

DB Schenker Land (Europe) - Scheduling API

1. About- DB Schenker Land (Europe)- Scheduling API

The Land Scheduling API provides information on schedules, lead-times and availability of DB Schenker products and options. The typical use is expected to be in the context of before, or during, the generating a booking / transport order towards DB Schenker.

Example usage

- Obtain information on available Products within or between countries
- Check for available Options for a certain Product and connection
- Check if a certain date is available for collection or delivery
- Retrieve allowed dates for the "Fix Day" Option for the "DB SCHENKERsystem" Product
- Get recommended date of collection for meeting a certain target delivery date
- General check of dates and lead-times per Product for a certain week

2. Documentation overview

- "DB Schenker Land (Europe)- Scheduling API" (this document) - general information about the API and high level introduction to the capabilities: 3. Introduction to the API functionality
- "DB Schenker Land (Europe)- Scheduling API - Usage Guideline" - in depth explanation on how to use the API (including appendencies post code formats etc.)
- "API Specification" - specification for implementing, for developers

3. General information

3.1 Geographic coverage and scope

The API mainly covers DB Schenker Land Transport in Europe (Part & Full Loads, System Freight, Parcel), with a few additional areas. Refer to the Appendices of this document for a list of supported countries

3.2 Functional overview

All functions take as input at least an Origin (Country + Postcode) and destination (Country + Postcode), exception is Available Products where the input is only the origin country and destination country.

The functions can be used separately from each other depending on context of integrating of the API, exception is Fixed Dates which must be used in succession of one of Lead Time, Delivery Dates, Collect Dates, and Date Availability

Function	Purpose	Comment
Lead Time	Provides "week view" of scheduling, based on a planned/wanted date of collection or on a wanted date of delivery	
Delivery Dates	Provides information on calculated date of delivery based on date of collection	
Collect Dates	Provides information on latest recommended date of collection to result in delivery on or before a wanted date of delivery	
Date Availability	Provides information on if a date is available for collection / delivery, and alternatives when this is not the case	
Fixed Dates	Provides information on possible "fixed dates" (of delivery) for DB SCHENKERsystem and "fix day" option, based on a planned date of collection	
Available Products	Provides the available products within or between countries	
Available Options	Provides the available options per product	
Collect Dates List	Provides a longer list of collect dates	

3.3 Example of use - Delivery Dates

This is an example request / response for Delivery Dates function (delivery-dates resource) requesting the expected delivery date for DB SCHENKERsystem premium product

```
GET '{{base-url}}/schedule/delivery-dates?
productCode=44&fromCountry=DE&fromPostcode=58239&toCountry=FR&toPostcode=40000&date=2021-05-17
```

Let us look at the parameters used in this request

In this request example we provide a specific product code, "44", for the System Freight product "DB SCHENKERsystem premium"

```
productCode=44
```

In our example we look for a transport from Germany to France, so next we specify the origin country code `fromCountry` / post code `fromPostcode` and destination country code `toCountry` / post code `toPostcode`. (supported country codes and postcode syntax per supported country are listed in the Appendices)

```
fromCountry=DE
fromPostcode=58239
toCountry=FR
toPostcode=40000
```

Finally we set the start `date` for our calculation, for the Delivery Dates resource this refers to the wanted or planned date of collection, in this case 2021-05-17

```
date=2021-05-17
```

A mockup response for this request would contain something like this

```
{
  "productSchedules": [
    {
      "code": "44",
      "description": "DB SCHENKERsystem premium",
      "options": [
        {
          "code": "56",
          "description": "Premium 13"
        }
      ],
      "collectionOnRequest": false,
      "distributionOnRequest": false,
      "collection": {
        "date": "2021-05-17",
        "dayOfWeek": 1
      },
      "expectedDelivery": {
        "date": "2021-05-19",
        "dayOfWeek": 3
      },
      "messages": []
    }
  ]
}
```

```
]
}
```

Let us break this response down to its parts

First the **productSchedules** array, which contains one value (object) per returned product schedule. In our case only one product schedule object is returned since we specifically requested DB SCHENKERsystem premium.

