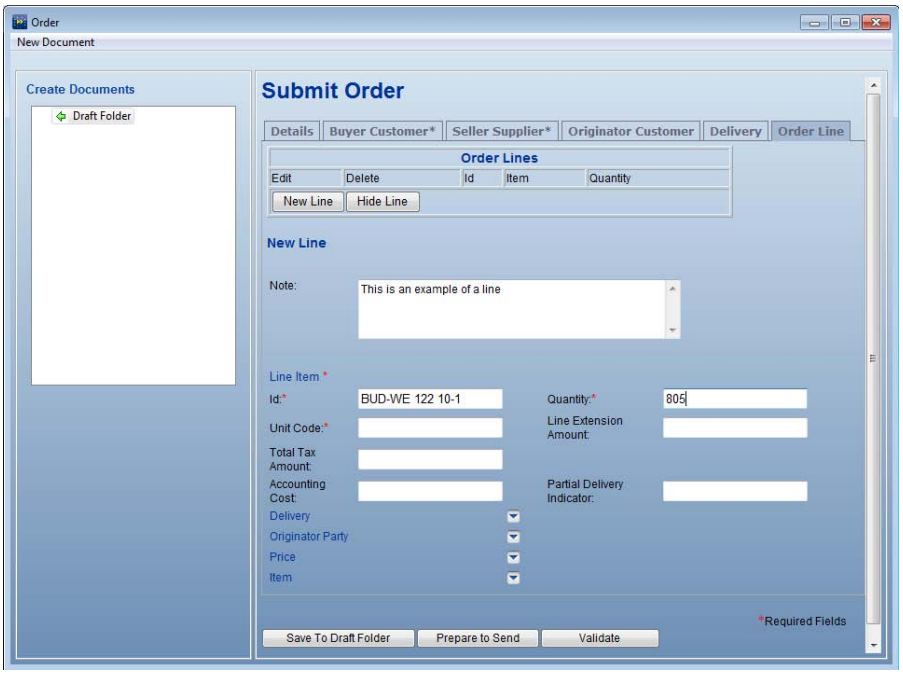

Figure 13: Editing an Order Line

- See the document created and check the tab “*Document Flow*” for status and “*Document*” to have a view of the document format.
- To send the document selected and then press “*Send*” button (green button). This will initiate sending.

