

DPDServices

DispositionModule User Handbook



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1. Document revision history

| Author of modification | Date of modification | Version | Description of modifications |
|------------------------|----------------------|---------|--|
| Kamil Kulpan | 2021-11-17 | 1.0.0 | Creation of a template of the document and of the main chapters |
| Kamil Kulpan | 2022-07-29 | 1.0.1 | Removal of the 'services' field from the endpoint for submitting a redirection instruction |
| Kamil Kulpan | 2022-08-04 | 1.0.2 | Change of dispositionId to dispositionUuid |
| Anna Wójcicka | 2022-08-17 | 1.0.3 | Supplementing the document with business information |

2. Introduction

2.1. Document purpose

The purpose of this document is to describe the mode of operation and the application of REST API interfaces to be used by DPD customers. We have developed a solution which offers a universal tool (OS agnostic) for the transfer of data between customer systems and DPD.

The document contains a description of the REST API methods for giving an instruction for undelivered parcel.

2.2. Glossary

| Name | Definition |
|---------|---|
| Waybill | Means the number identifying a given parcel |

| | |
|---------|---|
| Service | Modification of the manner of parcel processing and handling (e.g. guarantee of delivery during specified hours, payment upon receipt, carry-in). |
|---------|---|

2.3. Service URL address

The application interface is available at:

<https://dpdservicesdispositionmodule.dpd.com.pl>

2.4. Authorisation

Each request is secured by BasicAuth and requires a heading X-DPD-FID.

- Username – login
- Password – password assigned to the login
- X-DPD-FID – customer number

You have the right to manage the parcels to which you have authorisation.

Possible authorisations:

- RETURN – return operations,
- REDIRECT – address change operations.

In order to acquire the rights to the application, the commercial manager should be contacted and provided with: the types of operations to which access should be granted and a list of the customer's identifiers.

3. Business Description

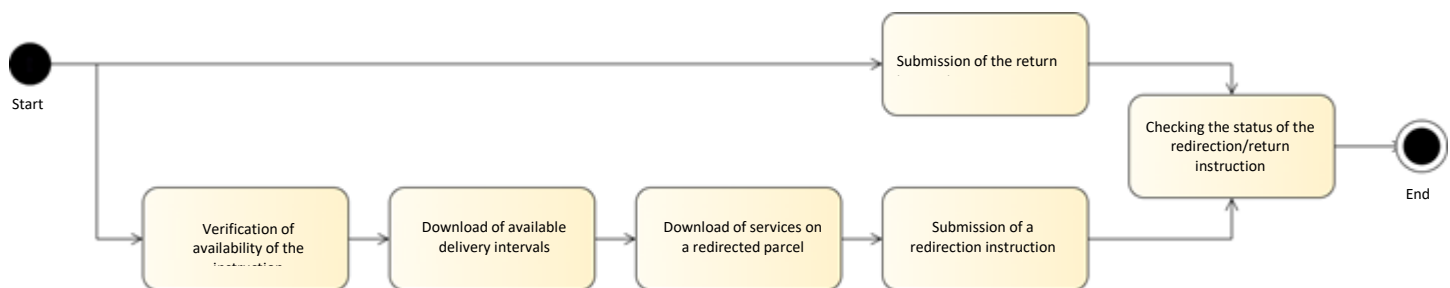
DPDServicesDispositionModule is a tool for managing undelivered parcels.

Operations available:

- verification of availability of the instruction,
- download of services on a redirected parcel,
- download of available delivery intervals,

- submission of a redirection instruction together with a change of the delivery date,
- submission of a return instruction,
- checking the status of the redirection/return instruction.

3.1. Sequence of operations



The link between business level operations and interface methods is shown in the table below:

