



OpenPEPPOL AISBL



Post Award Coordinating
Community

ICT – Models

**PEPPOL Punch Out
Login & Transmission Specification**



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1 Introduction

The PEPPOL Punch Out Login & Transmission Specification (PPOLTS) can be used to transfer message data between 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 PPOLTS may be relevant when retrieving data directly from a web site during business processes such as a punch out process. The PPOLTS 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].

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/UBL-2.1.html
[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	Organization	Description
1.0	March 2017	Georg Birgisson	Midran Limited	First version

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.

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4 Principles and prerequisites

4.1 Prerequisites

Reading this document requires general knowledge about the way http file downloading works.

The Supplier operates a Web shop that allows registered customers to login, select items and to retrieve the information about those items in an XML structured format that conforms to the PEPPOL BIS18 for Punch Out [BIS18]

4.2 Scope

Retrieval of Punch Out shopping cart message from a supplier's website.

5 Process

5.1 Goals and Objectives

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

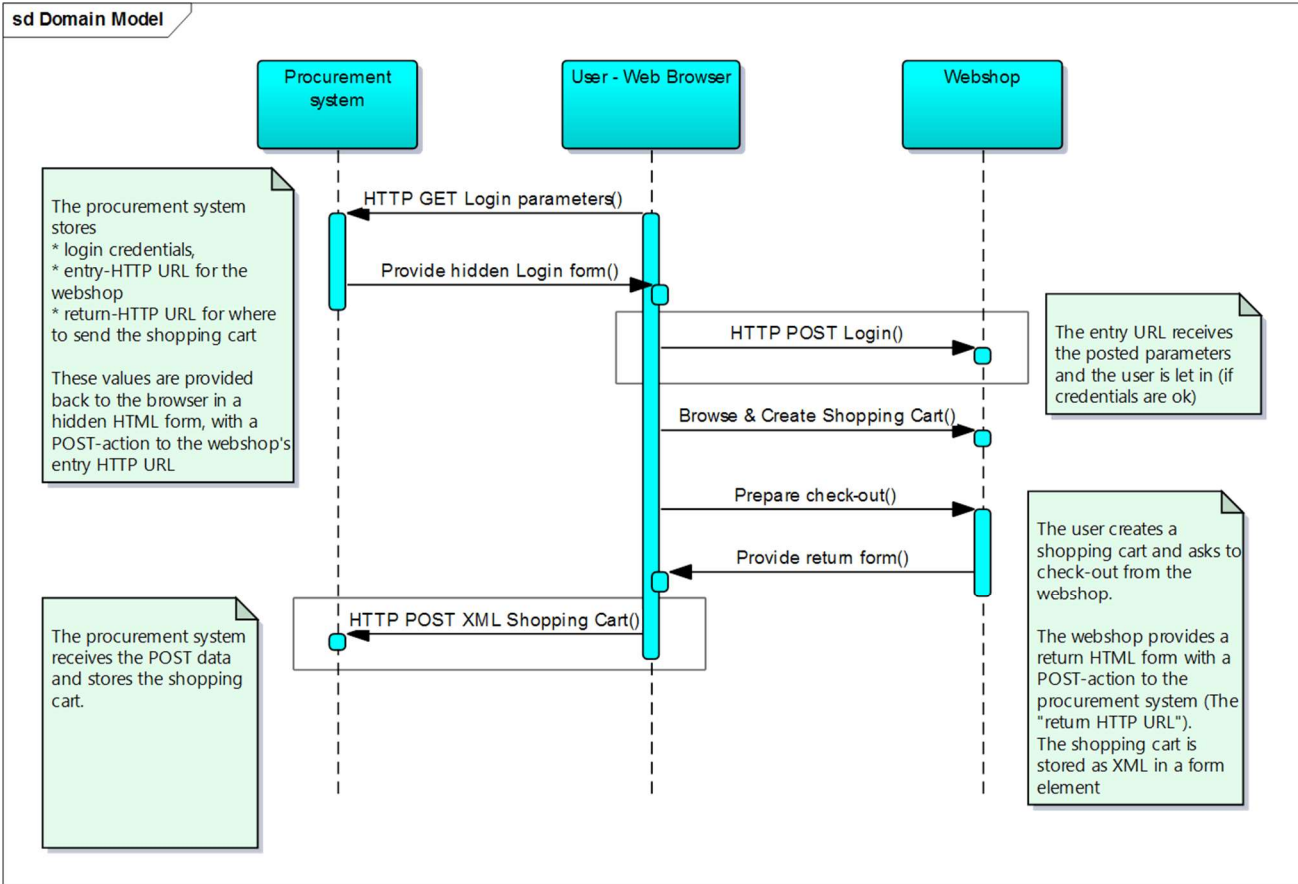
ID	Description
G-001	Enable web shop users and web shop operators to exchange shopping cart transaction in a synchronous way.

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, web shop user.
Supplier	The supplier is the legal person or organization who provides a product or service. Examples of supplier roles: seller, consignor, creditor, economic operator, web shop operator.
Role/actor	Description
User	The customer in the role of a user of the supplier's web shop.
Web shop operator	The Supplier in the role of the operator of a web shop.

