



# Domestic and international routing API

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## Document versions and changes

| 9 March 2017                | VERSION 1.0 |
|-----------------------------|-------------|
| Webservice                  | Change      |
| 11 <sup>th</sup> April 2017 | VERSION 1.1 |

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|                                  |             |
|----------------------------------|-------------|
| <b>29<sup>th</sup> June 2017</b> | Data review |
|                                  |             |

# Route

HTTP Method: **POST**

Content-Type: **application/xml or application/json**

Accept: **application/xml or application/json**

Authentication: **Basic or Token based (subject to agreement between DPD and the client)**

## URL

<https://papi.dpd.ie/common/api/route>

Authorization format & code is provided by DPD Ireland.

Routing API is publicly open service.

To use it, customer must have a token and include it with header for each call - this is unique number for each customer.

Token must be obtained from DPD Ireland.

**AUTHORIZATION REQUEST HEADER (Basic authentication model)**

| Field         | Format      | Example                              | Description  |
|---------------|-------------|--------------------------------------|--|
| Authorization | Basic Token | "Basic<br>QWxhZGRpbjppPcGVuU2VzYW11" | The Basic Token provided by DPD Ireland for the user of web service. It's always the same for all calls and it won't expire. |

**AUTHORIZATION REQUEST HEADER (Token authentication model)**

| Field         | Format       | Example                               | Description  |
|---------------|--------------|---------------------------------------|--|
| Authorization | Bearer Token | "Bearer<br>QWxhZGRpbjppPcGVuU2VzYW11" | The Bearer Token provided by DPD Ireland for the user of web service. It's always the same for all calls and it will expire on agreed date/time. |

## INPUT – XML message

| Parameter       | Type          | M / O | Example  | Description  |
|-----------------|---------------|-------|----------|--|
| RoutingRequest  | XML root node |       |          |  |
| RequestId       | CHR           | M     | „001”    | Custom identifier for the request – will be return in the response.<br>Should be unique per single API call.                   |
| CustomerAccount | CHR           | M     | „1234L3” | A DPD Ireland customer identifier  |
| ServiceType     | CHR           | M     | “1”      | One of:<br>1 – Overnight<br>2 – Saturday delivery<br>3 – Timed<br>4 – Special<br>5 – Cancelled On Arrival<br>6 – 2 day service |
| ServiceOption   | CHR           | M     | “5”      | One of:<br>1 – COD (cheque on  |

|                    |     |   |                    |   |
|--------------------|-----|---|--------------------|---|
|                    |     |   |                    | delivery)<br>2 – PDS (premium document service)<br>3 – RR (return receipt)<br>4 – SW (swapit)<br>5 – N (normal) |
| Method             | CHR | O | “Road”             | Road or AirExpress, mandatory for international shipments   |
| BusinessName       | CHR | M | “Mary’s newsagent” | Recipient company or person name  |
| AddressLine1       | CHR | M |                    | Recipient address line 1 (Street)   |
| AddressLine2       | CHR | O |                    | Recipient address line 2  |
| AddressLine3       | CHR | M |                    | Recipient address line 3 (City)   |
| AddressLine4       | CHR | O |                    | Recipient address line 4  |
| Country            | CHR | M | „GB”               | Valid 2 characters<br>GeoCountry code: See appendix A   |
| PostCode           | CHR | O | “CA11LN”           | Valid postcode. Mandatory for deliveries outside Republic Of Ireland  |
| DestinationDepot   | CHR | O | “”                 | Optional – Destination Depot number - for future use – should be blank or omitted in the request message        |
| DestinationNetwork | CHR | O | “”                 | Optional – Destination  |

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|             |     |   |    |  |
|-------------|-----|---|----|--|
|             |     |   |    | Network Code – should be blank or omitted  |
| TradeStatus | CHR | O | “” | Possible values: “” – empty – default value, “F” – Free = customer cleared parcels, “C” – Custom = custom not cleared parcels        |
| AsCode      | CHR | O | “” | Optional – Additional Service Code – should be blank or omitted  |
| SubCode     | CHR | O | “” | Optional – If a sender has his own Injection Code, then the last 2 digit should be used as SubCode – other way – leave blank or omit |

