



DHL EXPRESS GLOBAL WEB SERVICES

Web Services Developer Guide

Doc. Ref.	DHL Express Global Web Services – Developer User Guide
Version Number:	3.1
Status	FINAL
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Date	15/08/2017



Document Control

Revision history:

Version	Release Date	Updated by	Comments	Status
1.0h	05/09/2012	J Penmatcha	Modified XML structure to include label template in creation service	Approved
1.0i	04/08/13	V Rodriguez	Modified XML structure of Rate Request to add two more fields	Approved
1.0j	04/15/13	S Arora	Simplification of User guide with Tips and Notes and change of UAT endpoint (Sandpit)	Approved
1.0k	13/09/13	S Arora	Description around state province field added	Approved
1.0L	20/11/13	S Arora	Updated with Email field length	Approved
1.0M	03/12/13	S Arora/ V Rodriguez	Added Value Added Services for getRateRequest	Approved
1.0N	08/04/14	S Arora	Updated Service tag information and Account tag information for createShipmentRequest	Approved
2.1	22/04/14	S Arora/D Hill	Updated version control, added Tracking & ePOD	Approved
2.2	15/07/14	S Arora	Updated Non_Documents tag	Approved
2.3	14/08/14	T Sukardjo	Updated ShipmentRequest tags: PickupLocationCloseTime, SpecialPickupInstruction, PickupLocation.	Approved
2.4	09/03/15	S Arora	Updated minimum dimensions	Approved
2.5	29/06/15	S Arora	Updated package number requirement	Approved
2.6	15/12/15	S Arora	New release: DG,PLT, Data Staging etc	Approved
2.7	16/12/15	S Arora / D Hill	Re-formatting	Approved
2.8	10/05/16	S Arora	Clarification on Content	Approved
2.9	28/06/16	D Hill	Added info on WS Security	Approved
3.0	05/08/16	S Arora	Aligned max number of packages to WSDL	Approved
3.1	15/08/17	S Arora	Aligned packagetype in tracking response to 3 char	Approved

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1. INTRODUCTION

1.1 DHL Express Global Web Services Overview

The DHL Express Global Web Services are a set of operations offering DHL's core services like capability, rating or booking a pickup request to any customer. This enables the customer to integrate these services seamlessly into their own IT infrastructure. Customers can then ask for the available products and their prices (where applicable) online as well as creating a shipment together with a courier pickup.

This document describes how to integrate these services to your own applications and is intended as a user guide for developers.

1.2 Requirements – Technical Skills

Technically speaking, the DHL Express Global Web Services is a set of Operations accessible by a standardized web protocol. Each operation can be called by a client application to request shipment capability, estimated shipping price or even book a pickup of a shipment. Client applications will request a certain operation to be executed with the application specific request data. The DHL Express Global Web Services then responds synchronously by sending back response data in a standard pre-defined format. The client application can then process the response data to complete the subsequent workflow.

In order to access the web service, a SOAP protocol is used and developers should be familiar with XML and have a basic understanding of web services. Please find a list of helping resources in the Appendix.

1.3 Requirements – Business Understanding

Developers who plan to connect their tools or services to the DHL Customer Web Services should also have a closer look into DHL's product and services offering. More details about DHL products and services are available at www.dhl.com and your DHL Sales representative.

2. DHL Express Global Web Services Overview

There are some main points that must be noted before getting started with the DHL Express Global Web Services integration -

- The DHL customer web services consist of Port types and bindings that contain information about the service operation, service endpoints and service location.

2.1 Web Service Definition Language and Reference Documents

These documents will be used to integrate to the DHL Express Global Web Services, including WSDL and SOAP UI project.

Your DHL contact can provide the production endpoint upon completion of certification testing.

Reference	Description	Document
WSDL Description	RateRequest ShipmentRequest ShipmentDeleteRequest	https://wsbexpress.dhl.com:443/sndpt/expressRateBook?WSDL
WSDL Description	TrackingRequest	https://wsbexpress.dhl.com:443/sndpt/IDHLExpressTrack?WSDL
WSDL Description	DocumentRetrieve (ePOD)	https://wsbexpress.dhl.com:443/sndpt/getePOD?WSDL

Testing DHL Web Services with SOAP UI

The open source product SoapUI (<http://www.soapui.org/>) provides advanced support for testing Web Services. Prior to development cycle, this tool can be used to independently verify the DHL services in a test environment, and provide verification and context during the system development life cycle. It is also useful in providing functionality context to the consumer prior to development and independently validating security credentials.

Validation of the Input Data the Input data

The input data for the DHL Express Global Web Services is validated in several steps. The first step is general XML validation based on data cardinality and data content restrictions defined by the request message format (i.e. schema validation). In a second step, several business rules are applied on the passed data. The results of these validations are placed in the result message of the service operation. The service operation always delivers a result message. All errors or validation errors are stored in this result messages. Please refer to the Appendix for complete list of error codes.

2.2 Security and Authentication

External Web Service calls from the customer to DHL will be handled through the DHL Web Services Broker. The Web Services Broker is an XML and web services gateway used by DHL providing governance, security, virtualization, and enhanced performance for web service transactions.

The primary transport protocol for these calls is https (standard port 443). For this solution, the DHL Web Service Broker will validate that the messages are well formed and provide security and data encryption. DHL utilizes WS-Security features of the SOAP protocol.

Authentication using WS-Security

WS-Security offers a general-purpose mechanism for associating security tokens with message content. The specification defines three approved token types, but for the purposes of these services, UsernameToken will be used.

For example, the UsernameToken Profile describes how a Web service client can supply a UsernameToken as a way to identify the requestor by a username and by supplying a password. The SOAP header also requires the setting of Password Type as 'PasswordText'. The following XML snippet shows a sample WS-Security UsernameToken:

```
<wsse:UsernameToken wsu:Id="Example">
  <wsse:Username> ... </wsse:Username>
  <wsse:Password Type="..."> ... </wsse:Password>
  <wsse:Nonce EncodingType="..."> ... </wsse:Nonce>
  <wsu:Created> ... </wsu:Created>
</wsse:UsernameToken>
```

To authenticate using WS-Security for DHL Web Services, the consumer would need to add a SOAP header to the SOAP envelope. This header would contain the WS-Security information.

For more information about this please take a look into <http://docs.oasis-open.org/wss/>

User access rights

The applicable statement for user access relates to the authentication properties enforced at the web service broker. Authentication details will be stored on the Web Service broker as a configuration, and this solution assumes the customer will have established integration credentials at application level. Credentials will not be managed at the customer user level.

Example:

Customer XYZ is building a web portal ABC with internal user administration. This web portal will call the DHL Express Global Web Services. Just the application itself will get access to the DHL Express Global Web Services and not each user registered in the application ABC.

How to get access?

The authentication credentials will be provided by your DHL point of contact for the integration project.

3. What Web Services Operations are available?

For the orchestrated DHL web services offering, there are the following operations available for use.

- a) **RateRequest** – This service allows the customer to input characteristics about a *prospective* shipment, and outputs the corresponding available DHL products, along with rate estimates and estimated delivery date/time.
- b) **ShipmentRequest** – This service allows the customer to input characteristics about a *requested* shipment and pickup, and outputs reference information (waybill and piece ID) as well as a shipping label. If a pickup has been requested then the pickup confirmation number will also be sent back as an output.
- c) **ShipmentDeleteRequest** – This service allows the customer to request the deletion of a pickup, if it was requested in the original ShipmentRequest.
- d) **TrackingRequest** – This service allows the customer to input specific waybill numbers, and outputs tracking checkpoint information at the shipment or piece level.
- e) **DocumentRetrieve** – This service allows the customer to input parameters indicating which ePOD or ePODs is requesting and the content of the ePODs. The operation outputs the ePOD(s) as a base64 encoded string.

The services are called independently, but can also be used in concert (i.e. using output from one service as input into the next service) to meet the consumer requirements.

Reference	Description	Document
WSDL Description	a) RateRequest b) ShipmentRequest c) ShipmentDeleteRequest	https://wsbexpress.dhl.com:443/sndpt/expressRateBook?WSDL
WSDL Description	d) TrackingRequest	https://wsbexpress.dhl.com:443/sndpt/gIDHLExpressTrack?WSDL
WSDL Description	e) DocumentRetrieve (ePOD)	https://wsbexpress.dhl.com:443/sndpt/getePOD?WSDL

4. RateRequest

4.1 RateRequest - Description

The Rate request will return DHL’s product capabilities (products, services and estimated delivery time) and prices (where applicable) for a certain set of input data.

Using the shipper and receiver address as well as the dimension and weights of the pieces belonging to a shipment, this operation returns the available products and service including the shipping price (where applicable) and the potential delivery date considering the planned pickup date.

A shipment request can just be successfully executed (assuming the same input data) for a product and service combination which is returned by the rate request.

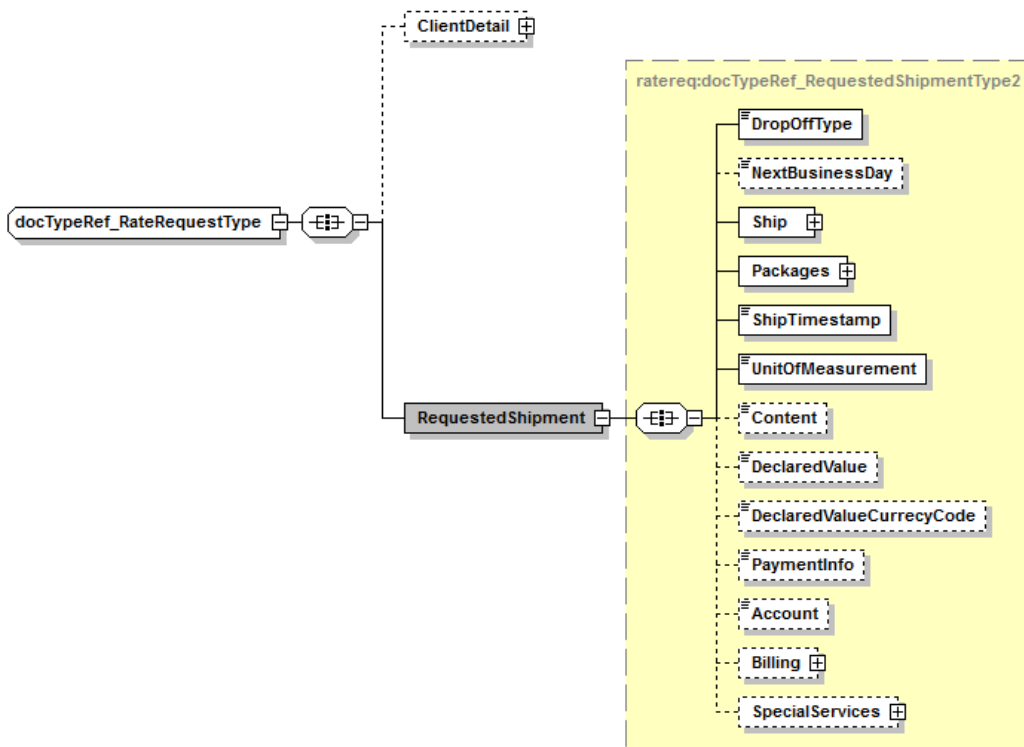
4.2 RateRequest - Input

The following diagram shows an overview of the request input structure.

Within the RateRequest, the ClientDetail is an optional node for reference use, and does not affect functionality. The critical elements are contained within the RequestedShipment node.

4.2.1 RateRequest Schema Diagram

Each of the individual sections of RequestedShipment is represented below in schema diagram, with context, and a detailed description of each field follows in the Input Field List.



4.2.2 RateRequest Input: DropOffType

The DropoffType is used to indicate whether a scheduled pickup is required as part of the consideration for the rate request. There are two possible values to indicate whether a pickup is considered. The possible values are as follows;

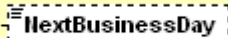
- REGULAR_PICKUP – The pickup location is already serviced by regularly scheduled courier pickup and an additional pickup does not need to be considered for this service.
- REQUEST_COURIER- The rating response returns products, for which the pickup capability is given, based on ShipmentTimeStamp.



4.2.3 RateRequest Input: NextBusinessDay

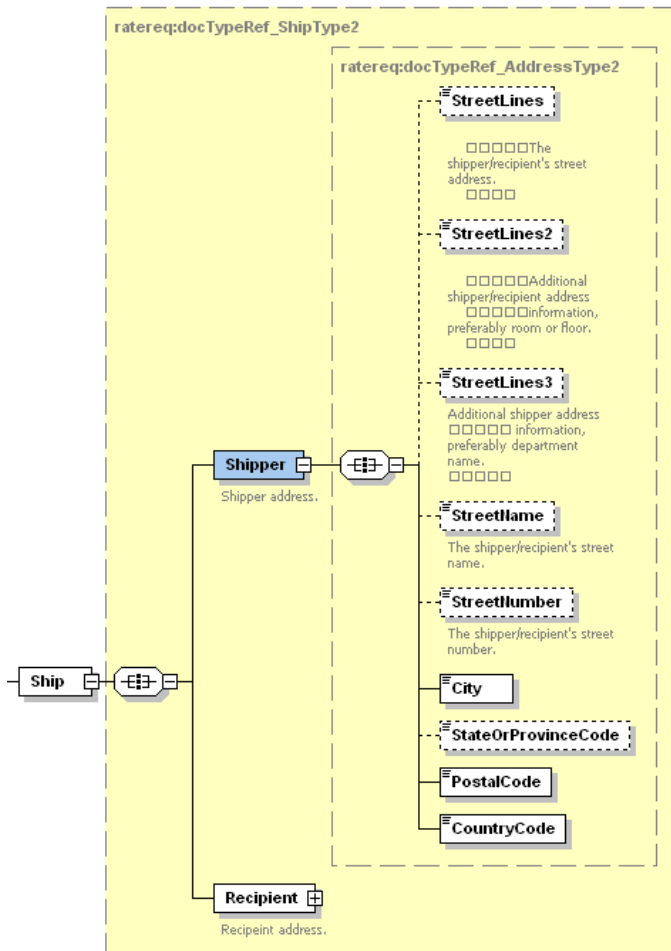
The NextBusinessDay field is used to indicate that the Rate Request process should query the next business day for available services if the current request is beyond cutoff, or occurs on a weekend or holiday. There are three possible use cases for this field.

- NextBusinessDay is null (node not included) – This represents the base functionality. In this case, the process will filter out any services which has a pickup date <> to the requested ship date. For example, if the requested shipment date is a Monday, but the next available pickup date is a Tuesday, this option will not present these services.
- NextBusinessDay = N – This case will behave identically to the above null case.
- NextBusinessDay = Y – This case will provide services for the subsequent business day, if available.



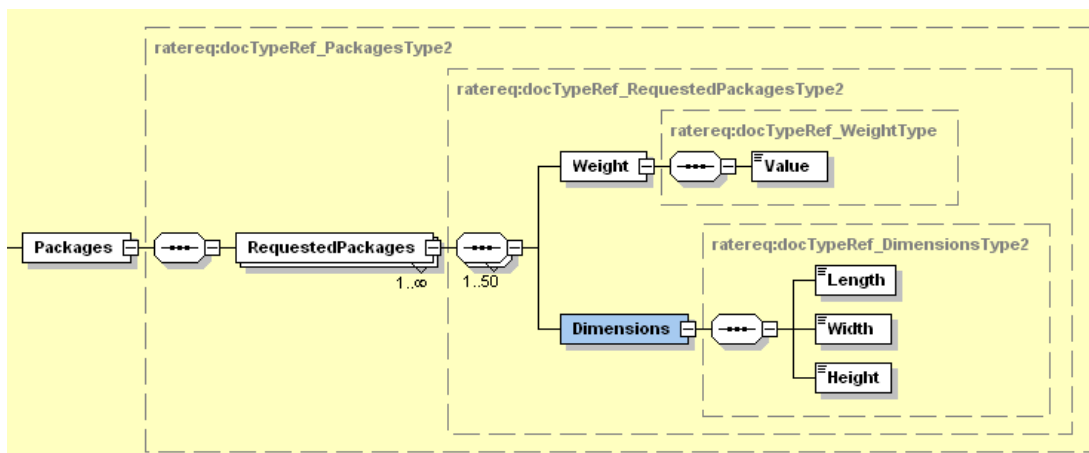
4.2.4 RateRequest Input: Ship

The Ship section outlines the shipper and receiver for the specific rate request. In the context to rate requests, the street address elements are not critical, since capability and rate are determined based on city, postal code, and country code. Please note that the Shipper and Recipient structures are identical.



4.2.5 RateRequest Input: Packages

The Packages section details the weight and dimensions of the individual pieces of the shipment. For example, the shipper may tender a single shipment with multiple pieces, and each piece may have a distinct shipping label. In this context, a RequestedPackage node represents each individual piece, and there is a limitation of 50 RequestedPackage nodes in the request.



4.2.6 RateRequest Input: ShipmentTimeStamp

The ShipmentTimeStamp node is the date/time stamp (including GMT offset) when the shipment will be ready for shipping and tendered to the carrier, either as part of a scheduled pickup, regular pickup, station dropoff, etc. Please note that the timestamp for this event does not represent the time of the execution of the service, and should not be considered a system event.



4.2.7 RateRequest Input: UnitOfMeasurement

The UnitOfMeasurement node conveys the unit of measurements used in the operation. This single value corresponds to the units of weight and measurement which are used throughout the message processing. The value of 'SI' corresponds to KG and CM, respectively, while the value of 'SU' corresponds to LB and IN, respectively.



4.2.8 RateRequest Input: Contents

The Contents node details whether a shipment is non-dutiable (value DOCUMENTS) or dutiable (NON_DOCUMENTS). Depending on the nature of the contents of the shipment, is customs duties are applicable, different products may be offered by the DHL web services.



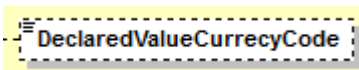
4.2.9 RateRequest Input: DeclaredValue

The DeclaredValue contains the value of the shipment. The field is optional decimal with a total length of 18 characters 3 corresponding to the fraction part.



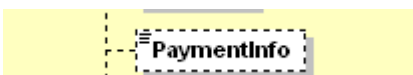
4.2.10 RateRequest Input: DeclaredValueCurrencyCode

This is to specify the currency code for the declared value. It is an optional field with a length of 3 characters.



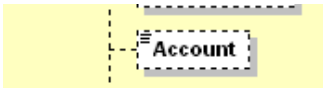
4.2.11 RateRequest Input: PaymentInfo

The PaymentInfo node details the potential terms of trade for this specific shipment, and the schema itself defines the possible enumerated values for this field.



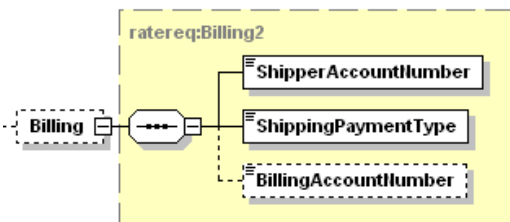
4.2.12 RateRequest Input: Account

The Account field details the DHL account number used for the rate request. When the account number is in this field, this account number serves as both the shipper account as well as payer account. DHL recommends the use the more robust Billing structure.



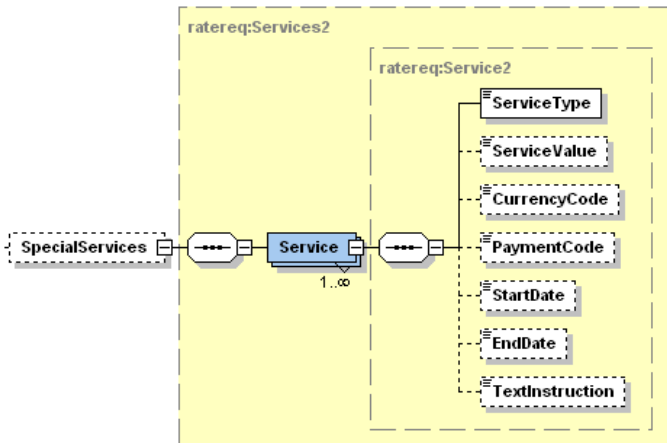
4.2.13 RateRequest Input: Billing

The Billing structure functions as a more robust alternative to the single Account field, and allows for using a payer account different than the shipper account (to allow for bill-to receiver or bill-to third party). The web service requestor should use either the Account field or the Billing structure to communicate account information, and DHL recommends the Billing structure.



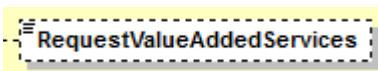
4.2.14 RateRequest Input: SpecialServices

The SpecialServices section communicates additional shipping services, such as Insurance (or Shipment Value Protection).



4.2.15 Rate Request Input: RequestValueAddedServices

Flag used to request all the existing special services for the requested product in the response message. If the value is "Y" all the additional services available for the product selected will be returned. The default value is "N".



4.3 RateRequest – Input Field List

Rate Request fields	Mandatory /Optional	Value constraints	Comments
RateRequest			
./ClientDetail			
Sso	O		This field is for internal use only
plant	O		This field is for internal use only
./RequestedShipment			
DropOffType	M		Possible values: - REGULAR_PICKUP, the pickup location is already served by a regular courier and an additional pickup does not need to be considered for this service - REQUEST_COURIER The rating response returns products for which the pickup capability is given, based on ShipmentTimeStamp.
NextBusinessDay	O	AN 1	Possible values include Y, N
RequestValueAddedServices	O	AN 1	If the value is "Y" all the additional services available for the product selected will be returned. The default value is "N".
./Ship			
./Shipper			
StreetLines	O	AN 35	Shipper street name and number
StreetName	O	AN 35	Shipper street name should already be sent as separate attribute if feasible.
StreetNumber	O	AN 15	Shipper street number should be sent as separate attribute, if feasible.
StreetLines2	O	AN 35	Shipper additional address information
StreetLines3	O	AN 35	Shipper additional address information
City	M	AN 35	Shipper city name
StateOrProvinceCode	O	AN 2	2 letter state code for the USA only
PostalCode	M	AN 12	Shipper postal code
CountryCode	M	AN 2	ISO 2 character codes of the Shipper country.

./Recipient			
./Address			
StreetLines	M	AN 35	Recipient street name and number
StreetName	O	AN 35	Recipient street name should be sent as separate attribute if feasible.
StreetNumber	O	AN 15	Recipient street number should be sent as separate attribute, if feasible.
StreetLines2	O	AN 35	Recipient additional address information
StreetLines3	O	AN 35	Recipient additional address information
City	M	AN 35	Recipient city name
StateOrProvinceCode	O	AN 2	2 Letter State code for the USA only
PostalCode	M	AN 12	Recipient postal code
CountryCode	M	AN 2	ISO 2 character codes of the Receiver country.
./Packages (1:1)			
./RequestedPackages (1:M)			
@number	M	No length constraint Max 50 occurrences	Will be used as Piece Sequence number and returned in the response.
Weight	M	15.3 D	Sum of the weight of the individual pieces/packages the rating request is for.
./Dimensions			
Length	M	5.1 D >=1	Length of the piece listed.
Width	M	5.1 D >=1	Width of the piece listed.
Height	M	5.1 D >=1	Height of the piece listed.
ShipTimestamp	M		<p>This timestamp identifies the ready date and time of the rated shipment.</p> <p>It needs to be provided in the following format with GMT offset</p> <p>YYYY-MM-DDTHH:MM:SSGMT+k</p> <p>2010-02-26T17:00:00GMT+01:00</p> <p>If the date is on a public holiday, sunday or any other day where there is no pickup, the rate request will return this in the error code as it is a non valid request.</p>
UnitOfMeasurement	M	N/A	Possible values:

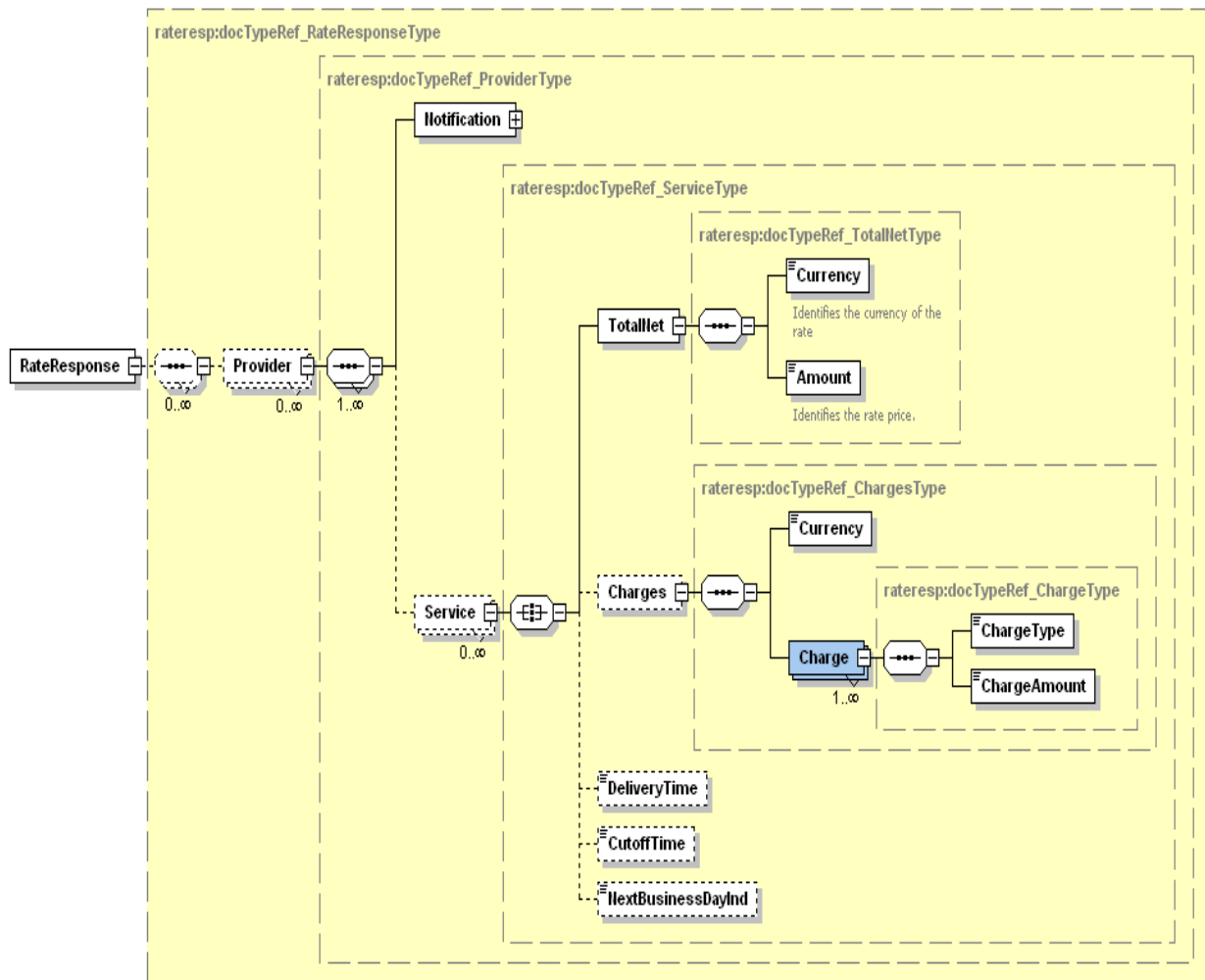
			<ul style="list-style-type: none"> - SI, international metric system (KG, CM) - SU, UK, US system of measurement (LB, IN) <p>The unit of measurement for the dimensions of the package.</p>
Content	M	N/A	<p>Possible values</p> <ul style="list-style-type: none"> - DOCUMENTS - NON_DOCUMENTS
DeclaredValue	O	15.3	Declared value of the shipment
DeclaredValueCurrencyCode	O	AN 3	3 character currency code for the declared value
PaymentInfo	M	N/A	<p>Possible values:</p> <ul style="list-style-type: none"> - See schema enumeration
Account	M	N/A	The DHL account number that is used for the shipment. Internally attached to this account are the customer specific rates. Please note if you use the <Account> tag then the Billing section below is not needed
Billing			
ShipperAccountNumber	O	N/A	The DHL account number used for the shipment. Used as the shipper account number. Please note if you use this billing section then the above <Account> tag is not needed. <ShipperAccountNumber> is mandatory then.
ShippingPaymentType	O	AN 1	<p>Possible values:</p> <ul style="list-style-type: none"> - S (use ShipperAccountNumber as payer) - R (use BillingAccountNumber as bill-to receiver account number) - T (use BillingAccountNumber as bill-to third party account number) <p>Please note if you use value R or T in this tag then the next tag <BillingAccountNumber> is also mandatory</p>
BillingAccountNumber	O	N/A	The DHL account number used for the shipment, if ShippingPaymentType is equal to R or T.
./SpecialServices			
./Service			
ServiceType	M	AN 2	Enter II if you wish to get a quote for Insurance with your prospect shipment. If not needed then leave the SpecialServices section out.

