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## **API : PEB**

### **Technical Documentation**

13 Pages

Summary:

The API PEB allows the Balance Responsible Parties (BRP) to notify RTE about their energy block exchanges (referred as PEB for the rest of the document) and to retrieve the states of their PEB.



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## 1. Introduction

The API PEB allows the Balance Responsible Parties (BRP) to notify RTE about their energy block exchanges (referred as PEB for the rest of the document) and to retrieve the states of their PEB.

### 1.1 Localisation

#### URL PrePROD

<https://secure-apps-dev.iservices.rte-france.com>

#### URL PROD

<https://secure-apps.iservices.rte-france.com>

### 1.2 Category

Confidentiality	Open API
Format	Rest XML

### 1.3 Resources

Name	Method	URI
Send a status request.	<b>GET</b>	/peb/status-request
Send a schedule document.	<b>POST</b>	/peb/schedule_document

## 2. API operations

### 2.1 General functioning system

The API works as following:

- User authentication with a PKI certificate
- Check if the customer's subscription exists in the application
- Then, the application sends the files depending on process

### 2.2 Functional rules

Functional rules are all implemented in this API. Controls made are based on the customer's parameters.

The functional rules are detailed in the SI rules published in the site of RTE : <https://www.services-rte.com/en/learn-more-about-our-services/becoming-a-balance-responsible-party/the-block-exchange-service.html>

The controls are made according to the parameters of the file sent.

### 3. Resource: /status-request

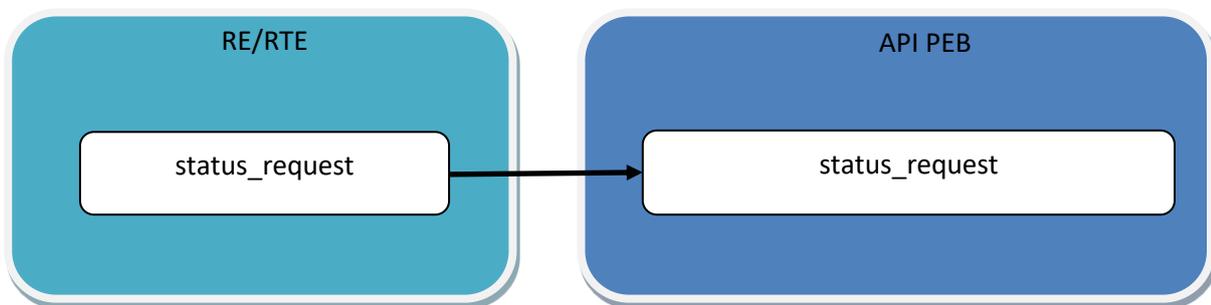
#### 3.1 GET /status-request

##### 3.1.1 Description

This service allows to send a status request to retrieve one of the following XML files:

- Confirmation report
- Anomaly report
- Publication report

##### 3.1.2 Calls



##### 3.1.3 Parameters

NAME	CARD.	DESCRIPTION	TYPE	VALUES / FORMAT
<b>request_type</b>	1	Type of requested document	Text	{anomaly, confirmation or publication}
<b>code_eic</b>	1	BRP's code sending the request	Text	
<b>period_time</b>	1	Delivery date requested	Date	YYYYMMDD
<b>process_type*</b>	1	Process of requested document	Text	A01 for D-1 or A18 for ID
<b>Resolution**</b>	0..1	Resolution requested	Text	PT30M, PT15M or P1D
<b>process_classification**</b>	0..1	Type of requested document in return.	Text	A01 for the detail (one time Series with the sales and one with the purchases) or A02 for the summary (time series with the total =  Sales-Purchases



<b>businessType **</b>	0..*	Business type requested	Text	<p>If it is absent, the application will return all business types.</p> <p>Z39 SPOT EPEX Z40 SPOT NORDPOOL Z43 Futures Z41 INFRA EPEX Z42 INFRA NORDPOOL A03 Interco Z44 PEB Z48 PEB PREV A24 VEJ (financial security check) Z49 VEJ PREV A15 Pertes (losses) Z45 ARENH A20 Forecast declarative imbalance</p>
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\*this parameter concerns the confirmation and anomaly report

