# ›eex group

# EEX Transparency Data
# - API User Guide

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# 1. Versions

| Version | Description | Date | Author |
|---------|-------------|------|--------|
| 0001 | Initial Draft | 01.11.2018 | EEX, Erik Hanns |
| 0002 | Changing of the field status. 'Inactive' will be replaced with 'Dismissed'. The unit for non-usabilities of gas consumption units will change from MW to KW. | 15.07.2020 | EEX, Sebastian Wykowski |
| 0003 | Adding Country ES including Control Area 'REE' (10YES-REE------0) and Country RO including Control Area 'Transelectrica' (10YRO-TEL------P). | 19.03.2021 | EEX, Sebastian Wykowski |
| 0004 | Inserting an overview of available data types and countries. Adding Country SE including Control Area 'REE' (10YES-REE------0), Country PL including Control Area 'PSE' (10YRO-TEL------P) and Market Area 'THE' (37Y005053MH0000R). Extension of the API responses for power non-usability data to consider events with changing capacity intervals. Furthermore, the non-usability data contains additional information, such as ACERCode, EIC, InstalledCapacity and AvailableCapacity. | 01.06.2022 | EEX, Erik Hanns |

**hat formatiert:** Englisch (Vereinigtes Königreich)

## 2. Glossary

| Term | Description |
|------|-------------|
| **A** | |
| API | Application Programming Interface |
| **C** | |
| CSV | Comma-separated values |
| **E** | |
| EEX | European Energy Exchange |
| Endpoint | A URL address which services the API requests |
| **J** | |
| JSON | JavaScript Object Notation |
| **M** | |
| MDS | Market Data Services |
| Method | An operation that takes parameters to create a specific request for data |
| **T** | |
| TPE | Transparency Platform of EEX |
| **U** | |
| URL | Uniform Resource Locator |
| UTC | Universal Time Coordinated |
| **X** | |
| XML | eXtensible Markup Language |

Table 1: Glossary of Terms

# 3. Introduction

## 3.1 Scope

The scope of this document is to provide a programmer who is familiar with web service Application programming interface (web API) with the information required to retrieve transparency data via programmatically.

## 3.2 Overview

The API User Guide provides information about how to retrieve transparency data of the EEX Transparency Platform in a programmatic way. This service provides real time updates of the transparency data available from EEX. The web service API returns XML and JSON responses. In order to access the API users will require credentials. These are available from EEX as part of a subscription package.

## 3.3 Subscription

The API solution allows users to receive real-time or delayed market data and transparency data. Get connected to EEX Group DataSource with fast and robust data directly from the source. Please find all information regarding ordering, prices and available modules of the API on our website.

**How to subscribe:**

https://www.eex.com/en/market-data/market-data-download/subscription/subscription-process

**Contact:**

Information Services
T +49 341 2156-288
datasource@eex-group.com

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# 4. Included Transparency Data

EEX Group DataSource offers the following APIs for transparency data:

- Transparency Data Power
- Transparency Data Gas
- Transparency Data Ad-hoc Messages

## 4.1 Available Countries

| Symbol | AT | BE | CH | CZ | DE | ES | FR | GB | IT | HU | NL | PL | RO | SE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NonUsabilityGenerationPower | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ExAnteInformationAvailableCapacityPower | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ExAnteInformationNonUsableCapacityPower | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ExPostInformationActualPlantGenerationPower | X | X | X | X | X | X | X | X | | X | X | | | |
| ExPostInformationActualUnitGenerationPower | X | X | X | X | X | X | X | X | | X | X | | | |
| ExAnteInformationPlannedGenerationPower | X | X | X | X | X | X | X | X | | X | X | | | |
| ExPostInformationGenerationSolarPower | X | | | X | X | X | X | X | X | | | | | |
| ExAnteInformationGenerationSolarPower | X | | | X | X | X | X | X | X | | | | | |
| ExPostInformationGenerationWindPower | X | | | X | X | X | X | X | X | | | | | |
| ExAnteInformationGenerationWindPower | X | | | X | X | X | X | X | X | | | | | |
| ExPostInformationGenerationEuroWindPower | X | | | | X | | | | X | | X | | | |
| ExAnteInformationGenerationEuroWindPower | X | | | | X | | | | X | | | | | |
| ExPostInformationGenerationEuroSolarPower | X | | | | X | | | | X | | X | | | |
| ExAnteInformationGenerationEuroSolarPower | X | | | | X | | | | X | | | | | |
| NonUsabilityConsumptionPower | | | | | X | | | | | | | | | |
| ExPostInformationActualConsumptionPower | | | | | X | | | | | | | | | |
| ExAnteInformationPlannedConsumptionPower | | | | | X | | | | | | | | | |
| NonUsabilityStoragePower | X | | X | | X | | | | | | | | | |
| ExAnteInformationWorkingCapacityStoragePower | X | | X | | X | | | | | | | | | |
| ExPostInformationActualStoragePower | X | | X | | X | | | | | | | | | |
| NonUsabilityConsumptionGas | X | | | X | X | | | | X | | | | | |
| ExPostInformationActualConsumptionGas | X | | | X | X | | | | | | | | | |
| ExAnteInformationPlannedConsumptionGas | X | | | X | X | | | | | | | | | |
| MasterData-Power | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| MasterData-Gas | X | | | X | X | | | | X | | X | | | |
| AdhocMessages | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

## 4.~~1~~4.2 Transparency Data Types

The products available and their symbol are listed below – full details of the returned data for these symbols and the parameters that can be used, can be found in section 6.

**Power**

Time-series data:
- ExAnteInformationAvailableCapacityPower
- ExAnteInformationNonUsableCapacityPower
- ExPostInformationActualPlantGenerationPower
- ExPostInformationActualUnitGenerationPower
- ExAnteInformationPlannedGenerationPower
- ExPostInformationGenerationSolarPower
- ExAnteInformationGenerationSolarPower
- ExPostInformationGenerationWindPower
- ExAnteInformationGenerationWindPower
- ExPostInformationGenerationEuroWindPower
- ExAnteInformationGenerationEuroWindPower
- ExPostInformationGenerationEuroSolarPower
- ExAnteInformationGenerationEuroSolarPower
- ExPostInformationActualConsumptionPower
- ExAnteInformationPlannedConsumptionPower
- ExAnteInformationWorkingCapacityStoragePower
- ExPostInformationActualStoragePower

Event data:
- NonUsabilityGenerationPower
- NonUsabilityConsumptionPower
- NonUsabilityStoragePower

Master data:
- Company
- ProdCons
- Unit
- Capacity

**Gas**

Time-series data:
- ExPostInformationActualConsumptionGas
- ExAnteInformationPlannedConsumptionGas

Event data:
- NonUsabilityConsumptionGas

Master data:
- Company
- ProdCons
- Unit
- Capacity

**Adhoc Messages**

Event data:
- AdhocMessages

### 4.24.3    Detailed definition of Line Types

In order to give users the possibility to establish a relation between API responses and the provided transparency files on sFTP, below is an overview of the Line Types and the respective API symbols.

