

Peppol

The future is open

Post Award Coordinating Community - Punch Out Login & Transmission Specification

Version: 1.1
June 2022

OpenPeppol AISBL
Rond-point Schuman 6, box 5
1040 Brussels Belgium

info@peppol.eu
www.peppol.eu



June 2022

Table of Contents

1	Introduction.....	3
1.1	OpenPeppol	3
2	References	4
3	Document history	4
3.1	Revision History	4
3.2	Contributors.....	4
4	Prerequisites and scope	6
4.1	Prerequisites	6
4.2	Scope	6
5	Process	6
5.1	Goals and Objectives	6
5.2	Parties and roles	6
5.3	Process description.....	7
6	Login transaction	9
	Example	9
7	Return message transaction	10
7.1	Minimum Requirements	10
8	Session handling	11
9	Appendices	11
9.1	Example a complete return message transaction	11

June 2022

1 Introduction

The PEPPOL Punch Out Login & Transmission Specification can be used to transfer message data between procurement/webshops/ERP systems in a synchronous way as an alternative to asynchronous message transfer via network such as the PEPPOL BusDox network. Message transport by use of this synchronous transfer specification may be relevant when retrieving data directly from a web site during business processes such as a punch out process. This synchronous transfer specification is based on the transfer mechanisms of HTTP.

1.1 OpenPeppol

This specification is a result of work within openPEPPOL and is published as part of the PEPPOL specifications.

The audience for this document is organizations wishing to be PEPPOL enabled for exchanging electronic messages, and/or their ICT-suppliers. These organizations may be:

- Service providers
- Contracting Authorities
- Economic Operators
- Software Developers

More specifically it is addressed towards the following roles:

- ICT Architects
- ICT Developers
- Business Experts

For further information on PEPPOL/OpenPEPPOL please see [PEPPOL].

June 2022

2 References

Peppol	http://www.peppol.eu/ , specifically http://www.peppol.eu/ressource-library/technical-specifications/post-award
Peppol_Transp	http://www.peppol.eu/ressource-library/technical-specifications/infrastructure-resources
UBL	http://docs.oasis-open.org/ubl
Schematron	http://www.schematron.com
XSLT	http://www.w3.org/TR/xslt20/
BIS18	http://www.peppol.eu/ressource-library/technical-specifications/post-award

3 Document history

3.1 Revision History

Version	Date	Author	Organisation	Description
1.0	April 2017	Georg Birgisson Martin Forsberg	Midran Ltd. Ecruc Consulting	First version.
1.1	June 2022	Erwin Wulterkens	OpenPeppol	New Lay-out

3.2 Contributors

The following individuals and their organizations have contributed to the development of this PEPPOL BIS document by participation in team meetings, discussion and by providing expert input and review.

Ahti Allikas, Opuscapita

Chris Heavey, Ghxeurope

I Burdon, Elcom

Jan Andre Maroe, DIFI

Jens Aabol , DIFI

Krist Deveugele, Basware

Martin Forsberg, Ecruc Consulting

Peter Danko, Edocdelivery

Petteri Zilliacus, Basware

June 2022

Seija Vallinen, Basware

Soren Pedersen, ESV

Thomas Pettersson, PSK-konsult

June 2022

4 Prerequisites and scope

4.1 Prerequisites

Reading this document requires general knowledge about the way http data transfer works.

The Supplier operates a Webshop that allows registered customers to login, select items and to retrieve the information about those items in an XML structured format.

4.2 Scope

Login transaction and retrieval of business documents from a business partner's website.

5 Process

5.1 Goals and Objectives

The main business benefits to be gained by implementing this specification are:

ID	Description
G-001	Enable transfer of XML messages based on Peppol BIS specification in a synchronous manner from websites.
G-002	Enable the website to identify the user to provide user specific information.
G-003	Support single sign-on for login to simplify users connections from within his own systems.
G-004	Provide a common established approach for login-transaction and transmission of message
G-005	Enable the user to maintain connection between work sessions on websites and in own systems.

