CESOP Web Service API for Payment Service Providers

Introduction

The CESOP Web Service API for payment service providers is used for the automated transmission of payment data and for querying the processing status of transmitted payment data via a web-based programming interface (API, Application Programming Interface). In order to authenticate web service calls and thus assign them to your company, a so-called API key must be sent in a defined HTTP request header in the HTTP call. This API key can be managed in the CESOP portal for payment service providers, as described below.

Test transmission

In order to support the development of your client software, the CESOP Web Service API offers, in addition to the endpoints for production transmission of payment data, also endpoints for test transmission, which you can use to test your software in the course of development. For this purpose, there is a separate API key for the test API as well as a separate one for the production API. The keys cannot be used reciprocally.

Please note that payment data transmitted via the Test API will only be used for technical tests and will not be used to fulfill legal reporting requirements.

API key management

IMPORTANT NOTICE	The API key is to be treated like a password, as it can be used to transmit CESOP payment data on behalf of your company or to read metadata about your transmitted data.

Generating an API key

To activate the CESOP Web Service API for payment service providers for your company, an API key has to be generated in the CESOP Portal for payment service providers. To do this, open the menu item "Production transmission" or "Test transmission" and click on the menu item "Web service access data". Then click on the button "Generate API key". An

API key will be generated and displayed once. For security reasons, the API key is stored in our database in encrypted form and cannot be displayed again later in plain text. The key can be copied to your clipboard by clicking the "Copy" button or by manually selecting it and pressing CTRL+C. Paste the API key into the configuration of your application and optionally store it in a secure location.

Deleting an API key

To disable access to the CESOP Web Service API for payment service providers, the API key can be deleted in the CESOP Portal for payment service providers. To do so, click on the "Delete API Key" button. To re-enable API access, a new API key must be generated.

Authentication with API key

The API key generated in the CESOP portal for payment service providers must be sent in the HTTP header X-CESOP-API-KEY of the web service requests.

```
X-CESOP-API-KEY: oUthYSTaQEWJXXmwR1XyBQUbDcttfosUahxXt2tCj7emdhEgCFzkaD74PCnDFJLQ
```

Requests without or with invalid API key are answered with HTTP status code 401 - Unauthorized.

General error codes

Client side errors like invalid parameter values or HTTP methods are answered with HTTP status codes 4xx. If an unforeseen server-side error occurs in the application, it is answered with status code 500 - Internal Server Error. In addition, under certain circumstances, such as network problems, the status codes 502 - Bad Gateway, 503 - Service Unavailable, or 504 - Gateway Timeout, which are generated by upstream systems (proxy servers) are generated.

Errors are returned in the form of a JSON object. The attributes "title" and "status" contain the HTML status code of the error. Also present is a timestamp and a detail description. The cause(s) can be taken from the "messages" field, which is a list of all errors that have occurred.

OpenAPI 3.0 Spezification

In addition to this documentation, you can use the included OpenAPI 3.0 specification of the CESOP Web Service API in JSON format (cesop-ws-v1-0-0.json) to generate automated client code for your application.

API Endpoints

For test and production submissions, there are two separate API base URLs with functionally identical endpoints:

- https://fon-cesop.bmf.gv.at/psp/api/test
- https://fon-cesop.bmf.gv.at/psp/api/prod

POST /payment-data

Transmission of payment data. The maximum size of the uncompressed request body is 1 gigabyte for production transmissions and 1 gigabyte for test transmissions. The size must be specified in the HTTP Request Header Content-Length. No transmission without defined size with chunked encoding is allowed.

Request Body

Content-Type: application/xml

XML according to CESOP Payment Data XML Schema Definition with <MessageType>PMT</MessageType>.

Response

Content-Type: application/json

Object containing metadata about the transmitted payment record.

Error Codes

Status Code	Description
411 - Length Required	The mandatory request header Request-Length is missing.

Status Code	Beschreibung
400 - Duplicate MessageRefId	A message already exists with the uploaded MessageRefId.

Beispiel

```
$ curl -XPOST -H 'X-CESOP-API-KEY: <apikey>' -H 'Content-Type: application/xml' -d '@daten.xml' https://psp-bmf-cesop-test.bmf.a2.cp.cna.at/psp/api/prod/payment-data'
```

```
Response Status: 200 OK
Response Body: { "messageRefId": "3a64a2f7-ceef-4f4b-91d3-0384aeaf85fc" }
```

GET /payment-data

Returns a list of the metadata of submitted payment records.