| Line Type | Definition | Symbol for API |
|-----------|------------|----------------|
| ACIL | Available Capacity Information Line | ExAnteInformationAvailableCapacityPower |
| NUIL | Non-Usable Capacity Information Line | ExAnteInformationNonUsableCapacityPower |
| APGL | Actual Plant Generation Line | ExPostInformationActualPlantGenerationPower |
| AUGL | Actual Unit Generation Line | ExPostInformationActualUnitGenerationPower |
| CPGL | Country Planned Generation Line | ExAnteInformationPlannedGenerationPower |
| ASPL | Actual Solar Power Generation Line | ExPostInformationGenerationSolarPower |
| ESPL | Expected Solar Power Generation Line | ExAnteInformationGenerationSolarPower |
| AWPL | Actual Wind Power Generation Line | ExPostInformationGenerationWindPower |
| EWPL | Expected Wind Power Generation Line | ExAnteInformationGenerationWindPower |
| ASPL | Actual Solar Power Generation Line | ExPostInformationGenerationEuroSolarPower |
| ESPL | Expected Solar Power Generation Line | ExAnteInformationGenerationEuroSolarPower |
| AWPL | Actual Wind Power Generation Line | ExPostInformationGenerationEuroWindPower |

| Line Type | Definition | Symbol for API |
|-----------|-----------|----------------|
| EWPL | Expected Wind Power Generation Line | ExAnteInformationGenerationEuroWindPower |
| ACPL | Actual Consumption Power Line | ExPostInformationActualConsumptionPower |
| PCPL | Planned Consumption Power Line | ExAnteInformationPlannedConsumptionPower |
| WCPL | Working Capacity Power Line | ExAnteInformationWorkingCapacityStoragePower |
| APSL | Actual Power Storage Line | ExPostInformationActualStoragePower |
| ACGL | Actual Consumption Gas Line | ExPostInformationActualConsumptionGas |
| APGL | Planned Consumption Gas Line | ExAnteInformationPlannedConsumptionGas |
| NUGL | Non-Usability Generation Line | NonUsabilityGenerationPower |
| NUCL | Non-Usability Consumption Line | NonUsabilityConsumptionPower |
| NUSL | Non-Usability Storage Line | NonUsabilityStoragePower |
| NUCL | Non-Usability Consumption Line | NonUsabilityConsumptionGas |
| AHML | Ad hoc Message Line | AdhocMessages |
| COIL | Company Information Line | MasterData-Power/Gas |
| PCIL | Producer Consumer Information Line | MasterData-Power/Gas |
| GUIL | Generation Unit Information Line | MasterData-Power |
| CUIL | Consumption Unit Information Line | MasterData-Power/Gas |
| SUIL | Storage Unit Information Line | MasterData-Power |
| GCIL | Generation Capacity Information Line | MasterData-Power |
| CCIL | Consumption Capacity Information Line | MasterData-Power/Gas |
| SCIL | Storage Capacity Information Line | MasterData-Power |

Table 2: Definition of Line Types

The line type is a returned field, however as the line type is defined and linked to the symbol used when requesting data (for example ExAnteInformationAvailableCapacityPower will return line type ACIL) it is not a parameter that can be filtered on.

# 5. Transparency Data API

| Criterion | Description |
|---|---|
| URL | All API calls will be made to:<br>• **https://api1.datasource.eex-group.com** |
| Data Domain | The API provides access to the Transparency data (Time Series, Event and Master Data) stored in the EEX Transparency Platform Database. This covers the following data areas:<br>• Power;<br>• Gas;<br>• Ad-hoc Messages. |
| Access | Access to the API is only possible if a client has a subscription package purchased from EEX. Furthermore, API customers will be permissioned for specific subscribed Products/Modules. |
| Availability | Transparency Data and the API are available for customers 24/7. The return formats provided are XML and JSON. |
| Source of Data | EEX Transparency Platform |
| Data Depth | Depending on the request parameters, the API will return real time data updates and historical data. |

Table 3: API Basics

## 5.1 Request method

The API is a synchronous interface. It supports one method of requesting data:

• **Https Get**

Any date or filter parameters are a part of the URL query string that is submitted (section 6)

In general, the request string is built as follows:

**https://datasource.eex-group.com/<method>?** followed by "**Parameter Name**"="**Parameter Value**", where each pair of parameter name and value are separated by an ampersand ("**&**")

Three methods are supported:
• GetTimeSeries
• GetEvent
• GetMasterData

As the Get request is a URL string, special characters will need to be escaped. Escaping means to replace the special character with the escape symbol. For instance to replace the space in 'a link', you have to use this 'a%20link' in the URL. The most common of these special characters including their respective translation can be found in the table below.

| Character | Escape Symbol | Character | Escape Symbol |
|-----------|---------------|-----------|---------------|
| Space | %20 | , | %2C |
| ! | %21 | / | %2F |
| # | %23 | : | %3A |
| $ | %24 | ; | %3B |
| & | %26 | = | %3D |
| ' | %27 | ? | %3F |
| ( | %28 | @ | %40 |
| ) | %29 | [ | %5B |
| * | %2A | ] | %5D |
| + | %2B | | |

Table 4: URL Escape Characters

This is not a comprehensive list. There are many resources on the internet that provide lookups for translation of URLs or specific special characters.

## 5.2   EndPoint

The endpoint for the service is:

- **https://api1.datasource.eex-group.com**

Please note, the endpoint supports html only. Furthermore, only https (secure http) address is supported.

## 5.3   Authentication

Authentication uses Basic access authentication. This is a user and password pair.

The user and password will be provided by EEX once a subscription is in place.

## 5.4 Definition of API Formats

The following formats will be used for the data fields of the API.

| Term | Description | Example |
|------|-------------|---------|
| <dateTime> | Time format – information of a point in time. Please note that all points in time are in UTC. | 2017-01-17T01:00:00Z |
| <string> | Alphanumeric string – used for text information. | Nuclear |
| <decimal> | The decimal data type is used to specify a numeric value including the zero. | 100.9 |
| <boolean> | The boolean data type is used to specify a true or false value. | true |
| <integer> | The integer data type is sued to specify a numeric value without a fractional component. | 99 |

Table 5: URL Escape Characters

## 5.5 Definition of API Data Fields

This is a full list of the data fields and their types for reference. The specific fields returned in a message are defined in section 5.5.1.

| Fieldname | Format | Description | example |
|-----------|--------|-------------|---------|
| ACERCode | <string> | The ACER code is the ACER identifier for the respective company assigned upon registration as a market participant. | 123456789.AB |
| ActualConsumption | <decimal> | This field contains the actual consumption of consumer. The unit is MW. | 80,4 |
| ActualGeneration | <decimal> | This field contains the actual production of generation units. The unit is MW. | 82465,4 |
| ActualSolarEnergy | <decimal> | This field contains the actual solar power generation. The unit is MW. | 135,5 |
| ActualWindEnergy | <decimal> | This field contains the actual wind power generation. The unit is MW. | 18254,6 |