\*\*these parameters concern the publication report

### Examples:

#### Anomaly Report

<p>GET</p> <p><b>Endpoint PreProd:</b> <a href="https://secure-apps-dev.iservices.rte-france.com">https://secure-apps-dev.iservices.rte-france.com</a></p> <p><b>Endpoint Prod:</b> <a href="https://secure-apps.iservices.rte-france.com">https://secure-apps.iservices.rte-france.com</a></p> <p><b>Resource:</b> /peb/status-request/anomaly/10X012345/20170307/A01</p> <p>HTTP/1.1</p> <p><b>Headers:</b></p> <p>Host: &lt;url_serveur&gt;</p> <p><b>Body:</b></p>
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#### Confirmation Report:

<p>GET</p> <p><b>Endpoint PreProd:</b> <a href="https://secure-apps-dev.iservices.rte-france.com">https://secure-apps-dev.iservices.rte-france.com</a></p> <p><b>Endpoint Prod:</b> <a href="https://secure-apps.iservices.rte-france.com">https://secure-apps.iservices.rte-france.com</a></p> <p><b>Resource:</b> /peb/status-request/confirmation/10X012345/20170307/A01</p> <p>HTTP/1.1</p> <p><b>Headers:</b></p> <p>Host: &lt;url_serveur&gt;</p> <p><b>Body:</b></p>
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#### Publication Report:



PEB – API  
Contrat d'interface

GET

**Endpoint PreProd:** <https://secure-apps-dev.iservices.rte-france.com>

**Endpoint Prod:** <https://secure-apps.iservices.rte-france.com>

**Resource:** /peb/status-request/publication/10X012345/20170307/P1D/A02?businessType=all

HTTP/1.1

**Headers:**

Host: <url\_serveur>

**Body:**

GET

**Endpoint PreProd:** <https://secure-apps-dev.iservices.rte-france.com>

**Endpoint Prod:** <https://secure-apps.iservices.rte-france.com>

**Resource:**

/peb/status-request/publication/10X012345/20170307/PT30M/A01?businessType=Z44&businessType=Z48

HTTP/1.1

**Headers:**

Host: <url\_serveur>

**Body:**



### 3.1.4 Responses

#### 3.1.4.1 Http status codes

Http codes	Case
200	Successfully treated
403	Permission denied
500	Technical error
404	Resource not found
400	Invalid request parameters

#### 3.1.4.2 Structures

The body contains only one of the following XML:

- Anomaly Report (cf. iec62325-451-2-anomaly\_v5\_1.xsd)
- Confirmation Report (cf. iec62325-451-2-confirmation\_v5\_0.xsd)
- Publication Report (cf. iec62325-451-2-schedule\_v5\_0.xsd)
- Acknowledgement (cf. iec62325-451-1-acknowledgement\_v7\_0.xsd)

#### 3.1.4.3 Return codes

Actions to be performed depend on the http return code:

- HTTP 200: The parameters of the request are correct and the requested file can be downloaded.
- HTTP 400: The parameters of the request are incorrect and an acknowledgement can be downloaded to know the reason.
- HTTP 404: The resource was not found.
- HTTP 403: The customer is not allowed to send a request.
- HTTP 500: An error has occurred trying to process the request.



### 3.1.5 Examples

#### 3.1.5.1 Example with valid parameters

The service will return the anomaly file in the body.

```
GET /peb/status-request/anomaly/10X12123/20161203/A01
```

```
HTTP/1.1 200 OK
```

#### 3.1.5.2 Example with invalid parameters

Send a request with an invalid date. The service will return an acknowledgement and a 400 http code.

```
GET /peb/status-request/anomaly/10X12123/20163203/A01
```

```
HTTP/1.1 400 BAD REQUEST
```

