

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

Version	Date	Remarks
1.0	2022-07-05	Initial
1.1	2022-11-10	Included Customer Specific Schedules

The External Land Scheduling API provides information on schedules, lead-times and availability of DB Schenker products and options.

This guide serves to present examples on how to use the API.

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)- External Scheduling API" - general information about the API and high level introduction to the capabilities.
- "DB Schenker Land (Europe)- External Scheduling API Usage Guide" (this document) - Example cases on how to use the API.
- "API Specification" - specification for implementing, for developers (distributed on request and at the discretion of the CTTS Team, contact support.ctts@dbschenker.com)

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2.2 Common Issues

Section dedicated to commonly reported issues. It is highly recommended to call the [available_products](#) function before making a specific schedule call to ensure that the Product you are calling for exists in the API. Some local products are not available in the call, but use a schedule of a similar product, for example Product 94 cannot currently be called in the API, but using Product 90 will return the same schedule (see Appendix 6.3).

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), the 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, the **exception is Fixed Dates which must be used in succession of one of Lead Time, Delivery Dates, Collect Dates, and Date Availability.**

Function	Purpose
Lead Time	Provides "week view" of scheduling, based on a planned/wanted date of collection or on a wanted date of delivery
Available Dates	Provides information on availability of collection/delivery date
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
Delivery Dates	Provides information on if a date is available for 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 Usage - Lead Times

3.3.1 - Lead Times Parameters

The Lead Times endpoint requires the following parameters:

Parameter	Type	Example Value	Comment
productCode	String	44/ALL/44,45	Multiple Product Codes can be requested, separated by a comma. "ALL" can also be passed in the parameter to receive all Products for this relation
fromCountry	String	PL	ISO 3166-1 2 letter country code
fromPostcode	String	02776 etc.	Origin postcode, for accepted values see Country Appendix
toCountry	String	PL	ISO 3166-1 2 letter country code
toPostcode	String	02776 etc.	Destination postcode, for accepted values see Country Appendix
date	String	2022-11-11	Date of collection or delivery, depending on the dateType parameter. If date parameter is not provided it defaults to the date of today.
time	String	12:00:00	If time parameter is not provided it is assumed no time should be used in the calculation.
dateType	String	COLLECT or DELIVER	Determines whether the date and time in the request pertains to collection or delivery.
customerWebId	String	PL0000000	For customers that have a specific schedule.
considerADR	Boolean	1/0	If the transported goods are categorised as dangerous, this parameter alters routing to use lanes allowing for dangerous goods.

3.3.2 - Lead Times Example Request

Below is an example call to the Lead Times function:

```
https://shield.dbschenker.com:443/api/scheduling/schedule/lead-time?productCode=44,45&fromCountry=DE&fromPostcode=58239&toCountry=DE&toPostcode=41112&date=2022-11-11&time=12:00:00&dateType=COLLECT
```