**OUTPUT – XML message**

| Field                 | Type            | M/O | Example | Description  |
|-----------------------|-----------------|-----|---------|--|
| RoutingResponse       | XML – root node |     |         |  |
| RequestId             | CHR             | M   | “001”   | Custom identifier for routing request – taken from request message |
| InternationalShipment | CHR             | M   | “false” | true – international shipment<br>false – domestic shipment         |
| DeliveryDepot         | CHR             | M   | “44”    | DPD IE depot number  |
| BarcodeService        | CHR             | M   | “101”   | Barcode service code   |
| BarcodeId             | CHR             | M   | “%”     | 28 digit barcode leading   |

|                 |     |   |           |   |
|-----------------|-----|---|-----------|---|
|                 |     |   |           | character – 1 character length  |
| BarcodePostcode | CHR | M | “0CA11LN” | 28 digit barcode postcode part – 7 characters length (leading with zeros if required) |
| BuAlphaStr      | CHR | M | “DPD”     | Business Unit – company code – 3 characters length                                    |
| BuCode          | CHR | M | “011”     | Business Unit – code – 3 digit number with leading zeros                              |
| CSort           | CHR | M | “”        | CSort information – max length: 5 characters  |
| DCountry        | CHR | M | “GB”      | Destination GeoCountry code: See appendix A   |
| DDepot          | CHR | M | “0111550” | Destination depot number – length: 7 digits with leading zeros                        |
| DDepotCountry   | CHR | M | “GB”      | Destination depot country: See appendix A   |
| DDepotStr       | CHR | M | “1550”    | 4 digit Destination Depot number  |
| DSort           | CHR | M | “”        | DSort information – max length: 5 characters  |
| NetworkCode     | CHR | M | “826”     | 3 digits network code with leading zeros  |
| OSort           | CHR | M | “”        | OSort information – max length: 5 characters  |
| PartnerCode     | CHR | M | “”        | Partner Code – max length:  |



|                      |      |   |            |  |
|----------------------|------|---|------------|--|
|                      |      |   |            | 3 characters   |
| ServiceMark          | CHR  | M | “”         | Service Mark – length: 1 character   |
| ServiceText          | CHR  | M | “D”        | Service Text – max length: 18 characters   |
| SSort                | CHR  | M | “”         | SSort information – max length: 5 characters   |
| Version              | CHR  | M | “17010205” | Version of routing database  |
| Status               | CHR  | M | “OK”       | Status if response is correct or not<br>OK – correct response<br>FAIL – incorrect response |
| RoutingDate          | Date | M | 24-05-2017 | Date of call   |
| RoutingTime          | Int  | M | 15:35:36   | Time of call   |
| LegalDisclaimerLine1 | CHR  | M |            | To be placed at the top of the label 1st line  |
| LegalDisclaimerLine2 | CHR  | M |            | To be placed at the top of the label 2nd line  |
| WarningList          | CHR  | O | “”         | List of warning messages if exists   |
| RoutingError         | CHR  | O | “”         | List of Errors if exists (when Status = FAIL)  |

## Domestic - Request for address in Republic of Ireland

### Example of request:

```
<?xml version="1.0" encoding="utf-8"?>
<RoutingRequest>
  <RequestId>1</RequestId>
  <CustomerAccount>1234L3</CustomerAccount>
  <ServiceType>1</ServiceType>
  <ServiceOption>5</ServiceOption>
  <BusinessName>DPD Head Office</BusinessName>
  <AddressLine1>Dublin Road</AddressLine1>
  <AddressLine2>Athlone Business Park</AddressLine2>
  <AddressLine3>Athlone</AddressLine3>
  <AddressLine4>Westmeath</AddressLine4>
  <Country>IE</Country>
  <PostCode></PostCode>
</RoutingRequest>
```

### Successful response

```
<RoutingResponse>
  <RequestId>1</RequestId>
  <InternationalShipment>false</InternationalShipment>
  <DeliveryDepot>44</DeliveryDepot>
  <BarcodeService>001</BarcodeService>
```

```
<BarcodeId>%</BarcodeId>
<BarcodePostcode>0237075</BarcodePostcode>
<BuAlphaStr>DPD</BuAlphaStr>
<BuCode>011</BuCode>
<CSort/>
<DCountry>IE</DCountry>
<DDepot>0111601</DDepot>
<DDepotCountry>IE</DDepotCountry>
<DDepotStr>1601</DDepotStr>
<DSort/>
<NetworkCode>372</NetworkCode>
<OSort/>
<PartnerCode/>
<ServiceMark/>
<ServiceText>D</ServiceText>  <SSort/>
<Version>17050105</Version>
<Status>OK</Status>
<RoutingDate>30-05-2017</RoutingDate>
<RoutingTime>15:49:10</RoutingTime>
<LegalDisclaimerLine1>Notification on damage which is not recognisable from the outside</LegalDisclaimerLine1>
<LegalDisclaimerLine2>has to be submitted to DPD within 7 days in writing</LegalDisclaimerLine2>
</RoutingResponse>
```

