



PROGRAMME & DEVELOPMENT SERVICES

XML Services

Ver. 5.2

Reference Document – Shipment Preparation
Guide



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1 Introduction

This summarises the:

BBX functionality, PLT functionality and Label Utility functionality in XML Services Shipment Validation service in v5.2.

2 PLT Functionality

2.1 Types of Shipment

There are two types of shipments supported in XML Services Shipment Validation service:

- i. Regular shipments
- ii. Paperless Trade (PLT) shipments

Regular is that type supported exclusively in all versions of XML Services previous to v5.2.

PLT shipments are now also supported in XML Services v5.2. This provides the ability for customers to send a Commercial Invoice and other Customs documentation for a shipment as images to DHL Express electronically. This is used instead of printing such paperwork to each physical package, as used with Regular shipments.

XML Services will only allow use of PLT for dutiable shipments. Also a number of countries' Customs authorities do not allow either or both exporting or importing without printed Customs paperwork affixed to shipments. In such cases Regular shipments must be sent and XML Services will not permit use of PLT.

Please refer to the following Reference documents in Toolkit\documents\ReferenceDocuments directory for region specific and global schema of the XML Services Shipment Validation service:

- XMLServices5.2_ShipmentValidationService.doc (Global schema)
- XMLServices5.2_ShipmentValidationService_EA.doc
- XMLServices5.2_ShipmentValidationService_AP.doc
- XMLServices5.2_ShipmentValidationService_AM.doc

2.2 Registration

Customers who wish to subscribe PLT shipment (even if they are current users of XML Services for Regular shipments) must register to use PLT, and must contact their local DHL E-Com team for assistance to do so.

2.3 How to prepare a PLT Shipment

After a customer has registered for PLT (i.e. their XML Services credentials are enabled for submission of PLT submission) they can submit PLT enabled XML Services Shipment Validation Request messages.

The following elements with the contents described below must be included in a PLT Shipment Validation Request:

- i. `<IsDutiable>` element must contain value of 'Y'
Element located at `/req:ShipmentValidateRequest/ShipmentDetails/IsDutiable`
Example:
`<IsDutiable>Y</IsDutiable>`
- ii. `<Dutiable>` element must be included
Element located at `/req:ShipmentRequest/Dutiable`
Example:
`<Dutiable>`
`<DeclaredValue>200.00</DeclaredValue>`
`<DeclaredCurrency>USD</DeclaredCurrency>`
`<ScheduleB>3002905110</ScheduleB>`
`<ExportLicense>D123456</ExportLicense>`
`<ShipperEIN>112233445566</ShipperEIN>`
`<ShipperIDType>S</ShipperIDType>`
`<ImportLicense>ImportLic</ImportLicense>`
`<ConsigneeEIN>ConEIN2123</ConsigneeEIN>`
`<TermsOfTrade>DTP</TermsOfTrade>`
`</Dutiable>`
- iii. `<SpecialServiceType>` element must contain value of 'WY'
Element located in SpecialService segment at
`/req:ShipmentValidateRequest/SpecialService/SpecialServiceType`.
Example:
`<SpecialService>`
`<SpecialServiceType>WY</SpecialServiceType>`
`</SpecialService>`
- iv. `<DocImages>` element must contain the commercial invoice or other supporting document images required for Customs clearance, encoded in base64 (not as an embedded image file of some kind), and the image file type which has been encoded must also be defined here.
Element located at `/req:ShipmentUploadImageRequest/DocImages`.
Example:
`<DocImages>`
`<DocImage>`
`<Type>CIN</Type>`
`<Image>IG9iago8PC9MZW5ndGggNiAwIFlvRmlsdGVyICF</Image>`
`<ImageFormat>PDF</ImageFormat>`



</DocImage>
</DocImages>

The customer must include functionality in their application which creates the XML Services Shipment Validation Requests to encode the image files submitted in base64. There is no encoding functionality provided in the XML Services Tool Kit.

The customer submits the Shipment Validation Request to DHL in the same way as for a regular shipment, and will receive a response in the same way.

If a success response is received with an element <PLTStatus> populated with A then the response can be used to create the Air Waybill shipment label. The resulting Air Waybill label will include PLT in reverse video on the Services section.

3 Label Utility Functionality

3.1 Using the Label Utility

An XML Services Shipment Validation Response can be returned, both for Regular and PLT shipments, with an element containing an image of the labels in either PDF format or EPL2, ZPL2 or LP2 printer code encoded in base64.

To receive such a response <LabelImageFormat> element must be included in the Shipment Validation Request and state the Output format required. This may contain either in PDF, EPL2, ZPL2 or LP2.

The Shipment Validation Response returned includes:

<OutputFormat> which states the image type returned, corresponding to the content of <LabelImageFormat> in the corresponding Shipment Validation Request

<OutputImage> containing the image in base64.

The customer can then use the Label utility in the XML Services Toolkit to generate labels from the Shipment Validation Response.