ServiceValue	O	15.3 D	Monetary value of service (e.g. Insured Value) – this is needed if you wish to get a quote on Insurance with your prospect shipment
CurrencyCode	O	AN 3	Currency code) – this is needed if you wish to get a quote on Insurance with your prospect shipment
PaymentCode	O	AN 3	For future use.
StartDate	O	Date	For future use.
EndDate	O	Date	For future use.
TextInstruction	O	AN 50	For future use.

4.4 RateRequest - Output

The following diagram shows an overview of the rate response structure. The critical information to derive from this response are the notification codes for the response, the products returned, the estimated charges, and the expected delivery time for the shipment.

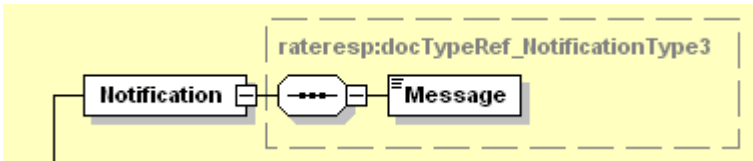
4.4.1 RateResponse Schema Diagram



Each of the individual sections of Rate Response is represented below in schema diagram, with context, and a detailed description of each field follows in the Output Field List.

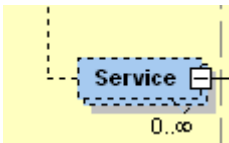
4.4.2 RateResponse Output: Notification

The Notification structure includes the result code and message, based on the results of the processing. Successful messages will include a zero error code and no corresponding message, while exceptions will be noted with both code and message.



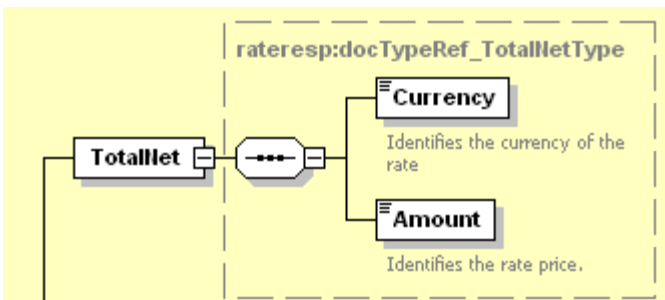
4.4.3 RateResponse Output: Service

For successful responses, there will be 1-to-M Service nodes returned, which will include all of the information about the DHL product returned. A critical element of the Service structure is the `@type` attribute, which designates the DHL global product code that corresponds to that service quotation. The charges and delivery times for that product are in the subsequent nodes within Service.



4.4.4 RateResponse Output: TotalNet

For successful responses, the total net structure shows the summary of the net estimated charges (plus currency) for a given Service. Please note that the subsequent nodes, under Charges, provides line item detail of the estimated charge. Nevertheless, for consumers only interested in the total estimate, these nodes will have the summary estimates.

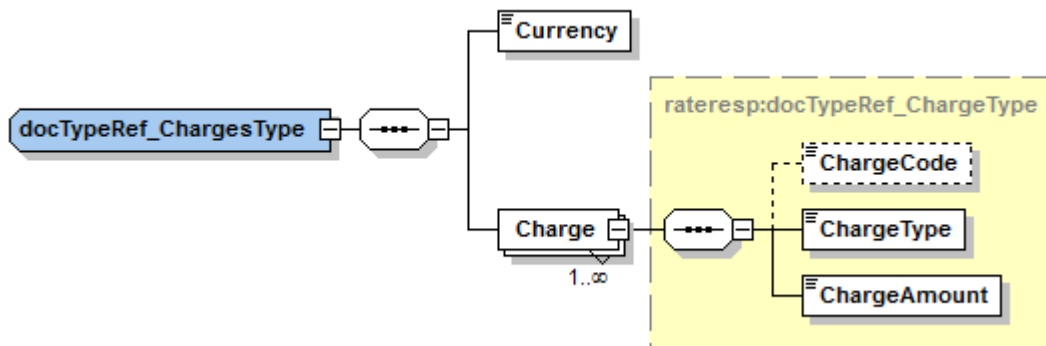


4.4.5 RateResponse Output: Charges

While the previous section, TotalNet, provides a single summary charge, this section provides line item visibility into the components of that charge and value added service codes that are available for the prospect shipment. In this context, the sum of the charges communicated in this structure will be equal to the charge in TotalNet. The Currency field will apply for all of the subsequent charges, and the ChargeType is a description of the local charge code description for that charge. The text in the ChargeType may vary, depending on locale.

Important: The <ChargeCode> field is the Value Added Service code you can use in your prospect shipment when using ShipmentRequest. Please note that FF (Fuel Surcharge) should not be used as this is automatically added during billing.

<ChargeType> is the name of the service i.e. Shipment Insurance or Dangerous Goods



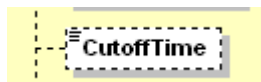
4.4.6 RateResponse Output: DeliveryTime

The DeliveryTime field is provided for each Service, and details the local timestamp (based on delivery location) when the shipment will be *delivered by*.



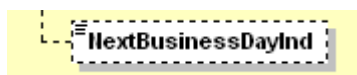
4.4.7 RateResponse Output: CutoffTime

The CutoffTime field is optionally provided for each Service, and details the local timestamp (based on origin location) when the service offered in the response has its operational cutoff. This is the timestamp when the shipment needs to be tendered to the courier in order to meet the cutoff for that day’s shipping.



4.4.8 RateResponse Output: NextBusinessDayInd

The NextBusinessDayInd field is optionally provided for each Service, and is a Y/N indicator to alert the consumer that the next available pickup date is beyond the requested shipment date. When the Request NextBusinessDay flag is not used (or N), this value will always be N. Otherwise, this value may have a value of Y or N, depending on how the next available pickup date relates to the requested shipment date/time.



4.5 Rate Response – Output Field List

Rate Response fields	Mandatory /Optional	Value constraints	Comments
RateResponse			
./Provider			
"@code"	M		Provider Code, always contains DHL.
./Notification			
"@code"	M		Error > 0 or Success Code = 0
message	M		Response Message, see Error codes for more details
./Service			
"@type"	M		This is the code for the product for which the delivery is feasible respecting the input data from the request.
"@account"	O		Not used.
DeliveryTime	O		This is the estimated date/time the shipment will be delivered by for the rated shipment and product listed
CutoffTime	O		This is the cutoff time for the service offered in the response. This represents the latest time (local to origin) which the shipment can be tendered to the courier for that service on that day.
NextBusinessDayInd	O		This indicator has values of Y or N, and tells the consumer if the service in the response has a pickup date on the same day as the requested shipment date (per the request).
./TotalNet			
Currency	M		This the currency of the rated shipment for the product listed.
Amount	M		This is the total prize of the rated shipment for the product listed.
./Charges			
Currency	M		This the currency for all line item charges listed in the Charge section



./Charge (1:M)			
ChargeCode	O		Special service or extra charge code – this is the code you would have to use in the ShipmentRequest message if you wish to add an optional Service such as Insurance.
ChargeType	M		Name of the Value Added Service
ChargeAmount	M		The charge amount of the line item charge.

5. ShipmentRequest

5.1 ShipmentRequest - Description

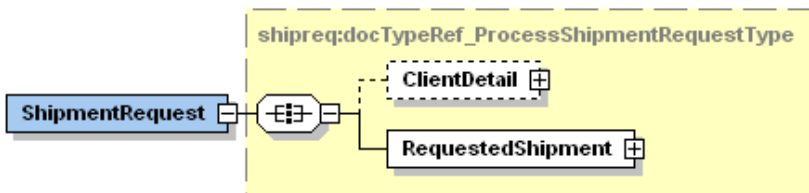
The ShipmentRequest Operation will allow you to generate an AWB number and piece IDs, generate a shipping label, transmit manifest shipment detail to DHL, and optionally book a courier for the pickup of a shipment. The key elements in the response of the Shipment Request will be a base64 encoded PDF label and the Shipment and Piece identification numbers, which you can use for tracking on the DHL web site.

While the RateRequest and ShipmentRequest services can be used independently, DHL recommends the use of RateRequest to first validate the products available for the shipper/receiver. The global product codes which are output during the RateResponse can be used directly as input into the Shipment Request, as both perform similar validations in terms of service capability.

5.2 ShipmentRequest - Input

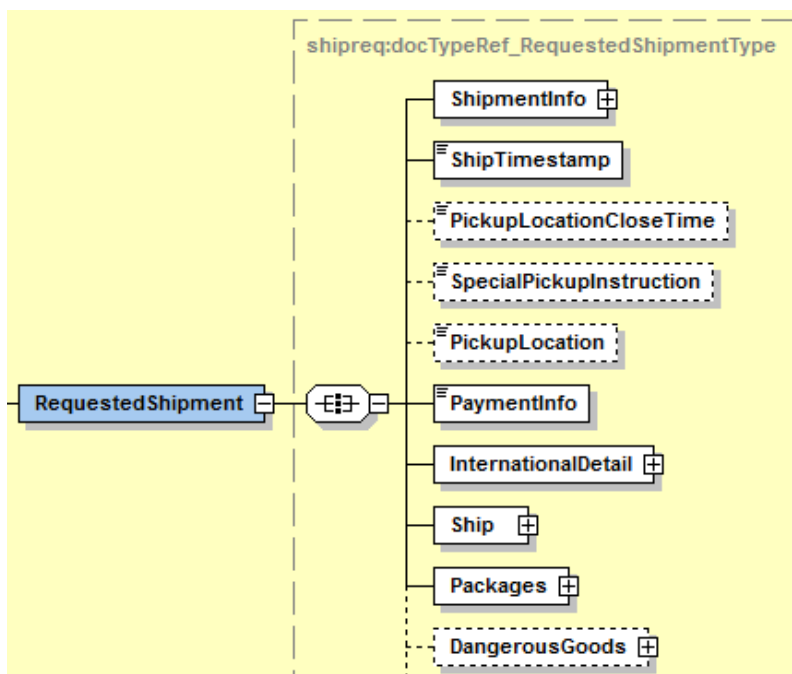
The following diagram shows an overview of the request input structure.

Within the ShipmentRequest, the ClientDetail is an optional node for reference use, and does not affect functionality. The critical elements are contained within the RequestedShipment node.



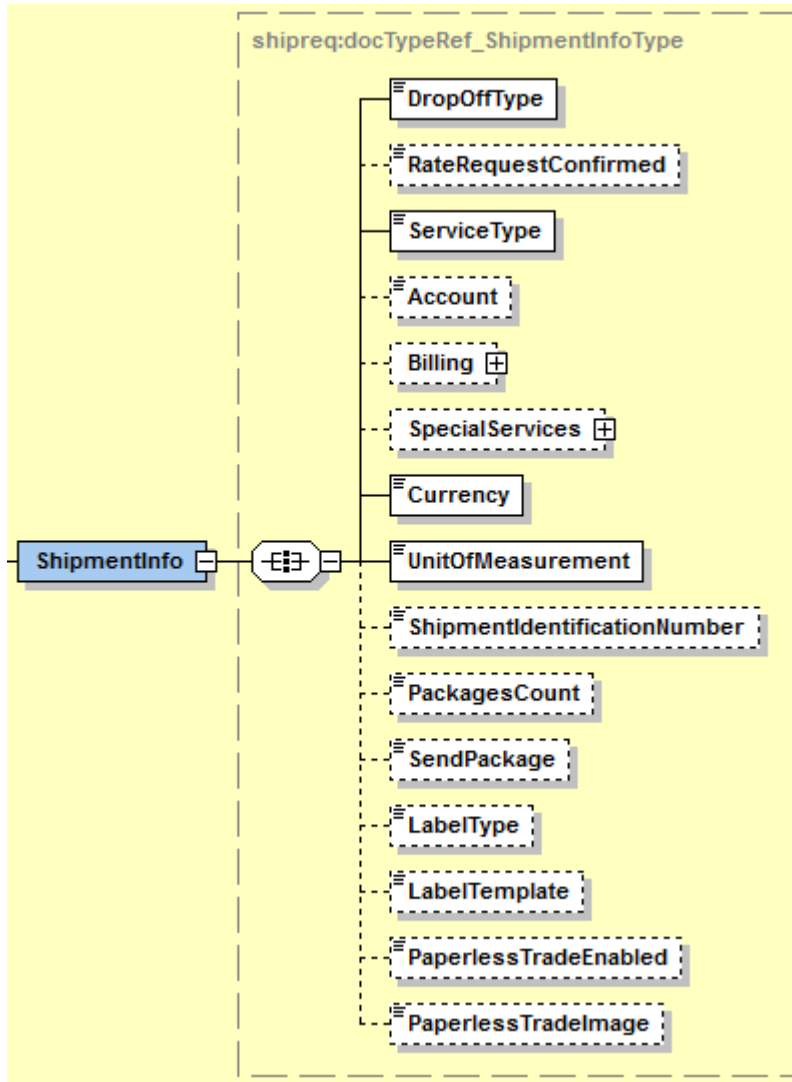
5.2.1 ShipmentRequest Schema Diagram

Each of the individual sections of RequestedShipment is shown below in schema diagram, with context, and a detailed description of each field follows in the Input Field List.



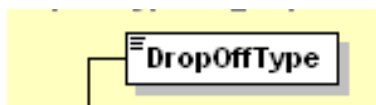
5.2.2 ShipmentRequest Input: ShipmentInfo

The ShipmentInfo section provides general shipment detail, pertaining to operational and billing features. The Billing and Special Services sub-structures are detailed in below sections.



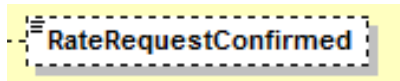
5.2.3 ShipmentRequest Input: ShipmentInfo DropOffType

The DropOffType is a required field with two possible values, and these values are used to determine whether a driver pickup will be scheduled as part of this orchestrated service. If a pickup is requested (REQUEST_COURIER), the web service consumer can expect the optional DispatchConfirmationNumber to be populated in the response. Otherwise, no pickup will be scheduled, and no pickup reference information will be provided in the response.



5.2.4 ShipmentRequest Input: RateRequestConfirmed

Currently not in use



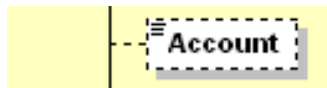
5.2.5 ShipmentRequest Input: ShipmentInfo ServiceType

The ServiceType is a required field which corresponds to the DHL global product code, which describes the product requested for this shipment. These product codes are available as output from Rate Request, and the product codes provided will be validated against the origin-destination requested in the Shipment Request.



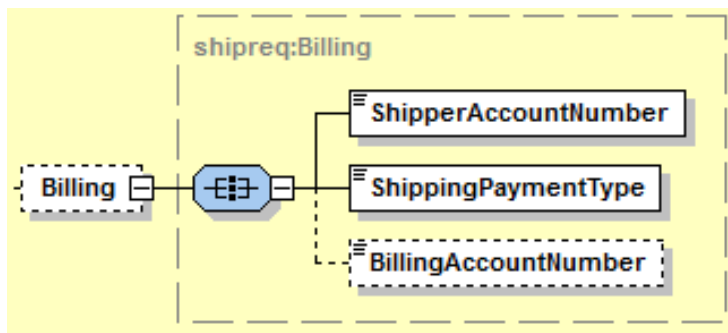
5.2.6 ShipmentRequest Input: ShipmentInfo Account

The Account field is a required business field, but is optional within the schema as this information can be provided in one of two structures. It must either be provided in this field or within the Billing structure (see below). DHL recommends use of more robust Billing structure. This field corresponds to the Shipper account number and usage of this field presumes that the account will also be used as the Payer account. This field is validated as a valid account for usage within this process.



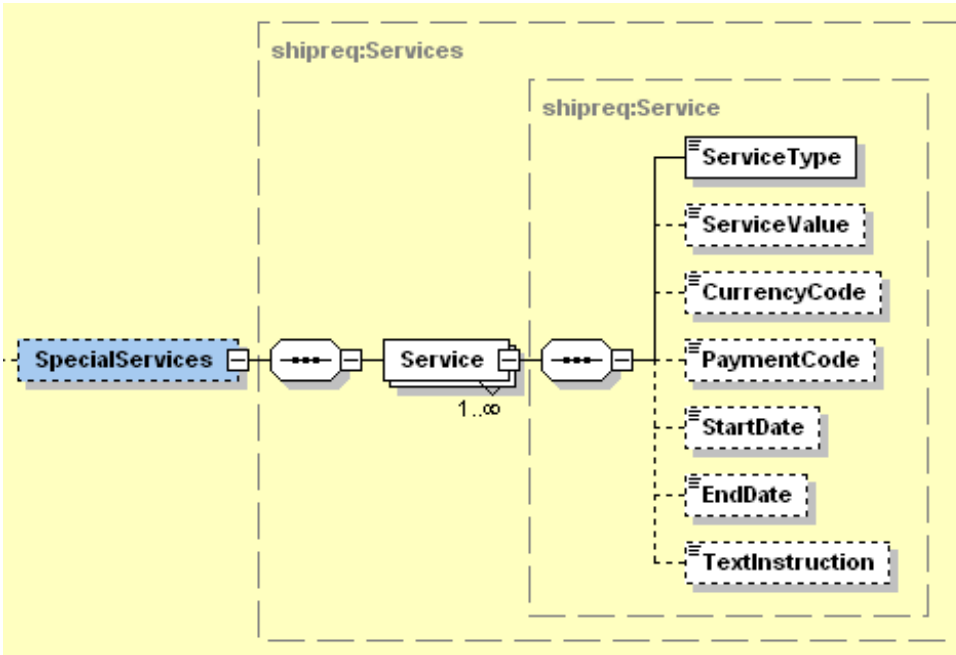
5.2.7 ShipmentRequest Input: ShipmentInfo Billing

If the Billing structure is included, the first two fields are required. This schema structure conveys the Shipper Account Number, as well as extensibility to convey receiver or third party account number as payer.



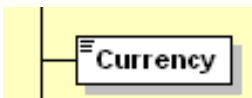
5.2.8 ShipmentRequest Input: ShipmentInfo SpecialServices

The SpecialServices section communicates additional shipping services, such as Insurance (or Shipment Value Protection). For example, to support Insurance, the ServiceType would have a value of 'II', which the ServiceValue and CurrencyCode containing the insured value and currency, respectively. Please note that for all other Value Added Service like Saturday Delivery, Dangerous goods etc you do not need to declare the service charge and currency.



5.2.9 ShipmentRequest Input: ShipmentInfo Currency

The Currency field is a required field which details the currency for the Customs Value.



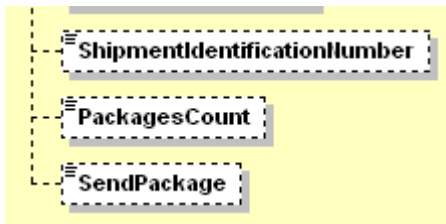
5.2.10 ShipmentRequest Input: ShipmentInfo UnitOfMeasurement

The UnitOfMeasurement node conveys the unit of measurements used in the operation. This single value corresponds to the units of weight and measurement used throughout the message processing. The value of 'SI' corresponds to KG and CM, respectively, while the value of 'SU' corresponds to LB and IN, respectively.



5.2.11 ShipmentRequest Input: ShipmentInfo Other fields

The following fields are optional and not used for specific processing. Please note the ShipmentIdentificationNumber field is reserved for future use to allow consumers to pass their own allocated shipment id (or airbill). The PackagesCount field is not used. The SendPackage field is not used.



5.2.12 ShipmentRequest Input: ShipmentInfo LabelType

The LabelType node conveys the label type used in the operation. It is an optional field. This single value corresponds to the label type returned to customer. Customer can send one of the four values in this field (PDF, ZPL, EPL, LP2). If customer didn't include this tag, the default is PDF.



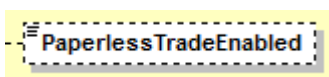
5.2.13 ShipmentRequest Input: ShipmentInfo LabelTemplate

The LabelTemplate node conveys the label template used in the operation. It is an optional field. This single value corresponds to the label template used to generate labels. – please check with your DHL Express IT representative which templates meets your requirements. If this tag is not included, then the default of ECOM26_84_001 will be used



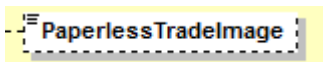
5.2.14 ShipmentRequest Input: ShipmentInfo PaperlessTradeEnabled

The PaperlessTradeEnabled node is an optional flag indicating if the request includes a Paperless Trade image/document.



5.2.15 ShipmentRequest Input: ShipmentInfo PaperlessTradeImage

The PaperlessTradeImage node is for the base64 encoded string with the image of export documentation (Commercial or Proforma Invoice). Allowed formats are JPEG, PDF (incl. multi-page), PNG. Maximum file size is 1MB A4.



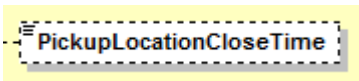
5.2.16 ShipmentRequest Input: ShipmentTimeStamp

The ShipmentTimeStamp node is the date/time stamp (including GMT offset) when the shipment will be ready for shipping and tendered to the carrier, either as part of a scheduled pickup, regular pickup, station dropoff, etc. Please note that the timestamp for this event does not represent the time of the execution of the service, and should not be considered a system event.



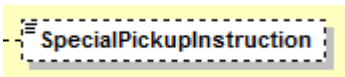
5.2.17 ShipmentRequest Input: PickupLocationCloseTime

The PickupLocationCloseTime node identifies the pickup location close time (i.e. what time do the premises where the collection is supposed to happen close). The value must be in local time. The value component must be HH:MM (using a 24-hours clock format, e.g. 14:00). This node is optional and must be used with DropOffType = 'REQUEST_COURIER'.



5.2.18 ShipmentRequest Input: SpecialPickupInstruction

The SpecialPickupInstruction node details any special instructions you wish to send to the courier for the order pick-up. This node is optional and must be used with DropOffType = 'REQUEST_COURIER'.



5.2.19 ShipmentRequest Input: PickupLocation

The PickupLocation node provides information on where the package should be picked up by DHL courier. This node is optional and must be used with DropOffType = 'REQUEST_COURIER'.



5.2.20 ShipmentRequest Input: PaymentInfo

The PaymentInfo node details the potential terms of trade for this specific shipment, and the schema itself defines the possible enumerated values for this field.



5.2.21 ShipmentRequest Input: International Detail

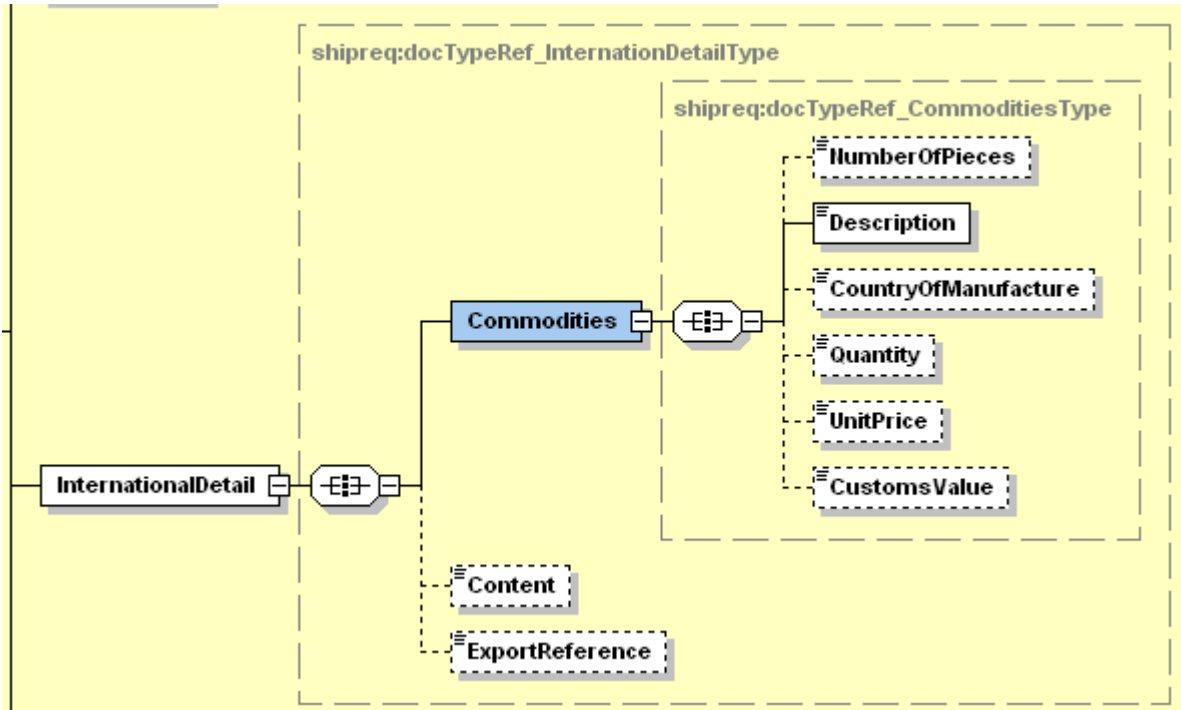
The InternationalDetail section conveys data elements for international shipping.