This object contains the following information for our example:

The code / description of the product for which the schedule applies

```
{
  "code": "44",
  "description": "DB SCHENKERsystem premium"
```

An array of bookable options for this particular product and origin / destination combination for the requested date

```
{
  "options": [
    {
      "code": "56",
      "description": "Premium 13"
    }
  ]
```

Indicators if the pick-up at origin or delivery at destination is served only after special agreement "on request" (applicable for terminal network based schedules)

```
{
  "collectionOnRequest": false,
  "distributionOnRequest": false,
```

Information on the start point **collection** of the calculation, in this examples the requested date was available for collection and the **date** is thus also then one used as start point

```
{
  "collection": {
    "date": "2021-05-17",
    "dayOfWeek": 1
  },
```

Expected delivery based on the calculation (note for some product schedules there is an **earliestDelivery**, **latestDelivery** object rather than a **expectedDelivery** object. This is explained further in the documentation per resource)

```
{
  "expectedDelivery": {
    "date": "2021-05-19",
    "dayOfWeek": 3
  },
}
```

Finally there is a **messages** array which may contain important contextual information to the response defined by code / description. In this particular case there is no additional information and thus the messages array is empty

```
{
  "messages": []
}
```

As a conclusion in this example a "DB SCHENKERsystem premium" shipment, if collected on 2021-05-17, is expected to be delivered on 2021-05-19 for the requested origin / destination combination.

3.4 How to get access

Currently the API is offered per individual agreement.

3.5 Terms of use

content to be defined.

4. API Specification

For implementation details please refer to the API specification, which is provided as an OpenAPI Specification *content to be defined, final OAS, or relevant specification after finalizing SHIELD publication*

5. API Usage Guide

The API usage guide is a supplement to the API specification, providing information on general aspect of using the API plus information how to interpret the responses.

5.1 Overview

The API is organized in a dedicated resource per function, accessed with an (HTTPS) GET request with function parameters in the query string. The response format is JSON.

5.2 Authentication

Currently authentication is based on basic auth (credentials) + API key, provided at the discretion of the CTTS team.

5.3 Functional guideline

5.3.1 General information

5.3.1.1 Parameters

All parameters are required unless otherwise stated

5.3.1.2 HTTP status codes

content to be amended/extended after finalizing SHIELD publication

200 OK

400 Bad Request - when possible an error message is returned explaining the issue

403 Forbidden

404 Not Found

5.3.1.3 Responses

General information here

5.3.1.4 Errors, Bad Request

5.3.1.5 Messages, array with additional information

The **messages** array, when available for a resource, provides context to the information in the response in form of a message code and description.

5.3.1.5.1 INF0010

fromPostcode not found in the scheduling data. Please check validity of provided postcode, if valid please contact {your local Schenker office}

The message is implemented for

- lead-time
- delivery-dates
- collect-dates
- available-dates
- available-options

5.3.1.5.2 INF0011

toPostcode not found in the scheduling data Please check validity of provided postcode, if valid please contact {your local Schenker office}

The message is implemented for

- lead-time
- delivery-dates
- collect-dates
- available-dates
- available-options

5.3.1.5.3 INF0012

Neither **fromPostcode** nor **toPostcode** was found in the scheduling data. Please check validity of provided postcodes, if valid please contact {your local Schenker office}

The message is implemented for

- lead-time
- delivery-dates
- collect-dates
- available-dates
- available-options

5.3.1.5.4 INF0013

The product code is valid but the concrete product is not available for the origin/destination combination

- lead-time
- delivery-dates
- collect-dates
- available-dates
- available-options
- available-products

This message is not returned when using parameter **productCode=ALL** for endpoints supporting this (lead-time, delivery-dates, collect-dates, available-products, available-options), it is only return when request is

made with specific product code(s)

5.3.1.5.5 INF0030

The scheduling calculation could not be completed as expected

The message is implemented for

- lead-time
- delivery-dates
- collect-dates
- available-dates
- available-options

5.3.1.5.6 INF0031

Specifically for direct based schedules (e.g. DB SCHENKERfull load, DB SCHENKERpart load), the message indicates that the information on possible lead time can only be provided after contact with the Schenker office

The message is implemented for

- lead-time
- delivery-dates
- collect-dates
- available-dates
- available-options

5.3.1.5.7 INF0050

Collection is generally possible the requested weekday, but is not available for certain date due to a holiday, the day has been removed from the array of lead times.