Request Parameter

Parameter	Optional	Defaultwert	Beschreibung
page	yes	0	Page number (starts with 0).
pageSize	yes	25	Number of entries per page. Maximum 500.
Sort	yes	receivedAt, asc	Sorting in the format Sort=<fieldname>
MessageType	yes	null	Message Type (PMT, VLD).
MessageTypeIndic_Type	yes	null	Value of MessageTypeIndic element of the payment or validation message (CESOP100, CESOP101, CESOP102)
Status	yes	null	Message Status (0=Submitted, 1=Transmitted, 2=Validated)
ValidationResult	yes	null	Validation Result (VALIDATED, PARTIALLY_REJECTED, FULLY_REJECTED)
ReportingPeriod	yes	null	Fiscal year and quarter of the reported payment data. Format" Q1.2024", "Q2.2024"
From	yes	null	Date of receipt from
To	yes	null	Date of receipt to

Sortable fields

- messageRefId
- corrMessageRefId
- reportingPeriod
- messageType
- messageTypeIndic_Type
- status
- validationResult

Sequence

- asc: ascending
- desc: descending

Response

Content-Type: application/json

A JSON object is returned in response. The object contains various meta information about the search, including the total number of pages and results found. The results consist of the stored metadata of the payment and validation messages and can be read from the $.content JSON path.

Exampel

```
$ curl -H 'X-CESOP-API-KEY: <apikey>' https://psp-bmf-cesop-
test.bmf.a2.cp.cna.at/psp/api/prod/payment-data?MessageType=VLD'
```

```
Response Status: 200 OK
Response Body: {
  "content": [
    {
      "messageRefId": "ef36af33-dbf9-4487-83ec-e4422f40b534",
      "corrMessageRefId": "00000000-0000-4000-8000-
000000000000",          "reportingPeriod": "Q1.2024",
      "messageType": "VLD",
      "messageTypeIndic_Type": "CESOP100",
      "status": 3,
      "validationResult": "FULLY_REJECTED"
    },
    {
      "messageRefId": "4189aa08-8c5b-4bfc-a9e5-63da684a6ccd",
      "corrMessageRefId": "00000000-0000-4000-8000-
000000000000",          "reportingPeriod": "Q1.2024",
      "messageType": "VLD",
      "messageTypeIndic_Type": "CESOP100",
      "status": 3,
      "validationResult": "FULLY_REJECTED"
    }
```

```
  ],
  "pageable": {
    "sort": {
      "empty": false,
      "sorted": true,
      "unsorted": false
```

```
        },
        "offset": 0,
        "pageNumber": 0,
        "pageSize": 25,
        "paged": true,
        "unpaged": false
    },
    "totalPages": 1,
    "totalElements": 2,
    "last": true,
    "size": 25,
    "number": 0,
    "sort": {
        "empty": false,
        "sorted": true,
        "unsorted": false
    },
    "numberOfElements": 2,
    "first": true,
    "empty": false
}
```


Status Code	Description
400 - From older than 5 years	The search field 'From' is older than 5 years –
400 - From cannot be before activation date	The search field 'From' cannot be before the valid start date
400 - From cannot be before To	The date in the 'From' search field must be after the date in the To' search field
400 - Quarter wrong format	The search field 'Quarter' must be in a specific format (e.g. Q4.2024) must be present.
400 - Status wrong format	The 'Status' search field must be in one of [0, 1, 2].
400 - Pagesize is too large	The maximum size for the pagesize is 500.
400 - Sort is not in the right format	The sort is in the wrong format. Correct format Sort=<key>, <direction

GET /payment-data/<messageRefId>/validation-result

Returns an XML document with the validation results for the payment record with the messageRefId. Only when the validation process on the part of the CESOP system of the EU is completed, this will be available.

Response

Content-Type: application/xml

XML according to CESOP Payment Data XML Schema Definition with <MessageType>VLD</MessageType>.

Error Codes

Status Code	Description
404 - Not Found	The payment record with the messageRefId does not exist, or there is no XML document with the validation results for this payment record yet.

Example

```
$ curl -H 'X-CESOP-API-KEY: <apikey>' https://psp-bmf-cesop-test.bmf.a2.cp.cna.at/psp/api/prod/payment-data/742ac138-e7f0-4465-9fd2-dd7929e5d745/validation-result'
```

```
 Response Status: 200 OK
 <?xml version="1.0" encoding="UTF-8" standalone="yes"?>
 <CESOP xmlns:ns2="urn:eu:taxud:commontypes:v1"
xmlns:ns3="urn:ec.europa.eu:taxud:fiscalis:cesop:v1">
   <ns3:MessageSpec>
     <ns3:TransmittingCountry>AT</ns3:TransmittingCountry>
     <ns3:MessageType>VLD</ns3:MessageType>
     <ns3:MessageTypeIndic>CESOP100</ns3:MessageTypeIndic>
     <ns3:MessageRefId>21e13f02-464e-43c4-bf6c-
b38672dd5a39</ns3:MessageRefId>       <ns3:CorrMessageRefId>742ac138-e7f0-4465-
9fd2- dd7929e5d745</ns3:CorrMessageRefId>
     <ns3:ReportingPeriod>
       <ns3:Quarter>1</ns3:Quarter>
       <ns3:Year>2024</ns3:Year>
     </ns3:ReportingPeriod>
     <ns3:Timestamp>2023-07-07T08:12:00.199+02:00</ns3:Timestamp>
   </ns3:MessageSpec>
   <ns3:ValidationResult>
     <ns3:ValidationResult>VALIDATED</ns3:ValidationResult>
   </ns3:ValidationResult>
 </CESOP>
```