The NumberOfPieces field is used to transmit the number of pieces in shipment, but for validation purposes this information is calculated based on the number of pieces in the message.

The Description field is used as a description of goods for the label and manifest.

The CountryOfManufacture, Quantity, and UnitPrice are field which are available for customs processing, but currently not mapped.

The CustomsValue field communicates the customs value of the shipment, used for manifesting.



5.2.22 ShipmentRequest Input: Content

The Contents node details whether a shipment is non-dutiable (value DOCUMENTS) or dutiable (NON_DOCUMENTS). Depending on the nature of the contents of the shipment, is customs duties are applicable, different products may be offered by the DHL web services.



5.2.23 ShipmentRequest Input: ExportReference

An optional field ExportReference exists in the InternationalDetail segment to support the requirement for origin specific export references, such as EEI/ITN reference information required for the US export. An example of the node contents is below.

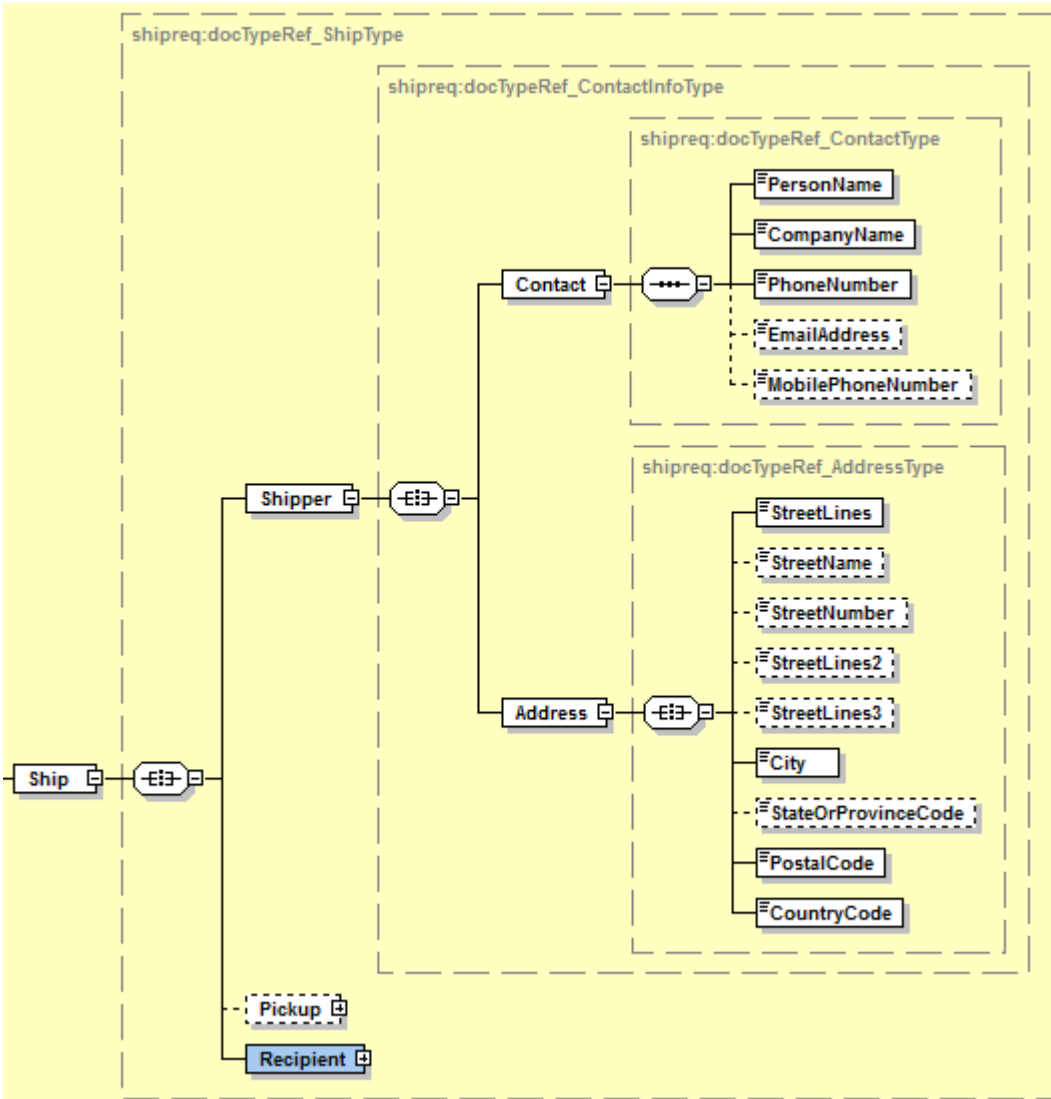
```
<ExportReference>AES X20101010123456</ExportReference>
```



5.2.24 ShipmentRequest Input: Ship

The Ship section outlines the shipper, receiver and optional pickup address for the specific shipment request. In the context to rate requests, the street address elements are not critical, since capability and rate are determined based on city, postal code, and country code. Please note that the Shipper, Pickup and Recipient structures are identical.

If included in the message, this optional Pickup structure will be used as precedence over the Shipper address when the Pickup service is invoked. The Pickup address will not be used in manifesting.



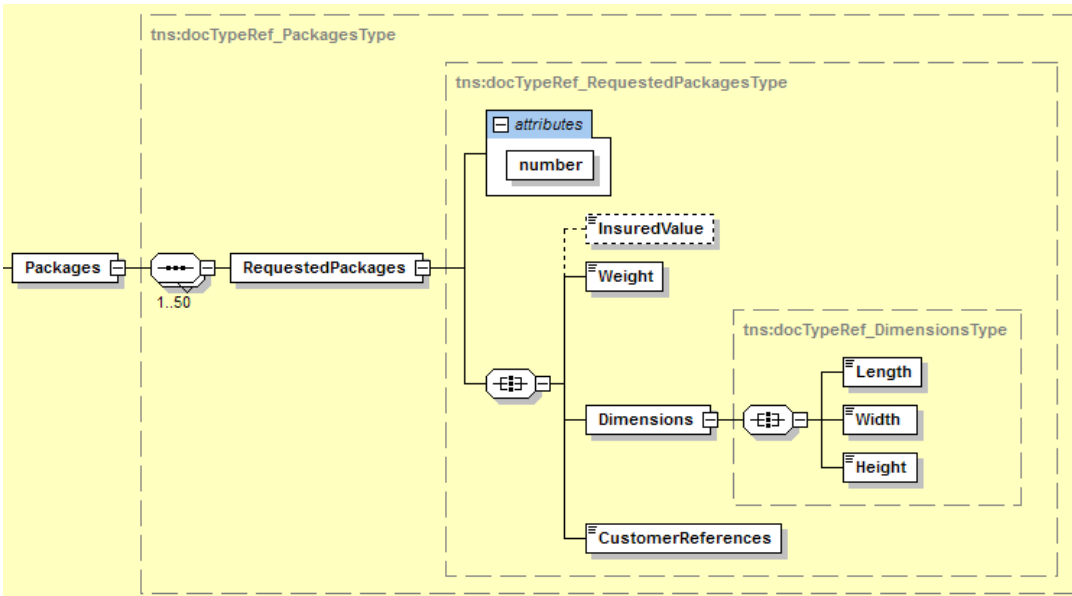
5.2.25 ShipmentRequest Input: Packages

The Packages section details the contents of individual pieces (or discrete shipping containers) within the shipment. The minimum number of packages or pieces in a shipment is one and the upper limit is 50.

The InsuredValue field is an optional field in the Packages section which will be deprecated from the interface, as the SpecialServices section should be used to convey Insured Value.

The Weight and Dimensions fields represent the weight and dims of the individual pieces.

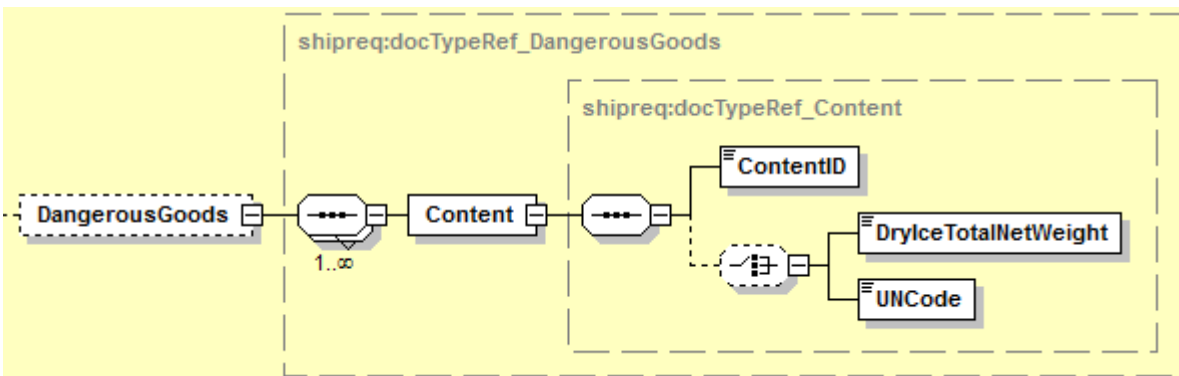
The CustomerReferences field is used as the Piece Reference and the first instance is also used as the Shipment Reference. Currently only the Shipment Reference appears on the label.



5.2.26 ShipmentRequest Input: DangerousGoods

The DangerousGoods section indicates if there is dangerous good content within the shipment. The ContentID node contains the Content ID for the Dangerous Good classification (please contact your DHL Express representative for the list of the codes). If the shipment is Dry Ice UN1845 (Content ID – 901) then the additional node needs to be populated - "DryIceTotalNetWeight."

If the shipment is "Excepted Quantities" then the additional node needs to be populated – "UNCode"



5.3 Shipment Request – Input Field List

Shipment Request fields	M/O	Values or Constraints	Comments
ShipmentRequest			
./ClientDetail			
sso	O		This field is for internal use only
plant	O		This field is for internal use only
./RequestedShipment			
./ShipmentInfo			
@provider	O	"DHL"	
DropOffType	M		<p>Possible values:</p> <ul style="list-style-type: none"> -REGULAR_PICKUP, the pickup location is already served by a regular courier and an additional pickup does not need to be considered for this service - REQUEST_COURIER <p>The rating response returns products for which the pickup capability is given, based on ShipmentTimeStamp.</p>
RateRequestConfirmed	O	AN 1	NOT IN USE
ServiceType	M	AN 1	The shipping product requested for this shipment, corresponding to the DHL Global Product codes.
Account	M/O	AN 9	<p>The customer account to be used as payer in the request. If the <Account> tag is used then there is no need to populate the Billing section further down below in this table as the <Account> tag will override any other accounts entered.</p> <p>However if you do wish to charge your shipment to a third party or receiver then please leave the ACCOUNT section out and populate the Billing section below</p>
Currency	M	AN 3	The currency of the monetary values presented in the request.

UnitOfMeasurement	M	AN 2	<p>The unit of measurement for the dimensions of the package.</p> <p>Possible values:</p> <ul style="list-style-type: none"> - SI, international metric system (KG, CM) - SU, UK, US system of measurement (LB, IN)
ShipmentIdentificationNumber	O	N/A	<p>The shipment identification number does not need to be transmitted in the request as the operation will assign a new number and return it in the response.</p>
PackagesCount	O	N/A	<p>Number of packages which need to be processed.</p>
SendPackage	O	N/A	
LabelType	O	AN 3	<p>Possible values:</p> <ul style="list-style-type: none"> - PDF - ZPL - EPL - LP2
LabelTemplate	O	AN 20	<p>Any valid DHL Express label template (please contact your DHL Express IT representative for a list of labels) – If this node is left blank then the default DHL ecommerce label template will be used.</p>
PaperlessTradeEnabled	O	N1 or A5	<p>Possible values (case sensitive):</p> <ul style="list-style-type: none"> - true - false - 0 - 1
PaperlessTradeImage	O	Base64 binary	<p>Base64 encoded image. Max size 1MB A4</p>
ShipTimestamp	M	<p>YYYY-MM-DDT24HH:MM:SS GMT+k</p>	<p>This timestamp identifies the pickup date and time of the rated shipment.</p> <p>It needs to be provided in the following format with GMT offset YYYY-MM-DDTHH:MM:SSGMT+k</p>

			2010-02-26T17:00:00GMT+01:00 If the date is on a public holiday, Sunday or any other day where there is no pickup, the rate request will return this in the error code as it is a non valid request.
PickupLocationCloseTime	O	HH:mm	This node identifies the closing time of your pickup location in local time. It needs to be provided in the following 24-hours time format: HH:mm Sample: 17:00
SpecialPickupInstruction	O	AN 75	This node details special pickup instructions you may wish to send to the DHL Courier
PickupLocation	O	AN 40	This node provides information on where the package should be picked up by DHL courier.
PaymentInfo	M	AN 3	Possible values: - See schema enumeration
./Billing			
ShipperAccountNumber	M/O	AN 9	The DHL account number used for the shipment. Used as the shipper account number. Please note if you use this billing section then the above <Account> tag is not needed. <ShipperAccountNumber> is mandatory then. Please note if you did declare the <Account> section above then the account number within will overwrite the entire Billing section.
ShippingPaymentType	M/O	AN 1	Possible values: - S (use ShipperAccountNumber as payer) - R (use BillingAccountNumber as bill-to receiver account number) - T (use BillingAccountNumber as bill-to third party account number) Please note if you use value R or T in this tag then the next tag <BillingAccountNumber> is also mandatory
BillingAccountNumber	O	AN 9	The DHL account number used for the shipment, if ShippingPaymentType is equal to R or T.

./SpecialServices			
./Service			
ServiceType	M	AN 2	Please enter the Value Added 2 digit/letter Service code here (e.g. II for Insurance). The valid Service code for the product you wish to ship to can be queried using RateRequest operation first.
ServiceValue	O	15.3 D	Monetary value of service (currently only applicable for Insurance)
CurrencyCode	O	AN 3	Currency code
PaymentCode	O	AN 3	For future use.
StartDate	O	Date	For future use.
EndDate	O	Date	For future use.
TextInstruction	O	AN50	For future use.
./InternationalDetail			
./Commodities			
NumberOfPieces	M	N6	The number of pieces in the shipment
Description	M	AN 1-35	The description of the content of the shipment.
CountryOfManufacture	O	AN 2	The country of manufacture of the content of the shipment.
Quantity	O	N 10	The quantity of the items in the shipment, e.g. 3 books.
UnitPrice	O	18.3 D	Price per item in the shipment, e.g. 7.50 € if one of the books costs 7.50€.
CustomsValue	O	18.3 D	The value which needs to be declared for customs.
Content	M	N/A	Possible values - DOCUMENTS - NON_DOCUMENTS
ExportReference	O	AN 40	Export Reference field, appears on label.
./Ship			
./Shipper			
./Contact			
PersonName	M	AN 45	A contact name of a person who will ship the shipment.

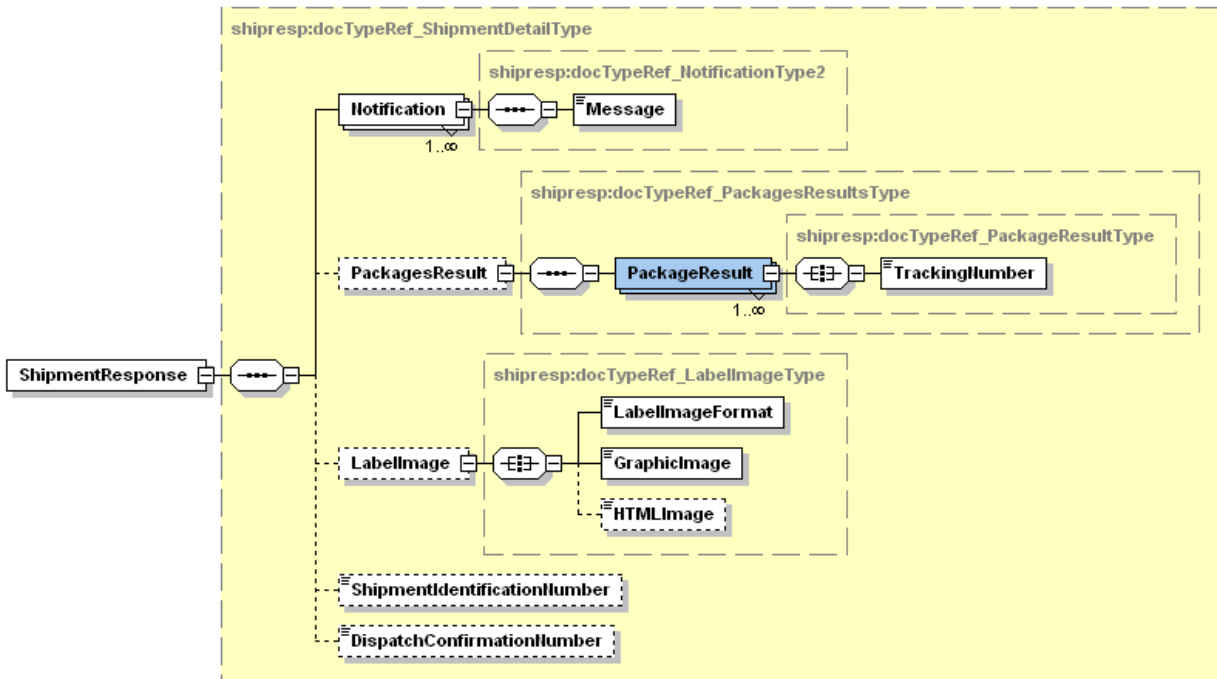
CompanyName	M	AN 35	The company name the person is working in.
PhoneNumber	M	AN 25	The contact person phone number. In case of questions, this person can be called by the courier.
EmailAddress	O	AN 50	The email address of the contact person.
MobilePhoneNumber	O	AN 25	The mobile phone number of the contact person.
./Address			
StreetLines	M	AN 35	The street line should contain street name and number of the shipper.
StreetName	O	AN 35	Shipper street name should be sent as separate attribute if feasible.
StreetNumber	O	AN 15	Shipper street number should be sent as separate attribute, if feasible.
StreetLines2	O	AN 35	Shipper additional address information
StreetLines3	O	AN 35	Shipper additional address information
City	M	AN 35	Shipper city name
StateOrProvinceCode	O	AN 2	2 Letter state code for the USA only
PostalCode	M	AN 12	Shipper postal code
CountryCode	M	AN 2	ISO 2 character codes of the Shipper country.
./Pickup			
./Contact			
PersonName	M	AN 45	A contact person of the pickup location.
CompanyName	M	AN 35	The company name the person is working in.
PhoneNumber	M	AN 25	The contact person phone number. In case of questions, this person can be called by the courier.
EmailAddress	O	AN 50	The email address of the contact person.
MobilePhoneNumber	O	AN 25	The mobile phone number of the contact person.
./Address			
StreetLines	M	AN 35	The street line should contain street name and number of the pickup location.

StreetName	O	AN 35	Pickup street name should be sent as separate attribute if feasible.
StreetNumber	O	AN 15	Pickup street number should be sent as separate attribute, if feasible.
StreetLines2	O	AN 35	Pickup additional address information
StreetLines3	O	AN 35	Pickup additional address information
City	M	AN 35	Pickup city name
StateOrProvinceCode	O	AN 2	2 Letter state code for the USA only
PostalCode	M	AN 12	Pickup postal code
CountryCode	M	AN 2	ISO 2 character codes of the Pickup country.
./Recipient			
./Contact			
PersonName	M	AN 45	A contact name of a person who will receive the shipment.
CompanyName	M	AN 35	The company name the person is working in.
PhoneNumber	M	AN 25	The contact person phone number. In case of questions, this person can be called by the courier.
EmailAddress	O	AN 50	The email address of the contact person.
MobilePhoneNumber	O	AN 25	The mobile phone number of the contact person.
./Address			
StreetLines	M	AN 35	The street line should contain street name and number of the receiver.
StreetName	O	AN 35	Recipient street name should be sent as separate attribute if feasible.
StreetNumber	O	AN 15	Recipient street number should be sent as separate attribute, if feasible.
StreetLines2	O	AN 35	Recipient additional address information
StreetLines3	O	AN 35	Recipient additional address information
City	M	AN 35	Recipient city name
StateOrProvinceCode	O	AN 2	2 Letter state code for the USA only
PostalCode	M	AN 12	Recipient postal code
CountryCode	M	AN 2	ISO 2 character codes of the Receiver

			country.
./Packages (1:1)			
./RequestedPackages (1:M)			
@number	M	Integer	Running number of the packages.
InsuredValue	O	N/A	Insurance values of the package.
Weight	M	15.3 D	The weight of the package.
./Dimensions			
Length	M	5.1 D >=0.5	Length of the piece listed.
Width	M	5.1 D >=0.5	Width of the piece listed.
Height	M	5.1 D >=0.5	Height of the piece listed.
CustomerReferences	M	AN 1-35	Customer Reference for the piece.
./DangerousGoods			
./Content			
ContentId	M	AN 3	Valid DHL Express Dangerous good content id (please contact your DHL Express IT representative for the relevant content ID code if you are shipping Dangerous Goods)
DryIceTotalNetWeight	C	AN 1-7	This is a numeric string with up to 7 char (i.e. 1000,00 or 1000.00)
UNCode	C	AN	Comma separated UN codes – eg. "UN-7843268473", "7843268473,123"

5.4 ShipmentRequest - Output

The following diagram shows an overview of the shipment response structure. The critical information to derive from this response are the notification codes for the response, the shipment and piece identifiers returned, the encoded label image, and the optional pickup confirmation reference.

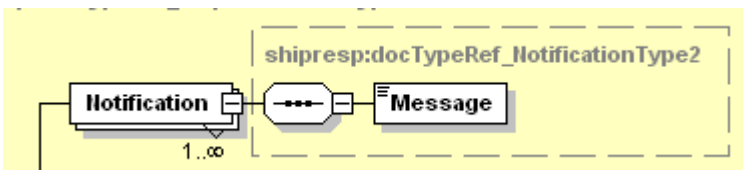


5.4.1 ShipmentResponse Schema Diagram

Each of the individual sections of `ShipmentResponse` is shown below in schema diagram, with context, and a detailed description of each field follows in the Output Field List.

5.4.2 ShipmentResponse Output: Notification

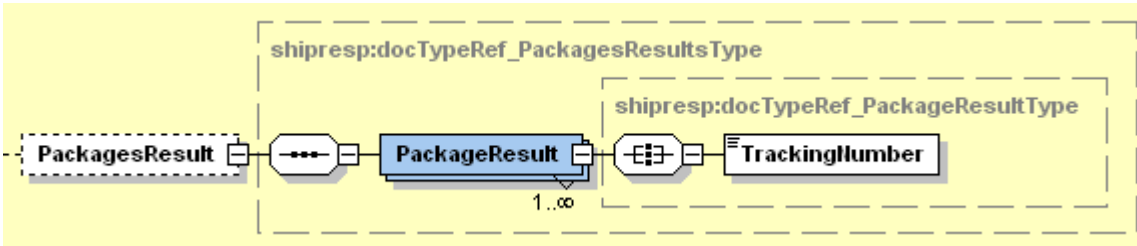
The `Notification` structure includes the result code and message, based on the results of the processing. Successful messages will include a zero error code and no corresponding message, while exceptions have both code and message.



5.4.3 ShipmentResponse Output: PackagesResult

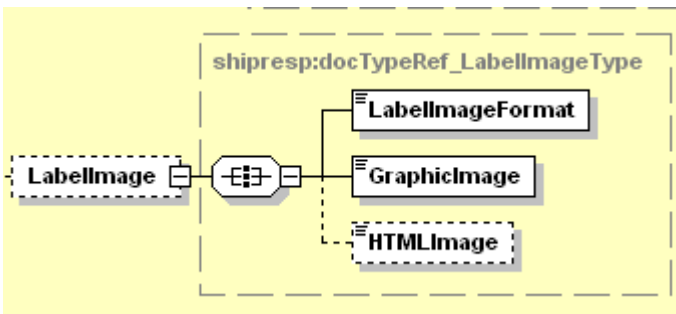
The PackagesResult provides the DHL piece ID associated to each RequestedPackage from the ShipmentRequest. In this case, the TrackingNumber is the Piece ID returned from the service. In order to tie the RequestedPackages from the ShipmentRequest with the PackageResult in the response, the @number attribute is used to referentially link the request and result packages.

The TrackingNumber field is the identifier for that specific piece of the shipment, of which there can be many.



5.4.4 ShipmentResponse Output: LabelImage

The Label Image section of the response provides the label format in the LabelImageFormat field (i.e. PDF), as well as the base64 encoded label image in the GraphicImage field. The HTML Image is not used.



5.4.5 ShipmentResponse Output: ShipmentIdentificationNumber

This field corresponds to the airbill number associated to this shipment. This is the primary tracking identifier within DHL, and is the DHL primary reference field in calling application.



5.4.6 ShipmentResponse Output: DispatchConfirmationNumber

This field is the confirmation number generated by the creation of a pickup, if requested. This data will need to be persisted if the web service consumer intends to utilize the DeleteShipment functionality, as it is a required field.



5.5 Shipment Response – Output Field List

Shipment Response xml fields (Source)	Mandatory/Optional	Values or Constraints	Comments
ShipmentResponse			
./Notification			
@code	M	N 6	Error > 0 or Success Code = 0
Message	M		Response Message, see Error codes for more details
./PackagesResult			
./PackageResult			
"@number"	O	Integer	Running number of the packages.
TrackingNumber	O	AN 35	This field contains a unique number for the individual package.
./LabelImage			
LabelImageFormat	O	AN 3	Mapped from Request Document. Currently always "PDF"
GraphicImage	O	Base64 Binary	This field contains the actual label as Base64 Binary. There will be one document containing all the labels for each package/piece on separate pages.
HTMLImage	O	Base64 Binary	Not used
ShipmentIdentificationNumber	O	AN 35	The shipment identification number also named airwaybill (AWB). This number can be used to track the progress of the shipment on the DHL website.
DispatchConfirmationNumber	O	AN 15	The booking reference number. This number should be used when interacting with the DHL customer service regarding the pickup process.