The message is implemented for

- lead-time

5.3.1.5.8 INF0051

It is not possible to book / schedule a collection due to a bank holiday on the requested date the calculation has moved forward to the next possible date of collection, the date used is returned with the collection object

The message is implemented for

- delivery-dates

5.3.1.5.9 INF0052

It is not possible to book / schedule a collection due to no collection being scheduled on the requested date. The calculation has moved forward to the next possible date of collection, the date used is returned with the

collection object

- delivery-dates

5.3.2 Lead Time - Overview

The lead-time resource provides "week view" of scheduling for origin (**fromCountry**, **fromPostcode**) destination (**toCountry**, **toPostcode**) combination. The scheduling calculation can be requested in a collect to deliver or vice versa

- Collect to deliver request is triggered by parameter/value **dateType=COLLECT**, this is the default mode. The provided **date** parameter value will be used to derive a calendar week for which to check for possible collect dates and then return lead times per collect date. If no date is provided the calculation will default to the current week
- Deliver to collect request is triggered by **dateType=DELIVER**. The provided **date** is used to derive a calendar week for target delivery, and present the collect dates and lead time to achieve the target delivery

It is possible to request one single, multiple, or all available product schedules in one go. See parameter **productCode** for further details

In addition to the lead time information, the available options are returned for each product

Called at /schedule/lead-time

5.3.2.1 Lead Time - Parameters

Parameter	Explanation	Example
fromCountry	origin country	DE
fromPostcode	origin postcode	58239
toCountry	destination country	FR
toPostcode	destination postcode	62000
dateType	date type	COLLECT DELIVER
date	date of collect or delivery, depending on dateType	2021-05-10
productCode	requested product code(s)	44
		ALL
		43,44

- If **dateType** parameter is omitted the calculation will assume "COLLECT"
- If **date** parameter is omitted the calculation will use the current date

5.3.2.2 Lead Time - Response

This document only provides guiding information to the response. Refer to the API specification for complete definition of the lead-time response

5.3.2.2.1 Product Schedule(s)

The `productSchedules` array holds one object per returned product schedule, the array is empty if there are no product schedules found

Each product schedule object then contains values with the relevant information,

5.3.2.2.2 Product Schedule - Product code and description

Product code and product name (description)

- `productSchedules[].code`
- `productSchedules[].description`

5.3.2.2.3 Product Schedule - Options

Available options as an array, if there are no options offered the array is present but empty

`productSchedules[].options`

For each available option the array contains the option code and option name (description)

- `productSchedules[].options[].code`
- `productSchedules[].options[].description`

5.3.2.2.4 Product Schedule - Lead Time

The `leadTimes` array of the product schedule holds the lead time information objects, one per possible collect day for the relevant week

If collection is generally possible for a weekday, but not available for certain date due to a holiday, then message code INF0050 is returned in the messages array and the collection day is omitted from the lead times array

`productSchedules[].leadTimes[]`

5.3.2.2.5 Product Schedule Lead Time - Collect On Request / Distribution on Request

`collectionOnRequest` and `distributionOnRequest` booleans of the lead time object, when true means that the collection address and, respectively distribution address, is served by the local terminal only "on request", i.e. after contacting the relevant Schenker office

- `productSchedules[].leadTimes[].collectionOnRequest` - relates to collection address, i.e. fromPostcode
- `productSchedules[].leadTimes[].distributionOnRequest` - relates to distribution address, i.e. toPostcode

Since These flags relates to terminal network based schedules they are only returned for certain product schedules

5.3.2.2.6 Product Schedule Lead Time - Collection

`collection` object holding the information on Collection

`productSchedules[].leadTimes[].collection` with the date and weekday

- `productSchedules[].leadTimes[].collection.date` - the date of collection used as basis for the lead time and calculated delivery date
- `productSchedules[].leadTimes[].collection.dayOfWeek` - a numeric representation of the weekday of collection as a convenience information

5.3.2.2.7 Product Schedule Lead Time - Lead Time Days

The Lead time days number represent contains the a count of the lead time in days for the collection, day of collection and weekends not counted.