Formatierte Tabelle

| Fieldname | Format | Description | example |
|---|---|---|---|
| AvailableCapacity | <decimal> | This field contains the amount of the available capacity (daily average value). The unit is MW. | 366,7 |
| CapacitySeries | <string> | This field contains the information for AvailableCapacity, NUMCapacity, IntervalStart and IntervalEnd as a series separated by "|". | AvailableCapacity="18.0", NUMCapacity="45.0", IntervalStart="2022-05-25T00:00:00Z", IntervalEnd="2022-05-25T06:36:00Z"| AvailableCapacity="21.0", NUMCapacity="42.0", IntervalStart="2022-05-25T06:36:00Z", IntervalEnd="2022-05-25T23:59:59Z" |
| ControlArea | <string> | This field contains the name of the control area the generation or consumer unit is connected to. | Amprion |
| Commercialisation | <boolean> | Commercialization of a generation unit. | True |
| Commodity | <string> | Commodity of the affected Unit. | Power |
| Country | <string> | Code of the country; Please refer to ISO 3166-1. | DE |
| CompanyID | <string> | The unique identifier of a company. | POWERHSLTD01 |
| CompanyName | <string> | The name of a company. | Powerhouse Generation Ltd. |
| CreationTimeStamp | <dateTime> | The timestamp of the file creation. | 2009-11-18T18:00:00Z |
| EIC | <string> | EIC is the 'Energy Identification Code' of an power or gas facility or unit. | 49W000000000181Q |
| EndDate | <dateTime> | The end date the data of the generation or consumer unit are delivered. | 2011-01-01T00:00:00Z |
| EventID | <string> | Unique ID for the respective Non-Usability. The EventID is always 29 characters long and is built as follows: | 00000000000022246422#2415_001 |

| Fieldname | Format | Description | example | Formatierte Tabelle |
|---|---|---|---|---|
| | | • Filling (000000000000)<br>• EventID (20180913)<br>• Unique (#2435)<br>• Version number (_013) | | |
| ExpectedSolarEnergy | <decimal> | This field contains the forecast of the expected generation from solar energy. The unit is MW. | 127,5 | |
| ExpectedWindEnergy | <decimal> | This field contains the forecast of the expected generation from wind energy. The unit is MW. | 2376,5 | |
| Facility | <string> | Identifier for the value chain of a Unit. | Producer | |
| InstalledCapacity | <decimal> | For generation units the field contains the amount of the installed net bottleneck output. For consumption units the maximum consumption capacity is filled in. The unit is MW. | 366,7 | |
| IntervalEnd | <dateTime> | The expected end date of a specific interval of a power generation, consumption or storage non-usability. | 2011-11-20T14:15:00Z | |
| IntervalStart | <dateTime> | The expected start date of a specific interval of a power generation, consumption or storage non-usability. | 2011-11-20T14:00:00Z | |
| LineNumbers | <integer> | Information about the number of lines of the file. | 32 | |
| MarketArea | <string> | This field contains the name of market area the generation or consumer unit is connected to. | CEGH | |
| MarketParticipantCode | <string> | This field contains the Market Participant Code (ACER Code) of the reporting company. | A0001523E.DE | |
| Message | <string> | Reports additional information. | Revision finished | |

| Fieldname | Format | Description | example |
|-----------|--------|-------------|---------|
| ModificationTimeStamp | <dateTime> | The timestamp of the modification of this information by the dispatcher. | 2009-11-15T11:43:00Z |
| NonUsableCapacity | <decimal> | This field contains the amount of the non-usable capacity (daily average value). The unit is MW. For non-usabilities of a gas consumption the unit is KW. | 366,7 |
| NonavailabilityReason | <string> | Reason of the Non-Availability (i.e. Maintenance, Outage) | Maintenance |
| NUMCapacity | <decimal> | This field contains the amount of the non-usability of a generation unit. The unit is MW. | 1265,2 |
| NUMEndDate | <dateTime> | The expected end date of a non-usability. | 2011-11-20T14:15:00Z |
| NUMStartDate | <dateTime> | The start date of a non-usability. | 2009-11-19T23:15:12Z |
| PlannedConsumption | <decimal> | This field contains the forecast of the planned consumption for the next day. The unit is MW. | 85405,6 |
| PlannedGeneration | <decimal> | This field contains the forecast of the planned generation for the next day. The unit is MW. | 85405,6 |
| PublicationTimeStamp | <dateTime> | The timestamp of the publication of this information on the website. | 2009-11-16T00:00:00Z |
| ProdConsID | <string> | The unique identifier of a generation, consumption or storage plant. | E000001 |
| ProdConsName | <string> | The name of a plant, consumer or storage. | Warp Generator |
| Quantity | <decimal> | This field contains the actual filling level of power storages. The unit is MWh. | 454164,2 |
| RealConsumption | <decimal> | Real consumption of a unit. The unit is MW. | 854,6 |

Formatierte Tabelle

| Fieldname | Format | Description | example | |
|---|---|---|---|---|
| Remarks | <string> | Any other information that facilitates the full understanding of the potential impact of the event. | Revision finished | ← Formatierte Tabelle |
| ReportingAvailableCapacity | <string> | This field contains information if the production company reports available capacity for all production units. | True | |
| Source | <string> | Name of the source. | Biomass | |
| StartDate | <dateTime> | The start date the data of the generation or consumer unit are delivered. | 2011-01-01T00:00:00Z | |
| Status | <integer> | The status of a non-usability source. | Active | |
| TimeStamp | <dateTime> | The timestamp of the referring data. | 2009-12-31T23:00:00Z | |
| Type | <string> | This field indicates if a generation or consumption unit already was disturbed when the notification was sent. | Planned | |
| UnitID | <string> | The unique identifier of a generation, consumption or storage unit. | E000001-001 | |
| UnitName | <string> | The name of a generation, consumption or storage unit. | Core 1 | |
| WorkingCapacity | <decimal> | Working capacity of a power storage unit. The unit is MW. | 854,6 | |
| WGS84Latitude | <decimal> | Latitude gives the location of a place on Earth north or south of the equator. | 51.3378 | Feldfunktion geändert / Feldfunktion geändert |
| WGS84Logitude | <decimal> | Longitude is the geographic coordinate most commonly used in cartography and global navigation for east-west measurement. | 12.3790 | Feldfunktion geändert |

Table 6: Definition of API Data Fields

## 5.5.1 Specific Range of Data Fields

Some fields have a fixed set of values that are valid. These are listed below, along with the values that will be returned or can be used for querying.

| Fieldname | Value | Translation |
|---|---|---|
| Commercialisation | false | Predominantly not for free marketing |
| | true | Predominantly for free marketing |
| ControlArea | APG | APG [10YAT-APG------L] |
| | Elia | Elia [10YBE----------2] |
| | CEPS | CEPS [10YCZ-CEPS-----N] |
| | SwissGrid | Swissgrid [10YCH-SWISSGRIDZ] |
| | TransnetBW | TransnetBW (formerly EnBW TNG) [10YDE-ENBW-----N] |
| | TenneT (DE) | TenneT (DE) (formerly Transpower, E.ON) [10YDE-EON------1] |
| | Amprion | Amprion (formerly RWE) [10YDE-RWENET---I] |
| | 50Hertz | 50 Hertz (formerly Vattenfall) [10YDE-VE-------2] |
| | RTE | RTE [10YFR-RTE------C] |
| | National Grid | National Grid [10YGB----------A] |
| | MAVIR | MAVIR [10YHU-MAVIR----U] |
| | Terna | Terna [10YIT-GRTN-----B] |
| | TenneT (NL) | TenneT (NL) [10YNL----------L] |
| | Transelectrica | 10YRO-TEL------P |
| | REE | 10YES-REE------0 |
| | PSE | 10YPL-AREA-----S |
| | Svenska kraftnät | 10YSE-1--------K |
| MarketArea | Gaspool | GASPOOL [37Y701133MH0000P] |
| | NCG | NetConnect Germany (NCG) [21Y-ERTV-------8] [37Y701125MH0000I] |
| | CEGH | MG-OST-AT - Market Area East AT (CEGH) [21Y000000000025G] Austrian Balancing Zone (VTP-CEGH) [21Y000000000009E] |
| | PSV IT | Virtual Trading Point [21Y---A001A010-A] |
| | VOB | VOB-CZ (formerly RWE Transgas Net) [21Y---A001A001-B] |