6. ShipmentDeleteRequest

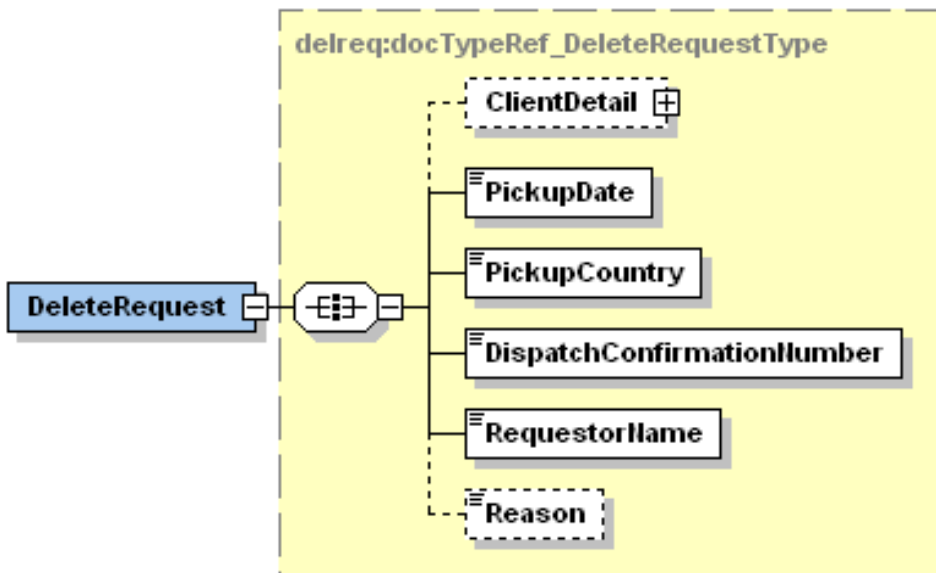
6.1 ShipmentDeleteRequest - Description

The ShipmentDeleteRequest Operation will allow the user to synchronously cancel a previous successful ShipmentRequest. The underlying process for the ShipmentDeleteRequest is a cancellation of a scheduled driver pickup, if included in the original request. Any shipment manifest data which was included in the original ShipmentRequest will not be deleted as part of this operation, but will not become an active shipment if the shipment label does not enter the DHL Network. If a scheduled pickup was not included in the original ShipmentRequest (i.e. DropOffType = REGULAR_PICKUP), then it is not necessary to delete the shipment.

6.2 ShipmentDeleteRequest - Input

The following diagram shows an overview of the request input structure.

Within the DeleteRequest, the ClientDetail is an optional node for reference use, and does not affect functionality. The critical elements are the remaining nodes in the request.



The PickupDate is the day of the scheduled pickup, previously communicated as part of the ShipmentTimestamp of the ShipmentRequest. For example, if the ShipmentTimestamp for the successful shipment was “2010-11-30T12:30:47GMT+01:00”, then the PickupDate would be “2010-11-30”.

The PickupCountry is the two character country code which was used in the original request.

The DispatchConfirmationNumber is the reference value which was in the original ShipmentResponse for DispatchConfirmationNumber.

The RequestorName is a required field, but is not validated against the original ShipmentRequest. This value is not validated against the original request, and can be defaulted if necessary.

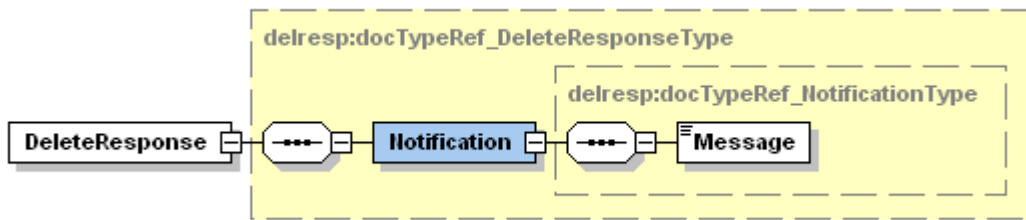
The Reason value is an optional field, and used to indicate the reason for the cancellation. The possible values are included in the table below. Value of 7 (“Other”) used in the absence of transmitted data.

Reason	Value
001	Package Not Ready
002	Rates Too High
003	Transit Time Too Slow
004	Take To Service Center or Drop Box
005	Commitment Time Not Met
006	Reason Not Given
007	Other
008	Pickup Modified

6.3 ShipmentDeleteRequest – Input Field List

ShipmentDeleteRequest fields	Mandatory /Optional	Value constraints	Comments
DeleteRequest			
PickupDate	M	YYYY-MM-DD	The scheduled pickup date of the shipment to be deleted.
PickupCountry	M	AN 2	The country code associated to the origin of the shipment.
DispatchConfirmationNumber	M	AN 20	The confirmation number returned from the original shipment request.
RequestorName	M	AN 45	The delete requestor name
Reason	O	AN 50	Optional reason code (see above table)
./ClientDetail			
sso	O		This field is for internal use only
plant	O		This field is for internal use only

6.4 ShipmentDeleteRequest – Output



6.5 ShipmentDeleteRequest – Output Field List

ShipmentDeleteResponse fields	Mandatory /Optional	Value constraints	Comments
DeleteResponse			
./Notification			
@code	M		Error > 0 or Success Code = 0
message	M		Response Message, see Error codes for more details

For this service, the potential error use cases include

- Pickup Not Found, if already deleted
- Pickup Not Found, if manually deleted otherwise
- Pickup Not Found, if still in process of creation

Please note, for the 3rd use case, there is a very small window of time between when the original pickup request is processed and when the backend system creates the pickup (< 30 secs). During this time, it may not be possible to delete the pickup request.

7. TrackingRequest

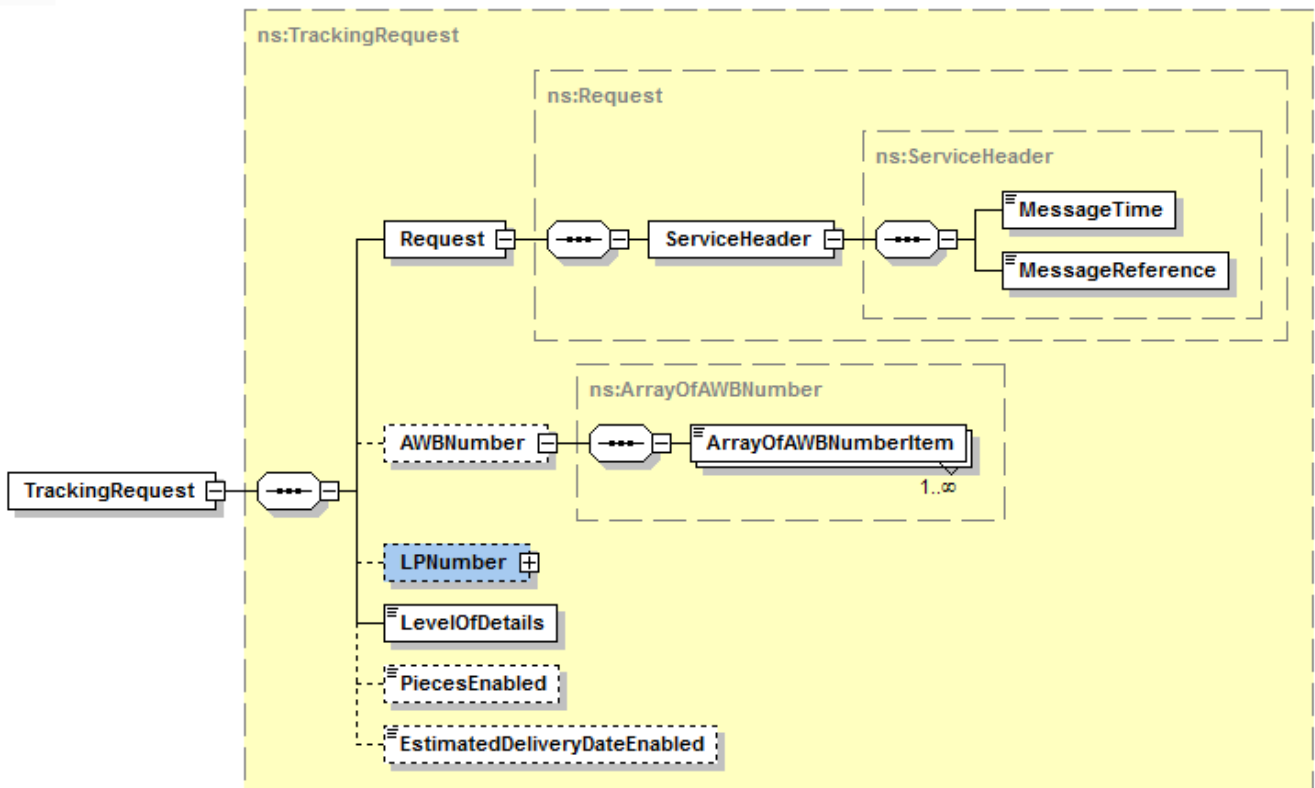
7.1 TrackingRequest - Description

The TrackingRequest operation is used to inform customers about the status of their in-transit shipments, based on the valid DHL Waybill Number. The resulting response will provide tracking events at both the Shipment and/or Piece events corresponding to the DHL Waybill(s) submitted.

When presenting the results of the web service, note that the resulting piece and shipment events should not be grouped separately. Depending on the type of event or DHL processing facility, only piece or shipment data (or both piece and shipment) may be available. Merging the resulting Piece and Shipment events will provide a consolidated view of the event history for the DHL Shipment.

7.1.1 TrackingRequest Schema Diagram

The following diagram details the schema diagram for the TrackingRequest, as input. While the critical input for the TrackingRequest is the DHL Airbill Numbers (ArrayOfAWBNumberItem), there are two options available to tailor the output.



The remaining subsections of 4.2.2 will provide additional context to the structures immediately below TrackingRequest, while the individual nodes are described in further detail in section 4.2.3.

7.2 TrackingRequest - Input

The Request node contains a ServiceHeader structure, which describes the MessageTime and MessageReference of the request. The Header fields are required fields for the request, used to distinguish individual requests. The MessageReference is required to be between 28 and 32 characters in length, but is not required to be unique between requests.

7.2.1 TrackingRequest Input: AWBNumber

The AWBNumber element must contain at least one element within the ArrayOfAWBNumberItem node. The DHL Waybill element is defined at a maximum length of 11 characters; the standard DHL Waybill used in shipping will typically be 10 digits. The AWBNumber element allows multiple DHL Waybill numbers in a single request, as multiple Waybill requests are batched on the backend to populate the response for multiple shipments.

7.2.2 TrackingRequest Input: LPNumber

The LPNumber element is currently not active, but is present within the service signature for future use of tracking by piece number.

7.2.3 TrackingRequest Input: LevelOfDetails

The LevelOfDetails element contains an enumerated value for checkpoint details requested in the response. It is a required element in the request, applies to all shipments in the request and has the following values.

- LAST_CHECK_POINT_ONLY
- ALL_CHECK_POINTS

7.2.4 TrackingRequest Input: PiecesEnabled

The PiecesEnabled element contains an enumerated value for shipment and/or piece details and events requested in the response. It is an optional element in the request, applies to all shipments in the request and has the following values.

- B = Both Piece and Shipment Details (recommended value)
- S = Shipment Details Only
- P = Piece Details Only.

7.2.5 TrackingRequest Input: EstimatedDeliveryDateEnabled

The EstimatedDeliveryDateEnabled element indicates if estimated delivery date (EDD) should be included in the service response (Estimated Delivery Date information is not always available).

7.3 TrackingRequest – Input Field List

The following table details the fields used by the TrackingRequest, their cardinality and a brief description of their usage.

Tracking Request fields	M/O	Values or Constraints	Comments
TrackingRequest			
./Request			
/ServiceHeader			
MessageTime	M	Date	The format of the should be YYYY-MM-DD(T)hh:mm:ss-Time Zone e.g. 2010-11-24T00:17:20Z 2010-11-24T00:17:20-07:00
MessageReference	M	AN 32	Message reference, between 28-32 characters in length.
./AWBNumber			
ArrayOfAWBNumberItem	M	AN 11	DHL Waybill number
./LPNumber			
ArrayOfTrackingPieceIDItem	O	AN 35	DHL Piece ID (future use, not active)
LevelOfDetails	M	Enumerated	Checkpoint Detail Indicator ALL_CHECK_POINTS LAST_CHECK_POINT_ONLY
PiecesEnabled	O	Enumerated	Pieces Indicator B = Both Piece and Shipment S = Shipment Details Only P = Piece Details Only.
EstimatedDeliveryDateEnabled	O	Enumerated	Possible values: - Y, EDD requested - N, EDD not requested (Estimated Delivery Date is not always returned and is subject to the scans by the DHL Operations team)

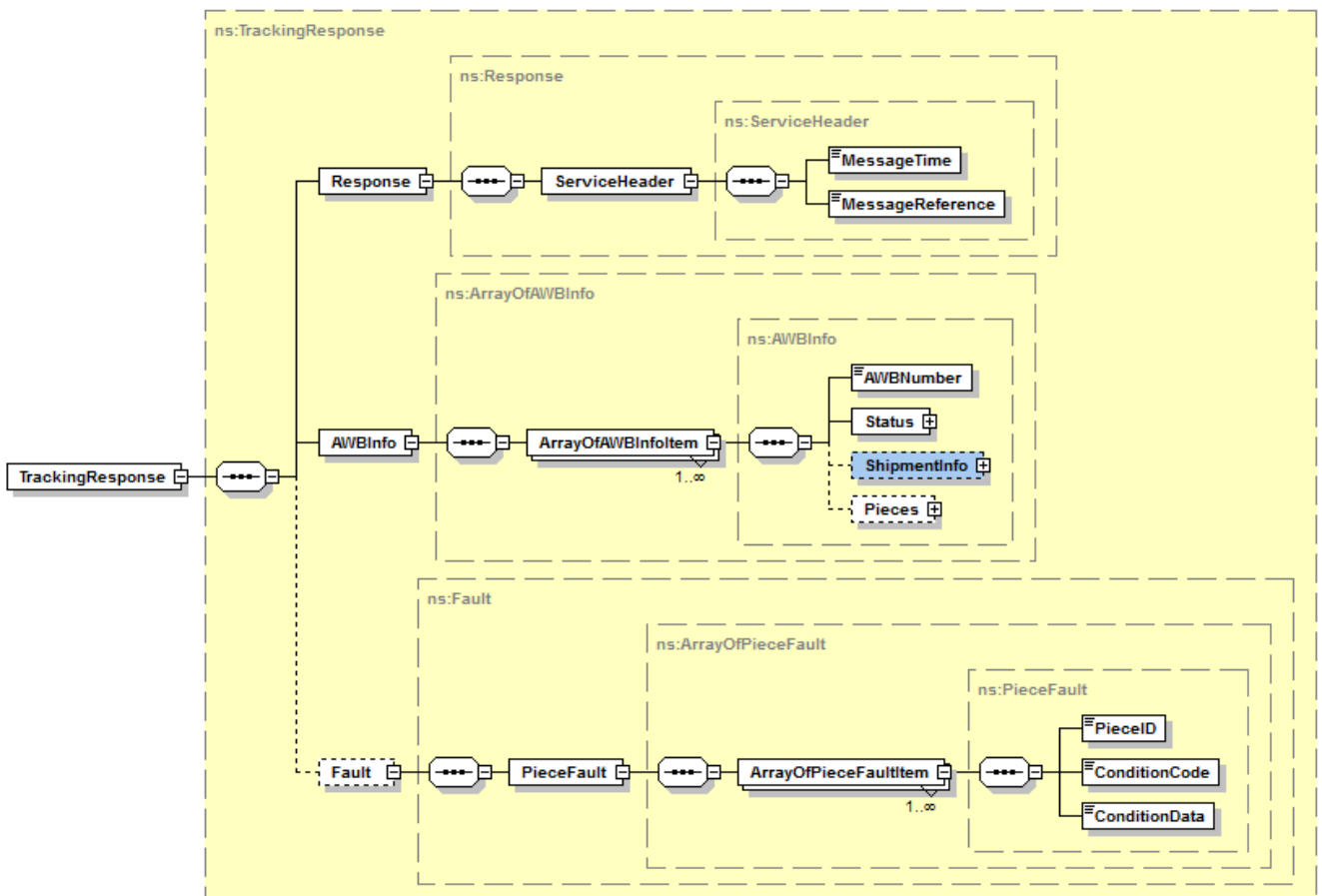
Waybill numbers to be used during Testing for Tracking

Please note that when testing the Tracking Web service, only the Waybill numbers below are loaded and any production Waybill numbers or ones created via CreateShipment will not be trackable.

3898464710	9296347550	9296392420	3567549160	8423914660	7195064870	7895183380
1191166550	7780184230	5220325810	7895111000	7898385320	5138809620	6424045110
6768764450	3314358460	9545331390	7895083910	8260591010	4688745390	7967566180

7.4 TrackingResponse - Output

The following diagram details the TrackingResponse. All successful tracking responses will conform to this schema.



At a high level, the TrackingResponse contains a Response element and an AWBInfo element. Within the AWBInfo element, each ArrayOfAWBInfoItem corresponds to the response for each DHL Airbill submitted in the original request.

The remaining subsections of 4.2.4 will provide additional context to the structures immediately below TrackingResponse, while the individual nodes are described in further detail in section 4.2.5.

7.4.1 TrackingResponse Output: Response

The Response element contains the service header information for the message. This includes the timestamp when the response generated to the consumer, as well as the unique message reference generated by DHL.

7.4.2 TrackingResponse Output: AWBInfo

The AWBInfo element is a complex element which maintains an array of airbill responses for each airbill requested. The ArrayOfAWBInfoItem consists of four child elements

- AWBNumber
- Status
- ShipmentInfo
- Pieces

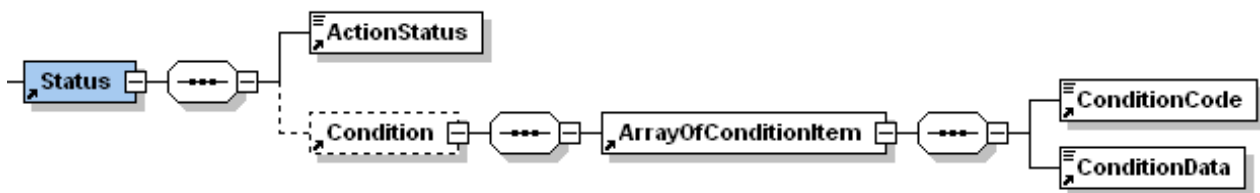
7.4.3 TrackingResponse Output: AWBNumber

The AWBNumber returned in the response corresponds to the DHL Airbill Number in the Tracking Request. For multiple shipment requests, this field is used to distinguish between the multiple responses.

7.4.4 TrackingResponse Output: Status

The Status element consists of a summary ActionStatus field, which describes the success of the service. Expected values for this element are "Success" and "No Shipments Found".

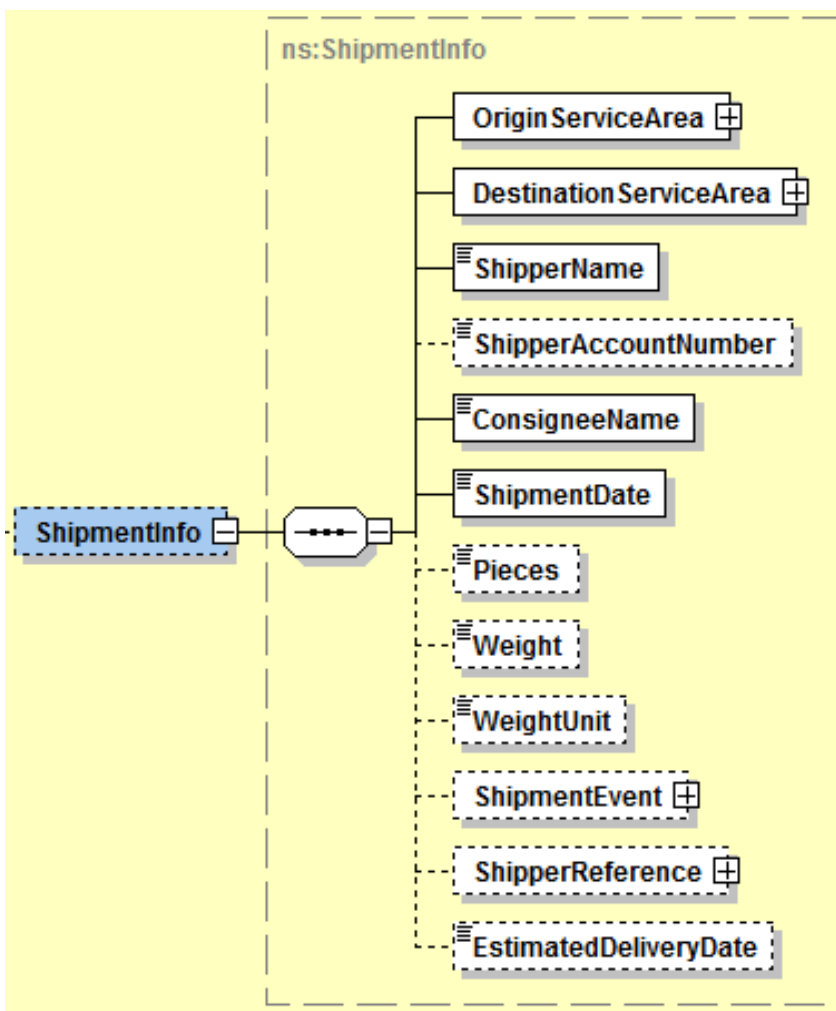
The optional Condition element consists of additional error information, and is only present in the case of an exception. Appendix A contains specific information on the values of the ConditionCode and ConditionData returned in the case of a Not Found exception.



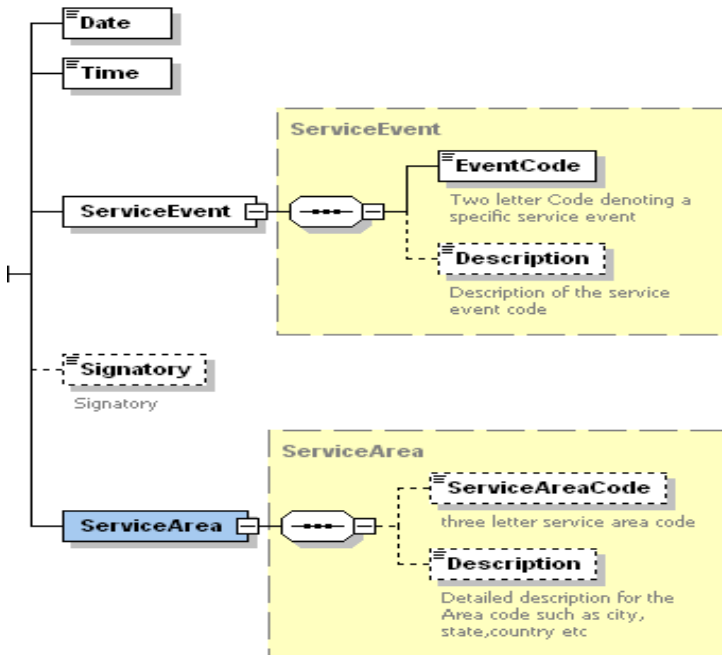
7.4.5 TrackingResponse Output: ShipmentInfo

The ShipmentInfo element is an optional element within the response, and will be populated for successful invocations. This element describes the shipment details, as well as provide optional ShipmentEvents. The ShipmentInfo element consists of the following child elements:

- OriginServiceArea – This complex element contains the Service Area code and Service Area description for the origin of the shipment.
- DestinationServiceArea – This complex element contains the Service Area Code and Service Area Description for the destination of the shipment.
- ShipperName – The name or title associated to the shipper.
- ShipperAccountNumber – The account number for shipping, currently not included for tracking purposes.
- ConsigneeName – The name or title associated to the receiver.
- ShipmentDate – The date of the shipment initiation.
- Pieces – The number of pieces in the shipment.
- Weight – The weight of the shipment.
- WeightUnit – The unit of measure for shipment weight.

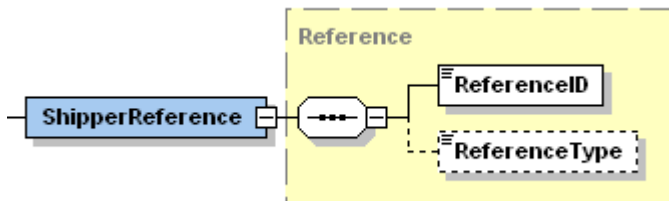


The ShipmentEvent element is an optional complex element detailing the specific shipment events for the entire shipment, and has a cardinality of zero to many. Each event will be detailed under the element ArrayOfShipmentEventItem, and the events will appear in descending order by date/time. The ArrayOfShipmentEventItem element consists of these child elements.



- Date – The date of the Shipment Event
- Time – The time of the Shipment Event (in local time)
- Service Event – The code and description of the event.
- Signatory – The signee for the shipment, if captured.
- Service Area – The service area code and description where the event occurred.

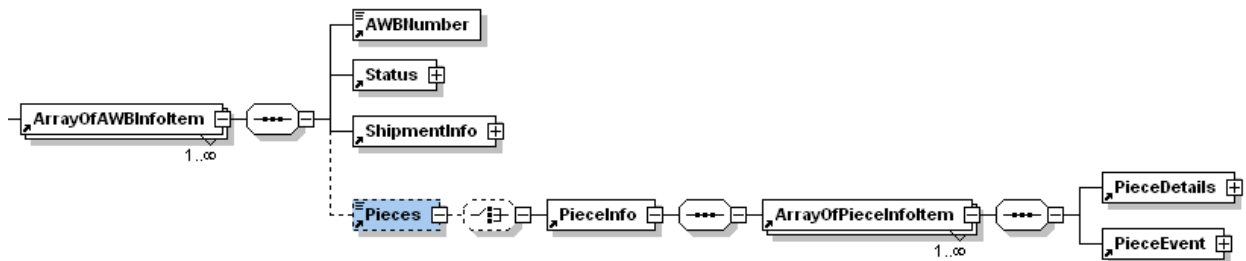
The ShipmentReference element is an optional complex element detailing the reference information, if any, available for this shipment



- EstimatedDeliveryData – estimated delivery date (EDD)

7.4.6 TrackingResponse Output: Pieces

The following diagram details the Pieces element of ArrayOfAWBInfoItem. The Pieces element is an optional element which contains a single complex PieceInfo element. The PieceInfo element consists of one to many ArrayOfPieceInfoItem elements.



Within the ArrayOfPieceInfoItem element, there are two complex child elements.

- PieceDetails – This element describes attributes of the specific piece, including piece id, dimensions and weight.
- PieceEvent – This element contains one to many events at the piece level, including a description of the event, the date/time of the event, and the location of the event. In this sense, it is identical in structure to the ShipmentEvent element.