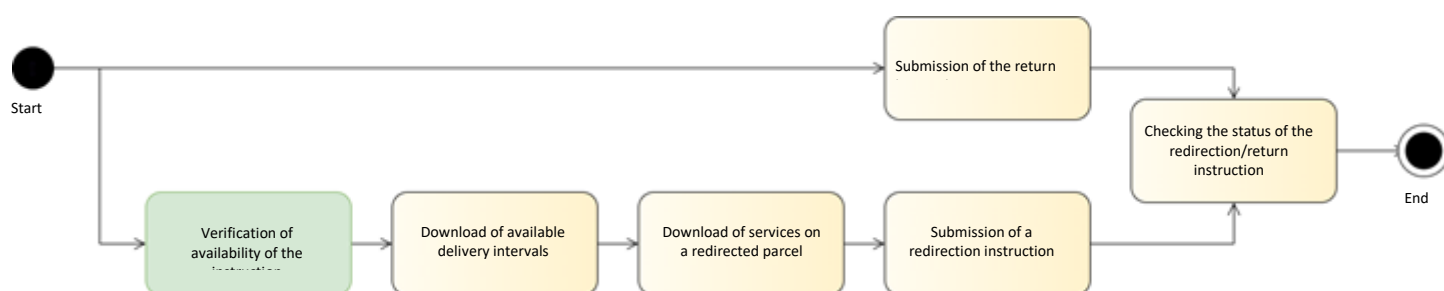
| Brief description | Name of the method | Endpoint of the method |
|---|----------------------------|---|
| Verification of availability of the instruction | redirectAvailabilityVerify | GET /api/package dispositions/validate/redirect/{waybill} |
| Download of services on a redirected parcel | redirectServicesGet | GET /api/package dispositions/validate/redirect/services |
| Download of available delivery intervals | availableTimesGet | GET /api/package dispositions/available-times |
| Submission of a redirection instruction | dispositionsRedirectsPost | POST /api/package dispositions/redirects |
| Submission of the return instruction | dispositionsReturnsPost | POST /api/package dispositions/returns |
| Checking the status of the redirection/return instruction | dispositionStatusGet | GET /api/package dispositions/status/{id} |

4. Description of the interface methods

API documentation available at: <https://dpdservicesdispositionmodule.dpd.com.pl/docs.html>

4.1. Verification of availability of the redirection instruction

The service enables verification whether the features of the parcel allow for a change of the delivery address.



The redirectAvailabilityVerify method assumes the following input parameters:

| Input parameter | Parameter description | Required? | Handover method |
|-----------------|------------------------------|-----------|-------------------------|
| X-DPD-FID | Heading containing X-DPD-FID | YES | Heading of the request |
| waybill | Waybill of the parcel | YES | Endpoint of the request |

On the side of the DPD system, the following operations are carried out:

| Operation |
|---|
| Verification of availability of the instruction |

4.1.1. Inquiry results

The inquiry results are divided into two categories – success and error.

The former concerns the correct verification of the availability of the redirection instruction and provides a detailed description of the components.

DispositionModuleResponse

```
{  
  "dispositionStatus": "OK"  
}
```

The latter describes an example of an incorrect verification of the availability of the redirection instruction.

Exception

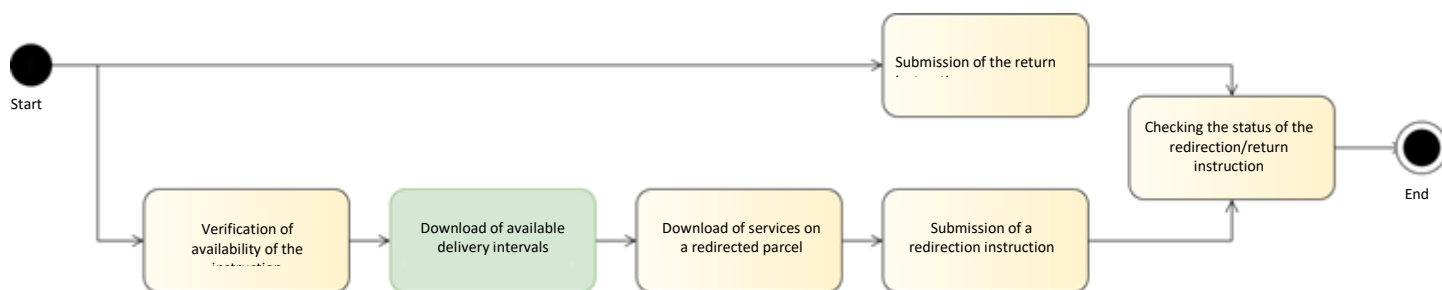
```
[  
  {  
    "code": "ACCESS_DENIED_FOR_FID",  
    "userMessage": "FID nie ma uprawnień do paczki wskazanej w żądaniu"  
  }  
]
```

4.1.2. Possible error codes:

| Error code | Moment of occurrence |
|-----------------------|--|
| ACCESS_DENIED_FOR_FID | When X-DPD-FID does not agree with the payer of the parcel |
| NONEXISTENT_PACKAGE | Where no parcel exists |
| REDIRECT_BLOCKED | Where a redirection instruction is unavailable |

4.2. Download of available delivery intervals

The service enables you to download a list of available delivery dates. The selected delivery interval shall be communicated in the request for the creation of a redirection instruction.