Refer to Toolkit_v51.pdf section 3.2.2., 5. XML Services v5.2 Label Utility functionality for details

In summary, the following steps are followed after double clicking on 'generateLabel.cmd' or run it via the command prompt to open the Label Utility:

- i. Against Shipment Response XML File select the Shipment Validation Response from which the labels are to be created
- ii. Against "Label Type" select "Both", to create both an Air Waybill shipment label and Archive Air Waybill label
- iii. Against "Output Format" select the same as given in <OutputFormat> in the Shipment Validation Response
- iv. If Output Format is PDF select the location where the resulting image files are to be placed against "Output PDF Location" using Browse

- v. If Output Format is any other value select the printer to be used against Printer using Browse
- vi. Select Submit
The Label utility will decode the <OutputImage> image value in Shipment Validation Response. If PDF was selected against “Label Type” the resulting file will be stored in the stated location. If EPL2, ZPL2 or LP were selected the Air Waybill label and Archive Air Waybill label will printed on the stated printer.

3.2 Generating Air Waybill and Archive Air Waybill Labels without the Label Utility

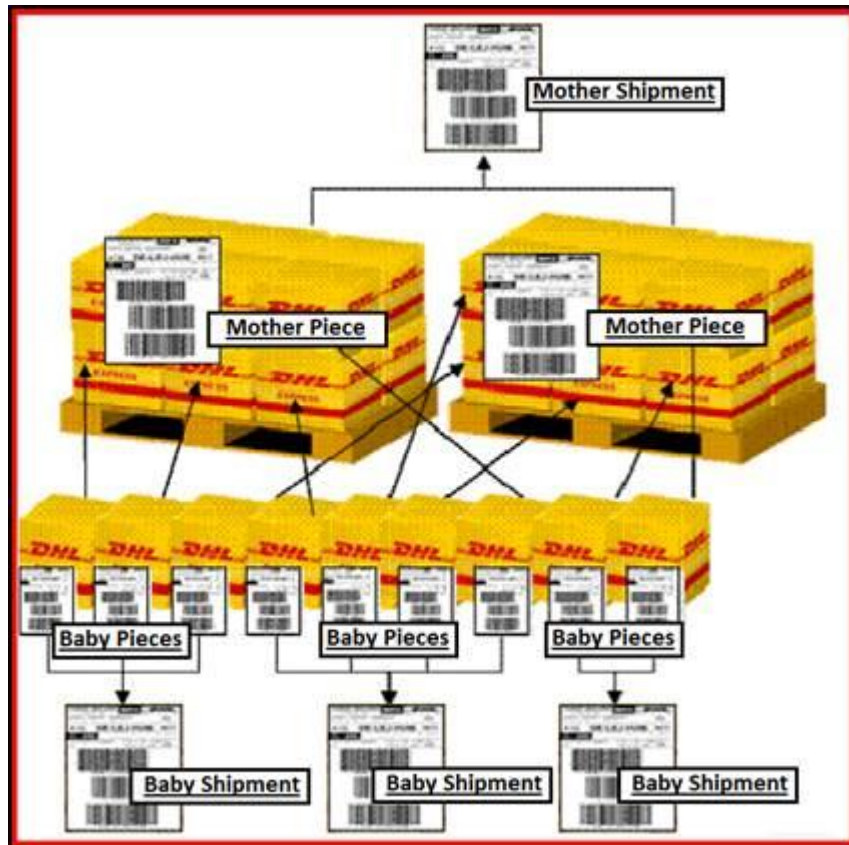
If the customer requires to write their own application to create the label images they can decode the contents of the <OutputImage>. Sample decode source code is available in the toolkit source code directory.

Alternatively they can use the data in the individual elements in the XML Services Shipment Validation Response in conjunction with label specifications available from DHL. In this case there is no need to include <LabelImageFormat> in the initial Shipment Validation Request.

4 BBX Functionality

4.1 Definition

BBX consists of a ‘Mother’ shipment which is cleared as one single shipment on entry to the nominated country of import. The mother will contain multiple ‘Baby’ shipments consigned to different receivers belonging to the same customs zone.



4.2 How to prepare a BBX shipment

XMLPI supports BBX shipment process where the customer knows the count of mother pieces upfront.

1. Customer sends shipment validation request message for Mother Shipment with relevant shipment information and the below information :
 - a. <NumberOfPieces> element must indicate the count of mother pieces.
 - b. The Pieces element should declare the relevant piece details
 - c. <SpecialServiceType> element must contain value of ‘YW’
 - d. <GlobalProductCode> element must contain value of ‘P’ or ‘H’



2. Customer receives shipment validation response message for Mother Shipment with the Pieces IDs. The successful response is used to create the Mother shipment label.
3. Customer sends shipment validation request message for Baby Shipment with relevant shipment information and the below information :
 - a. At the baby shipment level,
 - i. <ReferenceType> element must contain value of 'ACL'
 - ii. <ReferenceID> element must contain the Mother Shipment ID
 - iii. <GlobalProductCode> element must contain value of 'B'
 - b. For each baby piece id
 - i. <ReferenceType> element must contain value of 'ACL'
 - ii. <ReferenceID> element must contain the corresponding Mother Shipment's piece ID
4. Customer receives shipment validation response message for Baby Shipment. The successful response can be used to create the Baby shipment label.



5 Appendix A: Glossary of Terms

Term	Definition
PLT	Paperless Trade: functionality to allow submission of paperwork for Customs clearance to be submitted to DHL electronically rather than printing and affixing it to the corresponding shipment. Only available where both shipment origin and destination Customs authorities do not mandate use of printed documentation PLT is not required if a shipment is not dutiable (i.e. does not need to be declared to Customs)
Regular Shipment	Shipment where PLT is not used, either where it is dutiable and printed Customs documentation is attached to the shipment or where the shipment is not dutiable
BBX	BreakBulk Shipment