Parameter	Value
productCode	44,45
fromCountry	DE
fromPostcode	58239
toCountry	DE

toPostcode	41112
date	2020-05-25
dateType	COLLECT

3.3.3 - Lead Times Example Response

The call presented above returns the following response:

```
{
  "productSchedules": [
    {
      "code": "44",
      "description": "DB SCHENKERSsystem premium",
      "options": [
        {
          "code": "01",
          "description": "econeutral"
        },
        {
          "code": "09",
          "description": "Dangerous Goods"
        },
        {
          "code": "13",
          "description": "Notication by driver"
        },
        {
          "code": "14",
          "description": "Pre-advice e-mail"
        },
        {
          "code": "15",
          "description": "Cash On Delivery"
        },
        {
          "code": "16",
          "description": "Pre-notice Delivery email"
        },
        {
          "code": "19",
          "description": "Pre-notice Delivery SMS"
        },
        {
          "code": "51",
          "description": "Premium8"
        },
        {
          "code": "53",
          "description": "Premium12"
        }
      ]
    }
  ]
}
```

```
{
  "code": "55",
  "description": "Premium 10"
},
"leadTimes": [
  {
    "collectionOnRequest": false,
    "distributionOnRequest": false,
    "collection": {
      "date": "2020-05-25",
      "dayOfWeek": 1
    },
    "leadTimeDays": 1,
    "expectedDelivery": {
      "date": "2020-05-26",
      "dayOfWeek": 2
    }
  },
  {
    "collectionOnRequest": false,
    "distributionOnRequest": false,
    "collection": {
      "date": "2020-05-26",
      "dayOfWeek": 2
    },
    "leadTimeDays": 1,
    "expectedDelivery": {
      "date": "2020-05-27",
      "dayOfWeek": 3
    }
  },
  {
    "collectionOnRequest": false,
    "distributionOnRequest": false,
    "collection": {
      "date": "2020-05-27",
      "dayOfWeek": 3
    },
    "leadTimeDays": 1,
    "expectedDelivery": {
      "date": "2020-05-28",
      "dayOfWeek": 4
    }
  },
  {
    "collectionOnRequest": false,
    "distributionOnRequest": false,
    "collection": {
      "date": "2020-05-28",
      "dayOfWeek": 4
    }
  }
]
```

```

        "leadTimeDays": 1,
        "expectedDelivery": {
            "date": "2020-05-29",
            "dayOfWeek": 5
        }
    },
    {
        "collectionOnRequest": false,
        "distributionOnRequest": false,
        "collection": {
            "date": "2020-05-29",
            "dayOfWeek": 5
        },
        "leadTimeDays": 2,
        "expectedDelivery": {
            "date": "2020-06-02",
            "dayOfWeek": 2,
            "holidayInfluences": [
                {
                    "date": "2020-06-01",
                    "type": "LOCAL"
                }
            ]
        }
    }
],
"messages": []
},
{
    "code": "45",
    "description": "DB SCHENKERsystem home",
    "options": [
        {
            "code": "AK",
            "description": "Return Home"
        },
        {
            "code": "01",
            "description": "econeutral"
        },
        {
            "code": "15",
            "description": "Cash On Delivery"
        },
        {
            "code": "16",
            "description": "Pre-Notice Delivery e-mail"
        },
        {
            "code": "19",
            "description": "Pre-Notice Delivery SMS"
        }
    ]
}

```

```
],
"leadTimes": [
  {
    "collectionOnRequest": false,
    "distributionOnRequest": false,
    "collection": {
      "date": "2020-05-25",
      "dayOfWeek": 1
    },
    "leadTimeDays": 2,
    "expectedDelivery": {
      "date": "2020-05-27",
      "dayOfWeek": 3
    }
  },
  {
    "collectionOnRequest": false,
    "distributionOnRequest": false,
    "collection": {
      "date": "2020-05-26",
      "dayOfWeek": 2
    },
    "leadTimeDays": 2,
    "expectedDelivery": {
      "date": "2020-05-28",
      "dayOfWeek": 4
    }
  },
  {
    "collectionOnRequest": false,
    "distributionOnRequest": false,
    "collection": {
      "date": "2020-05-27",
      "dayOfWeek": 3
    },
    "leadTimeDays": 2,
    "expectedDelivery": {
      "date": "2020-05-29",
      "dayOfWeek": 5
    }
  },
  {
    "collectionOnRequest": false,
    "distributionOnRequest": false,
    "collection": {
      "date": "2020-05-28",
      "dayOfWeek": 4
    },
    "leadTimeDays": 3,
    "expectedDelivery": {
      "date": "2020-06-02",
      "dayOfWeek": 2,

```



```

        "holidayInfluences": [
            {
                "date": "2020-06-01",
                "type": "LOCAL"
            }
        ]
    },
    {
        "collectionOnRequest": false,
        "distributionOnRequest": false,
        "collection": {
            "date": "2020-05-29",
            "dayOfWeek": 5
        },
        "leadTimeDays": 3,
        "expectedDelivery": {
            "date": "2020-06-03",
            "dayOfWeek": 3,
            "holidayInfluences": [
                {
                    "date": "2020-06-01",
                    "type": "LOCAL"
                }
            ]
        }
    }
],
"messages": []
}
]
}

```

You will see that the response contains two blocks under the `"productSchedules":` array, one for each product code. These then in turn contain all available options for that product within the `"options":` array. This means that these options are available for that relation. For each of the products, we will receive a week's worth of lead times, starting from the date we specified in the call. These will be presented in the `"leadTimes":` array. We will see if the origin post code allows for collection on request, and likewise we will see if the delivery on request is available for the destination postcode within the following block:

```

"collectionOnRequest": false,
"distributionOnRequest": false,

```

The `"holidayInfluences":` element appears when a holiday influences a certain date, it will include the type of holiday (NATIONAL, HOLIDAY or WEEKEND) and its date.