The availableTimesGet method assumes the following input parameters:

```

{
  "waybill": "0000065058026W",
  "postalCode": "02274",
  "countryCode": "PL"
}
  
```

| Input parameter | Parameter description | Required? | Handover method |
|-----------------|---|-----------|------------------------|
| X-DPD-FID | Heading containing X-DPD-FID | YES | Heading of the request |
| waybill | Waybill of the parcel | YES | Body of the request |
| postalCode | Postal code of the parcel after redirection | YES | Body of the request |
| countryCode | Country code | YES | Body of the request |

On the side of the DPD system, the following operations are carried out:

| Operation |
|--|
| Download of available delivery intervals |

4.2.1. Inquiry results

The inquiry results are divided into two categories – success and error.

The former concerns the correct download of the available delivery intervals and provides a detailed description of the components.

DispositionModuleResponse

```
{
  "availableDates": [
    {
      "date": "2022-08-18",
      "timeRanges": [
        "12:00 - 15:00",
        "15:00 - 18:00",
        "18:00 - 21:00"
      ]
    },
    {
      "date": "2022-08-19",
      "timeRanges": [
        "12:00 - 15:00",
        "15:00 - 18:00",
        "18:00 - 21:00"
      ]
    },
    {
      "date": "2022-08-22",
      "timeRanges": [
        "12:00 - 15:00",
        "15:00 - 18:00",
        "18:00 - 21:00"
      ]
    }
  ]
}
```

In the case of a parcel with a service guaranteeing the delivery at a specified time, e.g. TIME0930 – guarantor 9:30, the available delivery intervals result from the guaranteed service.

DispositionModuleResponse

```
{
  "availableDates": [
    {
      "date": "2020-05-13",
      "timeRanges": [
```

```

    "09:30 - 09:30"
  ]
}
]
}

```

The latter describes an example of incorrect download of the available delivery intervals.

Exception

```

[
  {
    "code": "NONEXISTENT_POSTAL_CODE",
    "userMessage": "Kod pocztowy nie istnieje"
  }
]

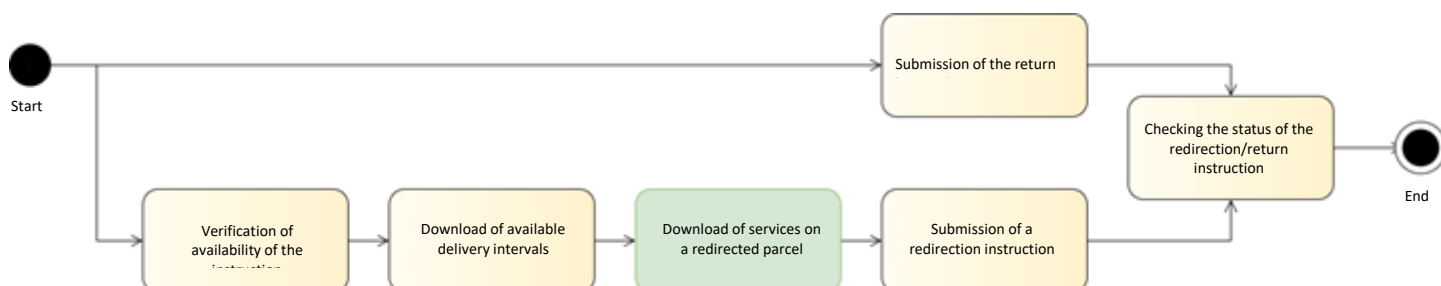
```

4.2.2. Possible error codes:

| Error code | Moment of occurrence |
|--------------------------|--|
| ACCESS_DENIED_FOR_FID | When X-DPD-FID does not agree with the payer of the parcel |
| NONEXISTENT_POSTAL_CODE | Where no postal code exists |
| NONEXISTENT_COUNTRY_CODE | Where no country code exists |
| NONEXISTEN_PACKAGE | Where no parcel exists |

4.3. Download of services on the redirected parcel

The service enables you to download the list of services that the parcel will have at the time of execution of the redirection instruction. The process of changing the delivery address may force the removal of certain services from the parcel instruction, e.g. due to the unavailability of a particular service under a new postal code. The result of the request is for information purposes only.