**hat formatiert:** Französisch (Frankreich)

| Fieldname | Value | Translation |
|---|---|---|
| | THE | Trading Hub Europe (THE) nationwide German gas market area (merger of NCG and Gaspool) [37Y005053MH0000R] |
| ReportingAvailable Capacity | false | The company delivers no information on a voluntary commitment. |
| | true | The company delivers information on a voluntary commitment. |
| Source | Biomass | Biomass |
| | Fossil Hard coal | Hard Coal |
| | Fossil Coal-derived gas | Coal-derived Gas |
| | Waste | Waste |
| | Fossil Gas | Gas |
| | Geothermal | Geothermal |
| | Fossil Brown coal/Lignite | Lignite |
| | Marine | Marine |
| | Fossil Oil | Oil |
| | Fossil Oil shale | Oil shale |
| | Other | Other |
| | Other renewable | Other Renewable |
| | Fossil Peat | Peat |
| | Hydro Pumped Storage | Pumped Storage |
| | Hydro Run-of-river and poundage | Run-of-River |
| | Hydro Water Reservoir | Water Reservoir |
| | Solar | Solar |
| | Nuclear | Nuclear |
| | Wind Offshore | Wind (Offshore) |
| | Wind Onshore | Wind (Onshore) |
| Status | Active | The non-usability message is active (not cancelled). |
| | Dismissed | The non-usability message is not active (cancelled). |

| Fieldname | Value | Translation |
|---|---|---|
| Type | Planned | If the disturbance takes place after the notification was sent. |
| | Unplanned | If the disturbance has already begun before the notification was sent. |
| Reason | External factors | Official instructions, environmental legislation requirements, work stoppages or the like lead to a restriction in output or to the standstill of the production, consumption or storage facility. |
| | Maintenance | Regular planned outage for the renewal, maintenance and review of components. |
| | Other | There is a reason which is not covered by the reasons below. |
| | Outage | There is a technical malfunction on at least one or several components of the production, consumption or storage unit. |

Table 7: Specific Range of Data Fields

## 5.6 Field specification for API Responses

### 5.6.1 Time series Data

The following chapter will list all available data types and the fields that the API can return. The heading for each section is the SYMBOL as passed into the API.

**5.6.1.1 ExAnteInformationAvailableCapacityPower**
The Available Capacity Information contains information on the available capacity of generation units. The Available Capacity Information will return the following data types:

- Symbol
- LineType
- Country
- Source
- TimeStamp
- AvailableCapacity
- PublicationTimeStamp
- ModificationTimeStamp

**5.6.1.2 ExAnteInformationNonUsableCapacityPower**
The Non-Usable Capacity contains information on the non-usable capacity of generation units. The Non-Usable Capacity Information will return the following data types:

- Symbol
- LineType
- Country
- Source
- TimeStamp
- NonUsableCapacity
- PublicationTimeStamp
- ModificationTimeStamp

**5.6.1.3 ExPostInformationActualPlantGenerationPower**
The Actual Generation contains information on the production of all power generation units per source in the respective country. The Actual Generation information will return the following data types:
- Symbol
- LineType
- Country
- Source
- TimeStamp
- ActualGeneration
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.4 ExPostInformationActualUnitGenerationPower

The Actual Unit Generation contains information on the actual production of generation units. The Actual Unit Generation will return the following data types:

- Symbol
- LineType
- Country
- UnitID
- TimeStamp
- ActualGeneration
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.5 ExAnteInformationPlannedGenerationPower

The Country Planned Generation Line containing information of the planned generation in the respective country by source. The Country Planned Generation will return the following data types:

- Symbol
- LineType
- Country
- Source
- TimeStamp
- PlannedGeneration
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.6 ExPostInformationGenerationSolarPower

The Actual Solar Power Generation contains publications of the actual generation from solar energy per control area. The Actual Solar Power Generation will return the following data types:
- Symbol
- LineType
- ControlArea
- Source
- TimeStamp
- ActualSolarEnergy
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.7 ExAnteInformationGenerationSolarPower

The Expected Solar Power Generation Line is used for publication of the expected generation from solar energy per control area. The Expected Solar Power Generation will return the following data types:
- Symbol
- LineType
- ControlArea
- Source
- TimeStamp

- ExpectedSolarEnergy
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.8 ExPostInformationGenerationWindPower
The Actual Wind Power Generation contains publications of the actual generation from wind energy per control area. The Actual wind Power Generation will return the following data types:

- Symbol
- LineType
- ControlArea
- Source
- TimeStamp
- ActualWindEnergy
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.9 ExAnteInformationGenerationWindPower
The Expected Wind Power Generation Line is used for publication of the expected generation from wind energy per control area. The Expected wind Power Generation will return the following data types:

- Symbol
- LineType
- ControlArea
- Source
- TimeStamp
- ExpectedWindEnergy
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.10 ExPostInformationGenerationEuroSolarPower
The Actual Solar Power Generation contains publications of the actual generation from solar energy per control area provided by EuroWind. The Actual Solar Power Generation will return the following data types:

- Symbol
- LineType
- ControlArea
- Source
- TimeStamp
- ActualSolarEnergy
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.11 ExAnteInformationGenerationEuroSolarPower

The Expected Solar Power Generation Line is used for publication of the expected generation from solar energy per control area provided by EuroWind. The Expected Solar Power Generation will return the following data types:

- Symbol
- LineType
- ControlArea
- Source
- TimeStamp
- ExpectedSolarEnergy
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.12 ExPostInformationGenerationEuroWindPower

The Actual Wind Power Generation contains publications of the actual generation from wind energy per control area provided by EuroWind. The Actual wind Power Generation will return the following data types:

- Symbol
- LineType
- ControlArea
- Source
- TimeStamp
- ActualWindEnergy
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.13 ExAnteInformationGenerationEuroWindPower

The Expected Wind Power Generation Line is used for publication of the expected generation from wind energy per control area provided by EuroWind. The Expected wind Power Generation will return the following data types:

- Symbol
- LineType
- ControlArea
- Source
- TimeStamp
- ExpectedWindEnergy
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.14 ExPostInformationActualConsumptionPower

The Actual Consumption Power contains information on the actual consumption of power units in the respective country. The Actual Consumption Power will return the following data types:

- Symbol

- LineType
- Country
- TimeStamp
- ActualConsumption
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.15    ExAnteInformationPlannedConsumptionPower
The Planned Consumption Power Line containing information of the planned consumption in the respective country. The Planned Consumption Power will return the following data types:

- Symbol
- LineType
- Country
- TimeStamp
- PlannedConsumption
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.16    ExAnteInformationWorkingCapacityStoragePower
The Working Capacity Power contains information on the working capacity of power units. The Working Capacity Power will return the following data types:

- Symbol
- LineType
- UnitID
- TimeStamp
- WorkingCapacity
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.17    ExPostInformationActualStoragePower
The Actual Power Storage contains information on the actual storage of power units in the respective country. The Actual Power Storage will return the following data types:

- Symbol
- LineType
- Country
- TimeStamp
- Quantity
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.1.18    ExPostInformationActualConsumptionGas
The Actual Consumption Gas contains information on the actual consumption of gas units. The Actual Consumption Gas will return the following data types:

- Symbol
- LineType
- MarketArea
- TimeStamp
- ActualConsumption
- PublicationTimeStamp
- ModificationTimeStamp

#### 5.6.1.19 ExAnteInformationPlannedConsumptionGas

The Planned Consumption Gas Line containing information of the planned consumption in the respective market area. The Planned Consumption Gas will return the following data types:

- Symbol
- LineType
- MarketArea
- TimeStamp
- ActualConsumption
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.2 Event Data

#### 5.6.2.1 NonUsabilityGenerationPower

The Non-Usability Generation Line is used for publication of Non-Usability Messages of power generation units. The Non-Usability Generation will return the following data types:

- Symbol
- LineType
- Country
- CompanyID
- ACERCode
- ProdConsID
- UnitID
- EIC
- Commodity
- Facility
- ControlArea
- Source
- InstalledCapacity
- Type
- EventID
- NUMStartDate
- NUMEndDate
- CapacitySeries
  - AvailableCapacity
  - NUMCapacity
  - IntervalStart
  - IntervalEnd

- NonavailabilityReason
- Remarks
- TimeStamp
- Status
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.2.2 NonUsabilityConsumptionPower

The Non-Usability Consumption Line is used for publication of Non-Usability Messages of power consumption units. The Non-Usability Consumption will return the following data types:

- Symbol
- LineType
- Country
- CompanyID
- ACERCode
- ProdConsID
- UnitID
- EIC
- Commodity
- Facility
- ControlArea
- InstalledCapacity
- Type
- EventID
- NUMStartDate
- NUMEndDate
- CapacitySeries
  - AvailableCapacity
  - NUMCapacity
  - IntervalStart
  IntervalEnd
  -
- NonavailabilityReason
- Remarks
- TimeStamp
- Status
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.2.3 NonUsabilityStoragePower

The Non-Usability Storage Line is used for publication of Non-Usability Messages of power storage units. The Non-Usability Generation will return the following data types:

- Symbol
- LineType
- Country
- CompanyID

- ACERCode
- ProdConsID
- UnitID
- EIC
- Commodity
- Facility
- ControlArea
- InstalledCapacity
- Type
- EventID
- NUMStartDate
- NUMEndDate
- CapacitySeries
  - AvailableCapacity
  - NUMCapacity
  - IntervalStart
  - IntervalEnd
- NonavailabilityReason
- Remarks
- TimeStamp
- Status
- PublicationTimeStamp
- ModificationTimeStamp

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#### 5.6.2.4 NonUsabilityConsumptionGas

The Non-Usability Consumption Line is used for publication of Non-Usability Messages of gas consumption units. The Non-Usability Consumption will return the following data types:

- Symbol
- LineType
- Country
- CompanyID
- ProdConsID
- UnitID
- Commodity
- Facility
- MarketArea
- Type
- EventID
- NUMStartDate
- NUMEndDate
- NUMCapacity
- NonavailabilityReason
- Remarks
- TimeStamp
- Status
- PublicationTimeStamp
- ModificationTimeStamp

**5.6.2.5 AdhocMessages**
The Ad hoc Message contains information on the ad hoc messages. The Ad hoc Message will return the following data types:

- Symbol
- LineType
- Country
- CompanyID
- CompanyName
- EventID
- Status
- AdhocType
- StartDate
- EndDate
- Message
- TimeStamp
- PublicationTimeStamp
- ModificationTimeStamp

## 5.6.3   Master Data

**5.6.3.1 Company**
The Company Information Line is used for publication of company information. The Company Information will return the following data types:

- Symbol
- LineType
- CompanyID
- CompanyName
- MarketParticipantCode
- ReportingAvailableCapacity
- PublicationTimeStamp
- ModificationTimeStamp

**5.6.3.2 ProdCons**
In the Producer and Consumer Information Line information to producers and consumers can be found. The Producer and Consumer Information will return the following data types:

- Symbol
- LineType
- CompanyID
- ProdConsID
- ProdConsName
- Commodity
- Facility
- WGS84Latitude

- WGS84Longitude
- Country
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.3.3 Unit

The Consumption Unit Information Line is used for publication of information regarding to consumption units. The Consumption Unit Information will return the following data types:

- Symbol
- LineType
- CompanyID
- ProdConsID
- UnitID
- UnitName
- Commodity
- Facility
- ControlArea (Power) ; MarketArea (Gas)
- Source
- Commercialisation
- StartDate
- EndDate
- PublicationTimeStamp
- ModificationTimeStamp

### 5.6.3.4 Capacity

The Generation Capacity Information Line is used for publication of information referring to the installed capacity of generation (installed net bottleneck output) units. The Generation Capacity Information will return the following data types:

- Symbol
- LineType
- UnitID
- TimeStamp
- Capacity
- PublicationTimeStamp
- ModificationTimeStamp

# 6. API Methods

## 6.1 getTimeSeries

The method returns time series data from the EEX Transparency Platform database:

### 6.1.1 getTimeSeries Parameters

| Name | Optional | Description |
|---|---|---|
| Symbol | No | Identifier for time series data package. |
| Start | No | A date in the format, depending on the time resolution of the time series requested (e.g. 'YYYY-MM-DD hh:mm'). Is equal to the first output TimeStamp. |
| End | No | A date in the format, depending on the time resolution of the time series requested (e.g. 'YYYY-MM-DD hh:mm'). Is equal to the last output TimeStamp. |
| DaysBack | No | Synonymous with the START/ END pair, with the proviso that END is the current date. So 3, would count 3 days back from today. |
| Country | Yes | Country which data is requested for (e.g. DE, AT, CH, …). |
| ControlArea | Yes | Control Area which data is requested for (e.g. Amprion, APG, …). |
| MarketArea | Yes | Market Area which data is requested for (e.g. CEGH, VOB, …). |
| Source | Yes | Fuel type which data is requested for (e.g. Biomass, Fossil Gas, …). |
| UnitID | Yes | Unit which data is requested for (e.g. E110235-001, S110328-001, …). |
| TimeStamp | Yes | Is related to quantity value. Number of time stamps depends on request. |
| Quantity | Yes | Value for a specific time stamp in the specific unit (e.g. MW, MWh, …). |
| PublicationTimeStamp | Yes | Date and time of the publication into database of the respective value. |
| ModificationTimeStamp | Yes | Date and time of the last update of the respective value. |

Table 8: getTimeSeries Parameters

## 6.2 getEvent

The method returns event data from the EEX Transparency Platform database:

### 6.2.1 getEvent Parameters

| Name | Optional | Description |
|------|----------|-------------|
| Symbol | No | Identifier for event data package. |
| Event_Start | No | A date in the format, 'YYYY-MM-DD hh:mm'. Is equal to the NUMStartDate. |
| Event_End | No | A date in the format, 'YYYY-MM-DD hh:mm'. Is equal to the NUMEndDate. |
| Update_Start | No | Expressed as date in the format, 'YYYY-MM-DD hh:mm'. Requests events with ModificationTimeStamp ≥ 'YYYY-MM-DD hh:mm'. If specified, Update_End needs be specified as well. |
| Update_End | No | Expressed as date in the format, ''YYYY-MM-DD hh:mm''. Requests events with ModificationTimeStamp ≤ 'YYYY-MM-DD hh:mm'. If specified, Update_Start needs be specified as well. |
| Event_Back | No | Expressed as an integer. Returns the most recent events based on the ModificationTimeStamp for the requested parameters. |
| Update_Back | No | Expressed as an integer. Synonymous with the Update_Start/ Update_End pair, with the proviso that Update_End is the current date. |
| Country | Yes | Country which data is requested for (e.g. DE, AT, CH, …). |
| CompanyID | Yes | Affected company |
| ProdConsID | Yes | Affected facility |
| UnitID | Yes | Affected unit |
| Commodity | Yes | Commodity of the affected Unit (Power, Gas). |
| Facility | Yes | Identifier if the affected Unit is Producer, Storage or Consumer. |
| ControlArea | Yes | Power: Control Area of the affected unit (e.g. Amprion, APG, …). |
| MarketArea | Yes | Gas: Market Area of the affected unit (e.g. CEGH, VOB, …). |
| Source | Yes | Fuel type of the affected unit (e.g. Biomass, Fossil Gas, …). |
| Type | Yes | Type of Non-Usability (Planned or Unplanned). |
| EventID | Yes | Unique identifier of the specific event. |

| Name | Optional | Description |
|---|---|---|
| NUMStartDate | Yes | Begin of the event (same as Event_Start). |
| NUMEndDate | Yes | Stop of the event (same as Event_End). |
| NUMCapacity | Yes | Value for non-usable capacity in MW. |
| NonavailabilityReason | Yes | Reason of the event (e.g. Outage, Maintenance, …). |
| TimeStamp | Yes | Date and time of the initial message. |
| Status | Yes | Status of the event (Active or Dismissed). |
| PublicationTimeStamp | Yes | Date and time of publication into database. |
| ModificationTimeStamp | Yes | Date and time of the last modification of the respective event. |

Table 9: getEvent Parameters

## 6.3 getMasterDataCompany

The method returns master data from the EEX Transparency Platform database:

### 6.3.1 getMasterDataCompany Parameters

| Name | Optional | Description |
|---|---|---|
| Symbol | No | Identifier for Company data package |
| CompanyID | Yes | ID of the company. |
| CompanyName | Yes | Name of the company. |
| MarketParticipantCode | Yes | Market Participant Code (ACER Code) of the reporting company. |
| ReportingAvailableCapacity | Yes | Flag for the reporting of the available capacity (true or false). |
| PublicationTimeStamp | Yes | Date and time of publication into database. |
| ModificationTimeStamp | Yes | Date and time of the last modification of the entries. |

Table 10: getMasterDataCompany Parameters

## 6.4 getMasterDataProdCons

The method returns master data from the EEX Transparency Platform database:

### 6.4.1 getMasterDataProdCons Parameters

| Name | Optional | Description |
|---|---|---|
| Symbol | No | Identifier for ProdCons data package. |
| CompanyID | Yes | ID of the company. |
| ProdConsID | Yes | ID of the facility. |
| ProdConsName | Yes | Name of the facility. |
| Commodity | Yes | Commodity of the affected unit (Power, Gas). |
| Facility | Yes | Identifier if the affected unit is Producer, Storage or Consumer. |
| WGS84Latitude | Yes | location of a place on earth north or south of the equator |
| WGS84Longitude | Yes | geographic coordinate navigation for east-west |
| Country | Yes | Country of the facility. |
| PublicationTimeStamp | Yes | Date and time of publication into database. |
| ModificationTimeStamp | Yes | Date and time of the last modification of the entries. |

Table 11: getMasterDataProdCons Parameters

## 6.5 getMasterDataUnit

The method returns master data from the EEX Transparency Platform database:

### 6.5.1 getMasterDataUnit Parameters

| Name | Optional | Description |
|---|---|---|
| Symbol | No | Identifier for unit data package. |
| Commodity | No | Valid values are Gas or Power. |
| CompanyID | Yes | ID of the company. |
| ProdConsID | Yes | ID of the facility. |
| UnitID | Yes | ID of the unit. |
| UnitName | Yes | Name of the unit. |

| Name | Optional | Description |
|---|---|---|
| Commodity | Yes | Commodity of the affected unit (Power, Gas). |
| Facility | Yes | Identifier if the affected unit is Producer, Storage or Consumer. |
| ControlArea | Yes | Control Area of the affected unit (e.g. Amprion, APG, …). |
| MarketArea | Yes | Market Area of the affected unit (e.g. CEGH, VOB, …). |
| Source | Yes | Fuel type which data is requested for (e.g. Biomass, Fossil Gas, …). |
| Commercialisation | Yes | Is the output free for marketing (true or false). |
| StartDate | Yes | Begin of reporting. |
| EndDate | Yes | End of reporting. |
| PublicationTimeStamp | Yes | Date and time of publication into database. |
| ModificationTimeStamp | Yes | Date and time of the last modification of the entries. |

Table 12: getMasterDataUnit Parameters

The compulsory parameter Commodity will determine whether ControlArea or MarketArea is returned in the response. If the Commodity=Power, then ControlArea will be returned. If the Commodity=Gas, then the MarketArea will be returned. If the request specifies Power but tries to filter using the MarketArea parameter, no results will be returned. Similarly, if the request specifies Gas but tries to filter using the ControlArea parameter, no results will be returned.

## 6.6 getMasterDataCapacity

The method returns master data from the EEX Transparency Platform database:

### 6.6.1 getMasterDataCapacity Parameters

| Name | Optional | Description |
|---|---|---|
| Symbol | No | Identifier for time capacity data package. |
| UnitID | Yes | ID of the unit. |
| TimeStamp | Yes | Describes the date from which this value is valid. |
| Capacity | Yes | Value for the installed Capacity (MW). |
| PublicationTimeStamp | Yes | Date and time of publication into database. |
| ModificationTimeStamp | Yes | Date and time of the last modification of the entries. |

Table 13: getMasterDataCapacity Parameters

## 7. API Calls

Below you will find examples for accessing the API.

### 7.1 API Requests

As described in section 5.1, subscribed customers are able to request the web service API. In the following the major request methods as well as example responses are described.

#### 7.1.1 URL Example Request

The simplest example is using an https request and should illustrate the structure of the request and the expected form of response.

The requests below query the results for the `Power Consumption Non-Usabilities` for the company ID `ENBWTRADING0` with Update time between `2018-01-01 11:20` and `2018-08-11 11:15` UTC.

**JSON Request (additional /JSON qualifier in request):**

- `https://api1.datasource.eex-group.com/getEvent/json?Symbol=NonUsabilityConsumptionPower&Update_Start=2018-01-01%2011:20&Update_End=2018-08-11%2015:00&CompanyID=ENBWTRADING0`

**XML Request (no qualifier):**

- `https://api1.datasource.eex-group.com/getEvent/?Symbol=NonUsabilityConsumptionPower&Update_Start=2018-01-01%2011:20&Update_End=2018-08-11%2011:15&CompanyID=ENBWTRADING0`

The data format required to be passed into the call is UTC standard date format: YYYY-MM-DD hh:mm. In the response the times returned are also in UTC, in standard format.