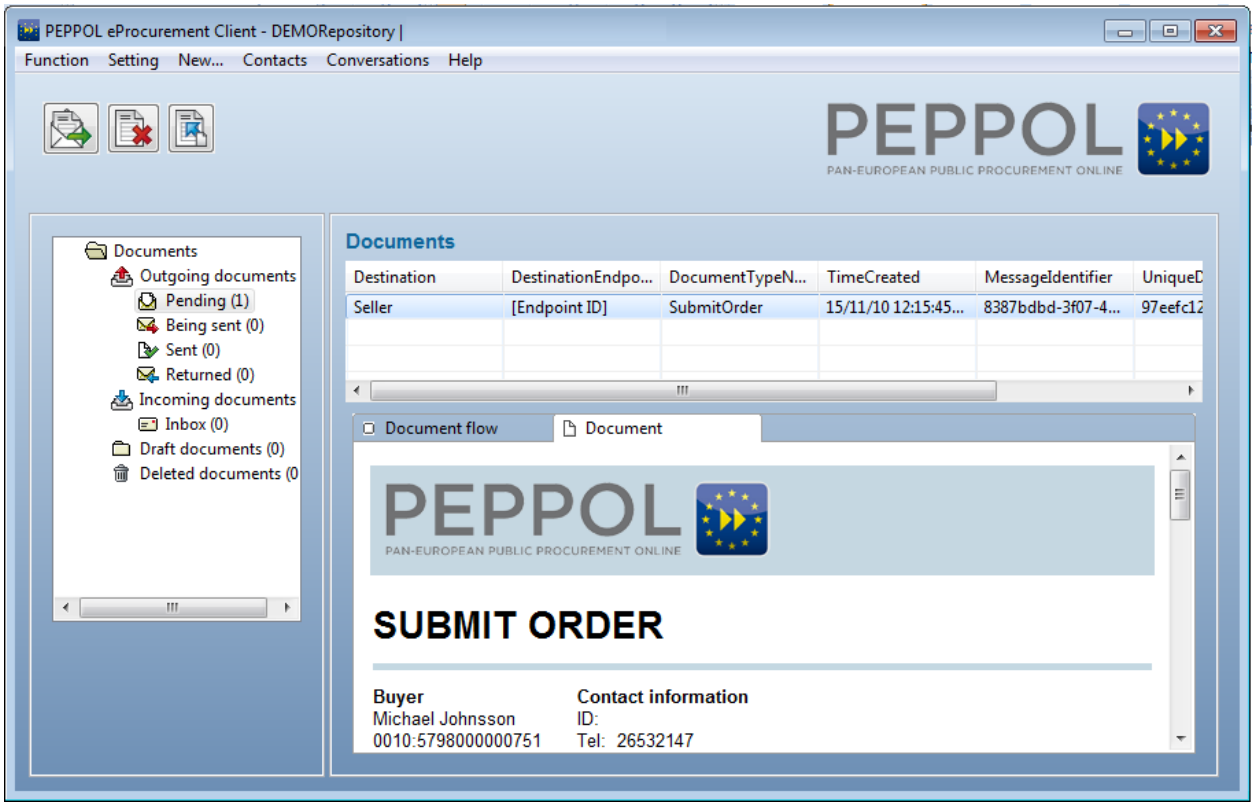

Figure 14: Preparing to send a created Order

- The document you have sent will be placed at the other “*Sent*” folder and you can see at the “*Sent*” item in the tree.
- Finally the document will be at the inbox of your business partner.
- When seller receives the document, this file will appear at the “*Inbox*” folder. The seller responds to the “*Order*” using the buttons in the “Document Flow” tab.
- Select “*Inbox*” folder.
- Select the “*Order*”.
- Select tab: Document flow.
- The picture bellow shows how the Client allows to the user follow the collaboration of a profile.

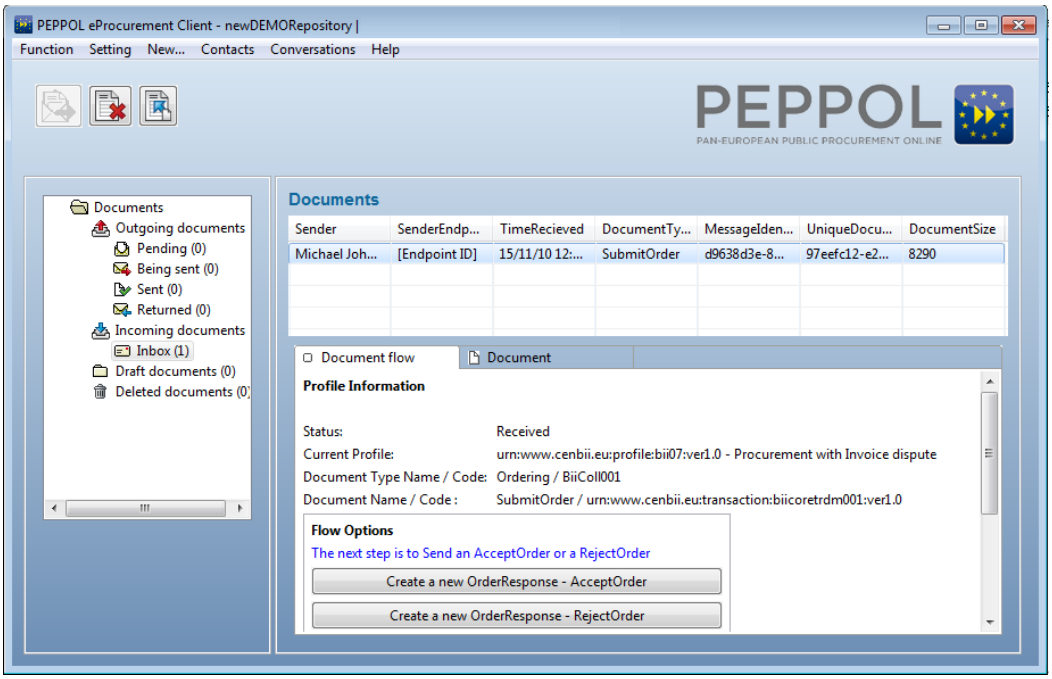

Figure 15: Options to follow the profile collaboration

- The Seller – Confirms or rejects the "*Order*" and responds. In this case the Seller response with an Accept Order and send it to the Buyer.
- Buyer receive the "*Order response*"
- The buyer will receive the order response from the seller and the system indicates what the next step is. In this case the customer has to receive an Invoice.