5.2 Parties and roles

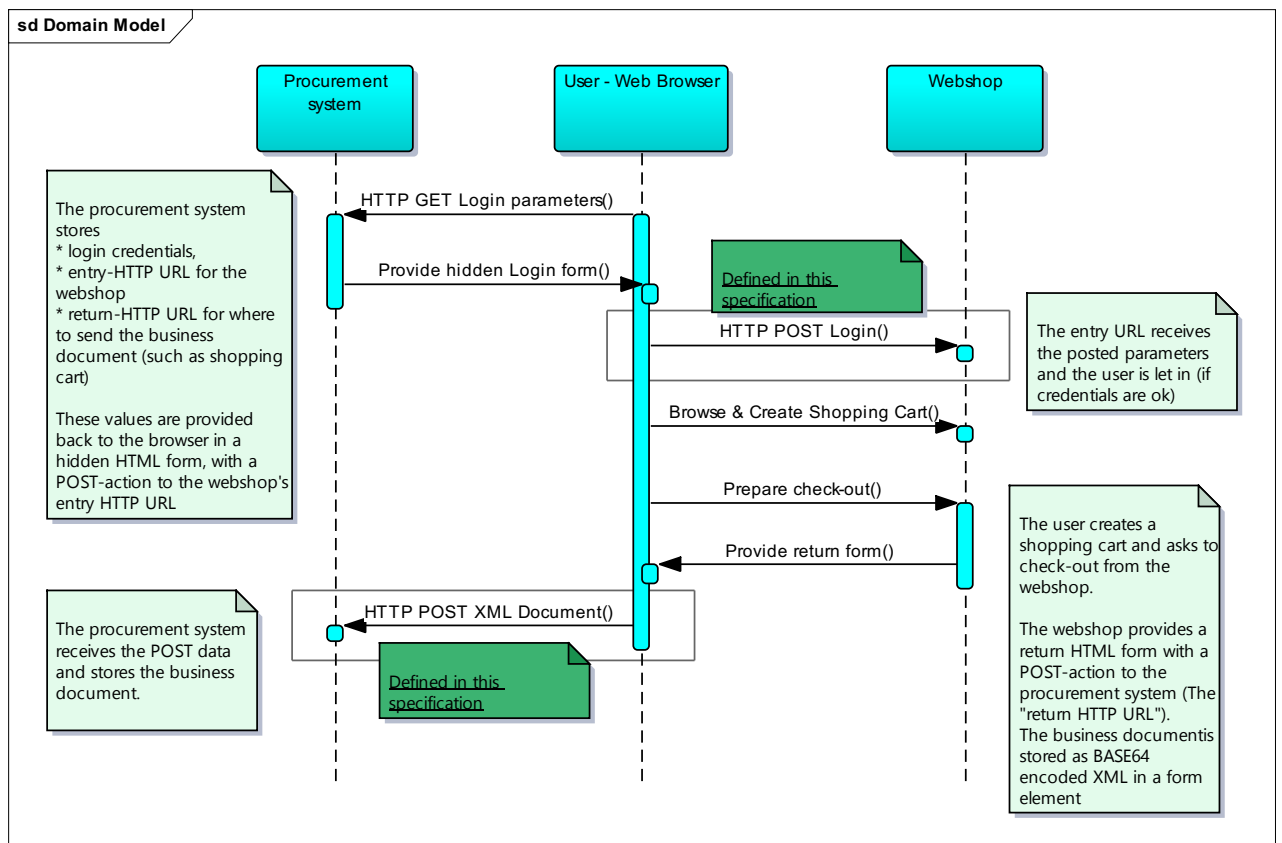
The table below gives the definitions of the parties and roles of the message transfer process.

Business partners	Description
Customer	The customer is the legal person or organization who is in demand of a product or service. Examples of customer roles: buyer, consignee/delivery part, debtor, contracting body.
Supplier	The supplier is the legal person or organization who provides a product or service.

June 2022

	Examples of supplier roles: seller, consignor, creditor, economic operator.
Role/actor	Description
Buyer (Webshop user - User)	The buyer is the legal person or organization acting on behalf of the customer and who buys or purchases the goods or services. As a webshop user the buyer accesses the Webshop, selects the items and quantities he wants and completes the action by punching-out.
Seller (Webshop operator)	The seller is the legal person or organization acting on behalf of the supplier and who sells goods or services to the customer. As a Webshop operator seller provides the Webshop into which the buyer logs on. The seller is responsible for providing up-to-date information on items and other relevant information in Webstore.