7.5 TrackingResponse – Output Field List

TrackingResponse	Mandatory /Optional	Value constraints	Comments
./Response			
./ServiceHeader			
MessageTime	M	Date	The format of the should be YYYY-MM-DD(T)hh:mm:ssZ (GMT) e.g 2011-01-12T18:41:12Z
MessageReference	M	AN 32	The unique message reference for this response.
./AWBInfo			
./ArrayOfAWBInfoItem			
AWBNumber	M	AN 11	Identifies the piece number as a counter, same as input.
./Status			
ActionStatus	M	AN 20	The summary status of the request. Values include; "Success" "No Shipments Found"
./Condition/ArrayOfConditionItem			
ConditionCode	O	N 3	Error Code associated to the request e.g. 101
ConditionData	O	AN 50	Error Description
/ShipmentInfo			
/OriginServiceArea			
ServiceAreaCode	O	AN 3	The DHL Service Area Code for the origin of the Shipment
Description	O	AN 40	The description of the Service Area Code.
OutboundSortCode	O	AN 4	Outbound Sort Code of Origin (currently not available)

/DestinationServiceArea			
ServiceAreaCode	O	AN 3	The DHL Service Area Code for the destination of the Shipment
Description	O	AN 40	Description
FacilityCode	O	AN 3	The DHL Facility Code for the Destination
InboundSortCode	O	AN 4	Inbound Sort Code of Destination (currently not available)
ShipperName	M	AN 35	Shipper Name
ShipperAccountNumber	O	N 10	Shipper's Account Number (currently not populated for tracking)
ConsigneeName	M	N 35	Receiver's Name
ShipmentDate	M	Date	The shipment initiation date, local to origin YYYY-MM-DD(T)HH:MM:SS+GMT 2010-11-09T14:30:00+01:00
Pieces	O	N 6	Number of pieces in shipment
Weight	O	AN 9	Weight of shipment Format 99999.999
WeightUnit	O	AN 1	L = Pounds K = Kilogram G = Grams
/ShipmentEvent/ArrayOfShipmentEventItem (1:m)			
Date	M	Date	Local Date of Shipment Event YYYY-MM-DD
Time	M	Time	Local Time of Shipment Event HH:MM:SS
ServiceEvent			
EventCode	M	AN 2	The event code for this specific event.
Description	M	AN 50	The description of the event
Signatory	O	AN 20	The signee for the shipment, only occurs for final disposition events (such as OK event)

ServiceArea			
ServiceAreaCode	O	AN 3	The DHL Service Area Code for the event
Description	O	AN 40	The description of the service area code.
/ShipperReference (currently not used)			
ReferenceID	O	AN 35	Reference ID for shipment
ReferenceType	O	AN 2	Reference Type
EstimatedDeliveryDate	O	Date	Estimted delivery date (EDD) YYYY-MM-DD(T)HH:MM:SS+GMT 2010-11-09T14:30:00+01:00
/Pieces/PieceInfo/ArrayOfPieceInfo			
PieceDetails			
AWBNumber	M	AN 11	Airbill associated to the Piece (same as the parent node airbill)
LicensePlate	M	AN 35	Piece ID associated to the Piece
PieceNumber	O	N 6	Number of the Piece
ActualDepth	O	AN 9	Actual Depth of shipment Format 99999.999
ActualWidth	O	AN 9	Actual Width of shipment Format 99999.999
ActualHeight	O	AN 9	Actual Height of shipment Format 99999.999
ActualWeight	O	AN 9	Actual Weight of shipment Format 99999.999
Depth	O	AN 9	Depth of shipment Format 99999.999
Width	O	AN 9	Width of shipment Format 99999.999
Height	O	AN 9	Height of shipment Format 99999.999

Weight	O	AN 9	Weight of shipment Format 99999.999
PackageType	O	AN 3	Package Type of Shipment
DimWeight	O	AN 9	Volumetric Weight of shipment Format 99999.999
WeightUnit	O	AN 1	L = Pounds K = Kilogram G = Grams
PieceContents	O	AN 20	Contents or description of the piece
/PieceEvent/ArrayOfPieceEventItem (1:m)			
Date	M	Date	Local Date of Piece Event YYYY-MM-DD
Time	M	Time	Local Time of Shipment Event HH:MM:SS
ServiceEvent			
EventCode	M	AN 2	The event code for this specific event.
Description	M	AN 50	The description of the event
Signatory	O	AN 20	The signee for the piece, only occurs for final disposition events (such as OK event)
ServiceArea			
ServiceAreaCode	O	AN 3	The DHL Service Area Code for the event
Description	O	AN 40	The description of the service area code.
/ShipperReference (currently not used)			
ReferenceID	O	AN 35	Reference ID for shipment
ReferenceType	O	AN 2	Reference Type

8. DocumentRetrieve - ePOD

8.1 DocumentRetrieve-ePOD - Description

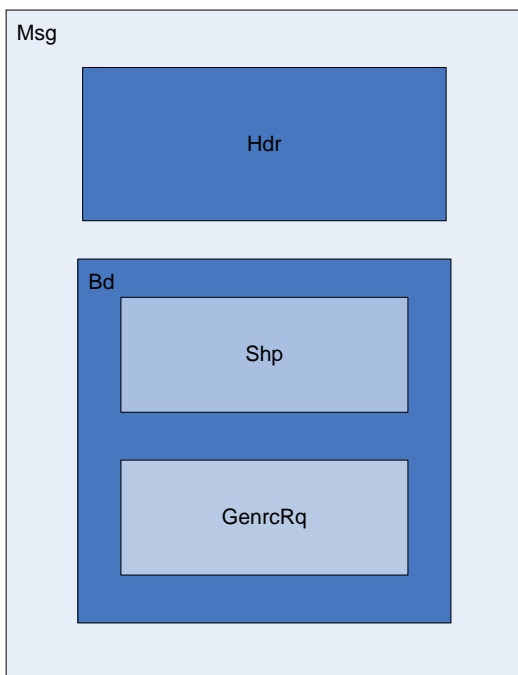
The Document Retrieve operation will return ePOD image(s) according to how the image was requested.

Using Waybill number as well as other shipment criteria, this operation returns the available ePOD image including, if requested, the ePOD details.

A Document Retrieve request is successfully executed if the correct combination of account/Waybill and image content is sent in the request.

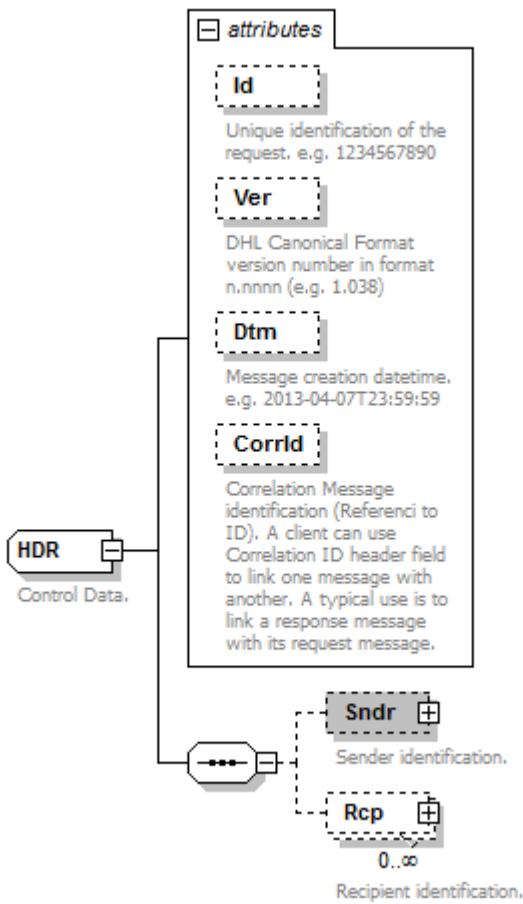
8.2 DocumentRetrieve-ePOD - Input

The following diagrams show an overview of the request input structure. It is composed of two main structures. The header (Hdr) and the Body(Bd). The Bd contains two structures, the Shipment (Shp) elements and the Generic Request (GenrcRq). Most of the parameters defining the image requested are on the Shp and GenrcRq segments.



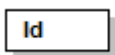
The representation of each of the individual sections of shipmentDocumentRetrieve request is below in schema diagram, with context, and a detailed description of each field follows in the Input Field List.

8.2.1 Header (Hdr) Schema Diagram



8.2.2 Header Input: Id

Unique identification of the request. e.g. 1234567890



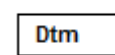
8.2.3 Header Input: Ver

Mandatory: Version of the DHL canonical format. This is a constant value that should be set to 1.038.



8.2.4 Header Input: Dtm

Mandatory: Message creation date-time in the following format: 2013-04-07T23:59:59



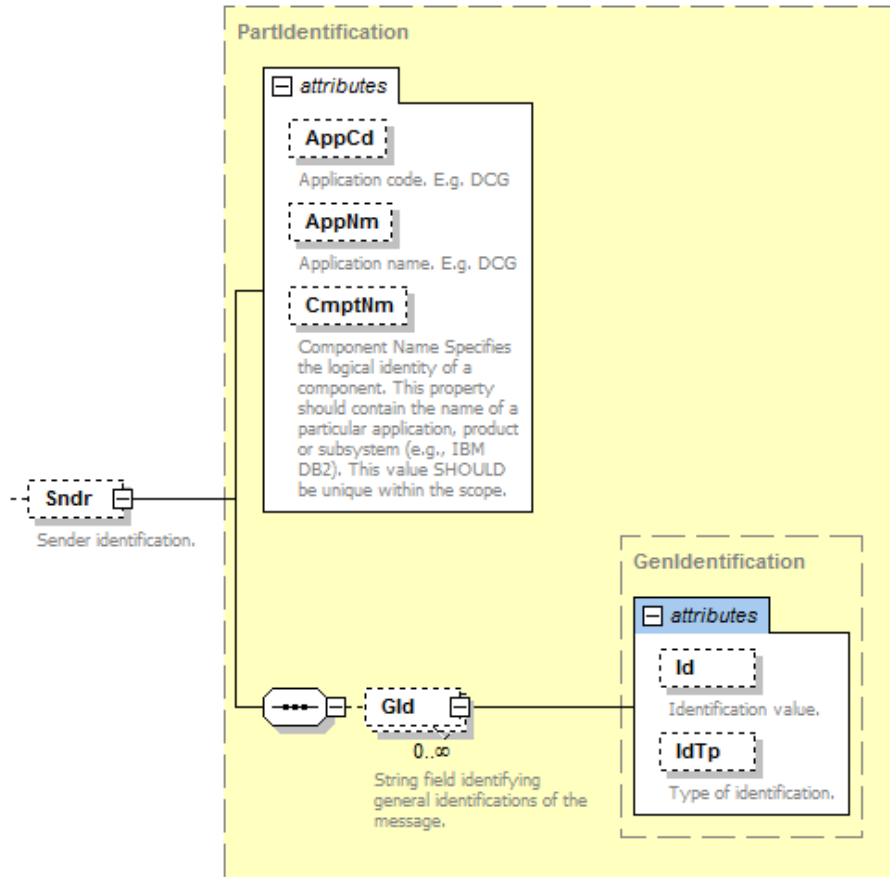
8.2.5 Header Input: Corrid

Correlation id can be used to link a message. It is optional and it is only used in the response.



8.2.6 Header Input: Sndr

The Sndr section provides details about the message sender.



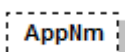
8.2.7 Sndr Input: AppCd

Mandatory: The AppCd identifies the application sending the request to the backend system. In this case, the value should be DCG.



8.2.8 Sndr Input: AppNm

Optional: The AppNm node contains the name of the sending application.



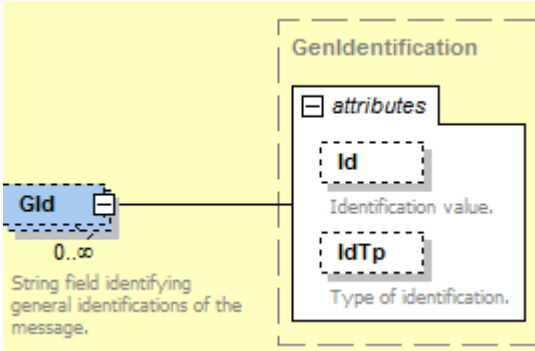
8.2.9 Sndr Input: CmptNm

Optional: The CmptNm is the name of the component in the application that is sending the request.



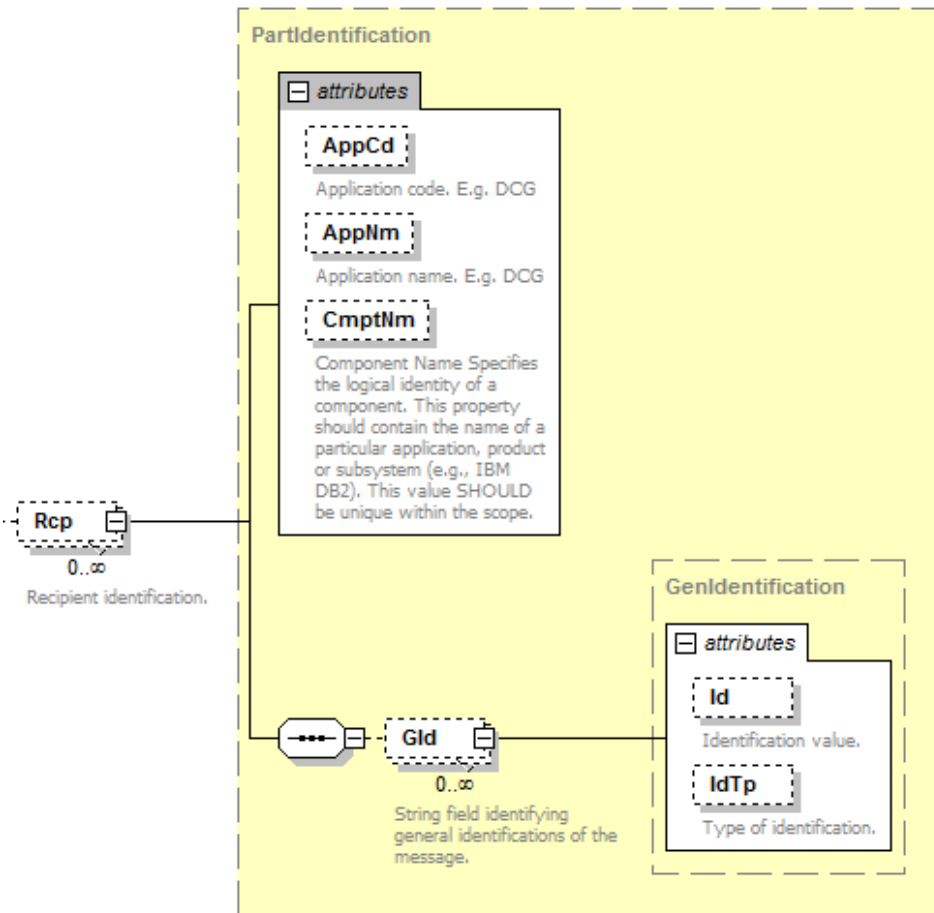
8.2.10 Sndr Input: Gld

Optional: General identification of the message. *In this process this group is not used.*

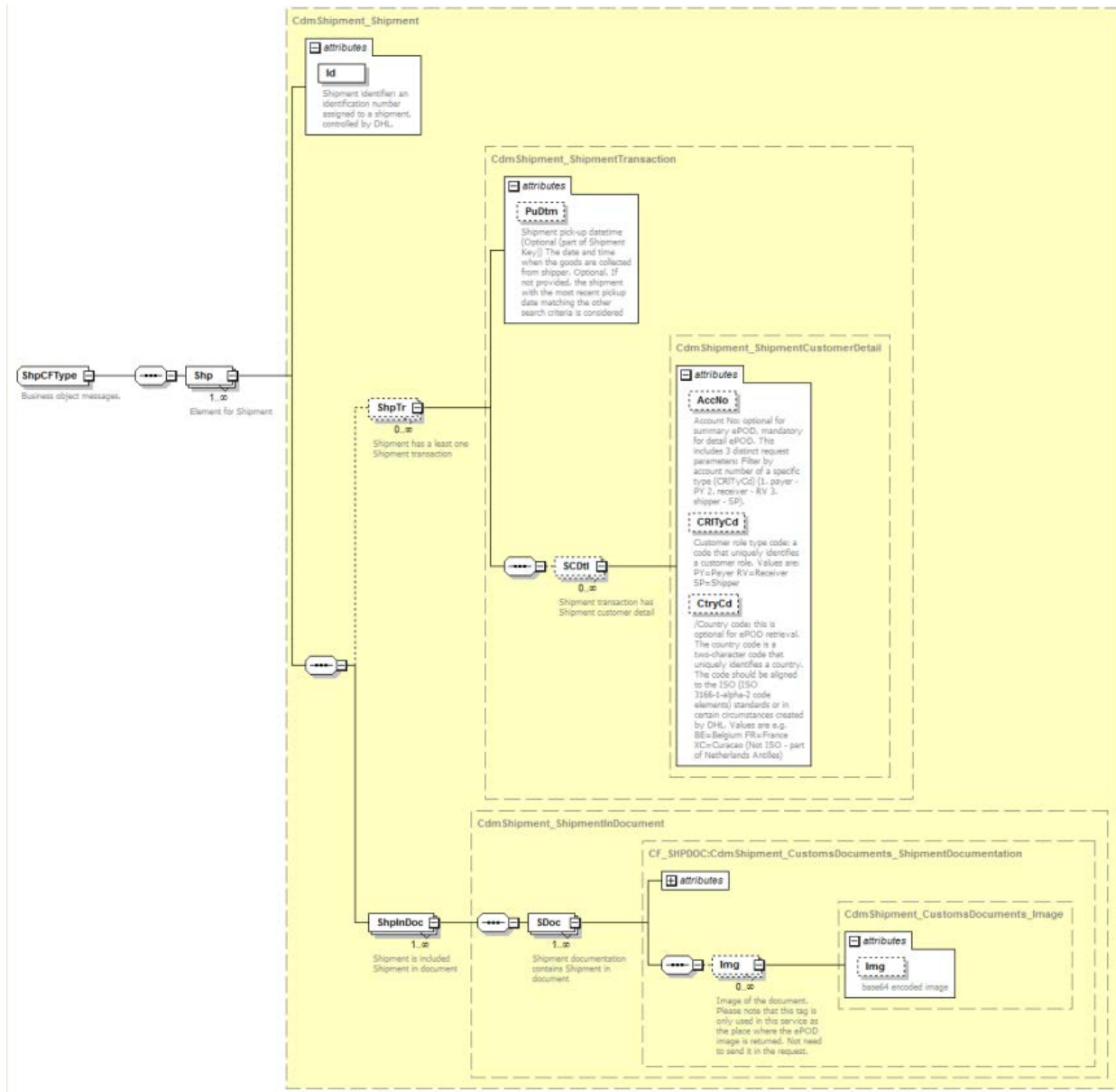


8.2.11 Header Input: Rcp.

Optional: Recipient identification. *This section is only used in the response no need to use it in the request.*



8.2.12 Bd Input: Shp Schema Diagram



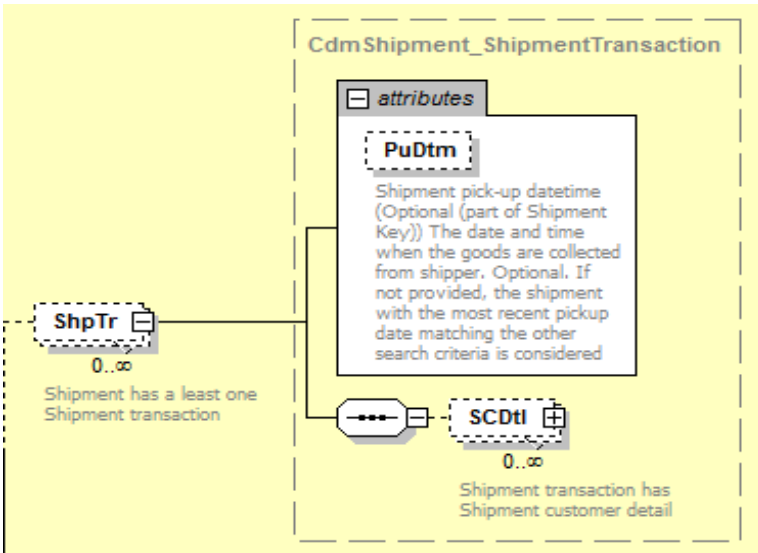
8.2.13 Shp Input: Id

Mandatory: Shipment identifier: an identification number assigned to a shipment, controlled by DHL.



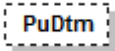
8.2.14 ShpTr Input: ShpTr

The ShpTr section contains the fields related to the shipment transaction



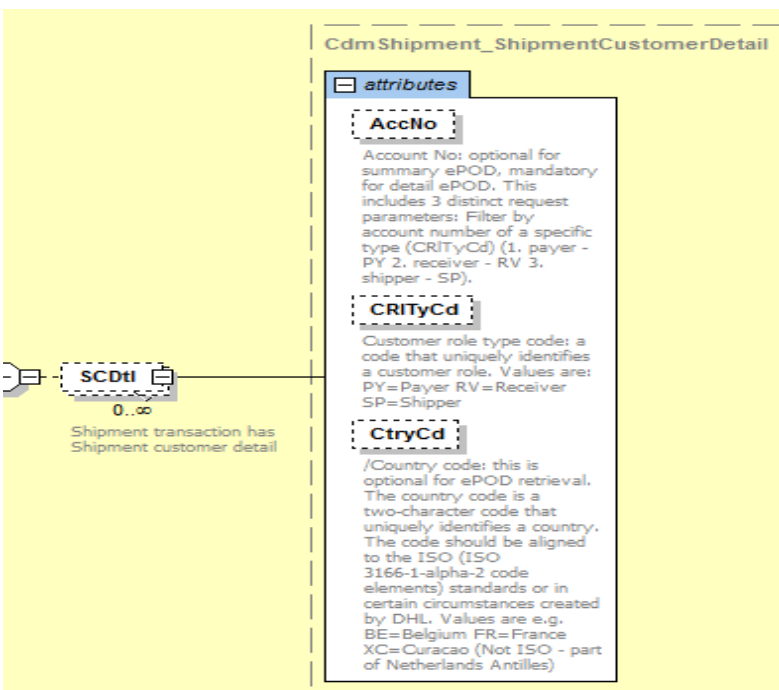
8.2.15 ShpTr Input: PuDtm

Optional: Shipment pick-up datetime (Optional (part of Shipment Key)) The date and time when the goods are collected from shipper. If not provided, the shipment with the most recent pickup date matching the other search criteria is considered.



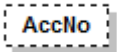
8.2.16 ShpTr Input: SCDtI

The SCDtI section contains shipment customer detail



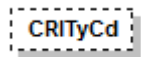
8.2.17 SCDtl Input: AcctNo

Account Number. This is optional if requesting a summary ePOD, however it is mandatory for each Waybill number to declare the corresponding account number.



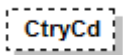
8.2.18 SCDtl Input: CRITyCd

Optional: If the AccNo is provided this field also should be provided. Customer role type code: It is optional for summary ePOD but mandatory for detail ePOD. This is the code that uniquely identifies a customer role. Values are: PY=Payer RV=Receiver SP=Shipper



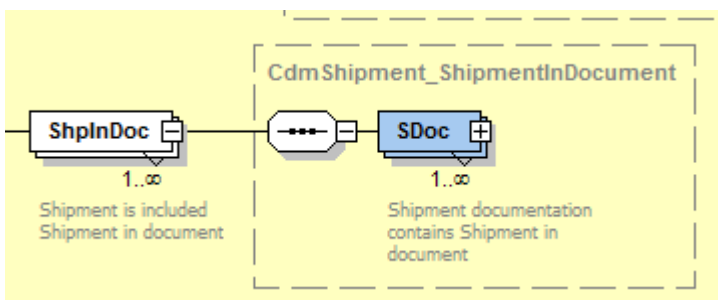
8.2.19 SCDtl Input: CtryCd

/Country code: this is optional for ePOD retrieval. The country code is a two-character code that uniquely identifies a country. The code should be aligned to the ISO (ISO 3166-1-alpha-2 code elements) standards or in certain circumstances created by DHL. Values are e.g. BE=Belgium FR=France XC=Curacao (Not ISO - part of Netherlands Antilles).