As we can see, the response contains not only the dates, but also the day of the week, found in the

```

"dayOfWeek": element.

```

Should a product not be available for a certain relation, the following response element with code: [INF0013](#) will be returned:

```
{
  "code": "90",
  "description": "SCHENKERparcel",
  "options": [],
  "leadTimes": [],
  "messages": [
    {
      "code": "INF0013",
      "description": "Requested product not available for this
relation"
    }
  ]
}
```

3.4 Usage - Available Dates

The Available Dates function can be called to see if a particular date is available for collection or delivery on a certain day, between two postcodes. It returns a very small response which states whether the date is possible and whether collection or distribution on request is available in those locations.

3.4.1 - Available Dates Parameters

The Lead Times endpoint requires the following parameters:

Parameter	Type	Example Value	Comment
productCode	String	44	Only a single Product Code can be provided
fromCountry	String	PL	ISO 3166-1 2 letter country code
fromPostcode	String	02776 etc.	Origin postcode, for accepted values see Country Appendix
toCountry	String	PL	ISO 3166-1 2 letter country code
toPostcode	String	02776 etc.	Destination postcode, for accepted values see Country Appendix
date	String	2022-11-11	Date of collection or delivery, depending on the dateType parameter. If date parameter is not provided it defaults to the date of today.
time	String	12:00:00	If time parameter is not provided it is assumed no time should be used in the calculation.
dateType	String	COLLECT or DELIVER	Determines whether the date and time in the request pertains to collection or delivery.
customerWebId	String	PL0000000	For customers that have a specific schedule.
considerADR	Boolean	1/0	If the transported goods are categorised as dangerous, this parameter alters routing to use lanes allowing for dangerous goods.

3.4.2 - Available Dates Example Request

Below is an example call to the Available Dates function:

```
https://shield.dbschenker.com:443/api/scheduling/schedule/available-dates?productCode=44&fromCountry=DE&fromPostcode=58239&toCountry=FR&toPostcode=62200&date=2020-05-10&dateType=COLLECT
```

Parameter	Value
productCode	44
fromCountry	DE

fromPostcode	58239
toCountry	FR
toPostcode	62200
date	2022-05-10
dateType	COLLECT

3.4.3 - Available Dates Example Response

As we can see the response is quite simple and means that the date of 10th of May 2022 is an available collect date for a Product 44 in Germany, 58239 for a product that is being sent to France.

```
{  
  "available": true,  
  "collectionOnRequest": false,  
  "distributionOnRequest": false  
}
```

3.5 Usage - Available Products

The Available Products function serves to list all available Products for a certain connection and a collection date. While you can check a single product, or several by passing comma-separated Product Codes, it is recommended to simply use the ALL parameter in productCode. Please note that Product Availability is defined on country level and some areas within the country may not support particular products. To receive the most accurate information on whether a shipment can be executed please use the Lead-Time endpoint with specific criteria.

3.5.1 - Available Products Parameters

Parameter	Type	Example Value	Comment
productCode	String	44/ALL/44,45	Multiple Product Codes can be requested, separated by a comma. "ALL" can also be passed in the parameter to receive all Products for this relation
fromCountry	String	PL	ISO 3166-1 2 letter country code
toCountry	String	PL	ISO 3166-1 2 letter country code

3.5.2 - Available Products Example Request

```
https://shield.dbschenker.com:443/api/scheduling/service/available-products?productCode=ALL&fromCountry=SE&toCountry=SE
```

Parameter	Value
productCode	ALL
fromCountry	SE
toCountry	SE

3.5.3 - Available Products Example Response

```
{
  "products": [
    {
      "code": "44",
      "description": "DB SCHENKERSsystem premium",
      "messages": []
    },
    {
      "code": "43",
      "description": "DB SCHENKERSsystem",
      "messages": []
    },
    {
      "code": "71",
      "description": "DB SCHENKERfull load",
      "messages": []
    }
  ]
}
```

```
        "messages": []
    },
    {
        "code": "72",
        "description": "DB SCHENKERpart load",
        "messages": []
    },
    {
        "code": "90",
        "description": "SCHENKERparcel",
        "messages": []
    },
    {
        "code": "97",
        "description": "SCHENKERparcel home evening",
        "messages": []
    }
]
}
```

The Products available for the selected countries are listed.