The redirectServicesGet method assumes the following input parameters:

```
{
  "waybill": "0000065058026W",
  "postalCode": "02200",
  "countryCode": "PL"
}
```

| Input parameter | Parameter description | Required? | Handover method |
|-----------------|---|-----------|------------------------|
| X-DPD-FID | Heading containing X-DPD-FID | YES | Heading of the request |
| waybill | Waybill of the parcel | YES | Body of the request |
| postalCode | Postal code of the parcel after redirection | YES | Body of the request |
| countryCode | Country code | YES | Body of the request |

On the side of the DPD system, the following operations are carried out:

| Operation |
|---|
| Download of services on a redirected parcel |

4.3.1. Inquiry results

The inquiry results are divided into two categories – success and error.

The former concerns the correct download of services on a redirected parcel and provides a detailed description of the components.

DispositionModuleResponse

```
{
  "services": [
    {
      "serviceCode": "FIXED_PRICE",
      "valid": true //usługa dostępna
    },
    {
      "serviceCode": "TIME0930",
      "valid": false //usługa niedostępna, realizacja dyspozycji przekierowania usunie usługę z przesyłki
    }
  ]
}
```

The latter describes an example of incorrect download of services on a redirected parcel.

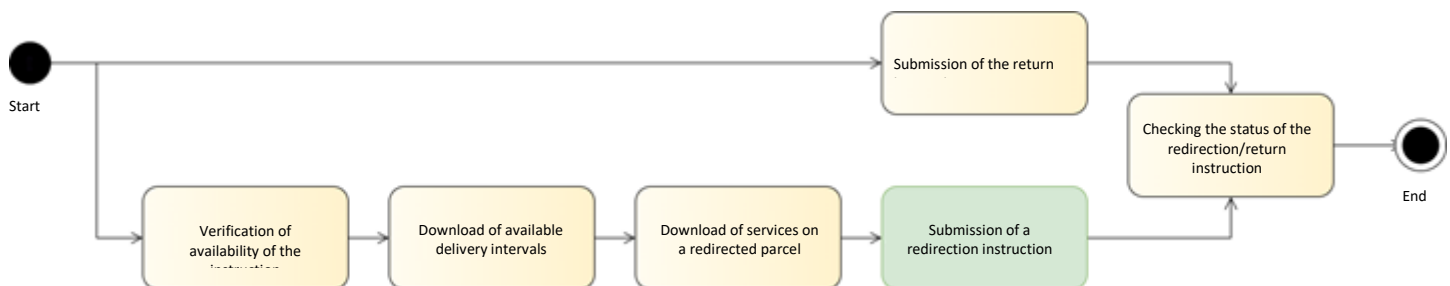
Exception

```
[
  {
    "code": "NONEXISTENT_PACKAGE",
    "userMessage": "Paczka nie istnieje"
  }
]
```

4.3.2. Possible error codes:

| Error code | Moment of occurrence |
|--------------------------|--|
| ACCESS_DENIED_FOR_FID | When X-DPD-FID does not agree with the payer of the parcel |
| NONEXISTENT_PACKAGE | Where no parcel exists |
| NONEXISTENT_POSTAL_CODE | Where no postal code exists |
| NONEXISTENT_COUNTRY_CODE | Where no country code exists |

4.4. Submission of a redirection instruction



The `dispositionsRedirectsPost` method assumes the following input parameters:

```
{
  "packageWaybill": "0000065058026W",
  "newReceiverName": "Jan Grochowski",
  "newReceiverCompanyName": "DPD Polska",
  "newReceiverEmail": "jgrochowski@gmail.com",
  "newReceiverPhoneNumber": "+48 666888555",
  "newReceiverAddress": "Mineralna 15",
  "newReceiverPostalCode": "02274",
  "newReceiverCity": "Warszawa",
  "newDeliveryNotes": "Klatka A",
  "newDeliveryDateTime": {
    "date": "2020-05-13",
    "timeRange": "10:00 - 12:00"
  }
}
```