Depending on product schedule the Delivery object is represented by either a single Expected lead time **or** as a pair of Earliest / Latest lead time

- `productSchedules[].leadTimes[].leadTimeDays`
- `productSchedules[].leadTimes[].minimumLeadTimeDays`
- `productSchedules[].leadTimes[].maximumLeadTimeDays`

5.3.2.2.8 Product Schedule Lead Time - Delivery

The Delivery objects contains the `date` and `dayOfWeek` for calculated delivery. Depending on product schedule the Delivery object is represented by either a single Expected delivery **or** as a pair of Earliest / Latest delivery

In addition the Delivery object may contain an `holidayInfluences` array of bank holidays which has influenced the date calculation

Observe, there are cases there there is a Collection object but no Delivery object, for example when the `distributionOnRequest` boolean is `true`

Expected, Earliest/Latest objects

- `productSchedules[].leadTimes[].expectedDelivery`
- `productSchedules[].leadTimes[].earliestDelivery`
- `productSchedules[].leadTimes[].latestDelivery`

These then, contain a similar structure of the expected or earliest / latest date of delivery based on the collect date and any holiday influences

`productSchedules[].leadTimes[].expectedDelivery.date`

a numeric representation of the weekday of the expected or earliest / latest date of delivery a convenience information

`productSchedules[].leadTimes[].expectedDelivery.dayOfWeek`

5.3.2.2.9 Product Schedule Lead Time - Delivery - Holiday influence

In case of the date calculation being influenced by at least one bank holiday, an array of objects with value string date / type of holiday

`productSchedules[].leadTimes[].expectedDelivery.holidayInfluences`

- `productSchedules[].leadTimes[].expectedDelivery.holidayInfluences[].date` - date of the holiday
- `productSchedules[].leadTimes[].expectedDelivery.holidayInfluences[].type` - type, e.g. local or national

5.3.2.2.10 Product Schedule - Messages

The product schedule holds a `messages` array which provides further context to the response when applicable. Please refer to the [dedicated section about messages \(5.3.1.4\)](#) in this document for messages and how they apply to the respective endpoint

5.3.3 Delivery Dates - Overview

The deliver-dates resource provide a calculated date of delivery (Expected or Earliest/Latest, depending on product) based on a planned date of collection (`date` parameter value). The request is made for an origin (`fromCountry`, `fromPostcode`) to destination (`toCountry`, `toPostcode`) combination.

It is possible to request one single, multiple, or all available product schedules in one go. See parameter `productCode` for further details

In addition to the delivery date information, the available options are returned for each product

Called at `/schedule/delivery-dates`

5.3.3.1 Delivery Dates - Parameters

Parameter	Explanation	Example
productCode	requested product code(s)	44
		ALL
		43,44
fromCountry	origin country	DE
fromPostcode	origin postcode	58239
toCountry	destination country	FR
toPostcode	destination postcode	62000
date	planned or wanted date of collect	2021-05-10

- If `date` parameter is omitted the calculation will use the current date

5.3.3.2 Delivery Dates - response

This document only provides guiding information to the response. Refer to the OpenAPI specification for complete definition of the delivery-dates response.

5.3.3.2.1 Product Schedule(s)

`$.productSchedules`

The `productSchedules` array holds one object per returned product schedule, the array is empty if there are no product schedules found

Each product schedule object then contains values with the relevant information.