3.6 Usage - Available Options

Available Options is analogous to the Available Products call, but also lists particular Options for the given Products. It is likewise advised to use ALL to see all available Products and Options between two postcodes, for a specified collection date.

3.6.1 - Available Options Parameters

Parameter	Type	Example Value	Comment
productCode	String	44/ALL/44,45	Multiple Product Codes can be requested, separated by a comma. "ALL" can also be passed in the parameter to receive all Products for this relation
fromCountry	String	PL	ISO 3166-1 2 letter country code
fromPostcode	String	02776 etc.	Origin postcode, for accepted values see Country Appendix
toCountry	String	PL	ISO 3166-1 2 letter country code
toPostcode	String	02776 etc.	Destination postcode, for accepted values see Country Appendix
date	String	2022-11-11	Date of collection. If date parameter is not provided it defaults to the date of today.

3.6.2 - Available Options Example Request

```
https://shield.dbschenker.com:443/api/scheduling/service/available-options?
productCode=ALL&fromCountry=DE&fromPostcode=58238&toCountry=FR&toPostcode=41100&date=2022-04-08
```

Parameter	Value
productCode	ALL
fromCountry	DE
fromPostcode	58238
toCountry	FR
toPostcode	41100
date	2022-04-08

3.6.3 - Available Options Example Response

```
{
  "products": [
    {
      "code": "44",
      "description": "DB SCHENKERsystem premium",
    }
  ]
}
```

```
"options": [  
  {  
    "code": "01",  
    "description": "econeutral"  
  },  
  {  
    "code": "09",  
    "description": "Dangerous Goods"  
  },  
  {  
    "code": "15",  
    "description": "Cash On Delivery"  
  },  
  {  
    "code": "16",  
    "description": "Pre-notice Delivery email"  
  },  
  {  
    "code": "19",  
    "description": "Pre-notice Delivery SMS"  
  },  
  {  
    "code": "55",  
    "description": "Premium 10"  
  },  
  {  
    "code": "56",  
    "description": "Premium 13"  
  }  
],  
"messages": [  
],  
{  
  "code": "43",  
  "description": "DB SCHENKERSsystem",  
  "options": [  
    {  
      "code": "01",  
      "description": "econeutral"  
    },  
    {  
      "code": "09",  
      "description": "Dangerous Goods"  
    },  
    {  
      "code": "15",  
      "description": "Cash On Delivery"  
    },  
    {  
      "code": "16",  
      "description": "Pre-notice Delivery email"  
    }  
  ],  
}
```



```
{
  {
    "code": "19",
    "description": "Pre-notice Delivery SMS"
  },
  {
    "code": "57",
    "description": "Fix Day 10"
  },
  {
    "code": "58",
    "description": "Fix Day 13"
  }
],
"messages": []
},
{
  "code": "45",
  "description": "DB SCHENKERsystem home",
  "options": [
    {
      "code": "01",
      "description": "econeutral"
    },
    {
      "code": "16",
      "description": "Pre-Notice Delivery e-mail"
    },
    {
      "code": "19",
      "description": "Pre-Notice Delivery SMS"
    }
  ],
  "messages": []
},
{
  "code": "71",
  "description": "DB SCHENKERfull load",
  "options": [
    {
      "code": "20",
      "description": "Time window pick-up (morning)"
    },
    {
      "code": "21",
      "description": "Time window pick-up (afternoon)"
    },
    {
      "code": "22",
      "description": "Time window delivery (morning)"
    },
    {
      "code": "23",
```

```

        "description": "Time window delivery (afternoon)"
    },
    {
        "code": "34",
        "description": "Same day collection"
    },
    {
        "code": "36",
        "description": "Fix day pick-up"
    },
    {
        "code": "37",
        "description": "Fix day delivery"
    }
],
"messages": []
},
{
    "code": "72",
    "description": "DB SCHENKERpart load",
    "options": [
        {
            "code": "20",
            "description": "Time window pick-up (morning)"
        },
        {
            "code": "21",
            "description": "Time window pick-up (afternoon)"
        },
        {
            "code": "22",
            "description": "Time window delivery (morning)"
        },
        {
            "code": "23",
            "description": "Time window delivery (afternoon)"
        },
        {
            "code": "34",
            "description": "Same day collection"
        },
        {
            "code": "36",
            "description": "Fix day pick-up"
        },
        {
            "code": "37",
            "description": "Fix day delivery"
        }
    ],
    "messages": []
}

```

```
}  
]
```

As you can see the Available Options function can replace the Available Products, but requires more detailed location information.