| Input parameter | Parameter description | Required? | Handover method |
|------------------------|-------------------------------------|-----------|------------------------|
| X-DPD-FID | Heading containing X-DPD-FID | YES | Heading of the request |
| packageWaybill | Waybill of the parcel | YES | Body of the request |
| newReceiverName | Recipient's full name | YES | Body of the request |
| newReceiverCompanyName | Recipient's company business name | YES | Body of the request |
| newReceiverEmail | Recipient's e-mail address | NO | Body of the request |
| newReceiverPhoneNumber | Recipient's telephone number | NO | Body of the request |
| newReceiverAddress | Recipient's street and house number | YES | Body of the request |
| newReceiverPostalCode | Recipient's postal code | YES | Body of the request |
| newReceiverCity | Recipient's city/town | YES | Body of the request |
| newDeliveryNotes | Notes | NO | Body of the request |
| newDeliveryDateTime | Object containing the date and time | YES | Body of the request |

On the side of the DPD system, the following operations are carried out:

| Operation |
|---|
| Submission of a redirection instruction |

4.4.1. Inquiry results

The inquiry results are divided into two categories – success and error.

The former concerns the correct submission of the redirection instruction and provides a detailed description of the components.

DispositionModuleResponse

```
{  
  "dispositionStatus": "REDIRECT_ACCEPTED",  
  "dispositionUuid": 123456789  
}
```

The latter describes an example of incorrect submission of a redirection instruction.

Exception

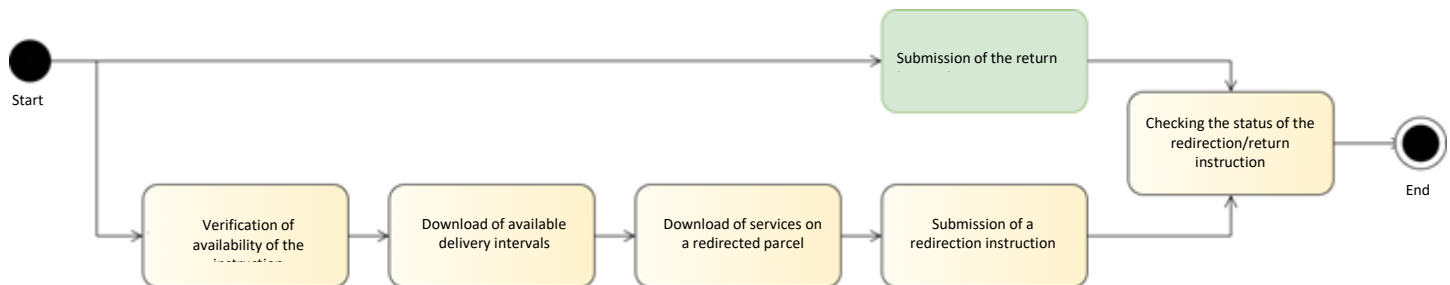
```
[  
  {  
    "code": "REDIRECT_BLOCKED",  
    "userMessage": "Dyspozycja przekierowania zablokowana"  
  }  
]
```

4.4.2. Possible error codes:

| Error code | Moment of occurrence |
|---------------------------------|--|
| ACCESS_DENIED_FOR_FID | When X-DPD-FID does not agree with the payer of the parcel |
| NONEXISTENT_PACKAGE | Where no parcel exists |
| REDIRECT_BLOCKED | Where the redirection has been blocked |
| NONEXISTENT_DISPOSITION | Where no instruction exists |
| INCORRECT_NEW_DELIVERY_DATETIME | Where the delivery time interval is incorrect |
| INCORRECT_COMPANY | Where the company business name is incorrect |
| INCORRECT_NAME | Where the full name of the recipient is incorrect |
| INCORRECT_EMAIL_ADDRESS | Where the e-mail address is incorrect |

| | |
|------------------------|--|
| INCORRECT_PHONE_NUMBER | Where the telephone number is incorrect |
| INCORRECT_ADDRESS | Where the address is incorrect |
| INCORRECT_CITY | Where the city is incorrect |
| INCORRECT_POSTAL_CODE | Where the postal code is incorrect |
| VALIDATION_ERROR | Where the additional validation has failed |

4.5 Submission of a return instruction



The `dispositionsReturnsPost` method assumes the following input parameters:

```

{
  "waybill": "0000065058026W"
}
  
```

| Input parameter | Parameter description | Required? | Handover method |
|-----------------|------------------------------|-----------|------------------------|
| X-DPD-FID | Heading containing X-DPD-FID | YES | Heading of the request |
| waybill | Waybill of the parcel | YES | Body of the request |

On the side of the DPD system, the following operations are carried out:

| Operation |
|--------------------------------------|
| Submission of the return instruction |

4.5.1. Inquiry results

The inquiry results are divided into two categories – success and error.