## Domestic - Request for address in Northern Ireland

### Example of request:

```
<?xml version="1.0" encoding="utf-8"?>
<RoutingRequest>
  <RequestId>1</RequestId>
  <CustomerAccount>1234L3</CustomerAccount>
  <ServiceType>1</ServiceType>
  <ServiceOption>5</ServiceOption>
  <BusinessName>Test NI address</BusinessName>
  <AddressLine1>Kilbegs Road</AddressLine1>
  <AddressLine2>Kilbegs Business Park</AddressLine2>
  <AddressLine3>Antrim</AddressLine3>
  <AddressLine4></AddressLine4>
  <Country>IE</Country>
  <PostCode>BT414LY</PostCode>
</RoutingRequest>
```

### Successful response

```
<RoutingResponse>
  <RequestId>1</RequestId>
  <InternationalShipment>false</InternationalShipment>
  <DeliveryDepot>60</DeliveryDepot>
  <BarcodeService>001</BarcodeService>
  <BarcodeId>%</BarcodeId>
  <BarcodePostcode>BT414LJ</BarcodePostcode>
  <BuAlphaStr>DPD</BuAlphaStr>
```

```
<BuCode>011</BuCode>
<CSort/>
<DCountry>IE</DCountry>
<DDepot>0111601</DDepot>
<DDepotCountry>IE</DDepotCountry>
<DDepotStr>1601</DDepotStr>
<DSort/>
<NetworkCode>372</NetworkCode>
<OSort/>
<PartnerCode/>
<ServiceMark/>
<ServiceText>D</ServiceText>
<SSort/>
<Version>17050105</Version>
<Status>OK</Status>
<RoutingDate>30-05-2017</RoutingDate>
<RoutingTime>15:51:35</RoutingTime>
<LegalDisclaimerLine1>Notification on damage which is not recognisable from the outside</LegalDisclaimerLine1>
<LegalDisclaimerLine2>has to be submitted to DPD within 7 days in writing</LegalDisclaimerLine2>
</RoutingResponse>
```

## International address

### Example of request:

```
<?xml version="1.0" encoding="utf-8"?>
<RoutingRequest>
  <RequestId>1</RequestId>
```

```
<CustomerAccount>1234L3</CustomerAccount>  
<ServiceType>1</ServiceType>  
<ServiceOption>5</ServiceOption>  
<Method>Road</Method>  
<BusinessName>DPD Opole</BusinessName>  
<AddressLine1>Wspolna 24</AddressLine1>  
<AddressLine2></AddressLine2>  
<AddressLine3>Opole</AddressLine3>  
<AddressLine4></AddressLine4>  
<Country>PL</Country>  
<PostCode>45304</PostCode>  
</RoutingRequest>
```

### Successful response

```
<RoutingResponse>  
  <RequestId>1</RequestId>  
  <InternationalShipment>true</InternationalShipment>  
  <DeliveryDepot>402</DeliveryDepot>  
  <BarcodeService>101</BarcodeService>  
  <BarcodeId>%</BarcodeId>  
  <BarcodePostcode>0045304</BarcodePostcode>  
  <BuAlphaStr>DPD</BuAlphaStr>  
  <BuCode>021</BuCode>  
  <CSort/>  
  <DCountry>PL</DCountry>  
  <DDepot>0211319</DDepot>  
  <DDepotCountry>PL</DDepotCountry>
```

```

<DDepotStr>1319</DDepotStr>
<DSort>OPO3</DSort>
<NetworkCode>616</NetworkCode>
<OSort/>
<PartnerCode/>
<ServiceMark/>
<ServiceText>D</ServiceText>
<SSort>OPL1</SSort>
<Version>17050105</Version>
<Status>OK</Status>
<RoutingDate>30-05-2017</RoutingDate>
<RoutingTime>15:52:35</RoutingTime>
<LegalDisclaimerLine1>Notification on damage which is not recognisable from the outside</LegalDisclaimerLine1>
<LegalDisclaimerLine2>has to be submitted to DPD within 7 days in writing</LegalDisclaimerLine2>
</RoutingResponse>