3.7 Usage - Collect Dates

This function is designed to return a collection date for a shipment to be delivered by the specified date. Please note that in the absence of the date parameter, the function will by definition return a past date.

3.7.1 - Collect Dates Parameters

Parameter	Type	Example Value	Comment
productCode	String	44/ALL/44,45	Multiple Product Codes can be requested, separated by a comma. "ALL" can also be passed in the parameter to receive all Products for this relation
fromCountry	String	PL	ISO 3166-1 2 letter country code
fromPostcode	String	02776 etc.	Origin postcode, for accepted values see Country Appendix
toCountry	String	PL	ISO 3166-1 2 letter country code
toPostcode	String	02776 etc.	Destination postcode, for accepted values see Country Appendix
date	String	2022-11-11	Date of delivery. If date parameter is not provided it defaults to the date of today.
customerWebId	String	PL00000000	For customers that have a specific schedule.
considerADR	Boolean	1/0	If the transported goods are categorised as dangerous, this parameter alters routing to use lanes allowing for dangerous goods.

3.7.2 - Collect Dates Example Request

```
https://shield.dbschenker.com:443/api/scheduling/schedule/collect-dates?productCode=44&fromCountry=AT&fromPostcode=4810&toCountry=FR&toPostcode=41100&date=2022-03-13
```

Parameter	Value
productCode	44
fromCountry	AT
fromPostcode	4810
toCountry	FR
toPostcode	41100
date	2022-03-13

3.7.3 - Collect Dates Example Response

```

{
  "productSchedules": [
    {
      "code": "44",
      "description": "DB SCHENKERsystem premium",
      "options": [
        {
          "code": "01",
          "description": "econeutral"
        },
        {
          "code": "09",
          "description": "Dangerous Goods"
        },
        {
          "code": "15",
          "description": "Cash On Delivery"
        },
        {
          "code": "16",
          "description": "Pre-notice Delivery email"
        },
        {
          "code": "19",
          "description": "Pre-notice Delivery SMS"
        },
        {
          "code": "55",
          "description": "Premium 10"
        },
        {
          "code": "56",
          "description": "Premium 13"
        }
      ],
      "collectionOnRequest": false,
      "distributionOnRequest": false,
      "collection": {
        "date": "2022-03-09",
        "dayOfWeek": 3
      },
      "messages": []
    }
  ]
}

```

The response will show if the holidays influence the collection date in the messages section. It will also specify whether collection/distribution on request is available. Note that you can also use the ALL

3.8 Usage - Delivery Dates

3.8.1 - Delivery Dates Parameters

Parameter	Type	Example Value	Comment
productCode	String	44/ALL/44,45	Multiple Product Codes can be requested, separated by a comma. "ALL" can also be passed in the parameter to receive all Products for this relation
fromCountry	String	PL	ISO 3166-1 2 letter country code
fromPostcode	String	02776 etc.	Origin postcode, for accepted values see Country Appendix
toCountry	String	PL	ISO 3166-1 2 letter country code
toPostcode	String	02776 etc.	Destination postcode, for accepted values see Country Appendix
date	String	2022-11-11	Date of collection. If date parameter is not provided it defaults to the date of today.
time	String	12:00:00	Time of collection/delivery to Schenker agent, which determines whether the parcel can be handled that same day. If empty, will default to current time.
customerWebId	String	PL00000000	For customers that have a specific schedule.
considerADR	Boolean	1/0	If the transported goods are categorised as dangerous, this parameter alters routing to use lanes allowing for dangerous goods.

3.8.2 - Delivery Dates Example Request

```
https://shield.dbschenker.com:443/api/scheduling/schedule/delivery-dates?
productCode=43&fromCountry=PL&fromPostcode=02796&toCountry=SE&toPostcode=51692&date=2022-04-21&time=01:00:00
```

Parameter	Value
productCode	43
fromCountry	PL
fromPostcode	02796
toCountry	SE
toPostcode	51692
date	2022-04-21
time	01:00:00

In this request we are asking for delivery dates if the collection is made on the 21st of April. Please note that same-day requests for collection may be difficult to realise if the cutoff time is not met. Thus, the time parameter should be used to see if the package will be sent further the next day.