The former concerns the correct submission of the return instruction and provides a detailed description of the components.

DispositionModuleResponse

```
{  
  "dispositionStatus": "RETURN_ACCEPTED",  
  "dispositionUuid": 123456789  
}
```

The latter describes an example of incorrect submission of a return instruction.

Exception

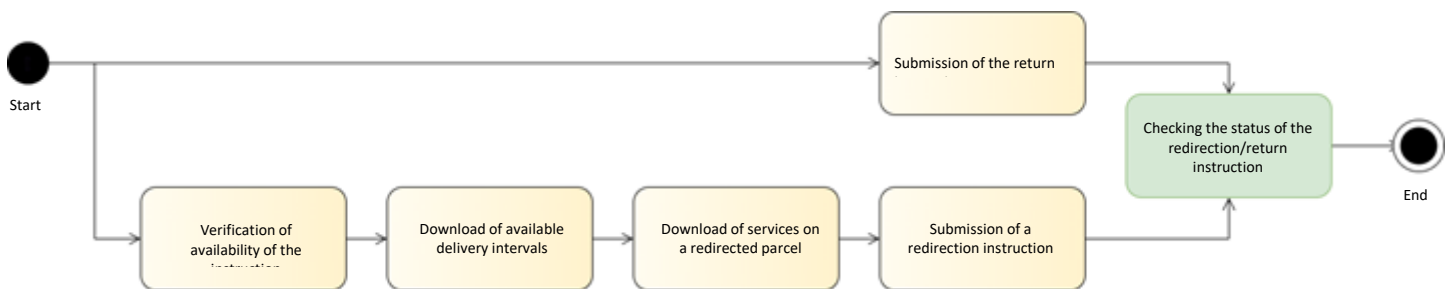
```
[  
  {  
    "code": "RETURN_REJECTED",  
    "userMessage": "Dyspozycja zwrotu odrzucona"  
  }  
]
```

4.5.2. Possible error codes:

| Error code | Moment of occurrence |
|-----------------|--|
| RETURN_REJECTED | Where the return instruction has been rejected |

| | |
|-----------------------|--|
| ACCESS_DENIED_FOR_FID | When X-DPD-FID does not agree with the payer of the parcel |
| NONEXISTENT_PACKAGE | Where no parcel exists |

4.6. Checking the status of the redirection/return instruction



The dispositionStatusGet method assumes the following input parameters:

| Input parameter | Parameter description | Required? | Handover method |
|-----------------|---|-----------|-------------------------|
| X-DPD-FID | Heading containing X-DPD-FID | YES | Heading of the request |
| id | Identifier of the submitted instruction | YES | Endpoint of the request |

On the side of the DPD system, the following operations are carried out:

| Operation |
|---|
| Checking the status of the redirection/return instruction |

4.6.1. Inquiry results

The inquiry results are divided into two parts.

The first one concerns the correct checking of the status of the redirection/return instruction.

DispositionModuleResponse

```
{
  "dispositionStatus": "REDIRECT_ACCEPTED"
}
```

Possible statuses of the instruction:

| Instruction status code | Moment of occurrence |
|-------------------------|---|
| REDIRECT_CREATED | Where a redirection instruction has been created |
| REDIRECT_ACCEPTED | Where a redirection instruction has been initially accepted |
| RETURN_CREATED | Where a return instruction has been created |
| RETURN_ACCEPTED | Where a return instruction has been initially accepted |

The latter describes examples of incorrect verification of the status of the redirection/return instruction.