5.3.3.2.2 Product Schedule - Product code and description

Product code and product name (description)

- `productSchedules[].code`
- `productSchedules[].description`

5.3.3.2.3 Product Schedule - Options

Available options as an array, if there are no options offered the array is present but empty

`productSchedules[].options`

For each available option the array contains the option code and option name (description)

- `productSchedules[].options[].code`
- `productSchedules[].options[].name`

5.3.3.2.4 Product Schedule - Collect On Request / Distribution on Request

`collectionOnRequest` and `distributionOnRequest` booleans of the lead time object, where true means that the collection address and distribution address is served by the local terminal only "on request", i.e. after contact with the relevant Schenker office

- `productSchedules[].collectionOnRequest` - relates to collection address, i.e. fromPostcode
- `productSchedules[].distributionOnRequest` - relates to distribution address, i.e. toPostcode

Since these flags relates to terminal network based schedules they are only returned for certain product schedules

5.3.3.2.5 Product Schedule - Collection

`collection` object holding the information on Collection

`productSchedules[].collection` with the date and weekday

- `productSchedules[].collection.date` - the date of collection used as basis for the lead time and calculated delivery date
- `productSchedules[].collection.dayOfWeek` - a numeric representation of the weekday of collection as a convenience information

If it is not possible to book / schedule a collection on the requested date the calculation will move forward to the next possible date of collection and use this instead. This new date is then returned in the `productSchedules[].collection.date`, in addition the message codes INF0051 or INF0052 is returned in messages array to indicate why the collection was moved forward

5.3.3.2.6 Product Schedule - Delivery

The Delivery objects contains the `date` and `dayOfWeek` for calculated delivery. Depending on product schedule the Delivery object is represented by either a single Expected delivery **or** as a pair of Earliest / Latest delivery

In addition the Delivery object may contain an `holidayInfluences` array of bank holidays which has influenced the date calculation

Notice that there are cases where there is a Collection object but no Delivery object, for example when the `distributionOnRequest` boolean is `true`

Expected, Earliest/Latest objects

- `productSchedules[].expectedDelivery`
- `productSchedules[].earliestDelivery`
- `productSchedules[].latestDelivery`

These then, contain the similar structure of the expected or earliest / latest date of delivery based on the collect date in the `collection` object and any holiday influences

`productSchedules[].expectedDelivery.date`

a numeric representation of the weekday of the expected or earliest / latest date of delivery a convenience information

`productSchedules[].expectedDelivery.dayOfWeek`

5.3.3.2.7 Product Schedule Delivery - Holiday influence

In case of the date calculation being influenced by at least one bank holiday, an array of objects with value string date / type of holiday

`productSchedules[].expectedDelivery.holidayInfluences`

- `productSchedules[].expectedDelivery.holidayInfluences[].date` - date of the holiday
- `productSchedules[].expectedDelivery.holidayInfluences[].type` - type, e.g. local or national

5.3.3.2.8 Product Schedule - Messages

The product schedule holds a `messages` array which provides further context to the response when applicable. Please refer to the dedicated section ***add link within document*** in this document for messages and how they apply to the respective endpoint

5.3.4 Collect Dates - Overview

The collect-dates resource provide latest recommended date of collection to result in delivery **on or before** a wanted date of delivery (**date** parameter value).

request is made for an origin (**fromCountry**, **fromPostcode**) to destination (**toCountry**, **toPostcode**) combination.

It is possible to request one single, multiple, or all available product schedules in one go. See parameter **productCode** for further details

In addition to the collect date information, the available options are returned for each product

Called at /schedule/delivery-dates

5.3.4.1 Collect Dates - Parameters

Parameter	Explanation	Example values
productCode	requested product code(s)	44
		ALL
		43,44
fromCountry	origin country	DE
fromPostcode	origin postcode	58239
toCountry	destination country	FR
toPostcode	destination postcode	62000
date	desired date of delivery	2021-05-10

- If **date** parameter is omitted the calculation will use the current date

5.3.4.2 Collect Dates - response

This document only provides guiding information to the response. Refer to the API specification for complete definition of the collect-dates response.