3.8.3 - Delivery Dates Example Response

```
{
  "productSchedules": [
    {
      "code": "43",
      "description": "DB SCHENKERsystem",
      "options": [
        {
          "code": "01",
          "description": "econeutral"
        },
        {
          "code": "09",
          "description": "Dangerous Goods"
        },
        {
          "code": "15",
          "description": "Cash On Delivery"
        },
        {
          "code": "16",
          "description": "Pre-notice Delivery email"
        },
        {
          "code": "19",
          "description": "Pre-notice Delivery SMS"
        }
      ],
      "collectionOnRequest": false,
      "distributionOnRequest": false,
      "collection": {
        "date": "2022-04-21",
        "dayOfWeek": 4
      },
      "earliestDelivery": {
        "date": "2022-04-26",
        "dayOfWeek": 2
      },
      "latestDelivery": {
        "date": "2022-04-27",
        "dayOfWeek": 3
      },
      "messages": []
    }
  ]
}
```

As we can see we receive the collection date that guarantess delivery between the 26th and 27th of April for this call. In this case changing the time in the call will not affect the delivery dates, but that is certainly possible in other cases and depends on a particular route.

3.9 Usage - Fixed Dates

The fixed dates function should be used in tandem with the Delivery Dates or Lead-Time function and Available Products function in order to make sure that a request is made for a valid connection. The result pickup date from one of the mentioned functions should be used in the Fixed Dates call. Alternatively an actual pickup date for an existing shipment can be chosen in order to provide delivery dates to the customer.

3.9.1 - Fixed Dates Parameters

Parameter	Type	Example Value	Comment
productCode	String	44	Only a single product code is accepted
fromCountry	String	PL	ISO 3166-1 2 letter country code
fromPostcode	String	02776 etc.	Origin postcode, for accepted values see Country Appendix
toCountry	String	PL	ISO 3166-1 2 letter country code
toPostcode	String	02776 etc.	Destination postcode, for accepted values see Country Appendix
date	String	2022-11-11	Date of collection. If date parameter is not provided it defaults to the date of today.
time	String	12:00:00	Time of collection/delivery to Schenker agent, which determines whether the parcel can be handled that same day. If omitted, will default to current time.
customerWebId	String	PL0000000	For customers that have a specific schedule.
considerADR	Boolean	1/0	If the transported goods are categorised as dangerous, this parameter alters routing to use lanes allowing for dangerous goods.

3.9.2 - Fixed Dates Example Request

Having previously checked that the date of 22nd of August is a valid pickup for this relation (Using the following call:

```
https://shield.dbschenker.com:443/api/scheduling/schedule/collect-dates?
productCode=45&fromCountry=PL&fromPostcode=02796&toCountry=FR&toPostcode=26000&date=2022-08-27&time=01:00:00
```

) We see that 29th is the earliest available collection date as we receive (despite calling for the 27th - see "messages" array in the partial response):

```
"collectionOnRequest": false,
"distributionOnRequest": false,
"collection": {
  "dayOfWeek": 1
  "date": "2022-08-22",
```

The request looks as follows:

Parameter	Value
productCode	43
fromCountry	PL
fromPostcode	02796
toCountry	FR
toPostcode	26000
numberOfDates	4
date	2022-08-22

3.9.3 - Fixed Dates Example Response

The response is quite concise -

```
{
  "fixedDates": [
    {
      "date": "2022-08-26"
    },
    {
      "date": "2022-08-29"
    },
    {
      "date": "2022-08-30"
    },
    {
      "date": "2022-08-31"
    }
  ]
}
```

Hence, we see that fixed day delivery can be set for any date between the 26th and 31st of August.

3.10 Usage - Collect Dates List

The Collect Dates List provides up to 10 collection dates, with the parameter numberOfDates.

3.10.1 - Collect Dates List Parameters

This endpoint features a special parameter called numberOfDates, which defaults to 4 if not provided and is limited up to 10 values.

Parameter	Type	Example Value	Comment
productCode	String	44	Only a single product code is accepted
fromCountry	String	PL	ISO 3166-1 2 letter country code
fromPostcode	String	02776 etc.	Origin postcode, for accepted values see Country Appendix
toCountry	String	PL	ISO 3166-1 2 letter country code
toPostcode	String	02776 etc.	Destination postcode, for accepted values see Country Appendix
date	String	2022-11-11	Date of collection. If date parameter is not provided it defaults to the date of today.
time	String	12:00:00	Time of collection/delivery to Schenker agent, which determines whether the parcel can be handled that same day. If omitted, will default to current time.
numberOfDates	String	4	Any value between 1 and 10.
customerWebId	String	PL0000000	For customers that have a specific schedule.