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.

1. The user automatically logs into the suppliers webstore directly from his procurement systems by using the relevant login credentials. The login credentials are transmitted to the sellers webshop in the form of of an outbound request as defined in following chapter.
2. In the webstore the user selects the items he is interested in by placing them in his shopping cart. When he has finised his selection he selects to check out. This initiates an action in the sellers webshop where the item information is compiled into a structured XML format conformant to the PEPPOL BIS18 [BIS18].
3. The structured XML information is encoded as an base 64 object and pushed to the user through a post action.
4. In the users procurement system the transferred object is decoded into an XML document and processed automatically into the procurement system as defined in BI18 [BIS18].

6 Request - outbound

PPOLTS message transfer is based on inbound- and outbound messages. An outbound message is sent from the eProcurement system to seller's web store. The outbound message is created in the buyer's procurement system

6.1 Minimum Requirements

The outbound message must contain the following elements:

- URL
- USERNAME
- PASSWORD
- BUYER
- RETURN_URL
- USER_ID

Element	Description	Requirements
url	The url for the login at the provider's web site.	
username	An identifier for the receiver on the providers site.	issued by the provider
password	A password matching the username that validates the user.	issued by provider according to his password policies. Recommended minimum length is 10 characters.
buyer	The name of the receiver in his role as a buyer.	
post_url	The url to where the provider will post the inbound message on the receivers site.	
receiver_id	An identifier for the party that is to receiver's the inbound message.	

6.2 Example

The following example is for the following details.

url: https://puchout.peppol.eu/request/callservice.jsp
 username: samplebuyer
 password: strongpass
 buyer: john.doe
 receiver_id: jd123
 post_url: https://purchase.johndoe.com/receive/receiveservice.jsp

```
<form method="post" enctype="application/x-www-form-urlencoded; charset=UTF-8" action=
https://puchout.peppol.eu/request/callspecification ="nameOnForm">
<input name="USERNAME" value=" samplebuyer " />
<input name="PASSWORD" value=" strongpass " />
<input name="RECEIVER_ID" value="jd123" />
<input name="BUYER" value=" john.doe " />
<input name="buyer_mpid" value="ef424336-0596-11df-ab05-593a56d89593" />
<input name="reqRole" value="FreeRequester" />
<input name="POST_URL" value=" https://purchase.johndoe.com/receive/receivespecification " />
<input type="submit" value="Login" />
</form>
```

7 Provide –inbound

7.1 Minimum requirements

The inbound message must contain the following elements:

- RETURNED_OBJECT
- RETURNED_OBJECT-SPEC_ID
- RETURNED_OBJECT-BASE64

Element	Description	Requirements
post_url	The url to where the provider will post the inbound message on the receivers site.	
SessionID		
returned_object-spec_id	The specification that govern the returned object and may be used to validate their content.	The relevant BIS customization identifier.
returned_object-mime	The mime code of the encoded object.	application/xml
returned_object-base64	The returned object encoded as base 64	

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

7.2 Example

```
<form name="posiform" action=" https://purchase.johndoe.com/receive/receiveservice.jsp " method="post"
  enctype="application/x-www-form-urlencoded; charset=UTF-8">
<input type="text" name="RETURNED_OBJECT-SPEC_ID" value="
urn:www.cenbii.eu:transaction:biitrns077:ver2.0:extended:www.peppol.eu:bis:peppol18
a:ver1.0"/>
<input type="text" name="RETURNED_OBJECT-MIME" value="application/xml"/>
<input type="text" name="RETURNED_OBJECT-BASE64" value="A76E1D3BBF4D....."/>
<input type="text" name="SessionID" value=" jd123"/>
```

8 Appendix

8.1 Example full inbound message

The following example returns the full example of the shopping cart message from PEPPOL BIS 18.

```
<form name="posiform" action=" https://purchase.johndoe.com/receive/receiveservice.jsp " method="post"
  enctype="application/x-www-form-urlencoded; charset=UTF-8">
<input type="text" name="RETURNED_OBJECT-SPEC_ID" value="
urn:www.cenbii.eu:transaction:biitrns077:ver2.0:extended:www.peppol.eu:bis:peppol18
a:ver1.0"/>
<input type="text" name="RETURNED_OBJECT-MIME" value="application/xml"/>
<input type="text" name="RETURNED_OBJECT-BASE64"
value="PD94bWwgdMvYc2lrbj0iMS4wliBlbmNvZGluZz0iSVNPLTg4NTktMSI/Pg0KPENhdGFsb2d1ZSB4
bWxuc2pjYWM9InVybjpvYXNpczpuYW1lc2pzcGVjaWZpY2F0aW9uOnVibDpzY2h1bWE6eHNkOkNv
bW1vbKFnZ3JlZ2F0ZUNvbXBvbmVudHMTMilgeG1sbnM6eHNpPSJodHRwOi8vd3d3LnczLm9yZy8y
MDAxL1hNTFNjaGVtYS1pbmN0YW5jZSIgeG1sbnM6Y2JjPSJ1cm46b2FzaXM6bmFtZXM6c3BIY2lm
```