Exception

```
[
  {
    "code": "NONEXISTENT_PACKAGE",
    "userMessage": "Paczka nie istnieje"
  }
]
```

4.6.2. Possible error codes:

| Error code | Moment of occurrence |
|------------|----------------------|
|------------|----------------------|

| | |
|-----------------------|--|
| ACCESS_DENIED_FOR_FID | When X-DPD-FID does not agree with the payer of the parcel |
| NONEXISTENT_PACKAGE | Where no parcel exists |
| REDIRECT_REJECTED | Where a redirection instruction has been rejected |
| RETURN_REJECTED | Where the return instruction has been rejected |

5. Response codes

| Code | Communication | Description | HTTP status |
|--------------------------|--------------------------------|--|-------------|
| NONEXISTENT_PACKAGE | No parcel exists | No parcel with a given waybill number exists | 404 |
| NONEXISTENT_COUNTRY_CODE | No country code exists | No country code exists | 404 |
| NONEXISTENT_POSTAL_CODE | No postal code exists | No postal code exists | 404 |
| NONEXISTENT_DISPOSITION | No instruction exists | No instruction with the given ID exists | 404 |
| ACCESS_DENIED_FOR_FID | Incorrect payer for the parcel | The validation of the payer provided in the heading <i>X-DPD-FID</i> failed. Applies to all the payer's validations – with respect to the LDAP, the parcel and <i>fid</i> entered in the local database. | 403 |
| UNAUTHORIZED | Incorrect user or password | The transferred user does not exist or incorrect password provided | 401 |
| UNKNOWN_ERROR | Unknown error | Unknown error, usually technical | 500 |
| DB_ERROR | Data base error | Technical error of database operations | 500 |
| RETURN_ACCEPTED | Return instruction accepted | The order to create a return is accepted (initially accepted), awaiting confirmation. | 200 |
| RETURN_CREATED | Return instruction created | The order to create a return is successfully processed, the instruction was created. | 201 |

| | | | |
|--------------------------|-------------------------------------|--|-----|
| RETURN_REJECTED | Return instruction rejected | The order to create a return was rejected. | 422 |
| OK | Redirection instruction possible | Validation of the possibility to create an instruction is positive. | 200 |
| REDIRECT_ACCEPTED | Redirection instruction accepted | The order to create a redirection is accepted (initially accepted), awaiting confirmation. | 200 |
| REDIRECT_CREATED | Redirection instruction created | The order to create a return is successfully processed, the instruction was created. | 201 |
| REDIRECT_BLOCKED | Redirection instruction unavailable | The validation of the possibility of redirecting the parcel was unsuccessful. | 422 |
| REDIRECT_REJECTED | Redirection instruction rejected | The order to create a return was rejected. | 422 |
| INCORRECT_COMPANY | | The <i>newReceiverCompanyName</i> field blank or has a value higher than 100 characters | 422 |
| INCORRECT_NAME | | The <i>newReceiverName</i> field blank or has a value higher than 100 characters | 422 |
| INCORRECT_EMAIL_ADDRESS | | The <i>newReceiverEmail</i> field has a value higher than 100 characters | 422 |
| INCORRECT_PHONE_NUMBER | | The <i>newReceiverPhoneNumber</i> in incorrect format or has a value higher than 50 characters | 422 |
| INCORRECT_ADDRESS | | The <i>newReceiverAddress</i> field blank or has a value higher than 100 characters | 422 |
| INCORRECT_POSTAL_CODE | | The <i>newReceiverPostalCode</i> field blank or has an incorrect value | 422 |
| INCORRECT_CITY | | The <i>newReceiverCity</i> field blank or has a value higher than 50 characters | 422 |
| INCORRECT_DELIVERY_NOTES | | The <i>newDeliveryNotes</i> field value higher than 200 characters | 422 |

| | | | |
|---------------------------------|--|---|-----|
| INCORRECT_NEW_DELIVERY_DATETIME | | The newDeliveryDatetime field is incorrect | 422 |
| VALIDATION_ERROR | | For any error from the business validation, the VALIDATION_ERROR status will be returned with an error message from the validation result | 422 |

6. DEMO environment

DEMO environment is available at:

<https://dpdservicesdispositionmoduledemo.dpd.com.pl>

Login data:

- **Login:** test
- **X-DPD-FID:** 1495
- **Password:** thetu4Ee

API documentation available: <https://dpdservicesdispositionmoduledemo.dpd.com.pl/docs.html>

It is not possible to obtain "RETURN_ACCEPTED", "REDIRECT_ACCEPTED" status on the DEMO environment.