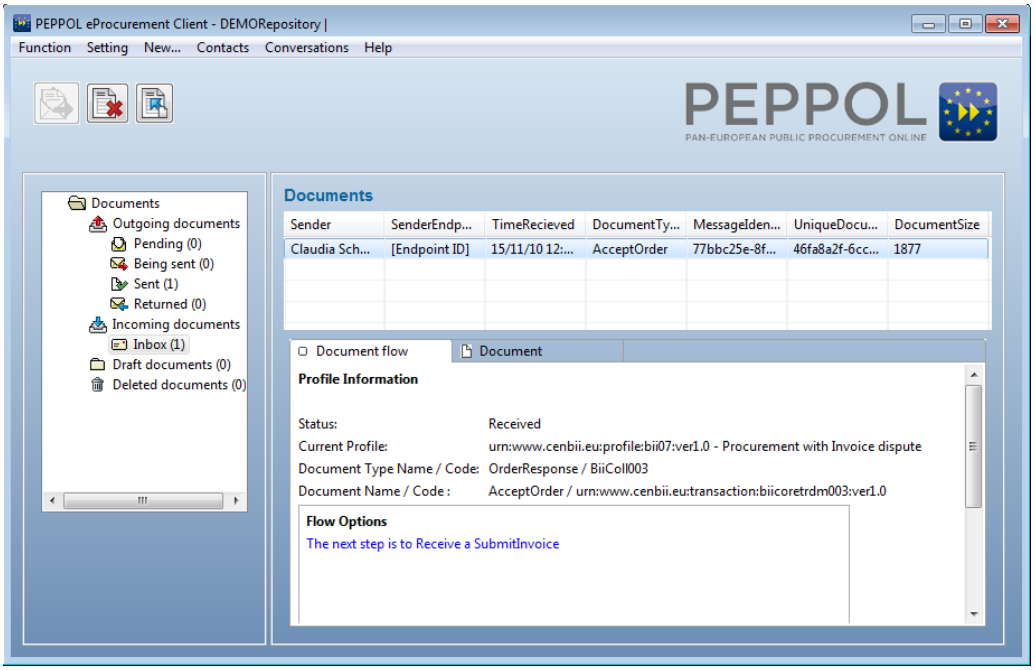

Figure 16: An accept Order was sent

- Seller sends the “*Invoice*”.
- The seller goes to Sent documents, and selects the Accept Order, the Client allows continuing the conversation creating an “*Invoice*”.