The API call must always include one of these start/end parameters as follows:
- Update_Start/End pair
- Event_Start/End pair
- Update_Back
- Event_Back

Additionally, the following conditions need to be considered:
- If an Update_Start parameter is provided, an Update_End parameter must be provided (and vice-versa)

- If an Event_Start parameter is provided, an Event_End parameter must be provided (and vice versa)
- An Update_Back parameter is a numeric value representing number of days back
- An Event_Back parameter is a number value representing the number of events back (for the events method) to retrieve data for

date parameters take precedence over the Update_Back and Event_Back parameters. If dates are provided, the relevant "Back" parameter is ignored. If dates are not provided, the "Back" parameter(s) calculate days back using 00:00:00 UTC time as a start time and 23:59:59 as an end time.

Please note, if all parameters are left blank, an error is returned noting all of the parameters cannot be left blank.

Additional filter parameters can be included. The example above uses the CompanyID to filter the results to return only those from ENBWTRADING0.

The range parameters should be the first parameters in the API call, after that the order of parameters is not important.

A full list of parameters for each call is detailed in the section 6 (API Methods).

### 7.1.2   Java Example Request

Below is the same example request written using Java.

```
package com.company.ps.test;

import java.io.DataOutputStream;
import java.io.IOException;
import java.net.HttpsURLConnection;
import java.net.MalformedURLException;
import java.net.URL;
import java.util.Scanner;

import sun.misc.BASE64Encoder;

public class EEXRequest {

    // Main method
    public static void main(String[] args) {

        EEXRequest client = new EEXRequest();
        if (args.length >= 3) {
            try {
                client.execute(args[0], args[1], args[2]);
            } catch (Exception e) {
```

```
                    e.printStackTrace();
            }
      } else {
            System.out.println("Usage : EEXRequest <URL> <user>
<password>");
            // Example https://api1.datasource.eex-
group.com/getEvent/csv?Symbol=NonUsabilityConsumptionPower&Update_Start=2018-01-
01T11:20Z&Update_End=2018-08-11T11:15Z user1 password123
      }
   }

   public void execute(String serverURL, String user, String password) throws
MalformedURLException, IOException {

         // If you need to go through proxy by setting system properties

         // Proxy server
//             System.getProperties().setProperty("proxySet", "true");
//             System.getProperties().setProperty("proxyHost", proxy);
//             System.getProperties().setProperty("proxyPort", proxyPort);

         // Proxy server credientials if needed
//
      System.getProperties().setProperty("proxy.authentication.username",
proxyUsername);
//
      System.getProperties().setProperty("proxy.authentication.password",
proxyPassword);

         // Construct request
         URL httpsFile = new URL(serverURL);
         HttpsURLConnection connection =
(HttpsURLConnection)httpsFile.openConnection();
         connection.setRequestMethod("GET");
         connection.setRequestProperty("Content-Type", "application/x-www-form-
urlencoded");

         // Add credential to the request.
         BASE64Encoder enc = new sun.misc.BASE64Encoder();
         String encodedUsernameAndPassword = enc.encode((user + ":" +
password).getBytes());
         connection.setRequestProperty("Authorization", "Basic " +
encodedUsernameAndPassword);

         //Send request
         connection.setUseCaches(false);
         connection.setDoInput(true);
         connection.setDoOutput(true);
         DataOutputStream wr = new
DataOutputStream(connection.getOutputStream());
```

```
        wr.flush();
        wr.close();

        // Read response and write to screen
        Scanner scanner = new Scanner(connection.getInputStream());
        String responseBody = scanner.useDelimiter("\\A").next();
        System.out.println(responseBody);

    }

}
```

The same rules apply to the parameters, so users are advised to read section 7.1.1– Basic Example.

### 7.1.3   C# Example Request

Below is an example using C# to interact with the API.

```
using System;
using System.IO;
using System.Net;
using System.Net.Https;
using CsvHelper;
using CsvHelper.Configuration;

public class Event {
        public string Symbol { get; set; }
        public string LineType { get; set; }
        public string Country { get; set; }
        public string CompanyID { get; set; }
        public string ACERCode { get; set; }
        public string ProdConsID { get; set; }
        public string UnitID { get; set; }
        public string EIC { get; set; }
        public string ControlArea { get; set; }
        public string Source { get; set; }
        public string InstalledCapacity { get; set; }
        public string Type { get; set; }
        public string EventID { get; set; }
        public DateTime NUMStartDate { get; set; }
        public DateTime NUMEndDate { get; set; }
        public string NUMCapacity CapacitySeries { get; set; }
        public string NonavailabilityReason { get; set; }
        public string Remarks { get; set; }
        public DateTime TimeStamp { get; set; }
        public string Status { get; set; }
        public DateTime PublicationTimeStamp { get; set; }
        public DateTime ModificationTimeStamp { get; set; }
```

```
        public string Commodity { get; set; }
        public string Facility { get; set; }

      public override string ToString() {
            return base.ToString();
      }
}

class Program {
      static void Main(string[] args) {
            var client = new HttpsClient(new HttpsClientHandler { Credentials =
new NetworkCredential("user", "password") });
            var resp = client.GetAsync("https://api1.datasource.eex-
group.com/getEvent?Symbol=NonUsabilityConsumptionPower&Update_Start=2018-01-
01T11:20Z&Update_End=2018-08-11T11:15Z").Result;
            if (!resp.IsSuccessStatusCode) {
                  Console.Error.WriteLine(resp.StatusCode + ": " +
resp.ReasonPhrase);
                  Environment.Exit(1);
            }

            using (var csv = new CsvReader(new
StreamReader(resp.Content.ReadAsStreamAsync().Result), new Configuration {
ShouldSkipRecord = arr => arr[0] == "Error" })) {
                  csv.Read();
                  csv.ReadHeader();
                  while (csv.Read()) {
                        var record = csv.GetRecord<Event>();
                        Console.WriteLine(record);
                  }
            }
      }
}
```

The same rules apply to the parameters, so users are advised to read section 7.1.1– Basic Example.


## 7.2   API Responses

API repsonses are available in two formats:
   a) JSON
   b) XML

Example responses for each type to be find in the following section.

## 7.3 JSON sample return

```
{
"Symbol": "NonUsabilityGenerationPower",
"LineType": "NUGL",
"Country": "NL",
"CompanyID": "Outsmart_Noordzeewind",
"ACERCode": "A0012844D.NL",
"ProdConsID": "E110645",
"Commodity": "Power",
"Facility": "Producer",
"UnitID": "E110645-001",
"EIC": "49W000000000118X",
"ControlArea": "Tennet (NL)",
"Source": "Wind Offshore",
"InstalledCapacity": 108,
"Type": "Planned",
"EventID": "0000OSPRFL2022-05-05#5485_002",
"NUMStartDate": "2022-05-05T00:00:00Z",
"NUMEndDate": "2022-05-05T23:59:59Z",
"CapacitySeries":
"AvailableCapacity=\"18.0\",NUMCapacity=\"42.0\",IntervalStart=\"2022-05-
05T00:00:00Z\",IntervalEnd=\"2022-05-
05T14:00:00Z\"|AvailableCapacity=\"21.0\",NUMCapacity=\"39.0\",IntervalStart=\"202
2-05-05T14:00:00Z\",IntervalEnd=\"2022-05-05T23:59:59Z\"",
"NonavailabilityReason": "Outage",
"Remarks": "",
"TimeStamp": "2022-04-30T16:35:03Z",
"Status": "Active",
"PublicationTimeStamp": "2022-05-05T05:56:05Z",
"ModificationTimeStamp": "2022-05-05T05:55:04Z"
}
{
"Symbol": "NonUsabilityConsumptionPower",
"LineType": "NUCL",
"Country": "DE",
"CompanyID": "ENBWTRADING0",
"ProdConsID": "V000027",
"Commodity": "Power",
"Facility": "Consumer",
"UnitID": "V000027-001",
"ControlArea": "TransnetBW",
"Type": "Unplanned",
"EventID": "00000000000022246422#2415_001",
"NUMStartDate": "2018-05-13T06:24:00Z",
"NUMEndDate": "2018-05-13T16:00:00Z",
"NUMCapacity": 50.0,
"NonavailabilityReason": "Outage",
"Remarks": "",
"TimeStamp": "2018-05-13T06:25:20Z",
"Status": "Active",
"PublicationTimeStamp": "2018-05-13T06:25:22Z",
"ModificationTimeStamp": "2018-05-13T06:25:20Z"
},
```

This is one example record from the retrieved response. It is standard JSON containing name/value pairs for the returned data.