5.3.4.2.1 Product Schedule(s)

\$.productSchedules

The **productSchedules** array holds one object per returned product schedule, the array is empty if there are no product schedules found

Each product schedule object then contains values with the relevant information,

5.3.4.2.2 Product Schedule - Product code and description

Product code and product name (description)

- **productSchedules[].code**
- **productSchedules[].description**

5.3.4.2.3 Product Schedule - Options

Available options as an array, if there are no options offered the array is present but empty

`productSchedules[].options`

For each available option the array contains the option code and option name (description)

- `productSchedules[].options[].code`
- `productSchedules[].options[].name`

`productSchedules[].leadTimes[]`

5.3.4.2.4 Product Schedule - Collect On Request / Distribution on Request

`collectionOnRequest` and `distributionOnRequest` booleans of the lead time object, when true means that the collection address respectively distribution address is served by the local terminal only "on request", i.e. after contact with the relevant Schenker office

- `productSchedules[].collectionOnRequest` - relates to collection address, i.e. fromPostcode
- `productSchedules[].distributionOnRequest` - relates to distribution address, i.e. toPostcode

Since These flags relates to terminal network based schedules they are only returned for certain product schedules

5.3.3.4.5 Product Schedule - Collection

`collection` object holding the information on Collection

`productSchedules[].collection` with the date and weekday

- `productSchedules[].collection.date` - the date of collection which will result on a delivery on or before (if e.g. the requested date of delivery is a bank holiday or not a scheduled delivery day) the date of delivery requested
- `productSchedules[].collection.dayOfWeek` - a numeric representation of the weekday of the date collection as a convenience information

5.3.3.2.6 Product Schedule - Messages

The product schedule holds a `messages` array which provides further context to the response when applicable. Please refer to the dedicated section ***add link within document*** in this document for messages and how they apply to the respective endpoint

5.3.5 Date Availability - Overview

The available-dates resource informs on if a date is available for collection (request parameter / value `dateType=COLLECT`) respectively delivery (request parameter / value `dateType=DELIVER`), and alternatives (when possible) when this is not the case

Request is made for an origin (`fromCountry`, `fromPostcode`) to destination (`toCountry`, `toPostcode`) combination and the request is made for a single product at a time

Called at /schedule/available-dates

5.3.5.1 Date Availability - Parameters

Parameter	Explanation	Example values
productCode	requested product code	44
fromCountry	origin country	DE
fromPostcode	origin postcode	58239
toCountry	destination country	FR
toPostcode	destination postcode	62000
date	collect or delivery date to check for availability	2021-05-10
dateType	type of date for availability check	COLLECT/DELIVER

- If **dateType** parameter is omitted the calculation will assume "COLLECT"

5.3.5.2 Date Availability - response

This document only provides guiding information to the response. Refer to the API specification for complete definition of the available-dates response.

5.3.5.2.1 Available

\$.available indicating possibility for collection / delivery on the requested date, as boolean

- **false** - the date is not available for collection (request parameter **dateType=COLLECT**) or distribution (request parameter **dateType=DELIVER**)
- **true** - the date is not available for collection (request parameter **dateType=COLLECT**) or distribution (request parameter **dateType=DELIVER**)

5.3.4.2.4 Collect On Request / Distribution on Request

collectionOnRequest and **distributionOnRequest** booleans of the lead time object, when true means that the collection address respectively distribution address is served by the local terminal only "on request", i.e. after contact with the relevant Schenker office

- **\$.collectionOnRequest** - relates to collection address, i.e. fromPostcode
- **\$.distributionOnRequest** - relates to distribution address, i.e. toPostcode

Since These flags relates to terminal network based schedules they are only returned for certain product schedules

5.3.5.2.3 Alternatives

An array of four alternatives for collection / delivery on the when the requested date is not available

`$.alternatives`

Each value of the array is a date string

`$.alternatives[].date`

The array is only returned in the case where the requested date is unavailable **and** it is possible to provide alternatives. As an example if the postcode for collection is served only "on request"

("collectionOnRequest": false), then there would be no alternatives array returned

`$.alternatives[].date`

5.3.5.2.4 Messages

The `messages` array provides further context to the response when applicable. Please refer to the dedicated section ***add link within document*** in this document for messages and how they apply to the respective endpoint

5.3.6 Fixed Dates - Overview

The fixed-dates resource provides a list of possible "fixed dates" to provide a fixed delivery date for shipments with fixed day product options

Option name	Option code
Fix Day	35
Fix Day	39
Fix Day 10	57
Fix Day 12	59
Fix Day 13	58

Availability of Fix Day 10, Fix Day 12 and Fix Day 13 is dependent on specific relation and destination postcode.