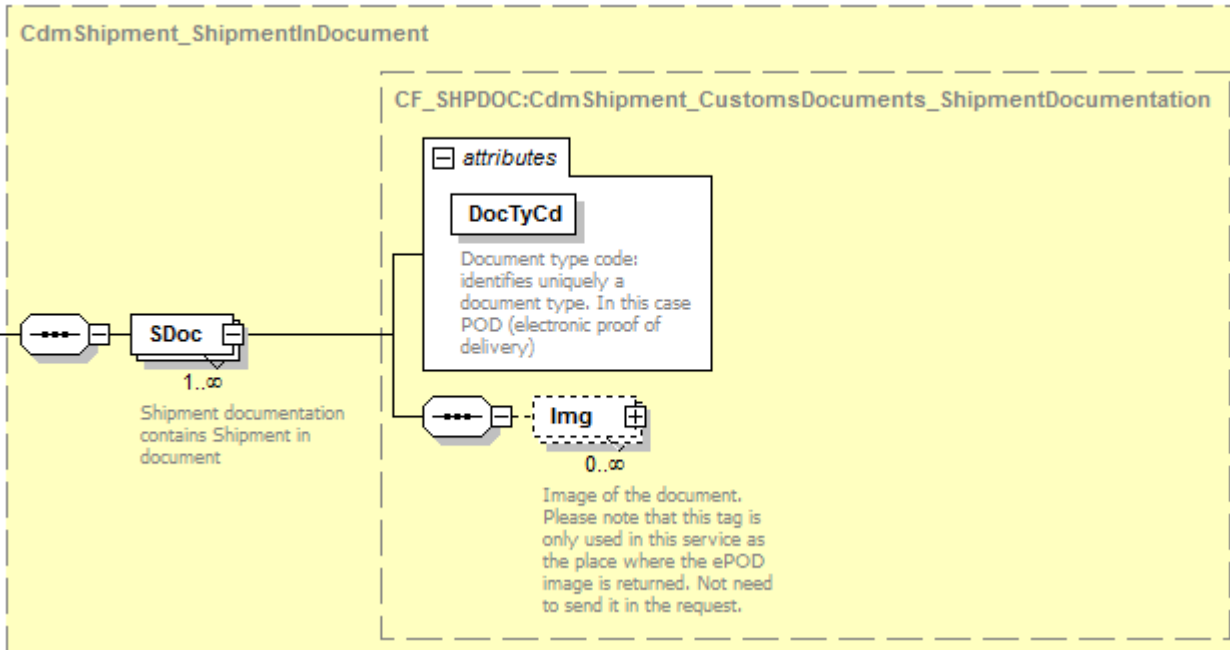
8.2.20 Shp Input: ShpInDoc

The ShpInDoc includes the SDoc(Shipment Documentation) section



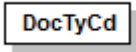
8.2.21 ShpInDoc Input: SDoc

SDoc contains shipment in document



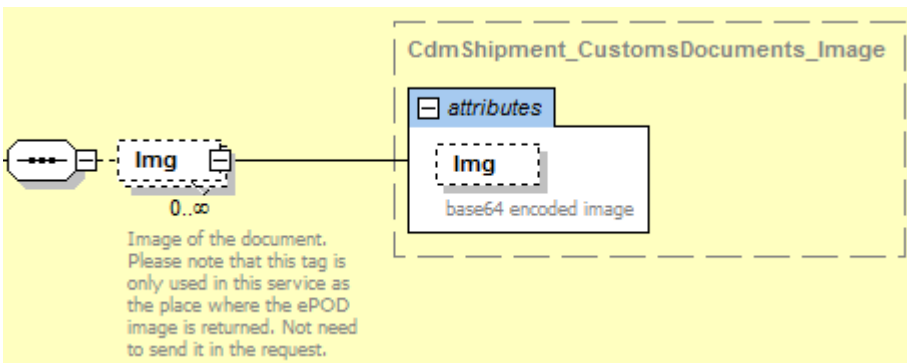
8.2.22 SDoc Input: DocTyCd

Mandatory: Document type code: identifies uniquely a document type. In this case POD (electronic proof of delivery)



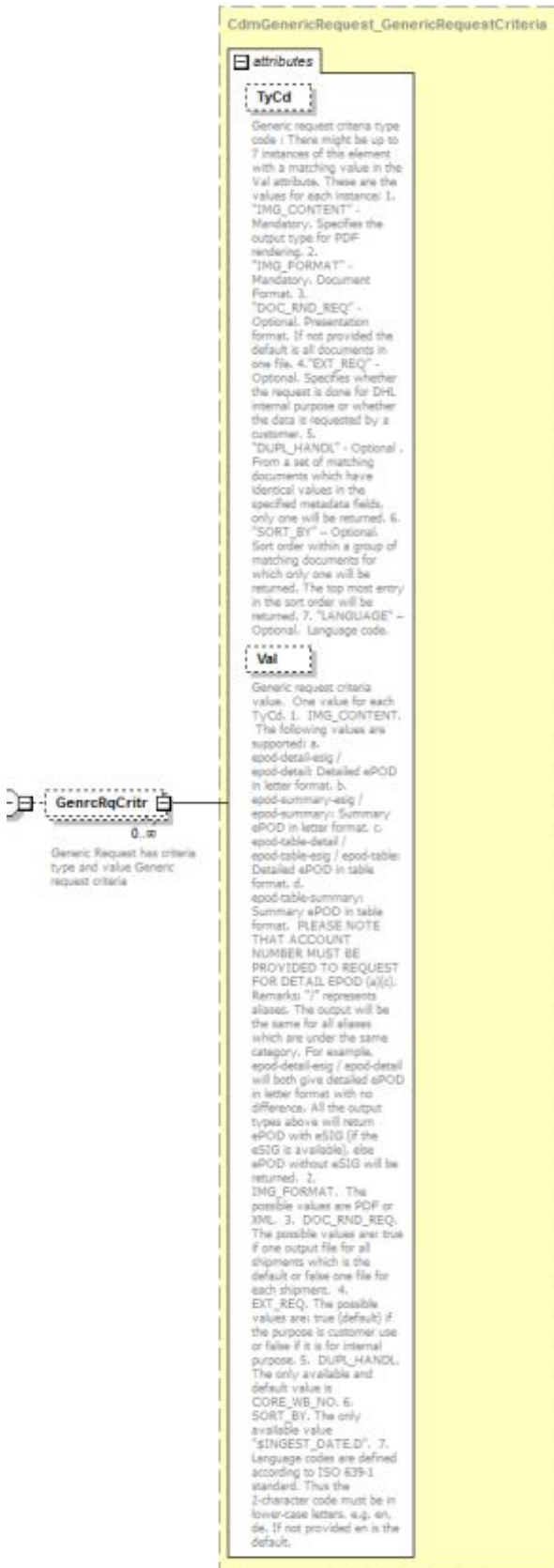
8.2.23 SDoc Input: Img

The `Img` (Image) section contains only the `Img` (image) field. Image of the document. *Please note that this tag is only used in this service as the place where the ePOD image is returned. Not need to send it in the request.*



8.2.24 Bd Input: GenrcRq

The Generic Request (GenrcRq) contains the type and value criteria of the request.



8.2.25 GenrcRq Input: TyCd

Generic request criteria type code : There might be up to 7 instances of this element with a matching value in the Val attribute. These are the values for each instance:

1. "IMG_CONTENT" - Mandatory. Specifies the output type for PDF rendering.
2. "IMG_FORMAT" - Mandatory. Document Format.
3. "DOC_RND_REQ" - Optional. Presentation format. If not provided the default is all documents in one file.
4. "EXT_REQ" - Optional. Specifies whether the request is done for DHL internal purpose or whether the data is requested by a customer.
5. "DUPL_HANDL" - Optional . From a set of matching documents which have identical values in the specified metadata fields, only one will be returned.
6. "SORT_BY" – Optional. Sort order within a group of matching documents for which only one will be returned. The top most entry in the sort order will be returned.
7. "LANGUAGE" – Optional. Language code.

TyCd

8.2.26 GenrcRq Input: Val

Generic request criteria value. One value for each TyCd.

1. IMG_CONTENT. The following values are supported: a. epod-detail-esig / epod-detail: Detailed ePOD in letter format. b. epod-summary-esig / epod-summary: Summary ePOD in letter format. c. epod-table-detail / epod-table-esig / epod-table: Detailed ePOD in table format. d. epod-table-summary: Summary ePOD in table format. PLEASE NOTE THAT ACCOUNT NUMBER MUST BE PROVIDED TO REQUEST FOR DETAIL EPOD (a)(c). Remarks: "/" represents aliases. The output will be the same for all aliases which are under the same category. For example, epod-detail-esig / epod-detail will both give detailed ePOD in letter format with no difference. All the output types above will return ePOD with eSIG (if the eSIG is available), else ePOD without eSIG will be returned.
2. IMG_FORMAT. The only possible value is PDF.
3. DOC_RND_REQ. The possible values are: true if one output file for all shipments which is the default or false one file for each shipment.
4. EXT_REQ. The possible values are: true (default) if the purpose is customer use or false if it is for internal purpose.
5. DUPL_HANDL. The only available and default value is CORE_WB_NO.
6. SORT_BY. The only available value "\$INGEST_DATE,D".
7. Language codes are defined according to ISO 639-1 standard. Thus the 2-character code must be in lower-case letters. e.g. en, de. If not provided en is the default.

Val

8.3 ShipmentDocumentRetrieve-ePOD – Input Filed List

Shipment Document Retrieve fields	Mandatory /Optional	Value constraints	Comments
shipmentDocumentRetrieveReq			
./MSG			
./Hdr			
@Id	O	AN 30	Request Id
@Ver	O	AN 7	Use always this value: 1.038
@Dtm	O	DateTime	Format: 2013-04-07T23:59:59
@CorrId	O	AN 20	Correlation ID. This field is only used in the response. No need to send in the request.
./Sndr			
@AppCd	M	AN 5	Value: DCGAP
@AppNm	O	AN 20	Value: DCGAP
@CmptNm	O	AN 256	Your own unique system name
./Rcp This section is not used in the request, only in the response.			
./Bd			
./Ship(1:M)			
@Id	M	AN 35	Shipment Id (AWB)
./ShpTr(0:M)			
@PuDtm	O	DateTime	Pickup Date-Time: We recommend not to enter the pick up date. However, the format of the pickup date is 2012-01-31T00:00:00.
./SCDtI():M)			
@AccNo	O	AN 12	Account No: optional for summary ePOD, mandatory for detail ePOD. This includes 3 distinct request parameters: Filter by account number of a specific type (CRITyCd) (1. payer - PY 2. receiver - RV 3. shipper - SP).

@CRITyCd	O	AN 2	<p>Customer role type code: This code identifies weather the above account number was used in the Payer, Receiver or Shipper Account field while creating the shipment.</p> <p>The possible codes are PY=Payer, RV =Receiver, SP=Shipper – You only need to specify this field if you are requesting a detailed ePOD</p>
@CtryCd	O	AN 2	<p>Country code: this is optional for ePOD retrieval. This is the origin country code..The country code is a two-character code that uniquely identifies a country. The code should be aligned to the ISO (ISO 3166-1-alpha-2 code elements) standards or in certain circumstances created by DHL. Values are e.g. BE=Belgium FR=France XC=Curacao (Not ISO - part of Netherlands Antilles)</p>
./ShpInDoc(1:M)			
./SDoc(1:M)			
@DocTyCd	M	AN3	<p>Document type code: identifies uniquely a document type. Value = POD (electronic proof of delivery)</p>
./GenrcRq(0:M)			
@ TyCd	O	AN12	<p>Generic request criteria type code : There might be up to 7 instances of this element with a matching value in the Val attribute. These are the values for each instance: 1. "IMG_CONTENT" - Mandatory. Specifies the output type for PDF rendering. 2. "IMG_FORMAT" - Mandatory. Document Format. 3. "DOC_RND_REQ" - Optional. Presentation format. If not provided the default is all documents in one file. 4."EXT_REQ" - Optional. Specifies whether the request is done for DHL internal purpose or whether the data is requested by a customer. 5. "DUPL_HANDL" - Optional . From a set of matching documents which have identical values in the specified metadata fields, only one will be returned. 6. "SORT_BY" – Optional. Sort order within a group of matching documents for which only one will be returned. The top most entry in the sort order will be returned. 7. "LANGUAGE" – Optional. Language code.</p>
@Val	O	AN75	<p>Generic request criteria value. One value for each TyCd. 1. IMG_CONTENT. The following values are supported: a. epod-detail-esig / epod-detail: Detailed ePOD in letter format. b. epod-summary-esig / epod-summary: Summary ePOD in letter format. c. epod-table-detail / epod-table-</p>

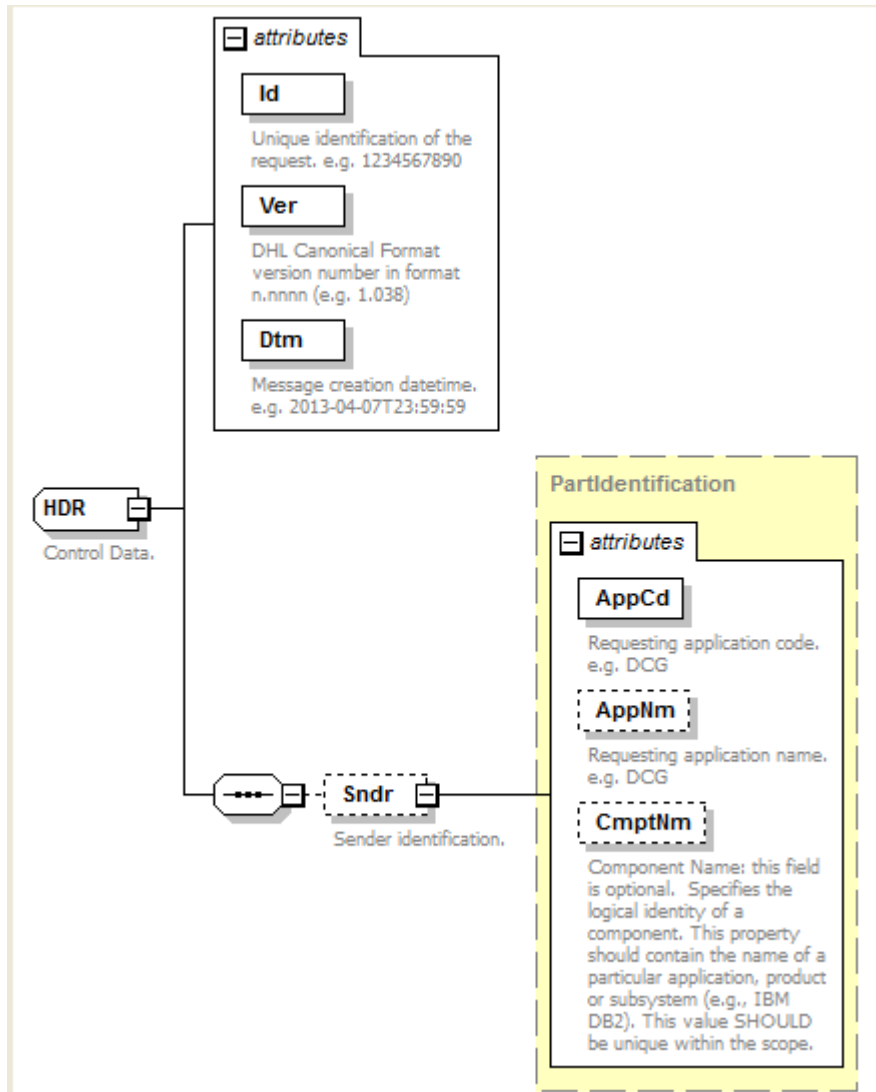


		<p>esig / epod-table: Detailed ePOD in table format. d. epod-table-summary: Summary ePOD in table format. PLEASE NOTE THAT ACCOUNT NUMBER MUST BE PROVIDED TO REQUEST FOR DETAIL EPOD (a)(c). Remarks: "/" represents aliases. The output will be the same for all aliases which are under the same category. For example, epod-detail-esig / epod-detail will both give detailed ePOD in letter format with no difference. All the output types above will return ePOD with eSIG (if the eSIG is available), else ePOD without eSIG will be returned. 2. IMG_FORMAT. The possible value is PDF. 3. DOC_RND_REQ. The possible values are: true if one output file for all shipments which is the default or false one file for each shipment. 4. EXT_REQ. The possible values are: true (default) if the purpose is customer use or false if it is for internal purpose. 5. DUPL_HANDL. The only available and default value is CORE_WB_NO. 6. SORT_BY. The only available value "\$INGEST_DATE,D". 7. Language codes are defined according to ISO 639-1 standard. Thus the 2-character code must be in lower-case letters. e.g. en, de. If not provided en is the default.</p>
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8.4 ShipmentDocumentRetrieve-ePOD – Output

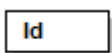
The representation of each of the individual sections of shipmentDocumentRetrieve response is below in schema diagram, with context, and a detailed description of each field follows in the Output Field List.

8.4.1 Header (Hdr) Schema Diagram



8.4.2 Header Output: Id

Unique identification of the response. e.g. 1234567890



8.4.3 Header Output: Ver

Version of the DHL canonical format. This is a value backend returns based on the canonical format version used. For example 1.038.

Ver

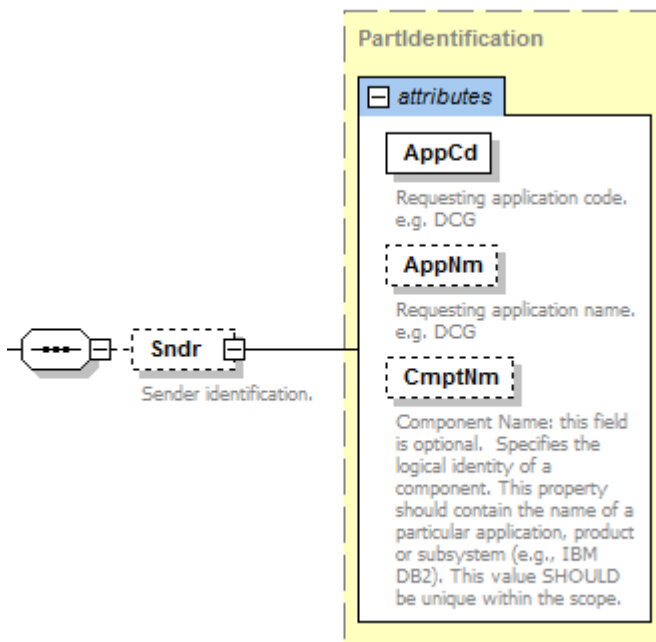
8.4.4 Header Output: Dtm

Response's date-time in the following format: 2013-04-07T23:59:59

Dtm

8.4.5 Header Output: Sndr

The Sndr section provides details about the response sender.



8.4.6 Header Output: AppCd

The AppCd identifies the application sending the response. In this case, the value is ESB.

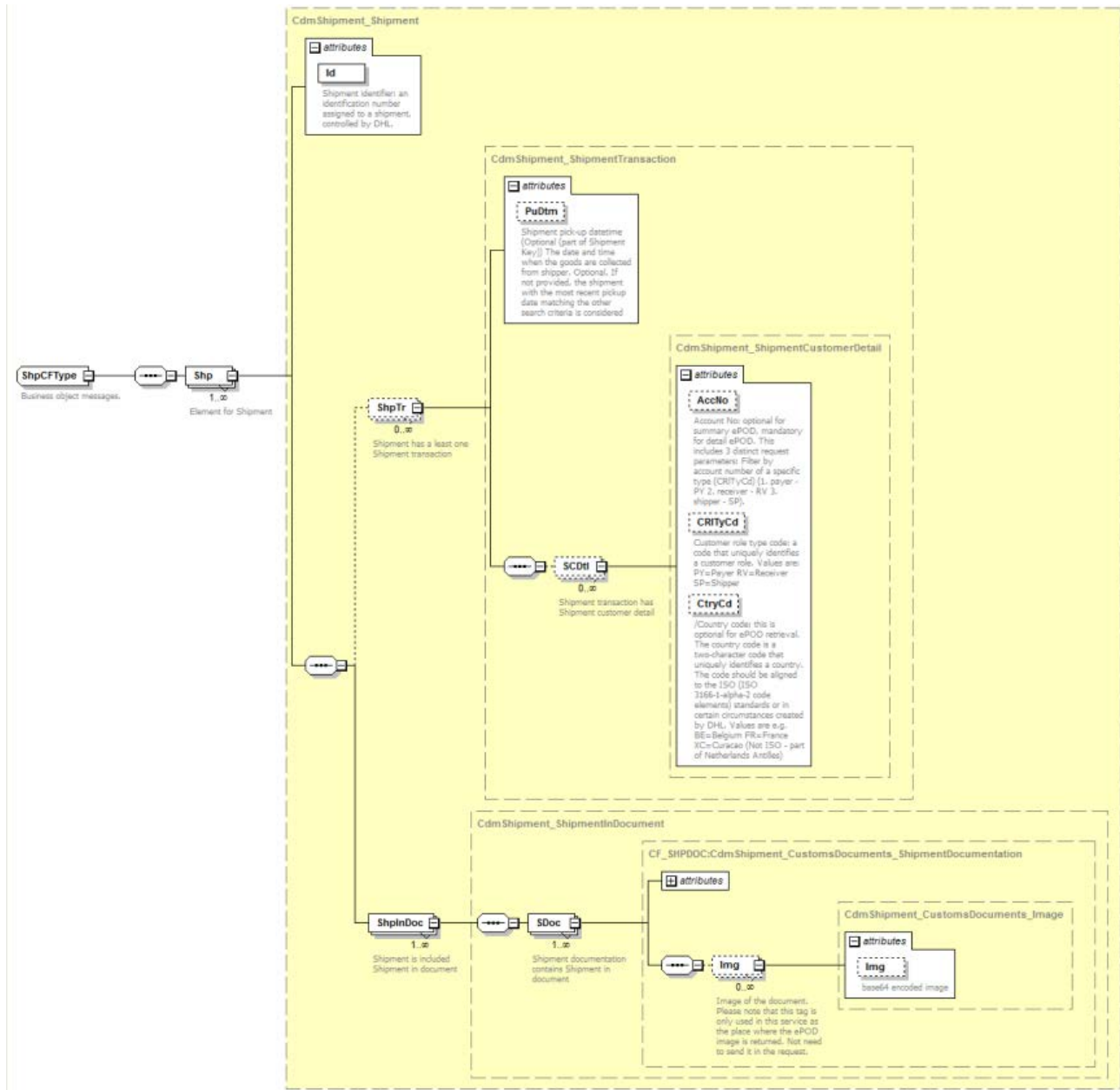
AppCd

8.4.7 Header Output: AppNm

The AppNm node contains the name of the responding application. The value is ESB.

AppNm

8.4.8 Bd Output: Shp Schema Diagram



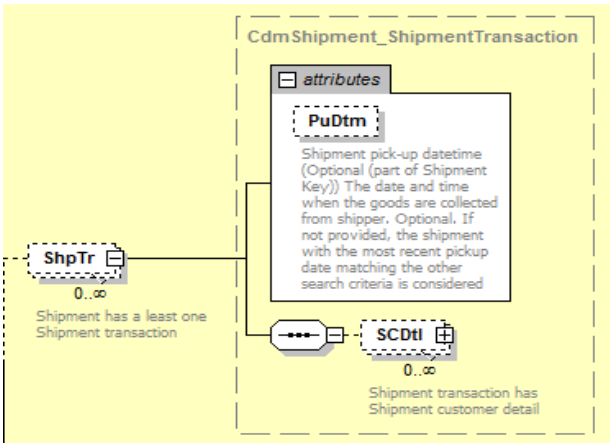
8.4.9 Shp Output: Id

Shipment identifier: **This is not returned in the response.**

Id

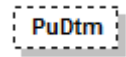
8.4.10 Shp Output: ShpTr

Nothing from ShpTr section is returned.



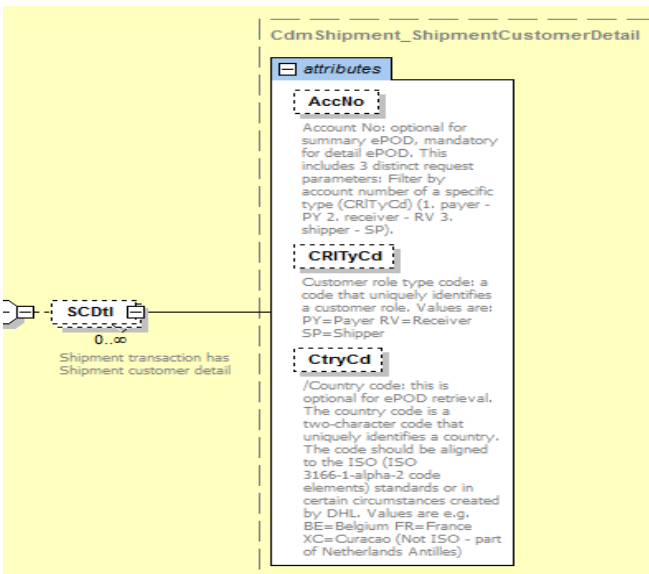
8.4.11 ShpTr Output: PuDtm

This is not returned.



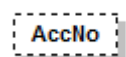
8.4.12 ShpTr Output: SCDtl

The SCDtl section contains shipment customer detail. This is not returned.



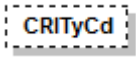
8.4.13 SCDtl Output: AcctNo

This is not returned.



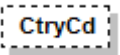
8.4.14 SCDtl Output: CRITyCd

This is not returned.



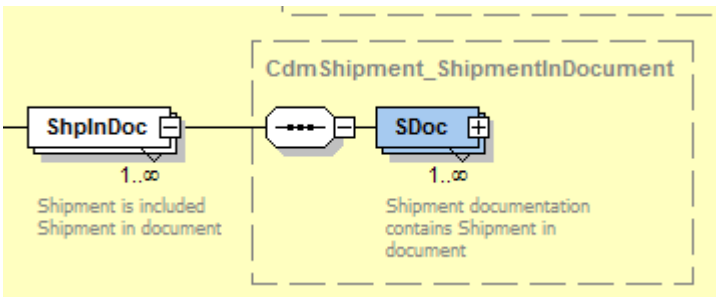
8.4.15 SCDtl Output: CtryCd

This is not returned.



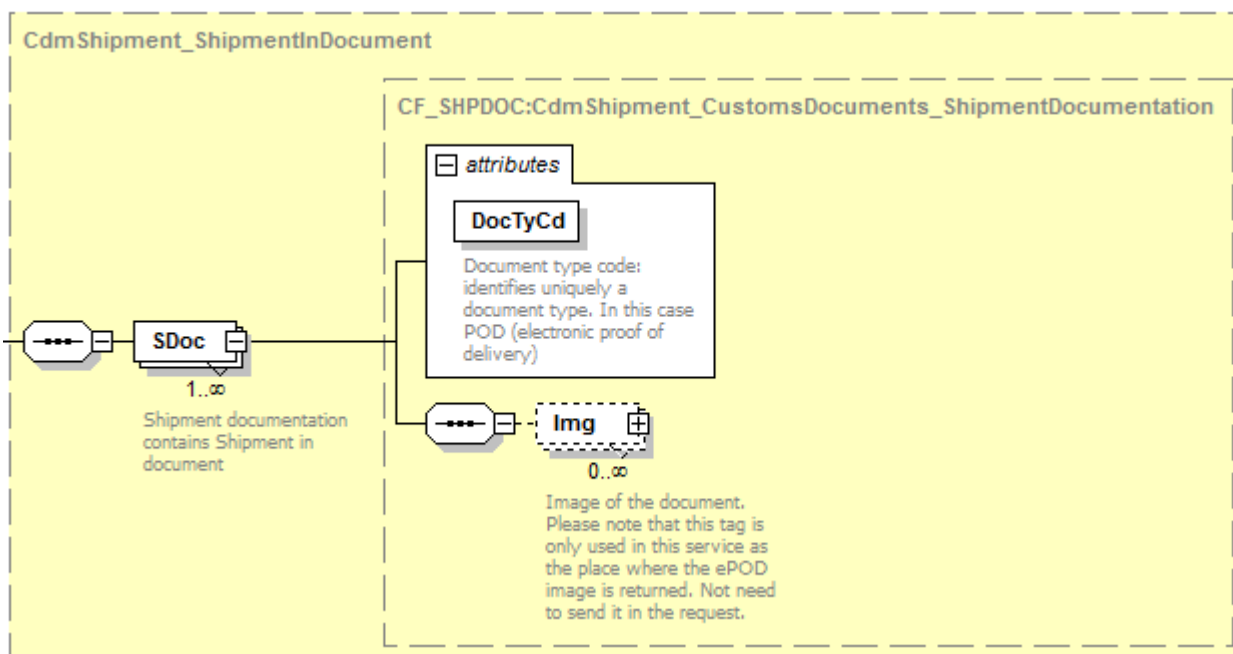
8.4.16 Shp Output: ShpInDoc

The ShpInDoc includes the SDoc(Shipment Documentation) section



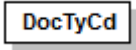
8.4.17 ShpInDoc Output: SDoc

SDoc contains shipment in document



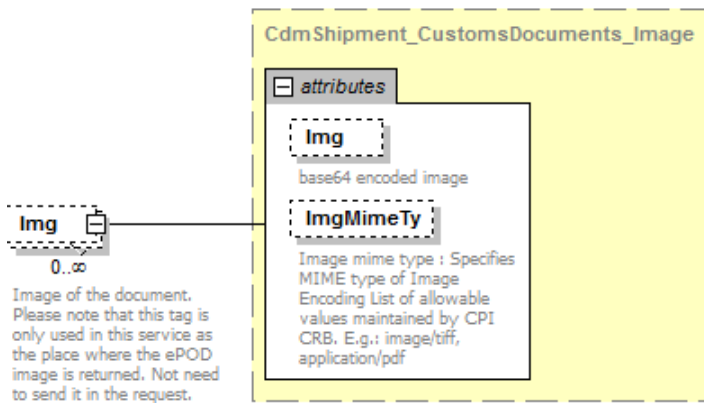
8.4.18 SDoc Output: DocTyCd

Document type code: Value returned is POD.