3.10.2 - Collect Dates List Example Request

Parameter	Value
productCode	45
fromCountry	PL
fromPostcode	02796
toCountry	FR
toPostcode	26000
numberOfDates	10
date	2022-08-22

For the same connection we look at possible pickup dates starting from the 22nd of August.

```
https://shield.dbschenker.com:443/api/scheduling/schedule/collect-dates-list?productCode=45&fromCountry=PL&fromPostcode=02796&toCountry=FR&toPostcode=26000&numberOfDates=10&date=2022-08-22
```

3.10.3 - Collect Dates List Example Response

```
{
  "collectDates": [
    {
      "date": "2022-08-22"
    },
    {
      "date": "2022-08-23"
    },
    {
      "date": "2022-08-24"
    },
    {
      "date": "2022-08-25"
    },
    {
      "date": "2022-08-26"
    },
    {
      "date": "2022-08-29"
    },
    {
      "date": "2022-08-30"
    },
    {
      "date": "2022-08-31"
    },
    {
      "date": "2022-09-01"
    },
    {
      "date": "2022-09-02"
    }
  ]
}
```

We receive 10 valid dates. Note that while these are consecutive, in many cases they will not be.

3.11 Customer Specific Schedules

Please note, that without knowing your Customer WebID, you will not be able to utilise this feature.

Customer Specific Schedules apply in most endpoints available on the external deploy of the Scheduling API. When successfully used in a call, an extra element of the response called "customerSchedules", example:

```
https://shield.dbschenker.com:443/api/scheduling/schedule/lead-time?
productCode=43&fromCountry=AT&fromPostcode=6020&toCountry=DE&toPostcode=41112&date=2022-
11-25&dateType=COLLECT&customerWebId=XX11111111
```

```
"customerSchedules": [
  {
    "options": [],
    "leadTimes": [
      {
        "collectionOnRequest": false,
        "distributionOnRequest": false,
        "collection": {
          "date": "2022-11-21",
          "dayOfWeek": 1
        },
        "leadTimeDays": 12,
        "expectedDelivery": {
          "date": "2022-12-07",
          "dayOfWeek": 3
        }
      }
    ]
  }
]
```

4. Authorisation

Currently authorisation is based on an API key and basic auth credentials. To receive access, please contact your DB Schenker representative who will in turn get in touch with the CTTS Team.

5. Errors, Additional Messages and Information Codes

5.1 Error Handling and Information Codes

5.1.1 HTTP status codes

200 OK

400 Bad Request - When one or more parameters are missing or deviate from accepted validation rules

401 Unauthorized - When request does not provide authentication information in header

403 Forbidden - When request provides incorrect authentication

404 Not Found

5.2 Messages Array and Information Codes

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

5.2.1 INF0010

`fromPostcode` not found in the scheduling data. Please check validity of provided postcode, if valid please contact {your local Schenker office}. This message signifies that the `fromPostcode` is not within the regularly scheduled network, so no schedule can be provided. You can try looking for a scheduled route to the nearest terminal.

5.2.2 INF0011

`toPostcode` not found in the scheduling data. Please check validity of provided postcode, if valid please contact {your local Schenker office} This message signifies that the `toPostcode` is not within the regularly scheduled network, so no schedule can be provided. You can try looking for a scheduled route to the nearest terminal.

5.2.3 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} This message signifies that the `toPostcode` and `fromPostcode` are not within the regularly scheduled network, so no schedule can be provided. You can try looking for a scheduled route to the nearest terminals.

5.2.4 INF0013

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

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 returned when request is made with specific product code(s).

5.2.5 INF0030

The scheduling calculation could not be completed as expected.

5.2.6 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.

5.2.7 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.

5.2.8 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.

5.2.9 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

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
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
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
WMT	Westmeath
WEX	Wexford
WIC	Wicklow

6.3 List of Product Codes in current use by the API

--	--

Product Code	Alternative Code
28	X
29	X
43	X
44	X
45	X
60	X
71	X
72	X
75	X
90	X
95	X
97	X
94	Use 90 in parameter