The following diagram links the business processes to the roles performed by the Business Partners.



5.3 Process description

The above diagram demonstrates the following process.

June 2022

The user automatically logs into the supplier's webstore directly from his procurement systems by using the relevant login credentials. The login credentials are transmitted to the sellers web shop in the form of an outbound request as defined in following chapter.

In the webstore the user selects the items he is interested in by placing them in his shopping cart. When he has finished his selection he selects to check out. This initiates an action in the seller's web shop where the item information is compiled into a structured XML format conformant to the PEPPOL BIS18 [BIS18].

The structured XML information is encoded as an base 64 object and pushed to the user through a post action.

In the user's procurement system the transferred object is decoded into an XML document and processed automatically into the procurement system as defined in PEPPOL BIS18 [BIS18].

June 2022

6 Login transaction

The login transaction must contain the following elements:

Element	Description	Notes
<form ... action="url">	The url for the login at the providers web site.	The value of the action in the form post.
username	An identifier for the user account on the website.	issued by the website
password	A password matching the username that validates the user.	issued by Webshop operator according to his password policies.
buyer_id	The id of the user in his role as a buyer.	Used for customized user experience. Such as his delivery addresses, delivery times , prices and terms. Provide if different from user name.
return_object_spec_id	An identifier of the document type and version expected to be returned (such as a shopping cart XML-format).	Identifies the specification that the returned object shall be compliant to.
post_url	The url to where the Webshop will post the inbound message on the users site. SessionID/TicketID can be part of the post_url so that received document can be connected to the user session.	The user may create an SessionID/TicketID and insert it into the post_url. The Webshop does not need to process the id but when it posts the document the user can parse the url and extract the id for matching.

Example

```
<form method="post" enctype="application/x-www-form-urlencoded; charset=UTF-8"
action="https://punchout.peppol.eu/request/callservice.jsp">
  <input type="hidden" name="username" value="samplebuyer"/>
  <input type="hidden" name="password" value="strongpass"/>
  <input type="hidden" name="buyer_id" value="jd123"/>
  <input type="hidden" name="return_object_spec_id" value="
urn:www.cenbii.eu:transaction:biitrns077:ver2.0:extended:www.peppol.eu:bis:peppol18a:ver1.0"/>
  <input type="hidden" name="post_url"
value="https://purchase.johndoe.com/receive/receiveservice.jsp?ticketid=XYZjd123"/>
  <input type="submit" value="Login"/>
</form>
```

June 2022

7 Return message transaction

The business document is transmitted back to the users service on the address (post_url) provided in the login transaction.

7.1 Minimum Requirements

The return message transaction must contain the following elements:

Element	Description	Notes
<form ... action="url">	The url to where the website will post the business document on the receivers site. This url is provided in the login transaction in the parameter named post_url.	The post url may contain the users Session or Ticket ID.
return_object_spec_id	The specification that governs the returned object and may be used to validate its content.	The relevant BIS customization identifier. Shall be the same as what was in the login transaction.
return_object_mime	The mime code of the encoded object.	Such as application/xml
return_object_encoding	The character encoding used in the returned object, i.e. the business document.	Such as UTF-8
return_object_base64	The returned object encoded as base 64	

Following example is for a returned object that is a base 64 encoded XML message which follows the specification of a PEPPOL BIS for Punch Out.

```
<form method="post" action="https://purchase.johndoe.com/receive/receiveservice.jsp?ticketid= XYZjd123" >
  <input type="hidden" name="return_object_spec_id" value="
urn:www.cenbii.eu:transaction:biitrns077:ver2.0:extended:www.peppol.eu:bis:peppol18a:ver1.0"/>
  <input type="hidden" name="return_object_mime" value="application/xml"/>
  <input type="hidden" name="return_object_encoding" value="UTF-8"/>
  <input type="hidden" name="return_object_base64" value="PD94bWwgdmVyc2lvbj0iM..." />
  <input type="submit" value="Return"/>
</form>
```