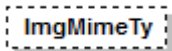
8.4.19 SDoc Output: Img

The Img (Image) section contains only the Img (image) field. Image of the document returned in a base64 encoded string. It also returns the ImgMimeTy with value = application/pdf



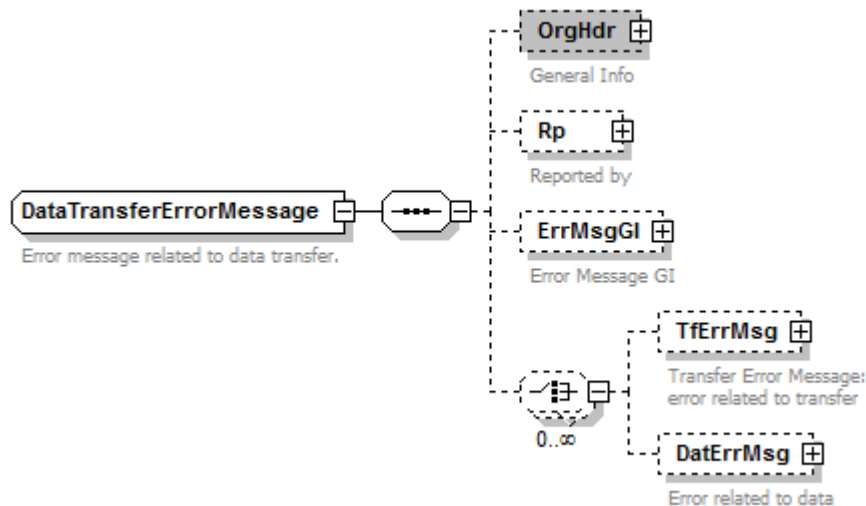
8.4.20 SDoc Output: ImgMimeTy

Image mime type : Specifies MIME type of Image. In this case the value is application/pdf.



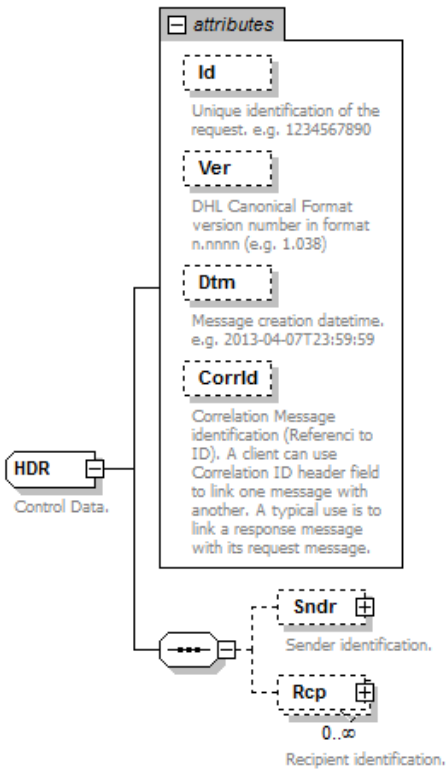
8.4.21 DatTrErr Output

The DatTrErr is where any messages generated during the process of the request are returned.



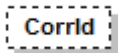
8.4.22 OrgHdr Output: Service

Even though this section has four attributes (Id, Ver, Dtm, and Corrid) and blocks Sndr and Rcp defined, the first three attributes return with null values. **Only Corrid is returned.**



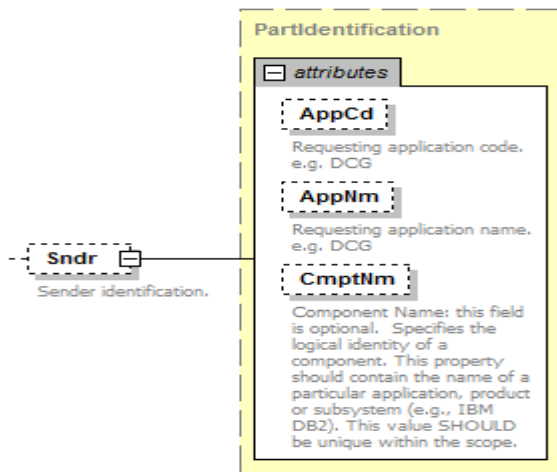
8.4.23 OrgHdr Output: Corrid

Correlation Message identification (Referenced to ID). In this case a unique number is returned(e.g.: 72563197).



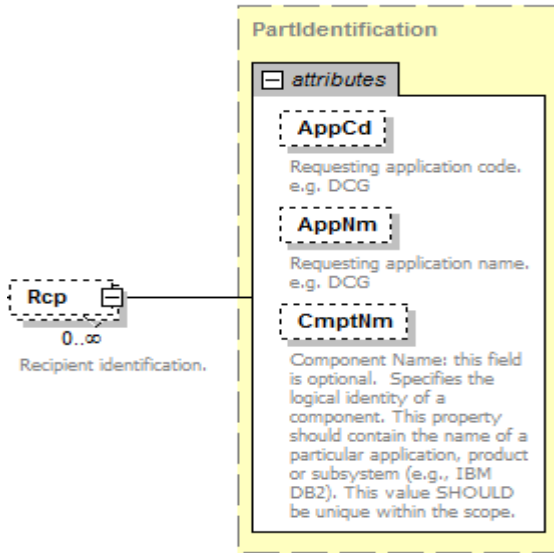
8.4.24 OrgHdr Output: Sndr

Sndr only returns fields AppNm and CmptNm with values “ESB” and “ESB”



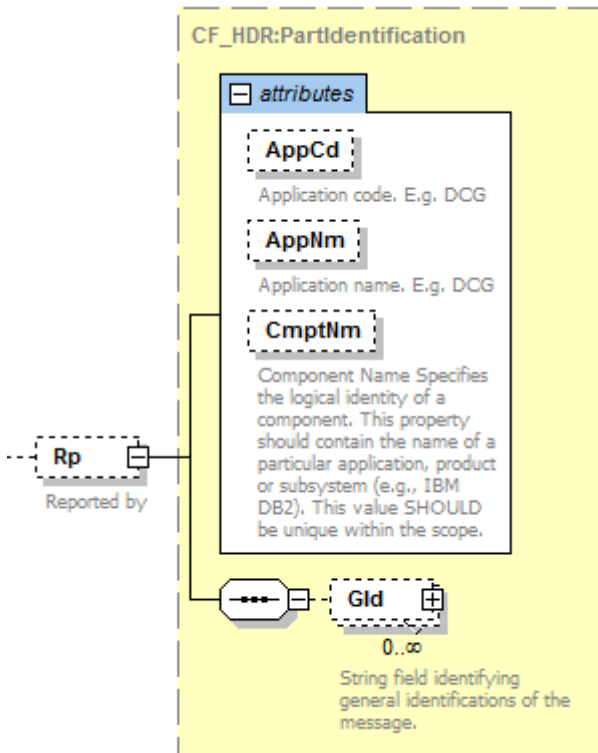
8.4.25 OrgHdr Output: Rcp

Rcp returns only AppNm and CmptNm with values “DCG” and “DCG”.



8.4.26 Rp Output

This section returns information about the backend service operation that processed the request. The below three attributes are returned.



8.4.27 Rp Output: AppCd

Backend returns a null value in this field.

AppCd

8.4.28 Rp Output: AppNm

Backend does not return this field.

AppNm

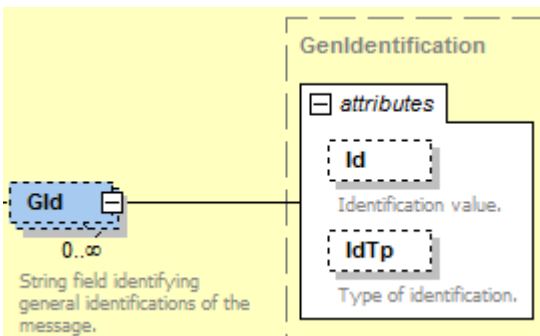
8.4.29 Rp Output: CmptNm

Backend returns the name of the operation that processed the ePOD request. It will always be the value "DocumentManagement.ShipmentDocumentRetrieveProvider".

CmptNm

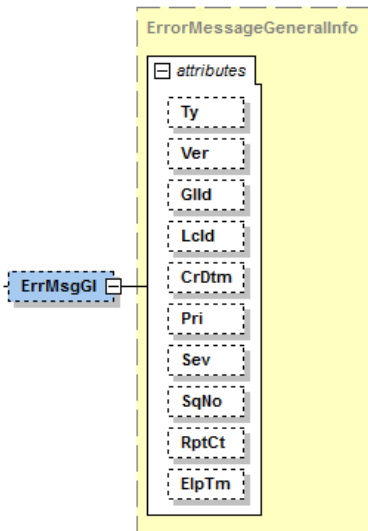
8.4.30 Rp Output:GId

General identification of the message. This is optional and might return two attributes: Id which is the message identification value and IdTp, which is the identification type.



8.4.31 DatTrErr Output: ErrMsgGI

The error message general info (ErrMsgGI) returns attributes that provide information about messages generated by backend. For this service only returns three attributes: Ty, Pri, and Sev. Only those three attributes will be described below.



8.4.32 ErrMsgGI Output: Ty

Error message type identifier. The value will always be “CF”.



8.4.33 ErrMsgGI Output: Pri

Priority defines the importance of the event. The backend operation will return a value of 2 for ePOD retrieval.



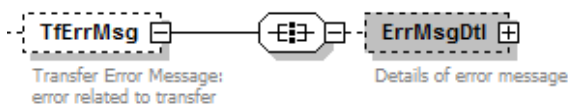
8.4.34 ErrMsgGI Output: Sev

Severity: the perceived severity of the status the event is describing with respect to the application that reports the event.



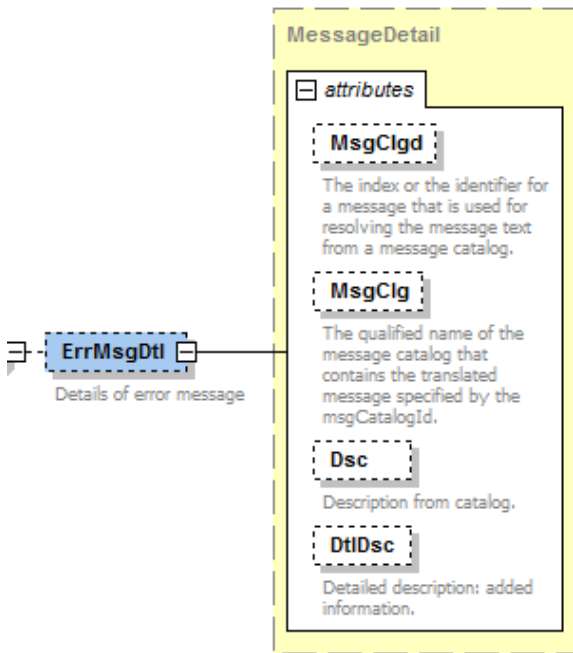
8.4.35 DatTrErr Output: TfErrMsg

Transfer Error Message (TfErrMsg) returns any errors related to the transfer of the message.



8.4.36 TfErrMsgOutput: ErrMsgDtl

This structure display the details of the error related to the transfer of the message. Usually Backend returns only MsgClgd and Dsc.



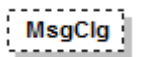
8.4.37 ErrMsgDtl Output:MsgClgd

The identifier for the error message. For example 100002.



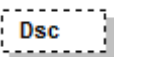
8.4.38 ErrMsgDtl Output:MsgClg

The message name regarding the identifier MsgClgd



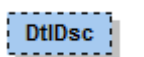
8.4.39 ErrMsgDtl Output:Dsc

The error message description



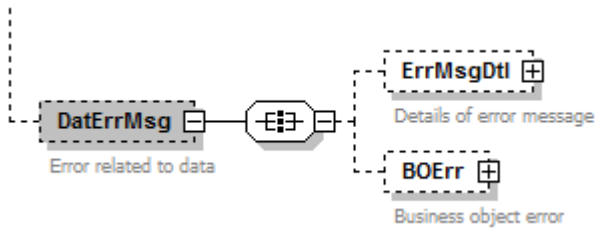
8.4.40 ErrMsgDtl Output: DtlDsc

Additional details about the error message.



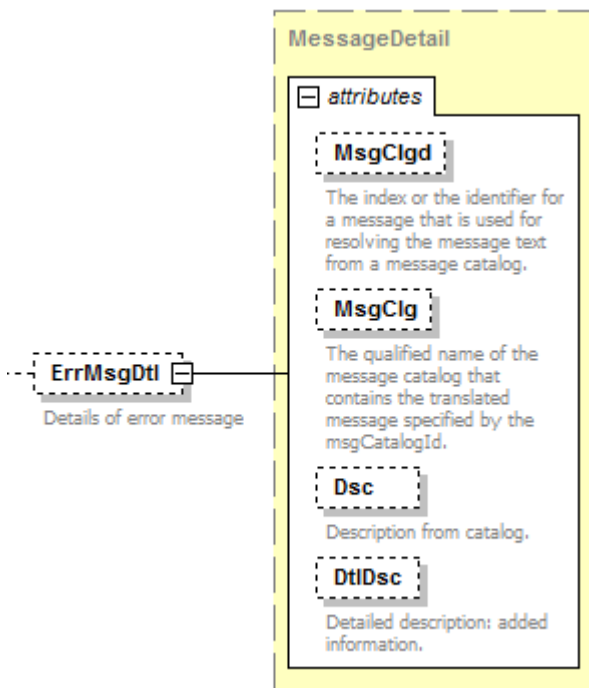
8.4.41 DatTrErr Output: DatErrMsg

Data Error Message (DatErrMsg). Information about errors related to data.



8.4.42 DatErrMsg Output:ErrMsgDtl

This structure display the details of the error related to the message data. Usually backend returns only MsgClgd and Dsc.



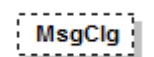
8.4.43 ErrMsgDtl Output:MsgClgd

The identifier for the error message. For example 100002.



8.4.44 ErrMsgDtl Output:MsgClg

The message name regarding the identifier MsgClgd



8.4.45 ErrMsgDtl Output:Dsc

The error message description



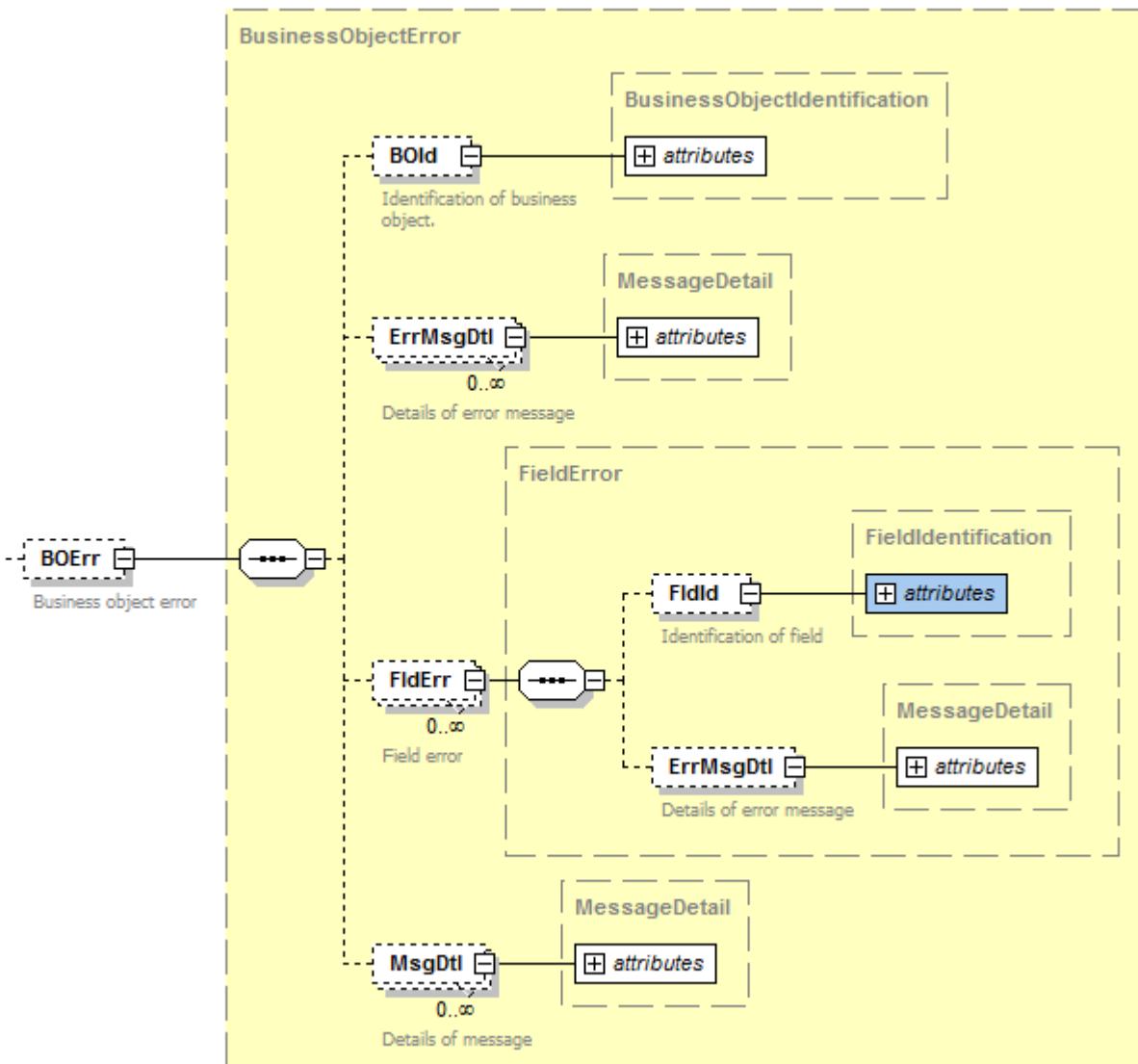
8.4.46 ErrMsgDtl Output: DtlDsc

Additional details about the error message.



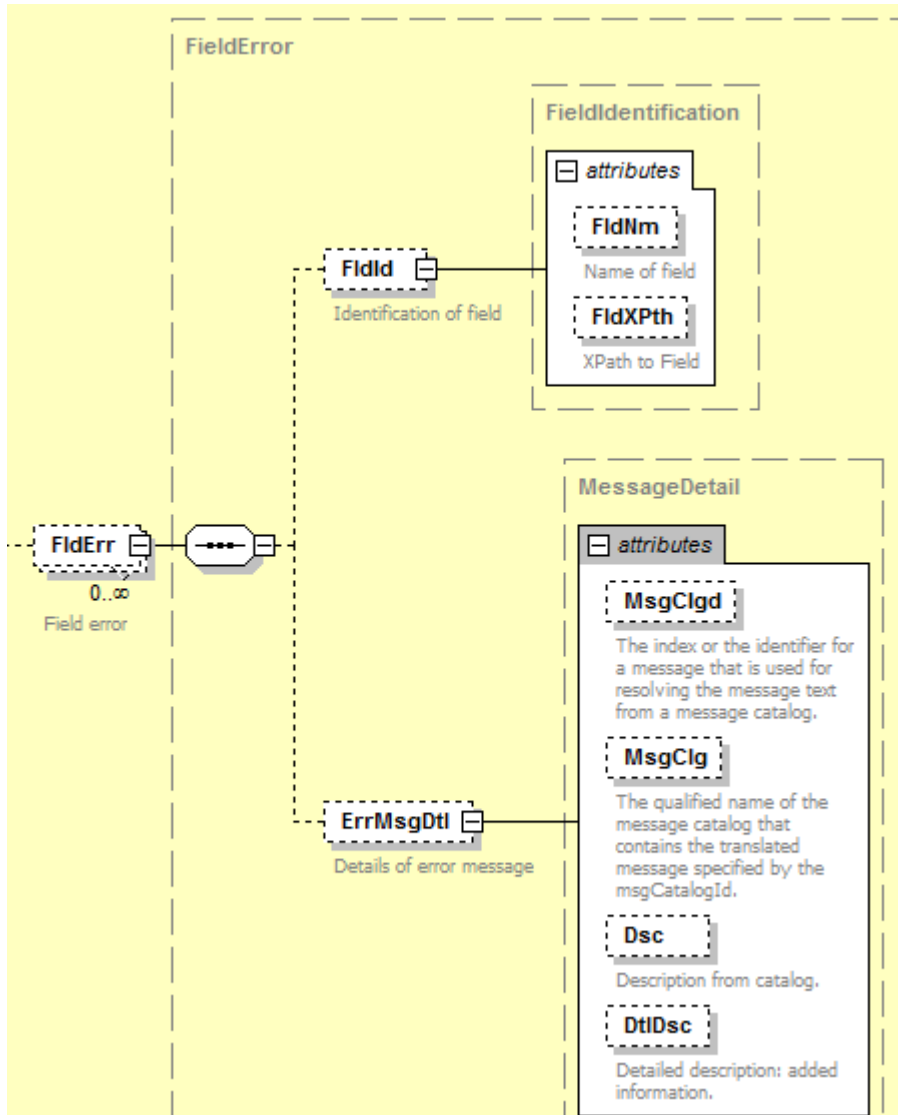
8.4.47 DatErrMsg Output:BOErr

Backend returns error messages when mandatory fields are missing. The error message will be in the section FldErr.



8.4.48 BOErr Output: FldErr

Errors related to mandatory missing fields:



8.4.49 FldErr Output: FldId

This structure returns FldXPth with the XPath of the field that is missing, for example: <FldId FldXPth="/ns:MSG/Bd/Shp/ShpInDoc/Sdoc@DocTyCd"/>

8.4.50 FldErr Output: ErrMsgDtl

ErrMsgDtl returns the field Dsc with the description of the missing field, for example: <ErrMsgDtl Dsc="DocTyCd is not set"/>

8.5 DocumentRetrieve-ePOD – Output Field List

Shipment Document Retrieve fields	Mandatory /Optional	Value constraints	Comments
shipmentDocumentRetrieveResp			
./MSG			
./Hdr			
@Id	M	AN 30	Response Id
@Ver	M	AN 7	Version of the response schema used: e.g.: 1.038
@Dtm	M	DateTime	Date-time when the response was created. Format: 2013-04-07T23:59:59
./Sndr			
@AppCd	M	AN 5	Value: ESB
@AppNm	O	AN 20	Possible values ESB
@CmptNm	O	AN 256	This field is not returned.
./Bd			
./Ship(1:M)			
@Id	M	AN 35	Shipment Id (AWB). Even though it is defined as mandatory in the schema, the field is returned with an empty value.
./ShpTr(0:M) Nothing from this section is returned			
@PuDtm	O	DateTime	Pickup Date-Time (Not returned)
./SCDtI(():M)			
@AccNo	O	AN 12	Account No: optional for summary ePOD, mandatory for detail ePOD. This includes 3 distinct request parameters: Filter by account number of a specific type (CRITyCd) (1. payer - PY 2. receiver - RV 3. shipper - SP). (NOT RETURNED)
@CRITyCd	O	AN 2	Customer role type code: a code that uniquely identifies a customer role. Values are: PY=Payer RV=Receiver SP=Shipper. (NOT RETURNED)
@CtryCd	O	AN 2	/Country code: this is optional for ePOD retrieval. The country code is a two-character code that uniquely identifies a country. The code should be aligned to the

			ISO (ISO 3166-1-alpha-2 code elements) standards or in certain circumstances created by DHL. Values are e.g. BE=Belgium FR=France XC=Curacao (Not ISO - part of Netherlands Antilles) (NOT RETURNED)
./ShpInDoc(1:M)			
./SDoc(1:M)			
@DocTyCd	M	AN 3	Document type code: Value returned: POD (electronic proof of delivery)
./Img (0:M)			
@Img	O	Base64Binary	Base64 encoded image
./DatTrErr(0:M)			
./OrgHdr(0:1)			
@Id	M	AN 20	Unique identifier of the response. In this case the field is returned with an empty value
@Ver	M	AN 7	Version schema format. Service returns null value in this field.
@Dtm	M	DateTime	Response creation date-time. Service returns null value in this field.
./Sndr(0:1) The service does not return anything from this section			
@AppCd	M	AN 5	This field is not returned.
@AppNm	O	AN 20	This field is not returned.
@CmptNm	O	AN 256	This field is not returned.
./Rp(0:1)			
@AppCd	M	AN 5	The service returns a null value in this field.
@AppNm	O	AN 20	The service does not return this field.
@CmptNm	O	AN 256	The service returns value "DocumentManagement.ShipmentDocumentRetrieveProvider"
./ErrMsgGl(0:1) Only 3 fields from this section sometimes are returned			
@Ty	O	AN 20	Error message type identifier: e.g.:CF
@Pri	O	NUMBER	Priority:e.g.:2
@Sev	O	NUMBER	Severity: e.g.: 10
./TfErrMsg(0:M)			
./ ErrMsgDtl(0:1)			
@ MsgClgd	O	AN 128	Error message identifier. For example:

			100000
@ MsgClg	O	AN 128	The message name regarding the identifier MsgClgd. For example: IPESB
@Dsc	O	AN 128	The error message description.
@ DtlDsc	O	AN 128	Additional details about the error message.
./ DatErrMsg (0:M)			
./ ErrMsgDtl(0:1)			
@ MsgClgd	O	AN 128	Error message identifier. For example: 100000
@ MsgClg	O	AN 128	The message name regarding the identifier MsgClgd. For example: IPESB
@Dsc	O	AN 128	The error message description.
@ DtlDsc	O	AN 128	Additional details about the error message.
./ BOErr (0:1)			
./FldErr(0:M)			
./FldId(0:1)			
@ FldXPth	O	AN 512	This structure returns FldXPth with the Xpath of the field that is missing, for example: <FldId FldXPth="/ns:MSG/Bd/Shp/ShpInDoc/Sdoc@DocTyCd"/>
./ ErrMsgDtl(0:1)			
@ Dsc	O	AN 128	ErrMsgDtl returns the field Dsc with the description of the missing field, for example: <ErrMsgDtl Dsc="DocTyCd is not set"/>

9. Appendix

Rate Request and Shipment Request Error codes and messages

The following table contains the possible error for the Rate and Shipment Request processes. The errors are broken down into categories for presentation.

Capability and Quotation Errors- rateRequest and shipmentRequest

For capability and quotation error codes, some errors are not possible to achieve based on schema validation (for required fields, field format, etc).