The fixed-dates resource is not self standing, it is expected that it is used after calling delivery-dates or lead-time, to check schedule possibility and obtain a validated possible date of collection to use as `date` parameter

Request is made for an origin (`fromCountry`, `fromPostcode`) to destination (`toCountry`, `toPostcode`) combination

The request is made for a single product at a time and only supports the DB SCHENKERsystem product (`productCode=43`), using any product code will throw a HTTP status 400 - Bad Request, and error message

Called at `/schedule/fixed-dates`

5.3.6.1 Fixed Dates - Parameters

Parameter	Explanation	Example values
-----------	-------------	----------------

Parameter	Explanation	Example values
productCode	requested product code	43
fromCountry	origin country	DE
fromPostcode	origin postcode	58239
toCountry	destination country	FR
toPostcode	destination postcode	62000
date	collect date	2021-05-10
time	desired time of collection	12:00:00

5.3.6.2 Fixed Dates - Response

This document only provides guiding information to the response. Refer to the API specification for complete definition of the fixed-dates response.

5.3.6.2.1 Fixed Dates

An array of four possible "fixed dates", if no possible dates was found the array is empty

`$.fixedDates`

Each value of the array is a date string

`$.fixedDates[].date`

5.3.6.2.2 Messages

This resource does not have a messages array

5.3.7 Available Products - Overview

The available-products endpoint provides information on the available products for between two countries (`fromCountry` to `toCountry`)

Invoked at `/service/available-products`

5.3.7.1 Available Products - Parameters

Parameter	Explanation	Example values
productCode	product code(s) to check for availability or ALL	44
		ALL
		43,44
fromCountry	origin country	DE
toCountry	destination country	FR

5.3.7.2 Available Products - Response

This document only provides guiding information to the response. Refer to the API specification for complete definition of the available-products response.

5.3.7.2.1 Available Products - Products

An array of available products based on requested products

`$.products`

Each value of the array contains an object with code and name (description) the product

- `products[].code`
- `products[].description`

When the resource is called with parameter/value `productCode=ALL` then all available products are returned

If the resource is called with specific product code as parameter value or list of product codes (e.g. `productCode=43` respectively `productCode=43,44`) and the requested product code is not available then a specific message code INF0013 is returned.

5.3.7.2.2 Messages

The `messages` array provides further context to the response when applicable. Please refer to the dedicated section ***add link within document*** in this document for messages and how they apply to the respective endpoint

5.3.8 Available Options - Overview

The available-options endpoint provides information on the available options per products for an an origin (`fromCountry`, `fromPostcode`) to destination (`toCountry`, `toPostcode`) combination

Called at `/service/available-options`

5.3.8.1 Available Options - Parameters

Parameter	Explanation	Example values
productCode	product code(s) to check for availability of options	44 / ALL / 43,44
fromCountry	origin country	DE
fromPostcode	origin postcode	58239
toCountry	destination country	FR
toPostcode	destination postcode	62000
date	planned or wanted date of collect	2021-05-10

- If `date` parameter is omitted the calculation will use the current date

5.3.8.2 Available Options - Response

This document only provides guiding information to the response. Refer to the API specification for complete definition of the available-products response.

Products as an array

5.3.8.2.1 Available Options - Products

`products[]`

Each value of the array contains an object with code and name (description) the product

- `products[].code`
- `products[].description`

5.3.8.3.2 Available Options - Products - Options

And the available options as an array

- `products[].options`

The array values contains an object with option code and option name (description)

- `products[].options[].code`
- `products[].options[].description`

When the resource is called with parameter/value `productCode=ALL` then all available products and options are returned

If the resource is called with specific product code as parameter value or list of product codes (e.g. `productCode=43` respectively `productCode=43,44`) and the requested product code is not available then a specific message code INF0013 is returned.