## 7.4 XML sample return

```xml
<Row>
<Field Name="Symbol">NonUsabilityGenerationPower</Field>
<Field Name="LineType">NUGL</Field>
<Field Name="Country">NL</Field>
<Field Name="CompanyID">Outsmart_Noordzeewind</Field>
<Field Name="ACERCode">A0012844D.NL</Field>
<Field Name="ProdConsID">E110645</Field>
<Field Name="Commodity">Power</Field>
<Field Name="Facility">Producer</Field>
<Field Name="UnitID">E110645-001</Field>
<Field Name="EIC">49W000000000118X</Field>
<Field Name="ControlArea">Tennet (NL)</Field>
<Field Name="Source">Wind Offshore</Field>
<Field Name="InstalledCapacity">108</Field>
<Field Name="Type">Planned</Field>
<Field Name="EventID">0000OSPRFL2022-05-05#5485_002</Field>
<Field Name="NUMStartDate">2022-05-05T00:00:00Z</Field>
<Field Name="NUMEndDate">2022-05-05T23:59:59Z</Field>
<Field Name="CapacitySeries">AvailableCapacity="18.0",NUMCapacity="42.0",IntervalS
tart="2022-05-05T00:00:00Z",IntervalEnd="2022-05-
05T14:00:00Z"|AvailableCapacity="21.0",NUMCapacity="39.0",IntervalStart="2022-05-
05T14:00:00Z",IntervalEnd="2022-05-05T23:59:59Z"</Field>
<Field Name="NonavailabilityReason">Outage</Field>
<Field Name="Remarks"/>
<Field Name="TimeStamp">2022-04-30T16:35:03Z</Field>
<Field Name="Status">Active</Field>
<Field Name="PublicationTimeStamp">2022-05-05T05:56:05Z</Field>
<Field Name="ModificationTimeStamp">2022-05-05T05:55:04Z</Field>
</Row>
<Row>
        <Field Name="Symbol">NonUsabilityConsumptionPower</Field>
        <Field Name="LineType">NUCL</Field>
        <Field Name="Country">DE</Field>
        <Field Name="CompanyID">ENBWTRADING0</Field>
        <Field Name="ProdConsID">V000027</Field>
        <Field Name="Commodity">Power</Field>
        <Field Name="Facility">Consumer</Field>
        <Field Name="UnitID">V000027-001</Field>
        <Field Name="ControlArea">TransnetBW</Field>
        <Field Name="Type">Unplanned</Field>
        <Field Name="EventID">00000000000022246422#2415_001</Field>
        <Field Name="NUMStartDate">2018-05-13T06:24:00Z</Field>
        <Field Name="NUMEndDate">2018-05-13T16:00:00Z</Field>
        <Field Name="NUMCapacity">50.0</Field>
        <Field Name="NonavailabilityReason">Outage</Field>
        <Field Name="Remarks"/>
        <Field Name="TimeStamp">2018-05-13T06:25:20Z</Field>
        <Field Name="Status">Active</Field>
        <Field Name="PublicationTimeStamp">2018-05-13T06:25:22Z</Field>
        <Field Name="ModificationTimeStamp">2018-05-13T06:25:20Z</Field>
```

&lt;/Row&gt;

This is standard XML representing the fields returned in the response.

## 7.5 Examples

### 7.5.1 getTimeSeries

1) https://api1.datasource.eex-group.com/getTimeSeries?Symbol=ExPostInformationActualUnitGenerationPower&Country=BE&DaysBack=6
2) https://api1.datasource.eex-group.com/getTimeSeries?Symbol=ExPostInformationActualUnitGenerationPower&Country=DE&Start=2018-10-18%2022:00&End=2018-10-19%2021:45
3) https://api1.datasource.eex-group.com/getTimeSeries?Symbol=ExAnteInformationPlannedGenerationPower&Start=2018-10-17%2022:00&End=2018-10-18%2021:45
4) https://api1.datasource.eex-group.com/getTimeSeries?Symbol=ExAnteInformationPlannedGenerationPower&Country=NL&Start=2018-10-17%2022:00&End=2018-10-18%2021:00
5) https://api1.datasource.eex-group.com/getTimeSeries?Symbol=ExAnteInformationAvailableCapacityPower&Start=2018-10-01&End=2018-10-02

### 7.5.2 getEvent

1) https://api1.datasource.eex-group.com/getEvent?Symbol=NonUsabilityGenerationPower&Country=DE&Update_Back=1
2) https://api1.datasource.eex-group.com/getEvent?Symbol=NonUsabilityConsumptionGas&Country=DE&Update_Back=100
3) https://api1.datasource.eex-group.com/getEvent?Symbol=NonUsabilityConsumptionPower&Update_Back=100
4) https://api1.datasource.eex-group.com/getEvent?Symbol=NonUsabilityStoragePower&Country=DE&Update_Back=5
5) https://api1.datasource.eex-group.com/getEvent?Symbol=AdhocMessages&Update_Back=10

### 7.5.3 getMasterData

1) https://api1.datasource.eex-group.com/getMasterData?Symbol=Company
2) https://api1.datasource.eex-group.com/getMasterData?Symbol=ProdCons
3) https://api1.datasource.eex-group.com/getMasterData?Symbol=Unit
4) https://api1.datasource.eex-group.com/getMasterData?Symbol=Capacity

# 8. Known Issues

## 8.1 General known issues

a) Occasional missing values for "ModificationTimeStamp" of historic data only

## 8.2 Symbol specific known issues

### 8.2.1 ExPostInformationActualPlantGenerationPower

a) incomplete data in API return for AT and DE (2014-12-31T23:00:00Z to 2015-07-24T21:00:00Z)

### 8.2.2 ExPostInformationActualUnitGenerationPower

a) Occasional missing historic data for inactive units only

### 8.2.3 NonUsabilityGenerationPower

a) The information on AvailableCapacity is only included from 2020-06-29
b) The information on InstalledCapacity is only included from 2022-06-28

### 8.2.4 NonUsabilityConsumptionPower

a) The information on AvailableCapacity is only included from 2020-06-29
b) The information on InstalledCapacity is only included from 2022-06-28

**Formatiert:** Einzug: Links: 0,63 cm

### 8.2.5 NonUsabilityStoragePower

a) The information on AvailableCapacity is only included from 2020-06-29
b) The information on InstalledCapacity is only included from 2022-06-28

**Formatiert:** Einzug: Links: 1,27 cm, Keine Aufzählungen oder Nummerierungen