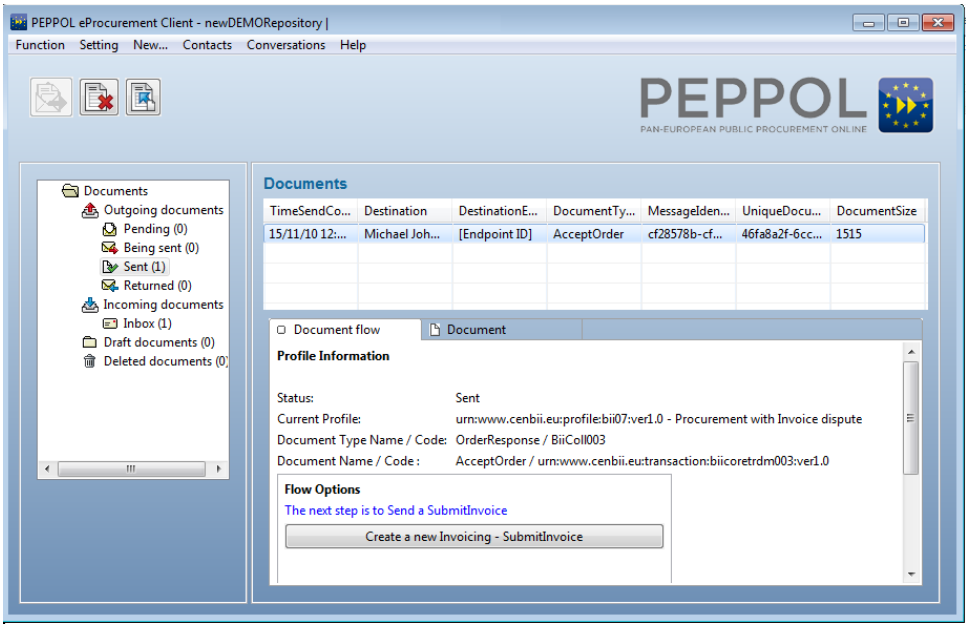

Figure 17: After sending an Accept Order, new options appear to follow the profile collaboration

- Seller sends the Invoice to the Buyer.
- Buyer receives the “*Invoice*”
- The buyer receives the “Invoice” and prepares the “*Dispute Invoice*” document to continue the process.

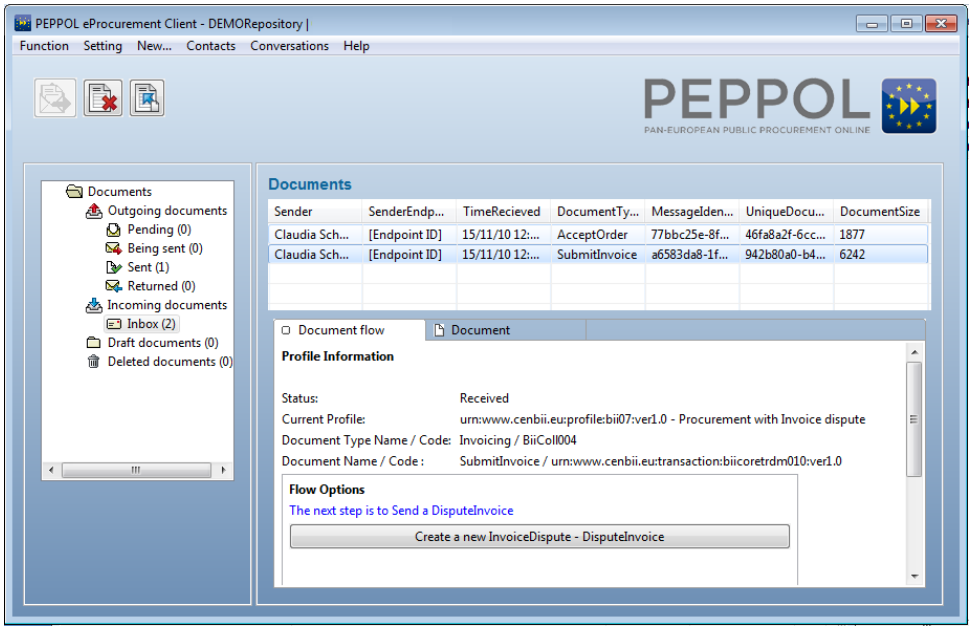

Figure 18: After receiving an Invoice, new options appear to follow the profile collaboration

- After sending the Dispute Invoice, the Buyer goes to Sent documents and selects the Dispute Invoice involved and the Client allows finishing the communication with two options.
- The Seller sends a "*Correct with credit*" or "*Correct with debit*", and by its side the communication has finished.