5.3.8.3.3 Messages

5.3.8.4.1 Collect Dates List - Overview

The collect-dates-list endpoint provides a longer (if needed) list of dates to be

5.3.8.4.2 Collect Dates List - Parameters

Parameter	Explanation	Example values
productCode	single product code to check for collection dates	44
fromCountry	origin country	AT
fromPostcode	origin postcode	8634
toCountry	destination country	DK
toPostcode	destination postcode	2670

Parameter	Explanation	Example values
date	planned or wanted date of collection	2021-09-10
time	planned or wanted time of collection	12:00:00
numberOfDates	number of dates to be returned	4

5.3.8.4.3 Collect Dates List - Response

This document only provides guiding information to the response. Refer to the API specification for complete definition of the available-products response.

5.3.8.4.5 Collect Dates List - Validation - numberOfDates

The **numberOfDates** parameter is optional, when omitted, it takes the value of 4 by default. The maximum value allowed is 10.

5.3.8.4.5 Collect Dates List - Validation - productCode

There are some basic validation rules to keep in mind: Only a single code is allowed to be provided in the **productCode** parameter.

6. Appendices

6.1 Country codes and post code syntax

The following country codes can be used for the fromCountry, toCountry parameters. The following postcode syntax is valid for the fromPostcode and toPostcode parameters

Country Code	Country Name	Postcode syntaxes
AD	Andorra	AANNN
AL	Albania	NNNN
AT	Austria	NNNN
BA	Bosnia and Herzegovina	NNNNN
BE	Belgium	NNNN
BG	Bulgaria	NNNN
BY	Belarus	NNNNNN
CH	Switzerland	NNNN
CY	Cyprus	NNNN
CZ	Czech Republic	NNN NN NNNNN
DE	Germany	NNNNN
DK	Denmark	NNNN
EE	Estonia	NNNNN
ES	Spain	NNNNN
FI	Finland	NNNNN
FR	France	NNNNN
GB	United Kingdom	AANA NAA
		ANA NAA
		AN NAA
		ANN NAA
		AAN NAA
		AANN NAA
GI	Gibraltar	AA
		AANN
		AANN NAA
		AANNNAA

Country Code	Country Name	Postcode syntaxes
GR	Greece	NNN NN NNNNN
HR	Croatia	NNNNN
HU	Hungary	NNNNN
IE	Ireland	(Ireland County 3-letter code)
IT	Italy	NNNNN
KZ	Kazakhstan	NNNNNN
LI	Lichtenstein	NNNN
LT	Lithuania	NNNNN
LU	Luxembourg	NNNN
LV	Latvia	NNNN
MA	Morocco	NNNNN
MD	Moldova	NNNN
ME	Montenegro	NNNNN
MK	Macedonia	NNNN
NL	Netherlands	NNNN NNNN AA NNNNAA
NO	Norway	NNNN
PL	Poland	NN-NNN NNNNN
PT	Portugal	NNNN NNNN-NNN NNNNNNN
RO	Romania	NNNNNN
RS	Serbia	NNNNN
RU	Russia	NNNNNN
SE	Sweden	NNN NN NNNNN
SI	Slovenia	NNNN
SK	Slovakia	NNN NN NNNNN

Country Code	Country Name	Postcode syntaxes
SM	San Marino	NNNNN
TR	Turkey	NNNNN
UA	Ukraine	NNNNN
XK	Kosovo	NNNNN

6.2 Ireland, counties

County Code	County Name
CAW	Carlow
CAV	Cavan
CLR	Clare
ORK	Cork
CFN	Donegal
DUB	Dublin
GWY	Galway
KIR	Kerry
KIL	Kildare
KLK	Kilkenny
LOI	Laois
LEI	Leitrim
LMK	Limerick
LFD	Longford
LTH	Louth
MAO	Mayo
MTH	Meath
MON	Monaghan
OFL	Offaly
RSM	Roscommon
SXL	Sligo
TPY	Tipperary
WAT	Waterford

County Code	County Name
WMT	Westmeath
WEX	Wexford
WIC	Wicklow