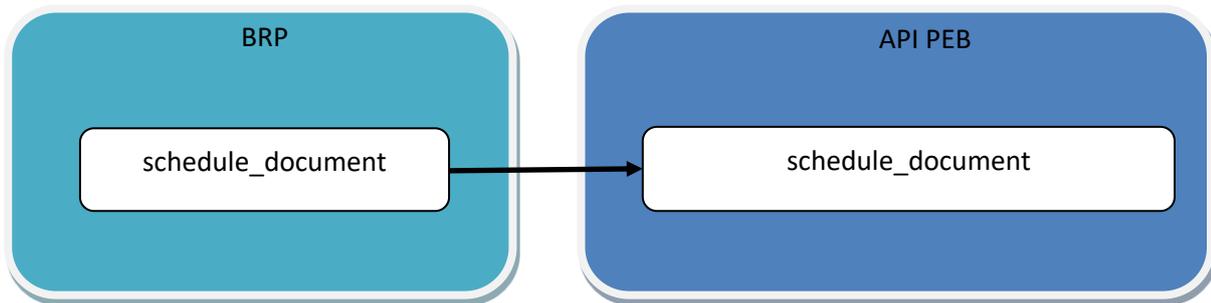
## 4. Resource: /schedule\_document

### 4.1 POST /schedule\_document

#### 4.1.1 Description

This service allows BRP to send RTE the declaration of energy block exchanges. It allows the BRP to send a schedule document in XML format.

#### 4.1.2 Calls



#### 4.1.3 Parameters

NAME	CARD.	DESCRIPTION	TYPE	VALUES / FORMAT
schedule_document	1	BRP 's Schedule document	XML	Cf. iec62325-451-2-schedule_v5_0.xsd

#### Example:

The body contains a valid schedule document.

POST

**Endpoint PreProd:** <https://secure-apps-dev.iservices.rte-france.com>

**Endpoint Prod:** <https://secure-apps.iservices.rte-france.com>

**Resource:** /peb/schedule\_document

HTTP/1.1 201 CREATED

**Headers:**

Host: <url\_serveur>

Content-Type : application/xml

**Body:**

Schedule document XML (Cf. iec62325-451-2-schedule\_v5\_0.xsd)

Encoding: "UTF-8"

Example:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Schedule_MarketDocument xmlns="urn:iec62325.351:tc57wg16:451-2:scheduledocument:5:0">
```



The body contains an invalid schedule document.

**POST**

**Endpoint PreProd:** <https://secure-apps-dev.iservices.rte-france.com>

**Endpoint Prod:** <https://secure-apps.iservices.rte-france.com>

**Resource:** /peb/schedule\_document

HTTP/1.1 400 BAD REQUEST

**Headers:**

Host: <url\_serveur>

**Body:**

Schedule document XML (Cf. iec62325-451-2-schedule\_v5\_0.xsd)



## 4.1.4 Responses

### 4.1.4.1 Http status code

http Codes	Case
201	Schedule document accepted
403	Forbidden
404	Resource was not found
500	A technical error has occurred
400	A functional error has occurred
407	Incorrectly formatted request

### 4.1.4.2 Structures

The body contains an acknowledgement XML (cf. iec62325-451-1-acknowledgement\_v7\_0.xsd). The acknowledgement notify if the schedule document is accepted or not.

### 4.1.4.3 Return codes

Actions to be performed on service's response, depends on its http return code:

- HTTP 201: The parameters of the request are correct and an acknowledgement can be downloaded.
- HTTP 400: The parameters of the request are incorrect and an acknowledgement can be downloaded to know the reason.
- HTTP 404: The resource was not found.
- HTTP 403: The customer is not allowed to send a request.
- HTTP 407 : The request is incorrectly formatted, check the contentType and encoding
- HTTP 500: An error has occurred trying to process the request.



## 4.1.5 Examples

### 4.1.5.1 Example with a valid schedule document

The service will return an acknowledgement to notify the customer that the schedule document was accepted.

```
POST /peb/schedule_document
HTTP/1.1 201 CREATED
```

Complete XML:



PEB\_ACK\_OK\_10XCodeEIC-BRPX\_20170509112630.xml

### 4.1.5.2 Example with an invalid schedule document

The schedule document contains an invalid EIC code. The service will return an acknowledgement to notify that the EIC code was not correct.

```
POST /peb/schedule_document
HTTP/1.1 400 BAD REQUEST
```

Complete XML:



PEB\_ACK\_REJ\_10XCodeEIC-BRPX\_20170329181423.xml



## 5. Error structure

### 5.1 Functional rules

If a functional rule is not respected during the processing, an error is identified.

In this case, an acknowledgement will be sent to the customer. The acknowledgement is an XML file which contains the reason codes. The reason codes identify the functional error.

**END OF THE DOCUMENT**