```

## Failed response - unauthorized user-created-returning HTTP status 401

(If customer will provide incorrect account number server will respond with HTTP status 401)

### Error message as response

```

<html xmlns="http://www.w3.org/1999/xhtml">
  <head>
    <title>GlassFish Server Open Source Edition 4.1.1 - Error report</title>
    <style type="text/css">
      <!--H1    {font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:22px;}    H2
      {font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:16px;}    H3

```

```
{font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:14px;}
{font-family:Tahoma,Arial,sans-serif;color:black;background-color:white;}
{font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;}
{font-family:Tahoma,Arial,sans-serif;background:white;color:black;font-size:12px;}A {color : black;}HR {color : #525D76;}-->
</style>
</head>
<body>
  <h1>HTTP Status 401 - Unauthorized</h1>
  <hr/>
  <p>
    <b>type</b>
    Status report
  </p>
  <p>
    <b>message</b>
    Unauthorized
  </p>
  <p>
    <b>description</b>
    This request requires HTTP authentication.
  </p>
  <hr/>
  <h3>GlassFish Server Open Source Edition 4.1.1</h3>
</body>
</html>
```

## Failed response - domestic - incorrect country code

### Example of request:



```
<?xml version="1.0" encoding="utf-8"?>
<RoutingRequest>
  <RequestId>1</RequestId>
  <CustomerAccount>3L4</CustomerAccount>
  <ServiceType>1</ServiceType>
  <ServiceOption>5</ServiceOption>
  <BusinessName>ACME Limited</BusinessName>
  <AddressLine1>Main St.</AddressLine1>
  <AddressLine2>Athlone</AddressLine2>
  <AddressLine3>Westmeath</AddressLine3>
  <AddressLine4></AddressLine4>
  <PostCode></PostCode>
  <Country>GB</Country>
</RoutingRequest>
```

**Failed response**

```
<RoutingResponse>
  <RequestId/>
  <InternationalShipment/>
  <DeliveryDepot/>
  <BarcodeService/>
  <BarcodeId/>
  <BarcodePostcode/>
  <BuAlphaStr/>
  <BuCode/>
  <CSort/>
  <DCountry/>
  <DDepot/>
  <DDepotCountry/>
  <DDepotStr/>
```

```
<DSort/>
<NetworkCode/>
<OSort/>
<PartnerCode/>
<ServiceMark/>
<ServiceText/>
<SSort/>
<Version/>
<Status>FAIL</Status>
<RoutingDate/>
<RoutingTime/>
<LegalDisclaimerLine1/>
<LegalDisclaimerLine2/>
<RoutingError>Missed PostCode (mandatory for deliveries outside Rep. of Ireland)</RoutingError>
</RoutingResponse>
```

## Failed response -international - missing postcode

### Example of request:

```
<?xml version="1.0" encoding="utf-8"?>
<RoutingRequest>
  <RequestId>1</RequestId>
  <CustomerAccount>3L4</CustomerAccount>
  <ServiceType>1</ServiceType>
  <ServiceOption>5</ServiceOption>
  <Method>Road</Method>
  <BusinessName>HOTEL BERLIN</BusinessName>
  <AddressLine1>Lützowplatz 17</AddressLine1>
  <AddressLine2>Berlin</AddressLine2>
```

```
<AddressLine3>BERLIN</AddressLine3>  
<AddressLine4>BERLIN</AddressLine4>  
<Country>DE</Country>  
<PostCode></PostCode>  
</RoutingRequest>
```

### Failed response

```
<RoutingResponse>  
  <RequestId/>  
  <InternationalShipment/>  
  <DeliveryDepot/>  
  <BarcodeService/>  
  <BarcodeId/>  
  <BarcodePostcode/>  
  <BuAlphaStr/>  
  <BuCode/>  
  <CSort/>  
  <DCountry/>  
  <DDepot/>  
  <DDepotCountry/>  
  <DDepotStr/>  
  <DSort/>  
  <NetworkCode/>  
  <OSort/>  
  <PartnerCode/>  
  <ServiceMark/>  
  <ServiceText/>  
  <SSort/>  
  <Version/>
```

```
<Status>FAIL</Status>  
<RoutingDate/>  
<RoutingTime/>  
<LegalDisclaimerLine1/>  
<LegalDisclaimerLine2/>  
<RoutingError>Missed PostCode (mandatory for deliveries outside Rep. of Ireland)</RoutingError>  
</RoutingResponse>
```