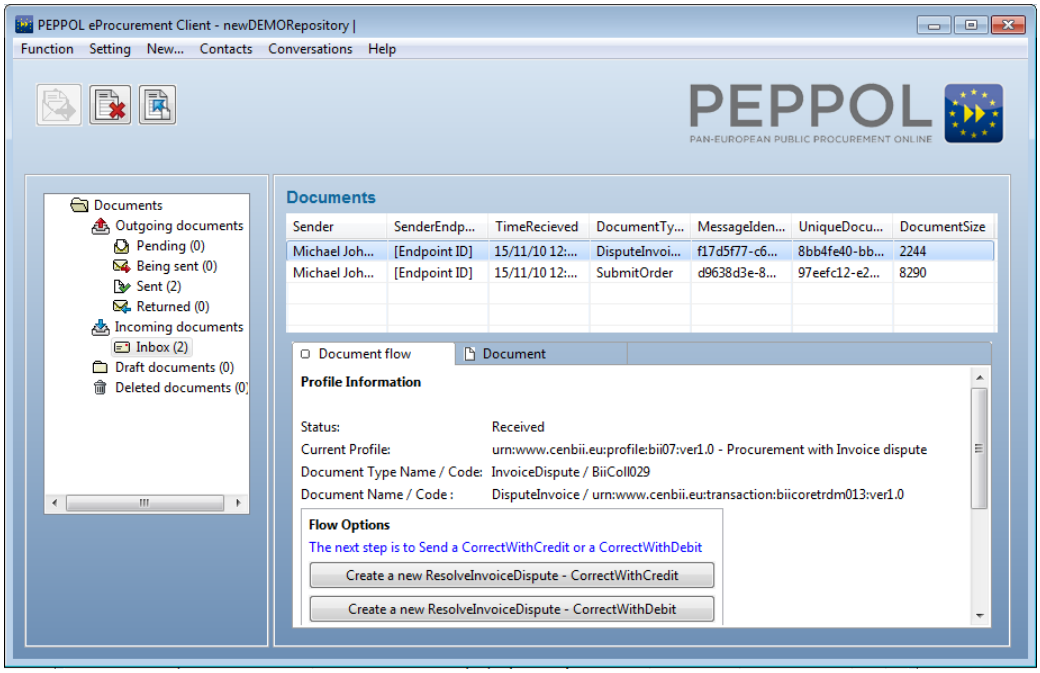

Figure 19: After receiving a Dispute Invoice, last options appear to finish the profile collaboration

- The Buyer receives a "*Correct with credit*" and its communication has finished.

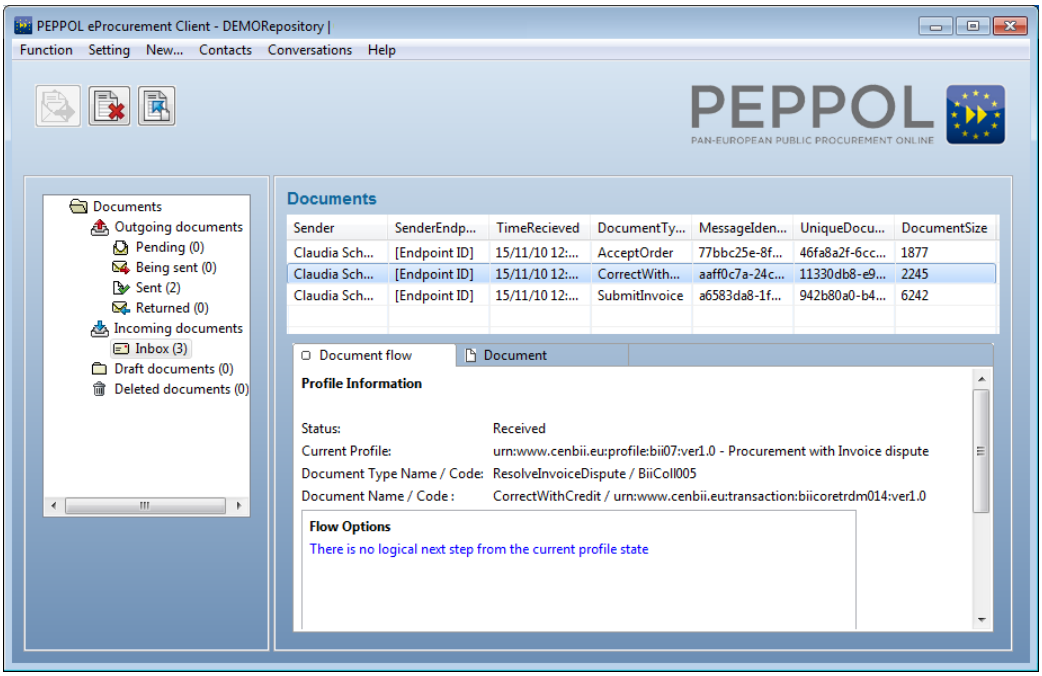

Figure 20: Document Flow tab shows to the user that the profile communication is finished