Capability and Quotation Errors		
(Rate and Shipment Requests)		
Error Code	Error Text	Notes (if applicable)
996	The requested product(s) not available based on your search criteria.	Condition met if no products are available for that pickup date/time.
1001	The requested product(s) not available based on your search criteria.	Condition met if no products are available for origin, destination.
1003	Pick-up service is not provided on this day.	
3000	The origin country code could not be found. Please check the country code.	
3001	The location country code could not be found please check the location country parameter.	
3002	The origin zip code could not be found please check your origin zip code parameter.	
3003	The origin city name could not be found please check the city name.	Condition met for non-postal code countries only
3004	The origin service area code could not be found please check the origin service area code.	
3005	The destination country code could not be found. Please check the country code.	
3006	The destination zip code could not be found please check your destination zip code parameter.	
3007	The destination city name could not be found please check the destination city name.	Condition met for non-postal code countries

3008	The destination service area code could not be found please check the destination service area code.	
3010	The format of the ready time is not correct. Please check the time format.	
3013	The shipment weight is not with the restrictions for the selected country. Please check your piece weight.	Condition is covered under "1001" error if restrictions not met
3014	The shipment height is not with the restrictions for the selected country. Please check your piece height.	Condition is covered under "1001" error if restrictions not met
3015	The shipment length is not with the restrictions for the selected country. Please check your piece length.	Condition is covered under "1001" error if restrictions not met
3016	The shipment width/diameter is not with the restrictions for the selected country. Please check your width/diameter	Condition is covered under "1001" error if restrictions not met
3018	The payment country could not be found please check your payment country.	Returns "6000-Unexpected application error"
3022	The origin postcode does not provide standard pick up. Please call customer service for special handling.	
3023	The destination postcode does not provide standard delivery. Please call customer service for special handling.	
5001	The origin country code is missing. This is a mandatory input parameter.	
5002	The origin zip code is missing. The zip code for the selected country is mandatory.	
5003	The origin city name is missing. The city name for the selected country is mandatory.	Confirmed, for non-postal code countries
5006	The destination zip code is missing. The zip code for the selected country is mandatory.	C
5007	The destination city name is missing. The city name for the selected country is mandatory.	Confirmed, for non-postal code countries
5009	The pickup date is missing. The pickup date is a mandatory field.	
5025	Sorry the maximum weight is 50kg or 110lbs.	Condition is covered under "1001" error if restrictions not met
5026	Sorry the maximum dimensions are 118x88x120cm or 46x35x47ins. (LxWxH)	Condition is covered under "1001" error if restrictions not met

5027	Sorry the input declared value cannot exceed the limit for this country.	
5038	The combination unit of weight and dimension is invalid.	
5100	Invalid product service combination.	
5110	Optional service not applicable.	
6000	Unexpected application error	

Route Code Errors

For the Shipment service only, the route code is required for most EU countries, so error handling for that lookup will only be active for those cases. The specific use case is the scenario where the route code value is not found for the origin address.

Route Errors		
(Shipment Requests Only)		
Error Code	Error Text	Notes (if applicable)
400501	Route Code not found for <address>	Condition met if no products are available for that pickup date.

Shipment Date Validation

For the Shipment service only, the ShipmentTimestamp is validated to ensure the proposed shipment date is not in the past, and within 10 days of current date.

Shipment Date Errors		
(Shipment Requests Only)		
Error Code	Error Text	Notes (if applicable)
998	The shipment date cannot be in the past or more than 10 days in future. Please check the shipment date and retry.	

Account Validation

For both Rate and Shipment, the account number must be valid and configured for use within the services. For help for account setup and configuration, please see your DHL integration point of contact.

Account Validation Errors		
(Rate and Shipment Requests)		
Error Code	Error Text	Notes (if applicable)
998	The account number is not found or invalid. Please check the account number and retry.	
998	The account number is not allowed for PaperLessTrade. Please check the account number and retry.	

Label Generation Errors

For Shipment service, the following errors may occur during label generation.

Label Generation Errors		
(Shipment Requests only)		
Error Code	Error Text	Notes (if applicable)
20001	Neither local nor Network Product Code is present.	
20002	Origin country code is absent.	
20003	Origin service area code is absent.	
20004	Destination country code is absent.	
20017	Neither destination postcode nor destination code is present.	
30001	Maximum length of local specific code exceeded.	
30002	Invalid postcode format.	
40001	Product short name is not found.	
40002	Product content code is not found.	

40004	Destination code is not found	
50003	More than one destination service area codes are found.	
90001	Unclassified error.	
90002	Invalid XML.	
90003	Error while accessing the cache.	
99999	GLS servers are not reachable.	
100002	The Dangerous Goods Content ID requested is invalid. Please update and try again	
100002	The Dry Ice Net Weight is missing in the request for the Dangerous Goods Content ID: 901. Please update and try again.	
100002	The UN code is missing in the request for the Dangerous Goods Content ID: E01. Please update and try again	

Manifest Submission Errors

For Shipment service, the following errors may occur during submission of the shipment manifest.

Shipment Manifest Errors (Shipment Requests only)		
Error Code	Error Text	Notes (if applicable)
400201	Failure during booking	
400202	Missing field(s)",	
400203	Error occurred while creating GNS521 file	
400204	Error while uploading manifest file to FTP server	
400205	Error while transforming result to XML	
411402	ShipmentManifest consumer timed out.	
998	Field 'ShipmentRequest/RequestedShipment/Shipment Info/PaperlessTradeImage' is mandatory when PaperlessTradeEnabled is set to true.	

Pickup Errors

For select Shipment requests, which include a pickup request (REQUEST_COURIER), the following errors may occur during processing of the pickup. Each of the pickup adaptor errors below carries the same Error Code.

<p>Pickup Errors (Shipment Requests only)</p>		
Error Code	Error Text	Notes (if applicable)
410928	<p>Booking adapter error response failure PU009a, 'Pickup NOT scheduled. There is no weekend pickup service at the location.</p> <p>Booking adapter error response failure PU003, Routing Service could not determine Origin Service Area. No pickup scheduled</p> <p>Booking adapter error response failure PU004, Account number or account type is some type of external billing account. Pickup Service requires a domestically billed shipper account. No pickup scheduled</p> <p>Booking adapter error response failure PU005, Account number is not found in IBS records. No pickup scheduled</p> <p>Booking adapter error response failure PU007a, Account number specified has a credit status of CUT. Directed to IBS. No pickup scheduled</p> <p>Booking adapter error response failure PU007b, Account number does not have a credit standing of "good standing" or "removed from credit suspension" No pickup scheduled</p> <p>Booking adapter error response failure PU009a, The pickup date is a weekend at the origin service area that has no pickup service. No pickup scheduled</p> <p>Booking adapter error response failure PU009b, The Pickup Ready-by time from the client is before the Station Pickup start time or after the Station Pickup end time. No pickup scheduled</p> <p>Booking adapter error response failure PU009c, The pickup date is a holiday at (origin service area). No pickup scheduled</p>	

	<p>Booking adapter error response failure PU011a, The pickup request time is less than 1 hour of the station pickup end time. No pickup scheduled.</p> <p>Booking adapter error response failure PU011b, At least one day of advance notice is required for pickup at <location>. Sufficient notice not provided. No pickup scheduled</p> <p>Booking adapter error response failure PU012, Ready by time is past the station ready by cutoff of <x>. No pickup scheduled.</p> <p>Booking adapter error response failure PU013a, Insufficient time between pickup request time and pickup end time. Pickups require at least one hour before station pickup end time.</p> <p>Booking adapter error response failure PU013b, Insufficient time between (current time), and (closing time). A business pickup requires one hour. A residence pickup requires two hours.</p> <p>Booking adapter error response failure PU012, Ready by time is past the station ready by cutoff of <x>. No pickup scheduled.</p> <p>Booking adapter error response failure PU012, Ready by time is past the station ready by cutoff of <x>. No pickup scheduled.</p>			
--	--	--	--	--

General Errors

Unexpected errors are handled with a standard error message. These error messages also contain a process id number, which is used during troubleshooting or follow-up.

<p>Shipment Date Errors (Shipment Requests Only)</p>		
Error Code	Error Text	Notes (if applicable)
998	Process failure occurred. Process ID associated for that transaction (9999999)	Where 9999999 is the process id

Tracking Errors

For TrackingRequest service, the primary exception for the service will be “Shipment Not Found”, with a corresponding ConditionCode of 101.

Shipment Document Retrieve Errors (ePOD)

Shipment Document Retrieve Error Codes		
Error Code	Error Text	Notes (if applicable)
100000	Service operation execution finished successfully	
100002	Service operation request message data validation failed	HP Global Imaging epod Service returned error code: No matching ePODs for search query
100010	When requesting ePod details account number and customer role must be provided	

10. Service Input/Output Examples for RateRequest

RateRequest: Sample Input

```

<RateRequest>
  <ClientDetail>
  </ClientDetail>
  <RequestedShipment>
    <DropOffType>REQUEST_COURIER</DropOffType>
    <Ship>
      <Shipper>
        <StreetLines>1-16-24, Minami-gyotoku</StreetLines>
        <City>Ichikawa-shi, Chiba</City>
        <PostalCode>272-0138</PostalCode>
        <CountryCode>JP</CountryCode>
      </Shipper>
      <Recipient>
        <StreetLines>63 RENMIN LU, QINGDAO SHI</StreetLines>
        <City>QINGDAO SHI</City>
        <PostalCode>266033</PostalCode>
        <CountryCode>CN</CountryCode>
      </Recipient>
    </Ship>
    <Packages>
      <RequestedPackages number=" 1 ">
        <Weight>
          <Value>2.0</Value>
        </Weight>
        <Dimensions>
          <Length>13</Length>
          <Width>12</Width>
          <Height>9</Height>
        </Dimensions>
      </RequestedPackages>
    </Packages>
    <ShipTimestamp>2010-11-26T12:00:00GMT-06:00</ShipTimestamp>
    <UnitOfMeasurement>SU</UnitOfMeasurement>
    <Content>NON_DOCUMENTS</Content>
    <DeclaredValue>0000000200</DeclaredValue>
    <DeclaredValueCurrencyCode>USD</DeclaredValueCurrencyCode>
    <PaymentInfo>DDP</PaymentInfo>
    <Account>000000000</Account>
  </RequestedShipment>
</RateRequest>

```

RateRequest: Sample Output

```

<rateresp:RateResponse>
  <Provider code="DHL">
    <Notification code="0">
      <Message/>
    </Notification>
    <Service type="8">
      <TotalNet>
        <Currency>JPY</Currency>
        <Amount>20475.00</Amount>
      </TotalNet>
      <Charges>
        <Currency>JPY</Currency>
        <Charge>
          <ChargeType>EXPRESS EASY</ChargeType>
          <ChargeAmount>17500.00</ChargeAmount>
        </Charge>
        <Charge>
          <ChargeType>FUEL SURCHARGE</ChargeType>
          <ChargeAmount>2975.00</ChargeAmount>
        </Charge>
      </Charges>
      <DeliveryTime>2010-12-02T23:59:00</DeliveryTime>
    </Service>
    <Service type="P">
      <TotalNet>
        <Currency>JPY</Currency>
        <Amount>20569.00</Amount>
      </TotalNet>
      <Charges>
        <Currency>JPY</Currency>
        <Charge>
          <ChargeType>EXPRESS WORLDWIDE</ChargeType>
          <ChargeAmount>17580.00</ChargeAmount>
        </Charge>
        <Charge>
          <ChargeType>FUEL SURCHARGE</ChargeType>
          <ChargeAmount>2989.00</ChargeAmount>
        </Charge>
      </Charges>
      <DeliveryTime>2010-12-02T23:59:00</DeliveryTime>
    </Service>
  </Provider>
</rateresp:RateResponse>

```

RateRequest: Request with error

```

<rateresp:RateResponse>
  <Provider code="DHL">
    <Notification code="1003">
      <Message>Pick-up service is not provided on this day.</Message>
    </Notification>
  </Provider>
</rateresp:RateResponse>

```

11. Service Input/Output Examples for ShipmentRequest

ShipmentRequest: Sample Input

```

<?xml version="1.0" encoding="UTF-8"?>
<ShipmentRequest xsi:noNamespaceSchemaLocation="ShipmentMsgRequest.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<shipreq:ShipmentRequest>
  <RequestedShipment>
    <ShipmentInfo>
      <DropOffType>REQUEST_COURIER</DropOffType>
      <ServiceType>U</ServiceType>
      <Account>000000000</Account>
      <Currency>EUR</Currency>
      <UnitOfMeasurement>SI</UnitOfMeasurement>
      <PackagesCount>1</PackagesCount>
      <LabelType>PDF</LabelType>
      <LabelTemplate>ECOM26_84_001</LabelTemplate>
    </ShipmentInfo>
    <ShipTimestamp>2010-10-29T09:30:47GMT+01:00</ShipTimestamp>
    <PickupLocationCloseTime>16:12</PickupLocationCloseTime>
    <SpecialPickupInstruction>fragile items</SpecialPickupInstruction>
    <PickupLocation>west wing 3rd Floor</PickupLocation>
    <PaymentInfo>DDP</PaymentInfo>
    <InternationalDetail>
      <Commodities>
        <NumberOfPieces>1</NumberOfPieces>
        <Description>ppps sd</Description>
        <CountryOfManufacture>CZ</CountryOfManufacture>
        <Quantity>1</Quantity>
        <UnitPrice>10</UnitPrice>
        <CustomsValue>1</CustomsValue>
      </Commodities>
      <Content>NON_DOCUMENTS</Content>
    </InternationalDetail>
    <Ship>
      <Shipper>
        <Contact>
          <PersonName>John Smith</PersonName>
          <CompanyName>DHL</CompanyName>
          <PhoneNumber>003932423423</PhoneNumber>
          <EmailAddress>John.Smith@dhl.com</EmailAddress>
        </Contact>
        <Address>
          <StreetLines>V Parku 2308/10</StreetLines>
          <City>Prague</City>
          <PostalCode>14800</PostalCode>
          <CountryCode>CZ</CountryCode>
        </Address>
      </Shipper>
      <Recipient>
        <Contact>
          <PersonName>Jane Smith</PersonName>
          <CompanyName>Deutsche Post DHL</CompanyName>
          <PhoneNumber>004922832432423</PhoneNumber>
          <EmailAddress>Jane.Smith@dhl.de</EmailAddress>
        </Contact>
        <Address>
          <StreetLines>Via Felice Matteucci 2</StreetLines>
          <City>Firenze</City>
          <PostalCode>50127</PostalCode>
          <CountryCode>IT</CountryCode>
        </Address>
      </Recipient>
    </Ship>
    <Packages>
      <RequestedPackages number="1">
        <InsuredValue>10</InsuredValue>
        <Weight>9.0</Weight>
        <Dimensions>
          <Length>46</Length>
          <Width>34</Width>
          <Height>31</Height>
        </Dimensions>
        <CustomerReferences>TEST CZ-IT</CustomerReferences>
      </RequestedPackages>
    </Packages>
  </RequestedShipment>
</shipreq:ShipmentRequest>

```


ShipmentRequest: Sample Output

```
<ShipmentResponse xmlns:shipresp="http://scxgxtt.phx-dc.dhl.com/euExpressRateBook/ShipmentMsgResponse" >
  <Notification code="0" >
    <Message/>
  </Notification>
  <PackagesResult>
    <PackageResult number="1" >
      <TrackingNumber>JD012038742880009933</TrackingNumber>
    </PackageResult>
  </PackagesResult>
  <LabelImage>
    <LabelImageFormat>PDF</LabelImageFormat>
    <GraphicImage>JVBERi0xLjQKJe...GraphicImage>
  </LabelImage>
  <ShipmentIdentificationNumber>2324866051</ShipmentIdentificationNumber>
  <DispatchConfirmationNumber>FLR-150103</DispatchConfirmationNumber>
</ShipmentResponse>
```

ShipmentRequest: Sample request with error

```
<ShipmentResponse xmlns:shipresp="http://scxgxtt.phx-dc.dhl.com/euExpressRateBook/ShipmentMsgResponse" >
  <Notification code="1001" >
    <Message>The requested product(s) (X) not available based on your search criteria.(8614)</Message>
  </Notification>
  <Notification code="998" >
    <Message>Process failure occurred. Process ID associated for that transaction (8614)</Message>
  </Notification>
</ShipmentResponse>
```

12. Service Input/Output Examples for ShipmentDeleteRequest

ShipmentDeleteRequest: Sample Input

```
<?xml version="1.0" encoding="UTF-8"?>
<del>DeleteRequest>
  <PickupDate>2010-12-03</PickupDate>
  <PickupCountry>IT</PickupCountry>
  <DispatchConfirmationNumber>FLR-804</DispatchConfirmationNumber>
  <RequestorName>Tom Jones</RequestorName>
  <Reason>001</Reason>
</del>DeleteRequest>
```

ShipmentDeleteRequest: Sample Output

```
<?xml version="1.0" encoding="UTF-8"?>
<delresp>DeleteResponse>
  <Notification code="0">
    <Message>Successfully cancelled</Message>
  </Notification>
</delresp>DeleteResponse>
```

ShipmentDeleteRequest: Sample request with error

```
<?xml version="1.0" encoding="UTF-8"?>
<delresp>DeleteResponse>
  <Notification code="410928">
    <Message>Cancellation of booking was not successful. Requested Pickup was not found.</Message>
  </Notification>
</delresp>DeleteResponse>
```

13. Service Input/Output Examples for TrackingRequest

TrackingRequest: Sample Input

```
<trackShipmentRequest>
  <trackingRequest>
    <TrackingRequest>
      <Request>
        <ServiceHeader>
          <MessageTime>2010-11-24T00:17:20Z</MessageTime>
          <MessageReference>1234</MessageReference>
        </ServiceHeader>
      </Request>
      <AWBNumber>
        <ArrayOfAWBNumberItem>2330982222</ArrayOfAWBNumberItem>
      </AWBNumber>
      <LevelOfDetails>ALL_CHECK_POINTS</LevelOfDetails>
      <PiecesEnabled>B</PiecesEnabled>
    </TrackingRequest>
  </trackingRequest>
</trackShipmentRequest>
```



TrackingRequest: Sample Output

```

<trackingResponse xmlns:ns="http://www.dhl.com">
  <TrackingResponse>
    <Response>
      <ServiceHeader>
        <MessageTime>2011-01-12T18:41:12Z</MessageTime>
        <MessageReference>86ef86501e7b11e08c81df5507f6bac8</MessageReference>
      </ServiceHeader>
    </Response>
    <AWBInfo>
      <ArrayOfAWBInfoItem>
        <AWBNumber>2331017371</AWBNumber>
        <Status>
          <ActionStatus>Success</ActionStatus>
        </Status>
        <ShipmentInfo>
          <OriginServiceArea>
            <ServiceAreaCode>FLR</ServiceAreaCode>
            <Description>Florence - Italy</Description>
          </OriginServiceArea>
          <DestinationServiceArea>
            <ServiceAreaCode>BRI</ServiceAreaCode>
            <Description>Bari - Italy</Description>
            <FacilityCode>WAD</FacilityCode>
          </DestinationServiceArea>
          <ShipperName>NUOVO PIGNONE SPA</ShipperName>
          <ConsigneeName>NUOVO PIGNONE SPA</ConsigneeName>
          <ShipmentDate>2010-11-09T14:33:00+01:00</ShipmentDate>
          <Pieces>1</Pieces>
          <Weight>0.500</Weight>
          <ShipmentEvent>
            <ArrayOfShipmentEventItem>
              <Date>2010-11-10</Date>
              <Time>15:12:00</Time>
              <ServiceEvent>
                <EventCode>MD</EventCode>
                <Description>Missed Delivery Cycle</Description>
              </ServiceEvent>
              <Signatory/>
              <ServiceArea>
                <ServiceAreaCode>BRI</ServiceAreaCode>
                <Description>Bari - Italy</Description>
              </ServiceArea>
            </ArrayOfShipmentEventItem>
          </ShipmentEvent>
        </ShipmentInfo>
        <Pieces>
          <PieceInfo>
            <ArrayOfPieceInfoItem>
              <PieceDetails>
                <AWBNumber>2331017371</AWBNumber>
                <LicensePlate>JD012038742880020267</LicensePlate>
                <ActualDepth>0.000</ActualDepth>
                <ActualWidth>0.000</ActualWidth>
                <ActualHeight>0.000</ActualHeight>
                <Depth>1.000</Depth>
                <Width>1.000</Width>
                <Height>1.000</Height>
                <Weight>0.500</Weight>
                <PackageType/>
                <DimWeight>0.520</DimWeight>
                <WeightUnit>KG</WeightUnit>
              </PieceDetails>
              <PieceEvent>
                <ArrayOfPieceEventItem>
                  <Date>2010-11-11</Date>
                  <Time>11:52:00</Time>
                  <ServiceEvent>
                    <EventCode>OK</EventCode>
                    <Description>Delivery</Description>
                  </ServiceEvent>
                  <Signatory>DEPALMA</Signatory>
                  <ServiceArea>
                    <ServiceAreaCode>BRI</ServiceAreaCode>
                    <Description>Bari - Italy</Description>
                  </ServiceArea>
                  <ShipperReference>
                    <ReferenceID/>
                    <ReferenceType/>
                  </ShipperReference>
                </ArrayOfPieceEventItem>
              </PieceEvent>
            </ArrayOfPieceInfoItem>
          </Pieces>
          <Courier</Description>
        </ArrayOfPieceInfoItem>
      </ArrayOfAWBInfoItem>
    </AWBInfo>
  </TrackingResponse>
</trackingResponse>

```

TrackingRequest: Sample Error

```
<trackingResponse xmlns:ns="http://www.dhl.com">
  <TrackingResponse>
    <Response>
      <ServiceHeader>
        <MessageTime>2011-01-12T17:40:58Z</MessageTime>
        <MessageReference>1d136ec01e7311e0a468e3cd6e9dbbd4</MessageReference>
      </ServiceHeader>
    </Response>
    <AWBInfo>
      <ArrayOfAWBInfoItem>
        <AWBNumber>2330982222</AWBNumber>
        <Status>
          <ActionStatus>No Shipments Found</ActionStatus>
          <Condition>
            <ArrayOfConditionItem>
              <ConditionCode>101</ConditionCode>
              <ConditionData>No Shipments Found for AWBNumber |
2330982222</ConditionData>
            </ArrayOfConditionItem>
          </Condition>
        </Status>
      </ArrayOfAWBInfoItem>
    </AWBInfo>
  </TrackingResponse>
</trackingResponse>
```

14. Service Input/Output Examples for ePOD

Sample Input

```
<doc:shipmentDocumentRetrieveReq>
  <MSG>
    <Hdr Id="123testrq" Ver="1.038" Dtm="2011-04-07T23:59:59">
      <Sndr AppNm="DCG" AppCd="DCG"/>
    </Hdr>
    <Bd>
      <Shp Id="2638825350">
        <ShpTr>
          <!--Zero or more repetitions:-->
          <SCDtl AccNo="000000000" CRITyCd="TC"/>
        </ShpTr>
        <ShpInDoc>
          <SDoc DocTyCd="POD"/>
        </ShpInDoc>
      </Shp>
      <GenrcRq>
        <GenrcRqCitr TyCd="IMG_CONTENT" Val="epod-detail-esig"/>
        <GenrcRqCitr TyCd="IMG_FORMAT" Val="PDF"/>
        <GenrcRqCitr TyCd="DOC_RND_REQ" Val="true"/>
        <GenrcRqCitr TyCd="EXT_REQ" Val="true"/>
        <GenrcRqCitr TyCd="DUPL_HANDL" Val="CORE_WB_NO"/>
        <GenrcRqCitr TyCd="SORT_BY" Val="$INGEST_DATE,D"/>
        <GenrcRqCitr TyCd="LANGUAGE" Val="en"/>
      </GenrcRq>
    </Bd>
  </MSG>
</doc:shipmentDocumentRetrieveReq>
```

Sample Output

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-
ENC="http://schemas.xmlsoap.org/soap/encoding/" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <tns:shipmentDocumentRetrieveResp xmlns:tns="glDHLExpress:POD/providers/DocumentRetrieve">
      <MSG>
        <Hdr Id="73475768" Ver="1.038" Dtm="2013-05-24T20:34:34">
          <Sndr AppCd="ESB" AppNm="ESB"/>
          <Rcp AppCd="DCG" AppNm="DCG">
            <Gld Id="SunnyTesting" IdTp="RQMSGID"/>
          </Rcp>
        </Hdr>
        <Bd>
          <Shp>
            <ShplnDoc>
              <SDoc DocTyCd="POD">
                <Img Img="JVBERi0xLjQKJelz9MKNiAwIG9.....==" ImgMimeTy="application/pdf"/>
              </SDoc>
            </ShplnDoc>
          </Shp>
        </Bd>
        <DatTrErr>
          <OrgHdr Corrid="SunnyTesting"/>
          <Rp CmptNm="DocumentManagement.ShipmentDocumentRetrieveProvider"/>
          <ErrMsgGl Ty="CF" Pri="2" Sev="10"/>
          <DatErrMsg>
            <ErrMsgDtl MsgClgd="100000" MsgClg="IPESB" Dsc="Service operation execution finished successfully" DtlDsc="Service
operation execution finished successfully"/>
          </DatErrMsg>
        </DatTrErr>
      </MSG>
    </tns:shipmentDocumentRetrieveResp>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Sample Error Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-
ENC="http://schemas.xmlsoap.org/soap/encoding/" xmlns:xsd="http://www.w3.org/20
01/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <SOAP-ENV:Header xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"></SOAP-ENV:Header><SOAP-ENV:Body>
<tns:shipmentDocumentRetrieveResp xmlns:tns="DocumentManagement/WSCConsumer/WS/DocumentManagement">
  <MSG>
    <Hdr Id="72048040" Ver="1.038" Dtm="2013-05-16T13:58:09">
      <Sndr AppCd="ESB" AppNm="ESB"></Sndr>
      <Rcp AppCd="WEBP" AppNm="WEBP">
        <Gld Id="1368626289303" IdTp="RQMSGID"></Gld>
      </Rcp>
    </Hdr>
    <DatTrErr>
      <OrgHdr Corrid="1368626289303"></OrgHdr>
      <Rp CmptNm="DocumentManagement.ShipmentDocumentRetrieveProvider"></Rp>
      <ErrMsgGl Ty="CF" Pri="2" Sev="40"></ErrMsgGl>
      <DatErrMsg>
        <ErrMsgDtl MsgClgd="100002" MsgClg="IPESB" Dsc="Service operation request message data validation failed" DtlDsc="HP Global
Imaging epod Service returned error code:No matching ePODs for search query"></ErrMsgDtl>
      </DatErrMsg>
    </DatTrErr>
  </MSG></tns:shipmentDocumentRetrieveResp></SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

15. Helpful XML and Web Services Links

XML.Org Home Page, Organization for the Advancement of Structured Information Standards (OASIS)
<http://www.xml.org/>

W3 Schools XML Tutorial, Reference Data
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